Ex-ante study of the EU-Australia and EU-New Zealand trade and investment agreements - Final Report

Multiple Framework Contract TRADE 2014/01/01

Request for services TRADE2015/C2/C16

Prepared by LSE Enterprise Ltd.
April – 2017

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EUROPEAN COMMISSION

Directorate-General for Trade

Directorate C — Asia and Latin America

Unit C2 — South and South East Asia, Australia and New Zealand

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ISBN 978-92-79-67776-2
doi:10.2781/537573

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ABBREVIATIONS

AANZFTA	ASEAN-Australia-New Zealand Free Trade Agreement
ACL	Australian Consumer Law
ACP	African, Caribbean and Pacific States
AIP	Australian Industry Participation
AMTF	Agricultural Markets Task Force
ANU	Australian National University
ANZTEC	Agreement between New Zealand and the Separate Customs Territory of Taiwan, Penghu, Kinmen, and Matsu on Economic Cooperation
APEC	Asia Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
AUD	Australian Dollar
AUS	Australia
AVE	Ad Valorem Equivalent (NTB values calculated in tariffs)
BICON	Biosecurity Import Conditions System
BIT	Bilateral Investment Treaty
BSE	Bovine spongiform encephalopathy
CAP	Common Agricultural Policy
CAT	Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment
CCPI	Climate Change Performance Index
CEACR	Committee of Experts on the Application of Conventions and Recommendations from ILO
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CEPEA	Comprehensive Economic Partnership for East Asia
CEPII	Centre de recherche français dans le domaine de l'économie internationale
CER	Closer Economic Relations agreement between Australia and New Zealand (also known as ANZCERTA)

CETA	Comprehensive Economic and Trade Agreement (Canada-EU)
CGA	Consumers Guarantees Act
CGE	Computable General Equilibrium
CIE	Centre of International Economics
ChAFTA	Australia-China FTA
CLIMI	Climate Laws, Institutions and Measures Index
CMO	Common Market Organisation
CO_2	Carbon Dioxide
CPC	Central Product Classification (United Nations)
CPI	Consumer Price Index
CRC	Convention on the Rights of the Child
CRPD	Convention on the Rights of Persons with Disabilities
DEE	Department of the Environment and Energy
DFAT	Department of Foreign Affairs and Trade
DG TRADE	Directorate General for Trade of the European Commission
EBRD	European Bank for Reconstruction and Development
ECIPE	European Centre for Political Economy
EDGAR	Emission Database for Global Atmospheric Research
EGA	Environmental Goods Agreement
EP	European Parliament
EPA	Economic Partnership Agreement
EPI	Environmental Performance index
EPS	Entry Price System
EU	European Union
EU28/EU27	EU with Croatia/without Croatia
EV	Equivalent variation
FAO	Food and Agricultural Organization

FDI	Foreign Direct Investment
FET	Fair and equitable treatment
FIRB	Foreign Investment Review Board
FOB	Free On Board
FPS	Full Protection and Security
FTA	Free Trade Agreement
FTAAP	Free Trade Area of the Asia-Pacific
GATT	General Agreement on Tariffs and Trade
GATS	General Agreement on Trade in Services
GCC	Gulf Cooperation Council
GCG	Greater Christchurch Group
GDP	Gross Domestic Product
GETS	Government Electronic Tendering
GHG	Green house gases
GI	Geographical Indications
GMO	Genetically modified organisms
GPA	Government Procurement Agreement
GPGC	Global public goods and challenges
GTAP	Global Trade Analysis Project
HR	Human Rights
HRIA	Human Rights Impact Assessment
HS	Harmonized System Codes
IAS	Indigenous Advancement Strategy
ICCPR	International Covenant on Civil and Political Rights
ICCPR-OP 1	Optional Protocol to ICCPR
ICCPR-OP 2	Second Optional Protocol to ICCPR, aiming at the abolition of the death penalty
ICERD	International Convention on the Elimination of All Forms of Racial

	Discrimination
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICPPED	International Convention for the Protection of All Persons from Enforced Disappearance
ICRMW	International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families
ICSID	International Centre for Settlement of Investment Disputes
ICT	Information and communication technology
ICS	Investment court system
ICSECR	International Covenant on Social, Economic and Cultural Rights
IEA	International Energy Agency
ILO	International Labour Organization
INDC	Intended Nationally Determined Contribution
ISDS	Investor State Dispute Settlement
ITA2	Information Technology Agreement update
IWDA	International Women's Development Agencies
JAEPA	Australia-Japan FTA
KAFTA	Australia-Korea FTA
KBC	Knowledge based capital
LDCs	Least Developed Countries
LMDI	Logarithmic Mean Divisia index
LULUCF	Land-use, land-use change and forestry
MEA	Multilateral Environmental Agreements
MERCOSUR	Mercado Común del Sur (Southern Common Market)
MFAT	Ministry of Foreign Affairs & Trade (NZ)
MFN	Most Favoured Nation
MoU	Memorandum of Understanding
MRA	Mutual Recognition Agreement
NAFTA	North American Free Trade Agreement

NAMA	Non-Agricultural Market Access
NIA	National Interest Analysis
NORMLEX	Information System on International Labour Standards, ILO
NOX	Nitrogen oxides
NTB	Non-Tariff Barriers
NTM	Non-Tariff Measures
NZ	New Zealand
NZAID	New Zealand's International Aid & Development Agency
NZD	New Zealand Dollar
NZFSA	New Zealand Food Safety Authority
NZHEA	New Zealand Horticulture Export Authority
OECD	Organisation for Economic Co-operation and Development
OHCHR	Office of the United Nations High Commissioner for Human Rights
OIO	Overseas Investment Office
OP-CAT	Optional Protocol to CAT
OP-CEDAW	Optional Protocol to CEDAW
OP-CRC-AC	Optional Protocol to CRC on the involvement of children in armed conflict
OP-CRC-IC	Optional Protocol to CRC on a communications procedure
OP-CRC-SC	Optional Protocol to CRC on the sale of children, child prostitution and child pornography
OP-CRPD	Optional Protocol to CRPD
OP-ICESCR	Optional Protocol to ICESCR
PACER	Pacific Agreement on Closer Economic Relations
PIC	Pacific Island Countries
PGPA	Public Governance, Performance and Accountability Act 2013
R&D	Research and Development
RED	European Union Renewable Energy Directive
RIETI	Research Institute of Economy, Trade and Industry

RoO	Rules of origin
SBA	Small Business Act
RCEP	Regional Comprehensive Economic Partnership
SEP	Strategic Economic Partnership
SITC	Statistics of International Trade in Services
SME	Small and Medium Sized Enterprise
SOE	State-owned enterprise
SOX	Sulfur oxide
SPS	Sanitary and Phytosanitary (measures)
STRI	Services Trade Restrictiveness Index
TARIC	Integrated Tariff of the European Union
TBT	Technical Barrier to Trade
TEPAC	Trade and Environment Policy Advisory Committee
TEU	Treaty on the European Union
TFES	Tasmanian Freight Equalisation Scheme
TFEU	Treaty on the Functioning of the European Union
TISA	Trade in Services Agreement
ToR	Terms of Reference
TPP	Trans-Pacific Partnership Agreement
TRIPS	Trade Related Intellectual Property Rights
TRQ	Tariff Rate Quota
TTIP	Transatlantic Trade and Investment Partnership (EU-USA)
TTMRA	Trans-Tasman Mutual Recognition Arrangement
UN	United Nations
UNCITRAL	United Nations Commission on International Trade Law
UNCTAD	United Nations Conference on Development and Trade
UNDP	United Nations Development Programme

UNEP	United Nations Environmental Program
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
UNGP	United Nations Guiding Principles on Business and Human Rights
UPR	Universal Periodic Review
US	United States
USD	United States Dollar
WDI	World Development Indicators
WET	Wine equalisation tax
WHO	World Health Organisation
WITS	Witwatersrand University
WTO	World Trade Organization

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ABSTRACT

This Report aims at examining the economic, social, environmental and human rights impacts of possible bilateral EU-Australian and EU-New Zealand Free Trade Agreements. The quantitative analysis is based on the CGE model employed by DG Trade.

EU trade and investment ties with both countries are close, and mutual trade and investment barriers with Australia and New Zealand are on average low, with occasional peaks.

The CGE model suggest overall positive effects on macroeconomic variables, with sectoral variances. GDP, trade and investment are expected to increase for the EU as well as Australia and New Zealand. SMEs can benefit, government procurement will open for the respective other country's enterprises. The model predicts positive long-term welfare effects for the both FTAs and limited but positive wage effects for workers in each trading partner. Consumers will largely benefit from proposed EU FTAs with Australia and New Zealand.

Both FTAs will have only a minor impact on the environment and will not diminish human rights in the EU, Australia and New Zealand in general. Effects on GDP of third countries, in particular LDCs seems to be slightly negative but negligible.

Part 1 General Report

1. INTRODUCTION

This Final Report aims at examining exisiting barriers to trade and investment between the European Union and Australia and between the EU and New Zealand respectively; estimating impacts of removing or reducing these barriers to trade and investment flows on a sectoral basis; and analysing economic, social, environmental and human rights impacts of such policy change. Thereby it is feeding into the Commission's impact assessment.

Since the Final Report analysis two FTA projects, we have decided to give this analysis a threefold structure. The first part contains introduction, methodological remarks and an overview about each task and concerns both Australia and New Zealand; it is entitled Part 1. The second and third parts are dealing with Australia and New Zealand respectively, discussing the impact of the two envisaged FTAs separately. They are called Part 2-AUS and Part 3-NZ respectively.

1.1. Overview of Project's Key Features and Context

The EU-Australia (EU-AUS) and EU-New Zealand (EU-NZ) relations constitute a key aspect of EU trade policy. As confirmed by the 2015 *Trade for All* strategy, the EU is pursuing closer trade and investment cooperation with its strategic partners and particularly strengthening its engagement in Asia and the Pacific region. Both Australia and New Zealand are close partners to the EU, where comprehensive economic relations could provide further integration in the wider region. The EU has recently sought or concluded Free Trade Agreements (FTAs) with many of Australia's and New Zealand's major Asia-Pacific and OECD trading partners such as South Korea, Singapore, Canada, Japan, the United States, and several members of the Association of Southeast Asian Nations (ASEAN), with which Australia and New Zealand have concluded a comprehensive FTA.

Relations with Australia and New Zealand take place in a wider global economic context. This is defined by the potential for further liberalization and for regulatory cooperation between countries with already existing high standards. These negotiations will have to take into consideration wider coherence with the Single European Market and the Trans-Tasman Mutual Recognition Arrangement (TT-MRA) and other Trans-Tasman instruments. Regulatory cooperation may have positive feedback effects beyond access to the markets of the EU, Australia and New Zealand. These agreements can also shape international trade and investment rules in light of limited progress at the multilateral, particularly the World Trade Organisation (WTO), level. Enhanced economic and regulatory cooperation with Australia and New Zealand will also have importance for the supply chains of EU producers in the Asia and Pacific region, especially in light of the recently signed but not yet ratified Trans-Pacific Partnership (TPP).

The regional economic architecture emerging in the Asia-Pacific presents another reason for the EU to conclude comprehensive and balanced agreements with Australia and New Zealand. This is addressed in the comparative analysis of EU-AUS and EU-NZ flows in goods and services, investment and public procurement with a small group of

reference countries in light of parallel FTAs, as well as through the assessment of existing studies modelling FTA impacts on the EU, Australia or New Zealand.

The overall economic narrative is supported by the fact that both Australia and New Zealand just like the EU pursue a multi-track trade policy. This includes a commitment to multilateral trade liberalization within the WTO,[1] a strong focus on regional co-operation and liberalization through active membership of such fora as the Asia Pacific Economic Cooperation (APEC) and the East Asian Summit, and active pursuit of negotiations within the region and beyond. Negotiations of bilateral and plurilateral trade arrangements include:

- the Closer Economic Relations (CER) agreement between Australia and New Zealand (in force since 1983); and the Trans-Tasman Mutual Recognition Arrangement, in force since 1998;
- the Free Trade Agreements with China (entered into force in 2008 with New Zealand and China-Australia FTA in force since Dec 2015);
- the ASEAN-Australia-New Zealand Free Trade Agreement (AANZFTA), negotiations started in 2005 and the agreement entered into force for all countries in 2012.
- Bilateral FTAs with Singapore, Thailand, Malaysia, Korea and Japan (only Australia);
- the New-Zealand Gulf Cooperation Council (GCC) Free Trade Agreement, which is concluded but not yet in force; Australia is also one of a number of countries negotiating FTAs with the GCC, however, the GCC has paused its trade negotiations with all partners pending a review of its trade agreement policy;2
- Agreement between New Zealand and the Separate Customs Territory of Taiwan, Penghu, Kinmen, and Matsu on Economic Cooperation (ANZTEC);
- New Zealand's agreement with the Trans-Pacific Strategic Economic Partnership Agreement (previously known as P4) with Singapore, Chile and Brunei;
- Trans-Pacific Partnership (signed but not ratified), which includes Australia, Canada, Japan, Malaysia, Mexico, Peru, the United States, Vietnam and the original P4 countries3;
- current negotiations with India, conducted both by New Zealand and Australia; and
- current negotiations on the Regional Comprehensive Economic Partnership (RCEP) which involve the ten members of ASEAN, China, India, Korea, Japan, Australia and New Zealand.

[1] This also includes participation in the Trade in Services Agreement (TiSA), Environmental Goods Agreement (EGA), Information Technology Agreement update (ITA2), WTO Government Procurement Agreement (New Zealand, 2014).
[2] See Australia-Gulf Cooperation Council (GCC) FTA. http://dfat.gov.au/trade/agreements/agccfta/pages/australia-gulf-cooperation-council-gcc-fta.aspx.
[3] Brunei, Chile, New Zealand, and Singapore.

In this context, in parallel to joint statements by the leaders of EU and New Zealand in 2014 and 2105 as well as of EU and Australia in 2015, there has also been increased attention from stakeholders and other institutions on the potential impact of the agreements. For example, following the launch of the *Trade for All*, members of the Committee on International Trade in the European Parliament (EP) examined the outlook for forthcoming trade talks with Australia and New Zealand in the broader context of concluded and on-going trade negotiations. The hearing focused on the two envisaged comprehensive "new generation" agreements with respect to market access, regulatory co-operation and global rule-setting potential.

The hearing summed up the following key points for the envisaged agreements[4] :

- Australia and New Zealand are significant trading partners of the EU, particularly vis-à-vis trade in services.
- Both countries are willing to engage in FTAs.
- Both are already open countries, where an FTA can provide improved market access.
- The FTAs would need to include a regulatory cooperation process.
- The FTAs would also need to address Investment Protection in such a way as to provide effective protection to EU companies that invest in Australia and New Zealand.

1.1.1. EU-Australia Context

The EU is not only a major trading partner for Australia, but it is similarly an extremely important source of, and destination for, foreign investment. Australia's relations are predominantly oriented to the Pacific region through the negotiations for the Trans-Pacific Partnership, Regional Comprehensive Economic Partnership (RCEP), and the trilateral China–Japan-South Korea Free Trade Agreement. Australia's strategy also closely links to EU's since it also focuses on wider objectives beyond trade in goods, especially tackling barriers in export markets.

Looking at Australia's top ten trading partners for goods and services, in 2015 these were: China, the EU, Japan, the US, Korea, Singapore, New Zealand, Thailand, Malaysia and India. Together, these 10 economies accounted for above 78% of total Australian trade in 2015.[5] The trading relations with these countries as seen above are covered by bilateral and plurilateral trade agreements with varying extent of depth and breadth of the FTAs. From an EU perspective, an agreement with Australia will provide better access and address the potential trade diversion effects resulting from regional trade agreements in the Asia-Pacific region. From an Australian perspective the EU is a natural partner due to the already extensive bilateral economic linkages between the two economies, potential economic gains, as well as the broader benefits of advancing liberalization and integration in the global economy. Beyond the

[4] Kerneis, Pascal 2015. INTA Public hearing on Trade Relations with Australia & New Zealand, 1 December 2015. https://polcms.secure.europarl.europa.eu/cmsdata/upload/2c6688f4-b3f2-4262-9d12-68e4f1e53929/Mr%20Kerneis_INTA%20Hearing_AUNZ.pdf.
[5] Australia's Trade in Goods and Services by top 15 Partners (AUD million). http://dfat.gov.au/about-us/publications/trade-investment/australias-trade-in-goods-and-services/Documents/fy2014-15-goods-services-top-15-partners.pdf.

'traditional' remit, an EU-Australia FTA addressing principles covering comprehensive treatment of trade in goods and services, issues such as government procurement, IPR, competition, trade and sustainable develipment go hand in hand with investment protection and regulatory cooperation.

A potential FTA will take into account the EU-Australia Partnership Framework, which was signed in 2008 and is planned to be supplanted by the imminent signing of the EU-Australia Framework Agreement. It will build on the work done by the EU-Australia Trade Policy Dialogue at the level of senior officials and other common initiatives. The EU and Australia also have bilateral agreements on mutual recognition in relation to conformity assessment as well as on trade in wine.

1.1.2. EU-New Zealand Context

Trade is a central component of New Zealand's economic policies, where exports of goods and services make up over 30% of New Zealand's GDP.[6] China, Australia, and the United States are New Zealand's three largest export markets and accounted for 48.2% of New Zealand's merchandise exports.[7] EU member states take around 10% of NZ exports (in value terms). Its top ten trading partners are Australia, China, the EU, the USA, Japan, Singapore, Korea, Malaysia, Thailand, and Taiwan. Vis-à-vis the composition of trade, New Zealand is reliant on exports of commodity-based products as well as on imports of raw materials and capital equipment for industry.

As pointed out in the INTA hearing mentioned above, "the idea of an FTA with New Zealand already enjoys the support of key EU Member States. New Zealand is consistently ranked number one on economic and personal freedom indices, and despite accounting for only 0.2% of EU external trade, New Zealand's economy is…" as important with respect to trade as EU FTA partners such Peru and Vietnam". [8]

Existing cooperation takes place through meetings of senior official level Annual Trade Talks as well as the Agriculture Dialogue. The EU and New Zealand also have bilateral agreements on mutual recognition in relation to conformity assessment as well as on sanitary measures applicable to trade in live animals and animal products.

1.2. Objectives

This section provides a description of the project's objectives and how these are met in the present report. It also gives an overview of the scenarios used for the CGE modelling and the subsequent analysis.

1.2.1. General Objective

The general objective of the project is to conduct an ex-ante study of possible new trade and investment agreements between the EU and Australia, and the EU and New Zealand, including examining existing barriers to trade and investment, estimating the impact of removing/reducing these barriers, and assessing the economic, social,

[6] New Zealand Government, 2015. New Zealand Economic and Financial Overview 2015. http://www.treasury.govt.nz/economy/overview/2015/nzefo-15.pdf.
[7] Ibid at p. 29.
[8] Lee Makiyama, Hosuk. 2015a. INTA Public hearing on Trade Relations with Australia & New Zealand, 1 December 2015. https://polcms.secure.europarl.europa.eu/cmsdata/upload/6ec59583-b33d-4a73-bf21-d97d992e0489/Mr%20Lee-Makiyama_INTA%20Hearing_AUNZ%20.pdf.

consumer, human rights, and environmental impacts. The study partly builds on a CGE modelling analysis completed by the European Commission's DG Trade.

1.2.2. Specific Objectives

More specifically, the project provides the following output, as stipulated by the ToR for the project:

1. Provide a description of the current trade and investment relationships between the EU and Australia, and the EU and New Zealand.
2. Identify and quantify existing barriers for investment and public procurement, and conduct qualitative analysis of existing barriers for trade in agricultural goods and food between the EU and Australia, and the EU and New Zealand.
3. Estimate the potential costs and benefits of removing or reducing barriers to trade and investment, and to participation in public procurement markets for producers and consumers in the EU, Australia, and New Zealand.
4. Estimate the overall impact on trade and the economy of the EU, Australia, and New Zealand, particularly on GDP, employment, wages, and outputs of key sectors, based on the Commission's CGE model and additional analyses.
5. Estimate the potential implications of the removal or reduction of barriers to trade and investment flows for third countries (with a focus on developing countries, and Least Developed Countries (LDCs)), based on the Commission's CGE model and additional analyses.
6. Analyse the likely social and environmental impacts of the liberalization scenarios on the EU, Australia, and New Zealand.
7. Analyse the likely human rights impacts of the liberalization scenarios on the EU, Australia, and New Zealand.

1.2.3. Specific tasks

As set out in the terms of reference of the present study, the economic modelling for the project has been completed by the Directorate-General for Trade of the European Commission and forms the basis for this study. In light of the results shared with the external consultant, the team conducts twelve tasks in course of the project, as sketched in Annex 3 of this Part.

1.3. Methodology and Structure of the Report

1.3.1. Quantitative modelling

The quantitative analysis of this study uses a Computable General Equilibrium (CGE) model (Dynamic GTAP) run by the Chief-Economist and Trade Analysis Unit of DG Trade. The modelling results were provided to the consultant.

The aim of this assessment is to identify the quantitative impact of an FTA between the EU and AUS and an FTA between EU and NZ for two policy scenarios. The main indicators provided by DG Trade include changes in consumer welfare, GDP, the bilateral trade flows (total and by sector), sectoral output change, consumer prices, wages (for unskilled and skilled labour), reallocation of jobs, and changes in CO2 emissions.

The simulation is based on a neoclassical closure, which assumes perfect market clearing. Accordingly, a certain level of employment is taken as given. Although this is a sensitive assumption, it is considered legitimate since the estimation is based on a long-run horizon (2030). The disadvantage, however, is that no conclusion can be drawn from the CGE modelling alone about the effect on short- to medium-term reallocation of jobs or scarcity of skilled or unskilled workers. The presentation of sectoral results, which are shown and discussed in this Final Report, follows the sectoral aggregation of the CGE model. The CGE modelling results are carefully taken into consideration by the authors throughout the analyses conducted.

1.3.2. Additional quantitative tools: Modelling environmental effects

The impact of trade liberalization on CO2 emissions in the EU, Australia and New Zealand is decomposed into scale, structural and technique effect (sector energy intensities, fuel mix and carbon factors) with the aim of understanding the underlying causes of the overall impact of the FTA on CO2 emissions. The decomposition is obtained using a Log Mean Divisia Index (LMDI). This method is applied to the same environmentally extended input-output tables employed by DG TRADE for CGE analysis and, therefore, ensures a perfect correspondence between the estimated environmental impact and the projected economic and structural effects of the FTA. We prefer this method among others because it gives a "perfect decomposition" of the change in emissions or energy use across each of the three different factors. The main disadvantage of using LMDI is that because it uses logarithms it cannot deal with zero or negative values in the source data. Nevertheless, there are no such problems in our data, as is the case with most emissions and production data.

The team employs the additive version of the method that breaks down the change in CO_2 emissions into the following three effects:

1. Scale effect: the effect of overall changes in output due to increased trade.
2. Structural (composition) effect: the effect of changing shares of output of different, more or less energy intensive, sectors (activity mix).
3. Technique effect: is the overall effect due to changes in sector-specific energy intensities (energy intensity effect) fuel shares (fuel mix effect) and carbon factors (emissions factor effect).

The methodology is based on the following relationship:

$$C = \sum_{ij} C_{ij} = \sum_{ij} Q \frac{Q_i}{Q} \frac{E_i}{Q_i} \frac{E_{ij}}{E_i} \frac{C_{ij}}{E_{ij}} \quad (1)$$

Where C is total GHG emissions, C_{ij} are emissions from fuel *j* in sector *i*, *Q* is output and E is energy consumption. The above relationship can be rewritten in terms of shares in the following form:

$$\sum_{ij} Q \frac{Q_i}{Q} \frac{E_i}{Q_i} \frac{E_{ij}}{E_i} \frac{C_{ij}}{E_{ij}} = \sum_{ij} Q S_i I_i M_{ij} U_{ij} \quad (2)$$

Where S_j is the share of output from sector *i*, I_j is the energy intensity (energy over output) of sector *i*, M_{ij} is the share of energy from fuel *j* in sector *i* (fuel mix effect) and U_{ij} is the share of emissions factor for fuel *j* in sector *i*. Given the above shares, a change in emission can be represented in the following additive form:

$$\Delta C = C^1 - C^0 = \Delta C_{scale} + \Delta C_{strc} + \Delta C_{\text{int}} + \Delta C_{fuel} + \Delta C_{emisf} \quad (3)$$

Each additive component represents:

1. the scale effect: $$\Delta C_{scale} = \sum_{ij} w_{ij} \ln\left(\frac{Q_i^1}{Q_i^0}\right)$$
2. the structure effect: $$\Delta C_{strct} = \sum_{ij} w_{ij} \ln\left(\frac{S_i^1}{S_i^0}\right)$$
3. the energy intensity effect: $$\Delta C_{\text{int}} = \sum_{ij} w_{ij} \ln\left(\frac{I_i^1}{I_i^0}\right)$$
4. the fuel mix effect: $$\Delta C_{fuel} = \sum_{ij} w_{ij} \ln\left(\frac{M_{ij}^1}{M_{ij}^0}\right)$$
5. and the emissions factor effect: $$\Delta C_{emisf} = \sum_{ij} w_{ij} \ln\left(\frac{U_{ij}^1}{U_{ij}^0}\right)$$

where w_{ij} is the logarithmic mean computed as follow:

$$w_{ij} = \frac{C_{ij}^1 - C_{ij}^0}{\ln C_{ij}^1 - \ln C_{ij}^0} \qquad (4)$$

The decomposition is based on the environmentally extended input-output tables, which incorporates sector-specific C02 emissions, used in the DG TRADE's CGE analysis and, therefore, is tight to information and the level of sectorial disaggregation provided by DG TRADE. These input-output tables contain the necessary information to perform the above decomposition and no additional sources are required.

1.3.3. Indicators used

Table 1 provides an overview of the impact indicators, which are used for the tasks in ToR. The indicators are based on the themes, as outlined in the IA methodology and the updated *Handbook for Trade Sustainability Impact Assessment*, but are reviewed again for each task during the implementation phase. In line with the *Handbook*, the use of indicators helps us ensure that the conclusions of the study are based on "measurable and easily comprehensible information".[9] Indicators can rely on both qualitative and quantitative data in order to provide a structured and clear method for analysis across the four dimensions: economic, social, environmental and human rights.

Table 1: Selected indicators

Dimension	Themes	Tasks	Indicators

[9] Handbook for Trade Sustainability Impact Assessments, Second Edition, page 15.

Economic	• Macro-economy • Labour market • Functioning of markets for businesses • Implications for consumers • RoW • SMEs	1, 2, 3, 4, 5, 6, 9, 10, 11	GDP, trade and investment flows, household income, consumption, terms of trade, sectoral output; reallocation of jobs, wages, real GDP growth per capita; consumer prices (rents, imports), product quality, consumer choice, consumer safety and protection issues
Social	• Decent work (full and productive employment, rights at work, social protection and social dialogue) • Education • Health/public health • Equality (e.g. gender equality, discrimination, people with disabilities, consumer protection) • Security • Population	4, 7	Reallocation of jobs, real wages, public expenditure; healthcare cost as share of GDP; Workforce participation rate; unemployment; Gini coefficient; wage gap (gender); level of compliance with ILO conventions
Environment	• Air and climate • Land • Water, oceans, seas and coast • Biodiversity • Energy • Waste • Transport • Chemicals	8	Energy intensity by sector; resource use and efficiency; CO2 emissions; GHG emissions (CH4 and N2O); Energy intensity by sector; Resource use and efficiency: level of deforestation waste intensity; Level of protection of threatened species, use of fertilizers and pesticides in agriculture; compliance with Multilateral Environmental Agreements
Human rights	• Adequate standard of living • Property	12	Human rights compliance record;

	• Fair trial • Freedom of expression and opinion • Privacy • Cultural life • Indigenous peoples • Right to water • Right to highest attainable standard of physical and mental health.	Stakeholder consultation processes in place; Inclusion of human rights' clauses in trade agreements;

1.4. Structure of the Final Report

As said above, the analysis comprises three parts, the first of which contains introduction, methodological remarks and an overview about each task; it is entitled Part 1. The second and third parts are dealing with Australia and New Zealand respectively, discussing each task for the two envisaged FTAs separately. They are called Part 2-AUS and Part 3-NZ respectively.

Apart from quantitative modelling, the report is based on qualitative desk research. We analyse the trade and investment flows, and present and discuss trade policy measures, both tariffs and nontariff barriers. In addition, we summarize the literature on FTAs between the EU and Australia and between the EU and New Zealand respectively, supported by an overall literature review on FTAs the two countries have concluded or are about to conclude. The literature review also contains studies relevant for all other tasks. The team refers to analysis and literature for Australia and New Zealand where possible in separated chapters, these studies are fed into the individual documents on Australia (Part 2-AUS) and New Zealand (Part 3-NZ). Due to the fact that many studies refer to both countries, we also provide joint analysis in Chapter 3 of Part 1.[10]

Part 1 also gives an overview about the results of research on individual tasks, which cannot be assigned to either countries or which are of general interest for both planned free trade agreements. The material presented here is mostly complementary to the respective Chapters in Part 2-AUS and Part 3-NZ.[11]

This study was closely guided both by the Better Regulation Guidelines and Toolbox as well as the updated DG Trade Handbook for Sustainability Impact Assessment of EU

[10] Throughout the Report, we present all data sources and legal documents in footnotes directly in the text. All academic texts are cited in the List of references and only referred to, according Harvard style.
[11] In a few cases, the reader will find duplications. These are exclusively meant to clarify the matter and ease the reading.

trade negotiations and the recently published Guidelines on the analysis of human rights impacts in impact assessments for trade-related policy initiatives[12].

The Report has the following structure, which we try to maintain this in all three parts:

1. Analysis of current trade and investment flows;
2. Economic effects (incl. as subsections: main indicators (GDP, etc.) sectoral impacts, incl. goods, agriculture and services; public procurement, investment; impact on SMEs);
3. Social impact (incl. impact on consumers);
4. Environmental impacts;
5. Human rights impacts;
6. Spillover effects on third countries/LDCs;
7. Conclusion (not in Part 1).[13]

The three documents should be read together, at least with respect to individual tasks; Annex 3 lists the locations where to find the treatment of the tasks in the respective documents. To avoid redundancies and to safe space, we do not offer extensive introductions in the country specific Part 2-AUS and Part 3-NZ, if such an introduction has been already given in Part 1 (or vice versa).

[12] *Guidelines on the analysis of human rights impacts in impact assessments for trade-related policy initiative* http://trade.ec.europa.eu/doclib/press/index.cfm?id=1344.

[13] As can be seen, the chapters are not equally long, which is due to different intensity with which some tasks as well of all parts within working on some tasks to be analysed. To give two rather diverse examples: Task 4 is treated extremely brief in Part 1 and extensively in Part 2-AUS and Part 3-NZ respectively; the material for both countries was rich and divergent. Task 10 (SMEs) is hampered by the fact that the data on international transactions of SMEs are very limited. Therefore, we focus on a general perspective on international trade of SMEs in the EU (Part 1) and rather briefly deal with an analysis of the consequences of the two envisaged FTAs in Part 2-AUS and Part 3-NZ respectively. The analysis about the rest of the world (RoW, Task 9), is exclusively done in Part 1, since the CGE model cannot distinguish effects of both planned FTAs.

2. DESCRIPTIVE ACCOUNT OF THE EU-AUSTRALIA AND EU-NEW ZEALAND TRADE FLOWS (TASK 1)

This chapter provides a brief overview of the EU-Australia and EU-New Zealand trade in goods. In addition, it outlines the trade and investment relation between the EU and Canada as a reference country. Canada has been selected as reference country as it is comparable to Australia and New Zealand with regard to the analysis of their role as trading partners of the EU. We also show diversification patterns, procurement spending and trade development for both countries.

2.1. Overview of EU's Trade in Goods with Australia, New Zealand and Other Selected Partners

In 2015 total trade between the EU and Australia amounted to €41 billion (rank 20 in total EU trade volumes). Total trade between the EU and New Zealand was worth €8.1 billion (rank 50 in total EU trade volumes). The EU's 2015 trade surplus with Australia amounts to €22.1 billion. The EU's trade surplus with New Zealand amounted to €1.1 billion.

In 2015, total EU imports from Australia amounted to €9.6 billion. The EU's major sector imports from Australia were coal, minerals, metal and machinery products. EU imports of chemicals products were significant too. Australia's imports from the EU were to the largest extent composed of high-value-added products, i.e. machinery, chemicals and motor equipment sectors, together accounting for almost €25 billion of €31 billion of total EU exports to Australia.

Total EU imports from New Zealand amounted to €3.5 billion in 2015. Ruminant meat and vegetable/fruit comprised the largest parts of imports, followed by beverages/tobacco imports. Total EU exports to New Zealand amounted to €4.6 billion in 2015. The large majority of New Zealand's imports from the EU are composed of motor equipment, machinery and chemical products.

2.1.1. Diversification patterns

Figure 1 allows for a first glance at trade diversification patterns. The numbers represent concentration ratios as calculated by the standard Hirschman Index. The Hirschman Index is a widely used measure of trade concentration. It is the index that would result if a country's export receipts were divided evenly among different products. Similar to alternative measures of concentration, the explanatory power of the Hirschman-Index is limited when detailed information is needed to derive sector-specific policy recommendations. However, the measure provides a first indication about the concentration of exports (and imports) on a range of export categories and a trading countries' comparative advantages respectively. It can be written as follows:

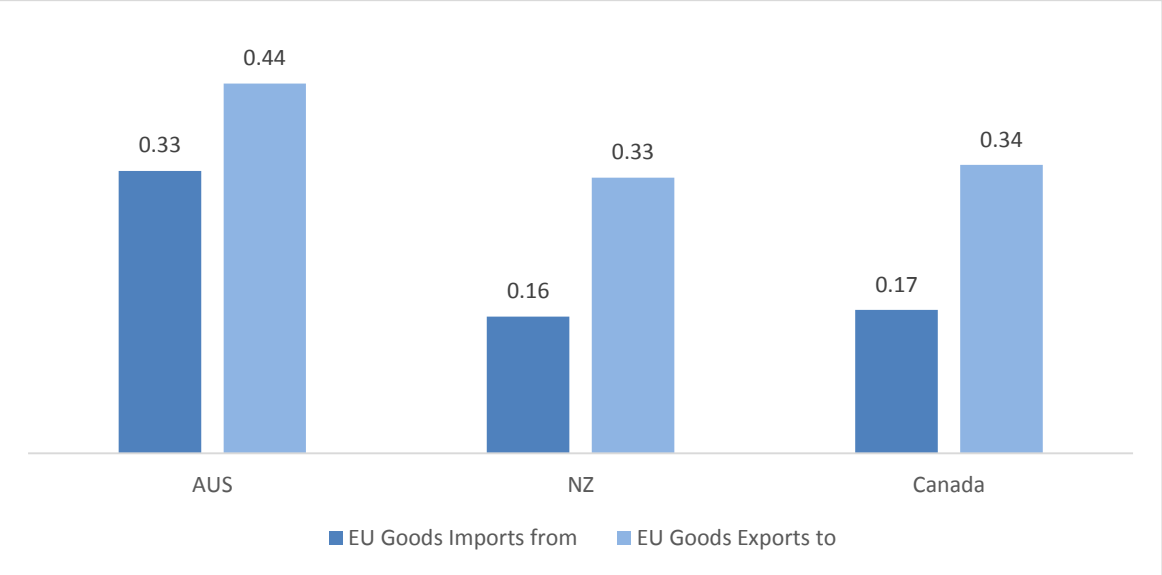
$$H_1 = \sqrt{\sum_{i=1}^{N} \left[\frac{x_i}{X}\right]^2},$$

where x_i is the export value of a specific commodity i, X the country's total export. A higher H_1 indicates greater concentration of exports/imports on a few commodities.

EU exports to Australia are relatively highly concentrated on three sectors: chemicals (23% of total EU exports), machinery equipment (30%) and motor equipment (20%). The EU's imports from Australia are less concentrated than the EU exports to Australia. EU imports from Australia are somewhat focused in coal (19%), minerals (16%), metal products (13%) and machinery equipment (12%).

EU trade with New Zealand shows patterns similar to EU-AUS trade, although both exports and imports are less concentrated compared to Australia. For EU-NZ trade, trade diversity is by and large similar to that of EU-Canada trade. However, while the EU's import composition for imports from Canada is fairly different from the composition of imports from New Zealand, the composition of EU exports to both regions is on the whole evenly distributed owing to the EU's comparative advantages in chemicals, machinery equipment and motor vehicles. EU exports to New Zealand are concentrated on motor vehicles (29%), machinery equipment (27%) and chemicals (17%). The EU's imports from New Zealand show a comparatively high share of ruminant meat (29%), but relatively low shares for those sectors immediately following ruminant meat, i.e., vegetables and fruit (14%), beverages/tobacco (10%), chemicals (7%) and machinery equipment (7%).

Figure 1: Diversification patterns for EU trade flows with Australia, New Zealand and Canada (Hirschman Index)[14]



2.1.2. Overview of Australia's and New Zealand's public procurement markets

The final report also provides a detailed overview of public procurement markets of Australia and New Zealand. In 2013, general government procurement accounted for a share of total government expenditures of 36.3% in New Zealand and 33.9% in Australia. These figures are both above the OECD countries' unweighted average of 29.1%, illustrating the relative potential of Australia's and New Zealand's public procurement markets for foreign companies. General government procurement accounted for 14.6% of GDP in New Zealand in 2013, which is above average of the OECD countries unweighted average of 13%. The corresponding figure for Australia is 12.4%.[15]

[14] Own calculations.
[15] OECD, 2015. Government at a Glance 2015. Available at: http://www.oecd-ilibrary.org/docserver/download/4215081ec042.pdf?expires=1472641756&id=id&accname=guest&checksum=112EE851970438AE8B49EC2DB757B05D.

In addition, note that the value of total procurement contracts reported in Australia has increased from €17,427.7 million during financial year 2006/7 to €41,368 million in financial year 2014/15. Out of this total value of contracts, a value of €5,259.1 million was awarded to overseas entities in financial year 2014/15. Out of the total number of contracts reported, 7.9% were awarded to overseas entities. These figures again illustrate the potential of the Australian public procurement sector for foreign companies.[16]

2.2. Overview of evolution of trade flows

Concerning the evolution of trade flows over time, Table 2 provides a short overview of selected indicators for all goods traded between the EU and Australia from 2004 to 2015. As outlined by Table 2, the EU as a whole ran consistent trade surpluses with Australia for the period 2004 to 2015. In 2015, Australia accounted for 0.6% of the EU's total imports (similar to Tunesia) and 1.8% of total EU exports (similar to Mexico). By comparison, Canada accounted for 1.6% of total EU imports and 2% of EU total exports in 2015.

The data is provided for EU-New Zealand overall trade in goods in Table 3. As concerns New Zealand, the EU shows consistent trade surpluses from 2011 onwards. New Zealand accounted for 0.2% of the EU's total imports (similar to Bosnia and Herzegovina) and 0.3% of total exports leaving the EU in 2015 (similar to Iraq). If both countries are taken as a single entity, the combined trade volume would correspond with the volume of EU-Mexico trade.

Tables 4 and 5 display European trade in services with Australia and New Zealand respectively. Trade in services with Australia is roughly 60% of the goods trade. It has been growing faster than goods trade since 2010, as Table 4 shows in comparison with Table 2. The EU runs a significant surplus in services trade with Australia.

Similarly, the EU runs a surplus in trade in services with New Zealand, which is smaller in both ablsolute and relative terms than the surplus vis-a-vis Australia. Trade in services is similarly relevant in New Zealand as compared to goods trade (Table 5 and Table 3) as in Australia (about 60% of goods trade), but does not grow as fast.

[16] Department of Finance, 2016. Statistics on Australian Government Procurement Contracts. Available at: https://www.finance.gov.au/procurement/statistics-on-commonwealth-purchasing-contracts/. Data retrieved in AUD. Average historical exchange rate calculated for Australian financial years 2006/7 and 2014/2015 using www.oanda.com, available at: https://www.oanda.com/lang/de/currency/average.

Table 2: Overview of EU-Australia total trade in goods, 2004-2015[17]

Indicators	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
EU trade balance with Australia (million Euro)	11,092	10,949	8,664	10,446	12,909	12,019	14,512	16,216	19,391	21,880	20,366	22,076
EU exports to Australia (million Euro)	19,910	20,887	21,763	23,907	26,700	21,948	26,972	31,174	33,924	32,052	29,560	31,643
EU imports from Australia (million Euro)	8,818	9,938	13,099	13,461	13,791	9,928	12,461	14,958	14,533	10,172	9,194	9,567
EU imports from Australia as share of total EU imports (%)	0.9	0.8	1.0	0.9	0.9	0.8	0.8	0.9	0.8	0.6	0.5	0.6
EU exports to Australia as share of total EU exports (%)	2.1	2.0	1.9	1.9	2	2	2	2	2	1.8	1.7	1.8

Table 3: Overview of EU-New Zealand total trade in goods, 2004-2015[18]

Indicators	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
EU trade balance with New Zealand (million Euro)	259	141	-189	-140	-92	-403	-46	264	586	1,051	1,102	1,124
EU exports to New Zealand (million Euro)	3,034	3,106	2,800	2,897	2,913	2,211	2,728	3,473	3,684	4,109	4,493	4,617

[17] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.
[18] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.

EU imports from New Zealand (million Euro)	2,775	2,964	2,988	3,037	3,005	2,615	2,774	3,209	3,098	3,058	3,391	3,492
EU imports from New Zealand as share of total EU imports (%)	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
EU exports to New Zealand as share of total EU exports (%)	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3

Table 4: Overview of EU-Australia total trade in services, 2004-2015[19]

Indicators	2010	2011	2012	2013	2014
EU services trade balance with Australia (million Euro)	7232.1	8254.3	10186.9	10942.3	10809.5
EU international services trade credit (exports) with Australia (million Euro)	14637.9	16152.3	18805.9	19116.3	18621.1
EU international services trade debit (imports) with Australia (million Euro)	7405.8	7898	8619	8174	7811.6
EU services imports from Australia as share of total EU services imports (%)	1.6	1.6	1.7	1.5	1.3
EU services exports to Australia as share of total EU services exports (%)	2.6	2.6	2.8	2.7	2.4

[19] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.

Table 5: Overview of EU-New Zealand total trade in services, 2004-2015[20]

Indicators	2010	2011	2012	2013	2014
EU services trade balance with New Zealand (million Euro)	836.7	845.4	826.1	857.6	866.2
EU international services trade credit (exports) with New Zealand (million Euro)	2041.1	2133.9	2435	2234.3	2214
EU international services trade debit (imports) with New Zealand (million Euro)	1204.4	1288.5	1608.9	1376.7	1347.8
EU services imports from New Zealand as share of total EU services imports (%)	0.3	0.3	0.3	0.3	0.2
EU services exports to New Zealand as share of total EU services exports (%)	0.4	0.3	0.4	0.3	0.3

[20] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.

3. LITERATURE REVIEW AND PREVIOUS ANALYSIS (TASK 2)

3.1. CGE Modelling: Some General Remarks

To measure the effects of trade liberalization, several methodological approaches are applied by academia and policymakers, depending on the objectives of the analyses policymakers or researchers wish to conduct.[21] Since the Consultant's report is based on the results of a Dynamic Global Trade Analysis Project (GTAP) model, which is among the leading methods applied internationally, the review provided in this Section begins with a discussion about computable general equilibrium (CGE) modelling, drawing on the example of the European Commission (2016b) model chosen for the ex-ante study at hand.

The model applied is the Dynamic GTAP model aggregating version 9 of the data into 18 countries and regions and 32 sectors respectively. The model is built on the Armington trade specification,[22] which takes into account consumers' preferences for variety in a perfect competition framework, and uses the neo-classical closure, implying a medium- to long-term focus and cleared markets while neglecting short-term (frictional) adjustments.

The results of the CGE model employed by DG Trade suggest that with respect to long-term (2030) change of GDP as compared with the status-quo development, the benefits of both an EU-AUS and an EU-NZ-FTA are comparatively small for the EU. Australia is estimated to gain somewhat more in relative terms. At the same time, New Zealand is estimated to gain relatively strongly.

In scenario I (liberalization), GDP is estimated to increase by 0.01% in the EU, 0.13% in Australia and by 0.28% in New Zealand by 2030 i.e. GDP in value terms for the EU will increase by €2.1 billion, Australia by €2.7 billion and New Zealand by €0.7 billion. The GDP figures are expected to be higher in the scenario II (increased liberalization), increasing by 0.02% for the EU, 0.20% for Australia and 0.52% for New Zealand. How do the results of DG Trade's model fit into the literature? The literature on potential effects of planned FTAs is rich. Depending on the nature of the research question, different scientific methodologies are applied: ex-ante versus ex-post, partial versus general equilibrium, quantitative versus qualitative analysis, and positive versus normative analysis. The greatest part of past and most recent literature deploy CGE models. These models are applied to simulate the quantitative effects of potential or realised trade liberalization on trade flows, per capita income and others. They also form the core of this literature review, which assesses the following topics:

1. Central for the study is a set of questions dealing with the opportunities EU-Australia and EU-New Zealand FTA offer for the EU. First, what is at stake for the different European sectors? Second, what are the quantitative effects of liberalization? Third, how does an FTA affect the political economy in Europe?
2. What insights can be drawn from other FTAs negotiated by the EU and the two countries with respect to the likelihood of potential opportunities being seized.

[21] For a discussion of different methods see, e.g., Hosny (2013).
[22] Armington (1969).

3. A third set of questions deals with barriers to trade.

We focus in particular on previous studies that analyse the effects of existing or intended FTAs of Australia and New Zealand. Besides those studies utilising CGE–based methodologies, this Section gives an overview of a number of qualitative studies looking into the political economy of EU-AUS and EU-NZ FTAs respectively.

Before we compare the results of DG Trade's calculation with the existing literature, some caveats have to be made. Critics of CGE models, such as Taylor and von Arnim (2006), argue that the properties of the model, in particular the Armington trade specification might render them too optimistic, in particular regarding the effects on developing countries. It is argued that the fiscal effects are overstated, that the elasticities often are too high, micro and macro aspects are mixed. Others, such as Zhai (2008), argue that to the contrary, the Armington framework causes welfare effects to be underestimated. In addition, the neo-classical closure, i.e., the full employment and market clearing assumption, is criticised. Another stated shortcoming is that the models are comparative static, i.e., they do not consider the transition process from the initial to the new equilibrium.

Most applied studies state that these criticisms are valid and therefore interpret the results carefully in their conclusions and policy lessons. Two recent papers published in the Journal of Global Economic Analysis pick up these problems and show how heterogeneous firms and imperfect competition can be incorporated into the GTAP model.[23] Such clarification as well as a modest interpretation of results are particularly relevant in the trade policy context, since both some modelling exercises as well as criticism and discussion of different models are politically and less academically or methodically motivated. Such discussion does not help decision-makers.[24] This review concentrates on the methodological issues.

The remainder of this chapter is divided into four parts. Sections 3.2 and 3.3. respectively outline the literature dealing exclusively or to a certain extent with EU-Australia and EU-New Zealand trade relations (sub-set of question 1) respectively. Section 3.4 gives an overview of the existing studies on Australia's and New Zealand's factual and potential FTAs with a focus on questions 1 and 2 respectively. In Section 3.5, we provide a summary table, comparing the results of some of the studies with the outcome of DG Trade's CGE model, and concluding remarks.

3.2. Studies with a Focus on FTAs Related to Australia or New Zealand

New Zealand and Australia do not only consider closer trade relations with the EU; they are also active to integrate themselves more deeply into the Pacific region. Asia has recently attracted much attention with respect to trade integration. Key studies,

[23] Dixon, Jerie and Rimmer (2016) and Akgul, Villoria and Hertel (2016).
[24] This problem can be well observed in the debate on both the Transatlantic Trade and Investment Partnership (TTIP) and TPP respectively. There are dozens of studies calculating the potential effects of these so-called mega-regionals. Not all of them seem to serve exclusively the need to learn about potential effects, but also to convey political messages. An example is the debate between Robert Lawrence (2106) and the authors from Tufts University (Capaldo et al. 2016). This debate is highly politicised, as the experience of one co-author of this ex-ante study shows; he tried to get hold of the data for a study by Capaldo and his team on TTIP, which was refused; today's academic routine is different and more transparent. See also Bauer and Erixon (2015a) as well as Bauer and Erixon (2015b).

which are used as a starting point for this analysis, explore models where the EU as well as Australia and New Zealand respectively are included along with the rest of the members of Asia-oriented agreements (e.g. TPP). Currently, there are several large-scale projects and a number of comprehensive studies looking into the impact of the liberalization under the TPP, which is why the report starts with an overview of these analyses.

In 2009, APEC (2009) conducted a study on the likely economic impact of a Free Trade Area of the Asia-Pacific (FTAAP). The FTAAP initiative aimed to create an FTA among all 16 APEC members. Several dimensions of the FTAAP relate to those areas covered by the TPP. Both treaties are deemed as WTO-Plus-agreements even though the four scenarios that are calculated using a GTAP model (in three versions: static, static + capital accumulation, dynamic) are less comprehensive than the agreed TPP:

Scenario I: basic scenario for trade liberalization through tariff elimination,

Scenario II: (I) + trade facilitation,

Scenario III: (II) + liberalization of trade in services,

Scenario IV: rules of origin (RoO) cumulation.

The results are encouraging for Australia and New Zealand, particularly in the RoO-cumulation version and the dynamic version of Scenario III respectively. As concerns the latter, Australian real GDP is estimated to increase by 2.31 percent, whereas real GDP in New Zealand is expected to rise by 4.19 percent. Some smaller members gain most in relative terms, while the EU and the rest of the world lose by more than 1% of real GDP each in this scenario. One has to be cautious to compare these results with subsequent studies about the effects of the TPP, which are envisaged to be more comprehensive. Nevertheless, since the results are in the same order of magnitude as other studies (see below), the study provides some general indications about the direction of the gains and losses in economic activity that are resulting from trade liberalization in the Asia-Pacific region.

The Peterson Institute for International Economics Series on the TPP explores several trade policy measures (tariff liberalization, Rules of Origin (RoO) issues), labour market adjustments and income distribution effects. Petri and Plummer (2016) and Petri, Plummer, and Zhai (2012) estimate a real GDP increase of 0.6% and 2.2% for Australia and New Zealand respectively. They also show that tariff liberalization accounts for 12% of the total benefits of all TPP members. By comparison, the liberalization of services' sector NTBs and barriers to FDI account for more than half of the gains in Australia. Strutt, Minor, and Rae (2015) analyse results for New Zealand and estimate a real GDP increase of 1.4%.

Cheong and Tongzon (2013) assess that the TPP would have little effect on the GDP of the member countries, when the accumulated impacts of other existing FTAs for the period 2013–27 are excluded. The results of the simulation preview economic losses resulting from trade diversions for those countries not participating in the TPP (Ibid,p. 153). However, the authors model only tariff reductions and assume substantial tariff liberalization among members prior to entry into force of the agreement.

In contrast to this study, Kawasaki (2014) estimates average annual gains of 1.8% of real GDP for all TPP members vs. 1.1% in the former study. Australia could gain 1.9% of GDP, New Zealand even 5.1% of GDP. The estimates assume that 50% of TPP liberalization is non-preferential compared to the 20% in Cheong and Tongzon (2013). The percentage of non-preferential liberalization reflects effects accrued to non-TPP members due to the fact that some provisions of the TPP agreement cannot be

restricted to TPP members and improve market access for third trading partners as well.[25]

Lee and Itakura (2014) represent the TPP with a 20% cut in service NTBs and estimate income gains of 0.8% for Australia, Canada, Japan, Mexico, and the United States.

A World Bank study conducted by Lakatos et al. (2016) uses a methodology similar to Petri and Plummer (2016) and Zhai (2008). They measure the potential macroeconomic implications of TPP for member and non-member countries, including the EU. Compared to other TPP members, Australia and the United States benefit the least from the TPP. According to the results, non-TPP-members including the EU lose in GDP. This view is shared by Bauer et al. (2014). They discuss the general consequences of TPP for the EU without referring to several CGE estimations. Their argument is based on the dynamic development of Asia compared to Europe.

Meyveci Doganay, Topkunar and Uzun (2014) analyse the effects of TTIP on Australia and New Zealand, among other Asian countries. Both countries lose slightly in real GDP, if TTIP is introduced without an Asian counterpart (e.g. members of RCEP). If the RCEP is concluded parallelly to TTIP, Australia and New Zealand are estimated to gain about 0.13% and 0.04 of real GDP respectively. For the EU, TTIP alone is estimated to cause relatively small gains in general economic activity. In combination with RCEP, TTIP is estimated to slightly reduce real GDP. Both estimates are, however, on a level below detection threshold.

Ando and Urata (2006) and Ando (2009) report on potential impacts of FTAs in different settings (ASEAN+1, ASEAN+3, ASEAN+6, APEC, global) in East Asia based on a wide range of CGE model applications, among them a few reported here. In cases that include Australia and New Zealand both countries gained in terms of general economic activity. In addition, the potential rise in GDP is stronger in a more comprehensive (WTO-Plus) agreement.

Fukunaga and Isono (2013) focus on reducing the number of RoOs. The authors test the effects of merging five ASEAN+1 FTAs including the one with Australia and New Zealand (AANZFTA) to the Regional Comprehensive Economic Partnership (RCEP), but without considering the effects on these countries. Asian countries are better off with RCEP than without, but the authors do not reveal in which sense.

Kawai and Wignaraja (2010) show the tremendous growth of the number of FTAs concluded by Asian countries during the first decade of the 21st century, thereby particularly addressing the 'noodle-bowl'-problem of overlapping FTAs. They provide a comparison of the coverage of a range of FTAs in Asia, indicating that FTAs are increasingly covering WTO-Plus elements. Finally, using results from a number of CGE model analyses to look at national-level results in terms of percentage changes from 2017 baseline income, the authors discuss the prospect of an Asia-wide (and beyond Asia, i.e., including Australia and New Zealand) FTA and argue for the creation of a region-wide agreement in East Asia, such as the Comprehensive Economic Partnership

[25] See Peter A. Petri and Michael G. Plummer, 2016, at p. 7 for a discussion on the effects.

for East Asia (CEPEA), as well as particular sequencing of agreements to improve effectiveness.[26]

Siriwardana (2015) looks into Australia's new FTAs with Japan and South Korea and potential economic and environmental impacts. Whereas the economic impact is estimated to be positive, the environmental consequences are not; CO_2 emission would increase. In an FTA with an emission trading scheme according to the Cancun negotiation results, the economic effect is also estimated to be negative.

CIE (2015) uses GTAP as well as an own, alternative model to analyse the combined effects of Australian FTAs with Korea, Japan and China. The study compares the results with two scenarios: a baseline scenario and a scenario where the three other countries conclude FTAs with other countries (e.g. Australia). Three liberalization scenarios are analysed: trade in goods, trade in services and investment. The effect of the combined liberalization in all three FTAs is modest: Australian GDP is estimated to be 0.1% higher than without the FTA by 2035.

In addition, a few studies deal with the effects of exclusive FTAs with China. Both Australia and New Zealand have concluded FTAs with China. Concerning Australia, Dixon (2015) estimates a modest but noticeable welfare gain for Australia, which will mainly be based on the improvement of the terms-of-trade. He also stresses the point that there will be winners and losers.

In an ex-ante study of the Australian FTA with China, Siriwardana and Yang (2007) use the GTAP model to estimate positive welfare effects for Australia (0.58% increase in real GDP), which are not evenly distributed among the different sectors. Agriculture generally gains in terms of economic activity, while manufacturers are estimated to experience both gains and losses.

Two studies analyse the New-Zealand-China FTA. Tan and Cai (2009) use a standard version of the GTAP model with two scenarios: first, free trade between China and NZ and, second, an FTA covering the two countries' multilateral trade policy reforms of the Doha Round (Swiss formula, removal of export subsidies and reduction of agricultural support in the OECD). Under scenario 1, both countries gain, under scenario 2, they lose in economic activity. The reason for this outcome is not clear, however.

New Zealand Government (2009) analyses the AANZFTA with respect to its economic, social, cultural and environmental effects on New Zealand. This careful and detailed qualitative analysis concludes that the AANZFTA is in New Zealand's national interest.

Finally, two qualitative studies are should be taken into consideration. First, Deardorff (2013) conducts a qualitative analysis of the effects of the TPP on TPP signatories (and ASEAN countries) against the background of each country's engagement in different FTAs. For Australia, the author predicts only small relative effects on trade flows. Major gains in trade are expected to be created with Japan. Since New Zealand does not have an FTA with the US, Deardorff (2013) predicts additional trade creation and larger gains for New Zealand. Second, Williams (2013), who does not calculate quantitative effects, assesses the TPP qualitatively and backs the analysis with

[26] See Kawai and Wignaraja (2010, p. 31) for a detailed analysis of sequencing.

descriptive statistics. The analysis takes a United States (US) perspective. The author concludes that due to the high diversity of potential TPP members, it is difficult to arrive at a clear-cut conclusion about the extent of changes in goods, services, and investment flows between TPP members and the US.

The EU has concluded a wide range of FTAs of which only a few are effective in Asia. Nevertheless, a recent study has been conducted by the Centre for European Policy Studies, in which the authors debate a potential EU-China FTA from several perspectives qualitatively and quantitatively. They conclude from their CGE analysis (Pelkmans et al., 2016) that the static gains for both sides are modest (plus 1.87% of GDP in China and plus 0.76% of GDP in the EU respectively in 2030). Another Asia-related FTA of the EU has been concluded with Korea. In its annual report, the European Commission (2016a) evaluates the results qualitatively and reports a successful but yet incomplete implementation.

3.3. Summary Table and Conclusions

Table 5 shows the results of those studies we deem most relevant for the assessment of a possible EU-AUS FTA and of a posisble EU-NZ FTA respectively. These studies report the economic effects of a hypothetical three-party FTA as well as other FTAs including the EU, Australia or New Zealand respectively. A general conclusion that can be drawn from the review of analyses shows that more comprehensive FTAs have a higher potential positive impact on Australia and New Zealand. In this respect, comprehensiveness refers to FTA coverage that goes beyond the elimination of tariffs and quotas, the rules of origin, and particularly involves harmonisation and mutual recognition of technical standards and testing procedures, investment and guidelines for regulatory cooperation in general. The analysis also show that the EU potentially loses from FTAs within the Asia-Pacific region, but potentially gains from an FTA with partners in the Pacific regions. Most studies arrive at rather modest results as they systematically underestimate the dynamic gains resulting from trade liberalization. Although some studies take into consideration investment, gains arising from competition, technology transfer and innovation in products, services and processes are not taken into consideration. This is true for both the quantitative analyses and the qualitative analyses.

To summarize, the literature is in accordance with the CGE model run by DG Trade (European Commission 2016b). The studies based on CGE models reviewed here suggest that regional integration is beneficial for the parties signing the agreement. On the costs and benefits of a prospective EU-NZ FTA, there is only one study (Plaisier et al. 2009). In order to understand the outcome of these two studies, we added further papers, 1) on the political economy of an EU-AUS and an EU-NZ FTAs and 2) assessing the impacts of Pacific integration in general. The political economy papers on the EU-AUS and EU-NZ FTAs reach optimistic conclusions, since they raise the issue of regulatory convergence, freedom and openness.

CGE models show a trade liberalization-induced rise in overall economic activity (GDP), which however is on average rather moderate. This may primarily be due to the fact that CGE analyses generally do not take into account dynamic feedback processes, such as the effects on domestic and international competition, knowledge spill-overs, technological spill-overs, increased innovation, and changes in domestic governance structures that encourage entrepreneurial opportunities and innovative behaviour, in addition there is only inexact capture of NTBs. The estimated effects of TPP on Australia and New Zealand are larger than those of bilateral FTAs with the European Union, which does not come as a surprise.

For third countries, the economic impact of an FTA is mostly negative. Again, however, CGE models do not take into account dynamic effects on and in third countries, such as the impact on third countries' governments to pursue good governance frameworks and create and/or maintain open markets and legal institutions that encourage entrepreneurial activity in these countries. A similar disclaimer is valid for second-round effects.

Table 5: Overview of selected CGE studies on FTAs

Study	Model/ Methodology	Scope Time frame	1. Affected Countries, 2. Issues	Results: GDP	Welfare (million USD)	Trade (Export)	CPI	Sectors EU and if indicated others (most important)
European Commission (2016b)	Dynamic GTAP 9	2030	1. EU, AUS, NZ 2. Tariffs, NTBs	EU: +0.02% AUS: +0.17% NZ: +0.63%	EU: +4.8 €bn AUS: +1.8 €bn NZ: +0.6 €bn	EU: +0.07% AUS: +0.72% NZ: +0.38%	EU: +0.06% AUS: -0.16% NZ: +0.29%	Agriculture – Machinery +
Plaisier et al. (2009)	GTAP 7	2020	1. EU, AUS, NZ 2. Tariffs, NTBs, Investment	n.a.	EU: +3.454 (mill. €) AUS/NZ: +1.557 (mill. €)	EU: +0.2% AUS/NZ: +4.4%	n.a.	Agriculture – Motor vehicles +
Siriwardana (2015)	GTAP-E 8.1	2020	Australia (with Japan & Korea) WTO+	AUS (trade only: 0.24% AUS (ETS): -3.69%	AUS (trade only: 3,652 AUS (ETS):-1,789	AUS (trade only: 2.65% AUS (ETS): -1%	AUS (trade only: 1.02% AUS (ETS): 1.68%	AUS: Mining – Agriculture +
CIE (29015)	GTAP 8 (dynamic) CIE G Cubed model (dynamic)	2035	Australia (with Japan, Korea & China) WTO+	AUS: +0.05 – 0.11%	AUS: +46,260 (AUDm)	AUS: +0.05 – 0.15%		AUS: Mining – Agriculture +
Strutt, Minor and Rae (2015)	GTAP 8.1 (dynamic)	2030	TPP (incl. NTBs)	NZ: +1.42%	NZ: 2,452 (NZDm)	NZ: +2.2 &	n.a.	NZ: Wool – Meat +
APEC	GTAP 7	n.a.	1. TPP	EU: -0.15%	EU: -12.021	EU: -0.26%	n.a.	n.a.

Study	Model/ Methodology	Scope Time frame	1. Affected Countries, 2. Issues	Results: GDP	Welfare (million USD)	Trade (Export)	CPI	Sectors EU and if indicated others (most important)
(2009)	(static, capital accumulation and dynamic)		(FTAAP) 2. WTO+	(capital accumulation) AUS: +3.32% (capital accumulation) NZ: +6.41% (capital accumulation)	(capital accumulation) AUS: +19.659 (capital accumulation) NZ: +5.821 (capital accumulation)	(capital accumulation) AUS: +10.58% (capital accumulation) NZ: +10.36% (capital accumulation)		
Petri and Plummer (2016)	GTAP 9.0 (dynamic, firm heterogeneity)	2030	1. TPP 2. WTO+	EU: +0.2% AUS: +0.6% NZ: +2.2%	n.a	EU: +0.5% AUS: +4.9% NZ: + 10.2%	n.a.	n.a.
Lakatos et al. (2016)	Dynamic CGE model (firm heterogeneity)	2030	1. TPP (FTAAP) 2. WTO+	EU: -0.01% AUS: ca. +1% NZ: ca. +3%	n.a	EU: +0.5% AUS: ca. +5% NZ: ca. + 11%	n.a.	n.a.

4. ECONOMIC IMPACT OF REMOVING OR REDUCING BARRIERS TO TRADE IN GOODS AND SERVICES

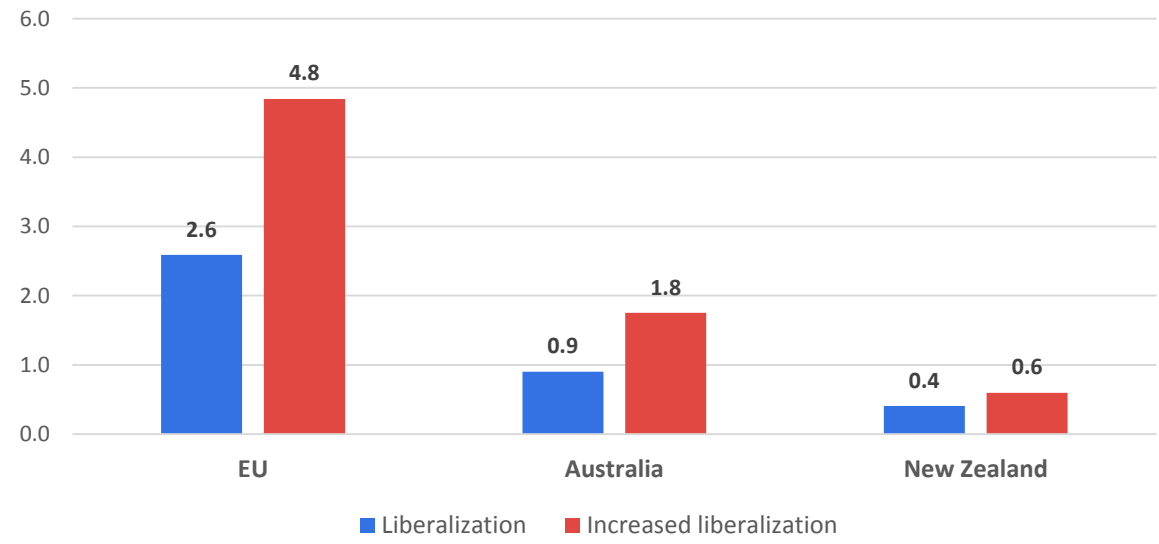
4.1. General Findings (Task 6)

We summarise the economic impacts of removing or reducing barriers to trade in goods and services for the different scenarios in the CGE modelling results provided by the European Commission (2016b), and estimate the economic impact of removing or reducing barriers to trade in goods in all significant sectors (including, inter alia, raw materials) and services sectors. We also estimate the economic impact of removing or reducing barriers to investments as well as government procurement.

4.1.1. Welfare effects

In case of the EU-Australia FTA, aggregate welfare effects are positive for both EU and Australia under both liberalization scenarios. For the EU, the gain in aggregate welfare amounts to €4.8 billion in the increased liberalization scenario, which is almost twice as high as in the liberalization scenario at €2.6 billion. Depending on the degree of liberalization, aggregate welfare improvements range from €0.9 billion to €1.8 billion for Australia. Likewise, for the EU-NZ FTA, the gains for EU are expected to be the same as discussed earlier since the EU welfare gains cover both EU-AUS and EU-NZ FTA.While for New Zealand depending on the degree of liberalization, aggregate welfare improvements are projected to range from €0.4 billion to €0.6 billion.

Figure 2: Change in Welfare (Long Term, €Billion)[27]



4.1.2. Sectoral impacts

We have selected motor equipment and machinery sectors for more detailed analysis, as they constitute among the top exports of EU to both Australia to New Zealand. Likewise, in services, both transport and communication services account for major share of EU's

[27] The EU welfare gains covers both EU-AUS and EU-NZ FTAs.

exports to Australia and New Zealand. Therefore, it is pertinent to analyze the likely impact on these sectors as a result of proposed FTAs.

4.1.2.1. Machinery

Trade in machinery products plays an important role in EU-AUS and EU-NZ trade relations. EU exports of machinery products to both Australia and New Zealand are significantly higher than these countries' exports of machinery to the EU. Machinery remains one of the major exports of EU and is also an important sector where EU will significantly gain in terms of increase in exports to both the countries especially in the increased liberalization scenario. Under the increased liberalization scenario, exports of machinery from EU to Australia are likely to increase by 61% while to NZ they are expected to increase by 65%. For the EU, the estimated percentage change of total output of machinery is below the perception threshold for both liberalization scenarios. Even aggregate average import prices for machinery products would not change (below the perception level) for the EU.

4.1.2.2. Motor Vehicles/ Transport Equipment

Another important sector for trade between EU-AUS and EU-NZ is motor vehicles. Motor vehicles is an important sector where EU will significantly gain in terms of increase in exports to both Australia and New Zealand and more so in the increased liberalization scenario. The exports for motor vehicles from the EU to Australia are expected to rise from the current whereas for New Zealand they are estimated to increase from the current. For the EU, the estimated percentage increase in total output of motor vehicles is 0.14% under the increased liberalization scenario. Aggregate average import prices for motor vehicles products would not change (below the perception level) for the EU.

4.1.2.3. Transport Services

Transport services form a major part of EU's services exports to both Australia and New Zealand. There is hardly any change in output increase in EU in both scenarios. Even import prices decline very slightly in EU, because, while both Australia and New Zealand form a negligible part of EU's import sources of transport services, EU forms an important part of their import sources of transport services. Moreover, EU does increase imports considerably from Australia (8.8-9.2%) and New Zealand (7.1-7.7%) in both the scenarios. However, its increases in exports to both the countries are even more in absolute terms, since initial level of exports are much higher than imports.

4.1.2.4. Communication Services

Trade in communication services forms a major part of EU-Australia and EU-New Zealand services trade, respectively. EU's imports considerably increase from Australia (8.9-9.4%) and New Zealand (8.7-7.4%) in both the scenarios, however, its increases in exports to both the countries are even more in absolute terms, since initial level of exports are much higher than imports. Also, with both Australia and New Zealand, EU's import prices increase slightly, thereby making their exports to the EU more competitive. Therefore, EU imports strongly from both Australia and New Zealand, so much so that its output has to decline slightly, despite an increase in exports.

In the following sections we briefly introduce approaches to and results of the analyses of the effects of both planned FTAs on agricultural market (Task 3), investment flows (Task 4), government procurement (Task 5) and SMEs (Task 10).

4.2. Analysis in Agricultural Goods and Food (Task 3)

This analysis is based on the CGE modelling results provided by DG Trade. The analysis covers agricultural commodities as well as food and beverages sectors. Both scenarios identified by the European Commission as "liberalization" and "increased liberalization" are taken into consideration. The indicators analysed are: (i) changes in long-term sectoral output, (ii) sectoral EU exports, and (iii) changes in sectoral EU imports and (iv) long-term changes in import prices imports in EU-AUS and EU-NZ trade respectively.

4.2.1. General remarks

The two scenarios show distinct results for the EU in the long run. For both liberalization scenarios, changes in EU import prices are below the perception threshold. One exception, however, is ruminant meat, for which the estimated relative decline in imports prices is 0.81%. Similarly, changes in sectoral output are generally below the perception threshold, whereas the the drop in output is relatively strong for the EU's ruminant meat sector (-1.2%).

For at least five reasons this chapter shows that within these parameters, both FTAs have the potential to bring overall positive and non-negligible results in terms of trade growth for both the EU-AUS FTA and the EU-NZ FTA.

First of all, productivity and efficiency gains throughout the agricultural value chain have contributed to performance improvements in a number of European agriculture and food industry sectors, maintaining the EU's position as the world's first agri-food exporter.[28] Reports by the food industry show that it is outperforming a large number of other EU manufacturing sectors, but still lags behind its main trading partners on R&D investment and export market shares. Nonetheless, 2012 brought a record trade surplus of €23 billion, and food exports to Australia increased by 18%, the EU's second highest export growth rate after food exports to China.[29] Policy developments and projects funded by the European Commission address all the main challenges identified: adapting to climate change, producing enough food and biomass using fewer resources, fighting diseases, using new technologies, and creating jobs.[30] For competitiveness and trade performance improvements, major efforts are underway, for instance in creating more transparency within the food supply chain, sustainable finance for sustainable agriculture and fisheries, and new risk management tools for producers.[31]

Second, the EU has concluded rather ambitious preferential import conditions for other countries, both in Europe and overseas. Some agreements implicitly disadvantage MFN suppliers like AUS and NZ. For example, South Africa and Peru, and even relatively developed countries like Chile can now ship kiwifruit and onions duty-free to the EU.

[28] European Commission, Agri-food trade in 2015. Brussels, 14 July 2016.
[29] Data & Trends of the European Food and Drink Industry 2013-2014.
[30] Agrinnovation: Where research and practice meet. EIP-AGRI magazine 2/2015, ISBN: 978-92-79-50614-7, downloaded 15 November 2016 at https://bookshop.europa.eu/en/agrinnovation-pbKFAM15001/?CatalogCategoryID=un8KABstLQ4AAAEjIYcY4e5K#.
[31] Improving Market Outcomes: Enhancing the Position of Farmers in the Supply Chain. Report of the Agricultural Markets Task Force. Brussels, November 2016. Downloaded on 15 November 2016 at http://ec.europa.eu/agriculture/agri-markets-task-force/improving-markets-outcomes_en.pdf.

Third, the Pacific region is steadily moving towards free trade, and this will not fail to impact on agricultural market shares. The TPP negotiations and the China-Australia FTA were concluded in 2015, and FTAAP and RCEP negotiations are ongoing in the same area. This is likely to affect agricultural trade. Between 2001 and 2015 EU agri-food exports to Australia have increased from €1,944 million to €2,798 million, while imports remained stagnant at €2,040 million. For the same period, EU Agri-food exports to New Zealand increased from €268 million to €443 million, whereas imports increased only from €2,315 million to €2,470 million. In 2015, Australia was the EU's 13th Agri-food trade partner for exports and the 19th for imports; New Zealand ranked 48th for EU agri-exports and 11th for imports.[32] Unless equivalent market access opportunities can be secured for EU exports, market shares of European commodities and for processed food on the AUS/NZ markets are bound to stagnate or decrease.[33]

Fourth, trade between the EU and AUS and between the EU and NZ respectively is distorted by tariffs, especially in the EU with an average applied MFN rate of 14.4%, while the WTO Trade Profiles show that the EU average simple MFN rates are 5.1% (10.7% for agricultural goods and 4.2% for non-agricultural goods).[34] Similarly AUS MFN applied non-ad valorem tariff rates in 2015 were 2.5% (1.2% for agricultural goods and 2.7% for non-agricultural goods), and NZ's 2.0% (1.4% for agricultural goods and 2.2% for non-agricultural goods).[35] Hence, while trade liberalization will bring for all parties overall positive results, in some tariff-protected sectors serious market share impairments could result for EU producers.[36]

Fifth, European wines and spirits, cheese and other products at the high end of the value chain of processed agricultural products, enjoy growing consumer demand and confidence in both Australia and New Zealand.[37] As for counterseasonal products like fresh fruits and vegetables, few are likely to displace European producers. Depending on the outcome of the two FTAs some such produce might actually displace developing country supplies with similar seasonal production patterns presently benefitting from preferential access.[38]

Both Australia and New Zealand have comparative advantages in several agricultural commodities, and many competitive product offers to the European market, even for food products like certain wines. Yet, both Australia and New Zealand also have trade-limiting measures in place, such as market-offer concentrations (i.e. Export State Trading) or virtual trade prohibitions by way of SPS measures. In the country-specific

[32] European Commission, Agri-Food Trade Statistical Factsheet European Union – Australia. Extraction date 14 April 2016.
[33] See (i) WTO, World Trade Report 2016, and (ii) Commonwealth Secretariat, Commonwealth Trade Review 2015.
[34] Villalta Pulg and Zeller (2016), Border Barriers and Behind the Border Barriers in the Australia – European Union Trade and Investment Relationship. Submission to the Department of Foreign Affairs and Trade (DFAT), Australian Government dated 3 February 2016. WTO Trade Profiles available at http://stat.wto.org/TariffProfile/WSDBTariffPFReporter.aspx?Language=E.
[35] WTO Trade Profiles available at http://stat.wto.org/TariffProfile/WSDBTariffPFReporter.aspx?Language=E.
[36] Diaz-Bonilla, E., D. Orden and A. Kwieciński (2014), Enabling Environment for Agricultural Growth and Competitiveness: Evaluation, Indicators and Indices. OECD Food, Agriculture and Fisheries Papers, No. 67, OECD Publishing. http://dx.doi.org/10.1787/5jz48305h4vd-en.
[37] European Commission, Agri-food trade in 2014, Vol. 1 and 2.
[38] FAO, The State of Agricultural Commodity Markets. Rome, 2015.

sections we analyse such non-tariff barriers to agricultural trade for Australia and New Zealand in more detail.

This means that more regulatory differences acting as NTBs could probably be eliminated by deep and comprehensive FTAs, the more so since both AUS and NZ are negotiating such agreements with the US (e.g. TPP). The EU, Canada and the US recognise each other's organic standards applying to the production of commodities and processed food.[39]

For investment policies in respect of the food value chain, there would probably be only few problems. Europeans invest substantially in Australian agricultural businesses.[40] Australia, where 11% of agricultural land is foreign-owned, refused certain large-scale land purchases by Chinese investors; its biggest dairy was sold to a China-based milk processor, accompanied by new laws with safeguards against tax minimisation by foreign firms.[41] New Zealand approved the sale of its largest family-owned dairy business to a Chinese company[42]; its biggest dairy company Fonterra has investments in three EU countries (see Sub-Section 3.2.2.8 in our Part NZ Report). Hence EU FTAs with both countries would increase two-way agriculture and food investments – not least for exports to third markets like China.

4.2.2. Geographical indications for food products and food standards

In view of the different approaches in the EU and in AUS/NZ, and the dynamic developments in respect of Geographical Indications (GIs), a brief look at the treaties and regulations in force in Australia and New Zealand and at some recent IP treaties seems appropriate here inasmuch as they add to the rights and obligations of all three parties under the WTO/TRIPS rules and disciplines.

The *Agreement between Australia and the European Community on Trade in Wine*, dated 1 December 2008, protects GIs for wines and spirits and lays down a number of production and labelling standards (see Section 3.2.2.9 in Part 2-AUS on alcoholic beverages). For instance, *Wine Australia* maintains the register of protected geographical indications and other terms as well as a label integrity program preventing false or misleading labelling. There is no bilateral agreement for other GIs.

New Zealand has no bilateral GI agreement with the EU. Article 10.5 in its *Transpacific Strategic Partnership Agreement* with Brunei Darussalam, Chile and Singapore provides that GIs for wines and spirits listed in Annex 10.A are protected in the territories of the other Parties like under TRIPS-Art.22.1 "to the extent permitted by and according to the terms and conditions set out in their respective domestic laws". Under New Zealand's domestic law, GIs may be protected under the Fair Trading Act 1986, the common law

[39] Global Organic Market Access (GOMA), Bilateral Equivalence Arrangements on Trade of Organic Products. Published by FAO, IFOAM and UNCTAD (2013).
[40] Kali Sanyal, Foreign investment in Australian agriculture. Parliament of Australia, Research Paper Series 2013–14, 18 February 2014.
[41] (i) Australia Approves Sale of Country's Largest Dairy to Chinese Buyer. The Wall Street Journal, China Real Time Report, 23 February 2016. (ii) Jamie Smith and Lucy Hornby, Chinese companies eye Australia's vast land sale. Financial Times, 7 October 2015. (iii) Geoffrey Smith, Australia Just Stopped China Buying a Farm the Size of Kentucky. Fortune, 19 November 2015. (iv) Australian Agriculture Investment Update. Second Edition, Corrs, Chambers Westgarth, October 2015.
[42] Dominique Schwartz, NZ approves dairy farm sale to China. ABC News 27 January 2012, downloaded 16 November 2016 at www.abc.net.au.

tort of "passing off" and through Trade mark law. For example, non-French winemakers are prevented from labelling their sparkling wine with "Champagne". The *Geographical Indications (Wines and Spirits) Registration Amendment Bill* submitted to Parliament in November 2015 is expected to come into force in 2017.[43]

Under the *ASEAN-Australia-New Zealand FTA* dated 27 February 2009 the Parties recognise that GIs may also be protected through a trademark system (Art. 7.4).

In the CETA, as signed on 30 October 2016, the relationship between GIs and trademarks has been clarified for a handful of EU names including Parma Ham or Black Forest Ham which are now protected in their original language. However, CETA does not define this relationship more generally, and there are no conflict resolution principles for specific cases.

The Intellectual Property (IP) Chapter 18 of the TPP also covers GIs by way of transparency and due process safeguards, the relationship between trademarks and geographical indications. It also prevents the unauthorised use of geographical indications with goods for which the trademark is registered. Article 18.19 specifies that signs which may serve as GIs such as collective trademarks are capable of protection under the trademark system in each contracting party. Only GIs originating in the territory of a Party fall under these provisions. But registration, for instance of EU GIs in each TPP Party, is available based on the TRIPs Agreement, and according to national prescriptions. For instance, TRIPs-Article 22.3 provides that WTO Members shall "refuse or invalidate the registration of a trademark which contains or consists of a geographical indication with respect to goods not originating in the territory indicated, if use of the indication in the trademark for such goods in that Member is of such a nature as to mislead the public as to the true place of origin."

4.3. Market Access and Regulatory Obstacles to Investment and Impact on Investment Flows (Task 4)

The chapter on investment is organised in three sections. First, it surveys the existing investment climate in Australia and New Zealand respectively, focussing on both countries' major barriers to foreign investment. We find that both Australia and New Zealand provide a broadly facilitative and encouraging environment for foreign investment, and identify the foreign investment screening system to be the most significant cross-sectoral limitation on FDI.

Second, the chapter surveys the relevant investment and investment-related treaty practice of both Australia and New Zealand as well as the EU. The baseline of existing investment treaty protection is identified, against which the further contribution of the proposed EU-AUS FTA and EU-NZ FTA is to be judged.

For Australia, this baseline consists of a series of 5 existing treaties between Australia and European Union member states, all of which are envisaged to be terminated in the event of a successful conclusion of an FTA with Australia. There are no existing investment treaties in force between New Zealand and EU member states. Then, the

[43] See the website of the *Intellectual Property Office of New Zealand* (IPONZ) at https://www.iponz.govt.nz/about-ip/geographical-indications/ last accessed on 14 November 2016.

recent treaty practice of the EU and Australia and the EU and New Zealand respectively is compared in respect of such issues as: pre-establishment disciplines; the content of core standards of protection such as fair and equitable treatment, expropriation and non-discrimination; the inclusion of certain exceptions; the inclusion of umbrella clauses; and dispute settlement.

Broadly speaking, the content of recent Australian and EU FTAs is relatively congruent, with important divergences of textual practice as regards umbrella clauses, the definition of the standard of fair and equitable treatment, and investor-state dispute settlement.

This is only slightly different for NZ as the content of recent New Zealand and EU FTAs is relatively congruent, with potential divergences of textual practice as regards umbrella clauses, the definition of the standard of fair and equitable treatment, and investor-state dispute settlement.

Third, the chapter qualitatively examines the question of the potential impact on foreign investment flows and stocks, as far as is possible within the confines of the present report. We find that the largest effect on inward FDI is likely to have come from the relaxation of screening limits in both the Australian and New Zealand foreign investment screening processes. Any independent effects of other aspects of the chapter are difficult conclusively to identify. The investment chapter of a prospective EU-AUS FTA as well of a prospective EU-NZ FTA will be only one part of a comprehensive agreement covering many aspects of the trade, investment and regulatory relationship between the two parties. Such agreements tend to work, synergistically, with the result that it is impossible to isolate and quantify the precise impact of each chapter or provision of the investment chapter.

4.4. Market Access and Regulatory Obstacles to Public Procurement (Task 5)

This section provides an overview of the legislative frameworks regarding public procurement (PP) in both Australia and New Zealand and surveys potential barriers in these Two basic sets of barriers are identified, "critical" and "conditioning" barriers.

Critical barriers are those which legally or effectively preclude delivery of public procurement internationally. The most obvous examples of such measures would be the explicit sectoral and sub-national exclusions that the New Zealand government has negotiated to its market access commitments under the GPA.

Conditioning barriers are not legal prohibitions, or impediments, but they can reduce the willingness of foreign companies to participate in the PP process and/or their chances to be awarded with a PP contract (such as home bias). Examples of this type of provision would include targets for sourcing from indigenous-owned businesses, preference margins for national suppliers that are SMEs and regulatory obligations such as those embodied in the Australian Industry Participation (AIP) plan, designed to familiarize potential supplies with the capabilities of Australian small and medium enterprises and identify suitable local suppliers. Measures of this nature are especially prevalent at the sub-federal level in Australia.

A lack of transparency, less directly, when combined with any barrier compounds its magnitude. Both New Zealand and Australia have well-developed central government platforms for e-procurement and procurement information. Advertising requirements, however, often do not extend to tenders at the sub-federal level and/or SOEs. A lack of basic market information can make it difficult for foreign suppliers to accurately access those market access opportunities that may exist. This is particularly the case in the context of public private partnerships.

Despite the all-encompassing "carve-out" for procurement conducted with "a view to commercial sale or resale, or for use in the production or supply of goods or services for commercial sale or resale" in the WTO GPA and the fact that the issue of state-owned enterpreises (SOEs) has not previously been dealt with in trade agreements, however, the architecture of this "framework" Agreement allows for disciplines to be imposed on state-owned enterprises. In this sense, NZ's GPA Annex 3 schedules currently offer a limited coverage of SOEs as well as a few "crown entities", or "bodies established by law in which the Government has a controlling interest but which are legally separate from the Crown".[44] Given the commitments that both countries have recently undertaken in the context of TPP negotiations vis-à-vis their SOEs, i.e. to engage in further negotiations on extending the application of disciplines to the activities of state-owned enterprises owned or controlled by a sub-central level of government, important market access opportunities for the EU may exist in this context. [45]

[44] An up-to-date listing of all the organisations of NZ's state sector may be found at: http://www.ssc.govt.nz/state_sector_organisations, last visited on 5 November 2016.
[45] See: http://dfat.gov.au/trade/agreements/tpp/official-documents/Documents/17-state-owned-enterprises-and-designated-monopolies.pdf and https://tpp.mfat.govt.nz/assets/docs/TPP_factsheet_SOEs.pdf.

4.5. The Impact on SMEs (Task 10)

This Chapter provides an analysis of the potential impact of FTAs between the EU and Australia as well as the EU and NZ on small and medium-sized enterprises (SMEs). The major aim of this analysis is to identify those sectors where SMEs are predominant and to analyse the impact on SMEs in the EU for different scenarios. It lays out major characteristics of the SME landscape of the EU and discusses how SMEs are typically affected by trade barriers and regulatory heterogeneity. The remainder of this Section provides two separate analyses of the potential impact on SMEs that would result from EU FTAs with Australia and New Zealand respectively. Thereby, the two scenarios envisaged by the European Commission are taken into consideration in the country analyses: the liberalization and the increased liberalization scenarios.

4.5.1. EU SMEs: Characteristics and patterns in internationalisation

In Article 2.1 of the European Commission's (2003) Recommendation 2003/361/EC, the category of small and medium-sized enterprises (SMEs) has been defined as follows. Enterprises must be considered as *micro, small and medium-sized* enterprises if they:

- employ fewer than 250 persons and
- have either an annual turnover not exceeding €50 million, and/or
- an annual balance sheet total not exceeding €43 million (European Commission 2003 and 2015c).

According to the European Commission's latest report on European SMEs, SME businesses comprise three categories of enterprises: micro, small, and medium-sized firms. Based on above definition, 22.3 million SMEs were active in the non-financial business sector across the EU28 in 2014, accounting for 90 million employees. By comparison, large enterprises accounted for 43.766 enterprises and 44.4 million employees. An overview of major characteristics of SME categories in the EU is provided by Tables 19 and 20 in the Annex on SMEs.

It should be noted at this stage that the official size class definition of SMEs in the EU differs from those applied in Australia and New Zealand. In Australia, the category SME applies for companies with 200 or fewer employees (Australian Bureau of Statistics 2002). In New Zealand, SMEs are generally defined as businesses with fewer than 50 employees.[46] In New Zealand, 99% of businesses employ fewer than 50 employees (which corresponds to the Ministry of Business, Innovation and Employment of New Zealand's official definition of an SME).[47] According to the country's first Small Business Sector Report, which outlines the statistics on New Zealand's 460,000 SMEs, one in three New Zealand workers is employed in a small business with less than 50 employees, and combined they contribute a third of New Zealand's gross domestic product (Government of New Zealand, Ministry of Business, Innovation and Employment 2015).

[46] Government of New Zealand, Ministry of Business, Innovation and Employment (2015), "The Small Business Sector Report 2014", available on http://apo.org.au/node/56230.
[47] See Government of New Zealand, Ministry of Economic Development (2011), "SMEs in New Zealand: Structure and Dynamics 2011", available on http://www.mbie.govt.nz/info-services/business/business-growth-and-internationalisation/documents-image-library/Structure-and-Dynamics-2011.pdf, p. 11; Government of New Zealand, Ministry of Business, Innovation and Employment (2015), "The Small Business Sector Report 2014", available on http://apo.org.au/node/56230.

SMEs are the backbone of the EU economy, representing 99% of all companies. Following Eurobarometer's SME survey of 2015 (fieldwork: June 2015), most of the EU's SMEs are either working in the retail (42%) or service sectors (36%).[48] About 8% are working in manufacturing. A slightly larger proportion are firms in the industry sector (14%). At the same time, the distribution of SMEs across sectors varies significantly from country to country.

As concerns the EU's key SME sectors in 2014, Eurostat data reveals that the "wholesale and retail trade" sector was the most important SME sector. Wholesale and retail trade ranked first in three relevant indicators – employment, number of enterprises, and value added. SME wholesale and retail businesses accounted for 26% of SME employment and 22% of SMEs total value added in 2014. The second most important sector in terms of total SME employment (20%) and value added (20%) in 2014 was the "manufacturing" sector. The sector of third highest importance in 2014, in terms of EU28 SME's employment (12%) and number of enterprises (11%), was the "construction" industry.

In terms of share of value added by SMEs, the sector which ranked third, was "business services" (13), followed by "construction" (11%), "administrative services" (7%), "transportation services" (6%), "real estate services" (6%), "information and communication services" (6%) and "accommodation and food services" (see Figure 5 in the Annex on SMEs).

Based on Eurostat statistics of 2013, more than 656,000 SMEs exported beyond the EU's external borders, accounting for 31% of the total value of EU exports to the world and almost 80% of all EU exporters (as measured by the total number of exporting businesses incl. large enterprises of 250+ employees).[49] As stated by the European Commission, the share of SME exports in total EU exports as well as the share of SMEs in the total number of the EU's exporting companies would be even higher if indirect exports through value chains were registered and included.

According to Eurostat, extra-EU trade accounted for almost half of total intra-EU trade, for both the number of enterprises and trade value (for both imports and exports). For extra-EU trade, SMEs (0-249 employees) were responsible for almost 47% of the value of imports. By contrast, large enterprises (>250 employees) accounted for the remaining 53%. When looking on the total trade value for exports, the role of large enterprises is more significant than the role of SMEs. Small enterprises accounted for almost 21% of the trade value and medium-sized enterprises for 18% of the trade value. By contrast, large enterprises for more than 61%. At the same time, in the "trade sector", SMEs accounted for a value of exports of 77% of total exports. In the "industry sector", SMEs account for about 26% of the total value exported to non-EU countries.

As concerns sector-specific export intensities, export intensities are on average highest for manufacturing sectors, e.g. motor and transport equipment, motor vehicles, machinery and electrical equipment, and a number of services sectors, e.g. transport services and business services. At the same time, some of the EU's most important SME

[48] Eurobarometer 2015, Flash Barometer 421, Internationalisation of Small and Medium-sized Enterprises.
[49] Eurostat Trade by Enterprise Characteristics Database and European Commission (2014), Small and Medium Sized Enterprises and the Transatlantic Trade and Investment Partnership, page 3, available at: http://trade.ec.europa.eu/doclib/docs/2015/april/tradoc_153348.pdf.

services sectors show rather low export intensities. "Retail trade" shows a low export intensity of exports over total sales between 0 and 5%. Similarly, "construction" as well as "accommodation and food services" sectors show comparatively low export intensities, indicating exports over total sales between 0% and 5%. At the same time, some services such as wholesale trade, advertising, legal and business consulting services show somewhat higher, but still low export intensities when compared to manufacturing (a rather high export intensity sector), ranging from 5% and 10% in exports over total sales (see Figure 6 in the Annex on SMEs).

Extra-EU trade data for EU SMEs offer valuable information for the identification of those sectors in which exports of EU SMEs are comparatively strong. It should be noted, however, that SME trade statistics are not available on a trading partner basis, i.e., the impact assessment of those sectors where SMEs are predominant has to be conducted on the basis of the full aggregation of "extra-EU" SME trade volumes, where extra-EU trade is a proxy for all trade partners outside the EU, i.e. outside the EU's internal market/customs union.

Eurostat's Trade by Enterprise characteristics (TEC) data reveal that the EU's top-3 extra-EU export sectors, for both the number of enterprises and total sectoral export volumes, are "wholesale, retail and repair" services, "manufacturing" industries, and "professional, scientific and technical" services, accounting for 288,187, 134,019, and 32,215 enterprises respectively, and export volumes of €211 billion, €137 billion and €31 billion respectively (see Figures 7 and 8 in the Annex on SMEs).

Other sectors of significant importance are "transportation and storage services", "construction" and "information and communication" services accounting for 20,050, 19,070 and 15,360 enterprises respectively, and extra-EU export volumes of €26 billion, €20 billion, €7.7 billion. For construction, however, it is primarily buinesses with 250 and more employees (about 3.3% of all EU construction businesses) that account for almost half of EU external trade. While "administrative and support services" and "agriculture, forestry and fishing" businesses also account for a comparatively high number of enterprises and export volumes, "mining and quarrying" as well as "real estate services" play a minor role in EU SMEs' exports.

Disaggregated SME export statistics vis-a-vis trading partners outside the EU are only available for manufacturing industries (detailed numbers for several sub-categories are provided by Tables 21, 23 and 24 in the Annex on SMEs). The numbers show that EU SME manufacturers are particularly strong in exporting "metal products", "machinery and equipment" products, and "rubber and plastics" products, accounting for 30,865, 28,943 and 14,832 SME enterprises and €23.4 billion, €65 billion, and €12.5 billion in export volumes respectively. "Food products", "computer, electronic and optical products" as well as "chemical" products' sectors also show high volumes of extra-EU exports and a high number of enterprises operating in these sectors. The "chemicals products" sector shows a relatively low number of enterprises compared to the high volume of extra-EU exports of€27 billion (see Figure 9 in the Annex on SMEs).

For both, AUS and NZ, the country-specific analyses focuses on tariffs and potential non-tariff barriers in a number of those manufacturing sectors, where EU SMEs are strong exporters.

4.5.2. Barriers for EU SMEs in Cross-border Commerce

Recognising the importance of SMEs, the EU's Small Business Act (SBA) provides an overarching framework for EU policies on SMEs.[50] Due to their size and limited resources, SMEs are, however, potentially more affected by regulatory costs of trade and investment agreements than their larger competitors. Therefore, the Commission made a commitment in the *Small Business Act* of 2008 to implementing the "think small first" principle in its policymaking – by assessing the impact of forthcoming legislation and administration on SMEs (the "SME test") and by taking this into account when designing proposals.

During negotiations with third countries, special attention should be given to those areas that potentially have a greater impact on SMEs and their ability to access third country markets. Thereby the focus of the analysis should be directed on regulatory differences, rules for competition, rules of origin and customs procedures. The EU was already negotiating an SME chapter in the Transatlantic Trade and Investment Partnership negotiations which was put on hold in 2016. It also plans to include such a chapter in all future trade agreements. At the same time, Australia and New Zealand have already agreed to a dedicated chapter on SMEs in the Trans-Pacific Partnership.[51]

Regulatory trade barriers incl. regulatory heterogeneity may have a greater impact on SMEs than on larger companies. SMEs have generally more limited financial resources and lower human resource capacities than larger enterprises and are thus less well-equipped to handle heterogeneous administration, deal with diverse national regulatory rules and bodies and to absorb risks, especially when operating in diversely regulated, intensely competitive markets, and markets dominated by large and long-established enterprises.

Wang (2016) and Cernat at al. (2014) note that SMEs often face different market entry constraints than large firms. Similarly, recent research by Freund et al. (2016) highlights that it is more likely for small firms to show increased participation in international trade while exports from large firms are more likely to grow in volume.

Cernat et al. (2014) present several dimensions of impediments that hinder SMEs in engaging in international commerce. These are:

1. Internal SME-specific impediments for internationalization, e.g., human resource constraints, financial restraints, and constraints related to lacking information regarding commercial regulations and foreign countries.

2. Exogenous impediments at domestic level, e.g., domestic policy directed at promoting the internationalisation process of SMEs, and

[50] European Commission (2008), "Think Small First" - A "Small Business Act" for Europe", Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, COM (2008) 394 final, Brussels.
[51] For an overview of the TPP chapter on SMEs, see Australian Government (2016), "Chapter Summary: Small and Medium-Sized Enterprises", Fact Sheet on the Trans-Pacific Partnership Agreement (last updated: 14 July 2016), available on http://dfat.gov.au/trade/agreements/tpp/ and Australian Government (2015), "Outcomes: Small and Medium-Sized Enterprises", Fact Sheet on the Trans-Pacific Partnership Agreement (last updated: 12 October 2015), available on http://dfat.gov.au/trade/agreements/tpp/.

3. More specific trade and investment barriers, such as non-tariff trade barriers that disproportionately affect SMEs due to fixed compliance costs that do not vary with the amount traded and the inability of SMEs to spread these costs over large export values (e.g., compliance with certain foreign technical standards, difficult licensing procedures and certifications)

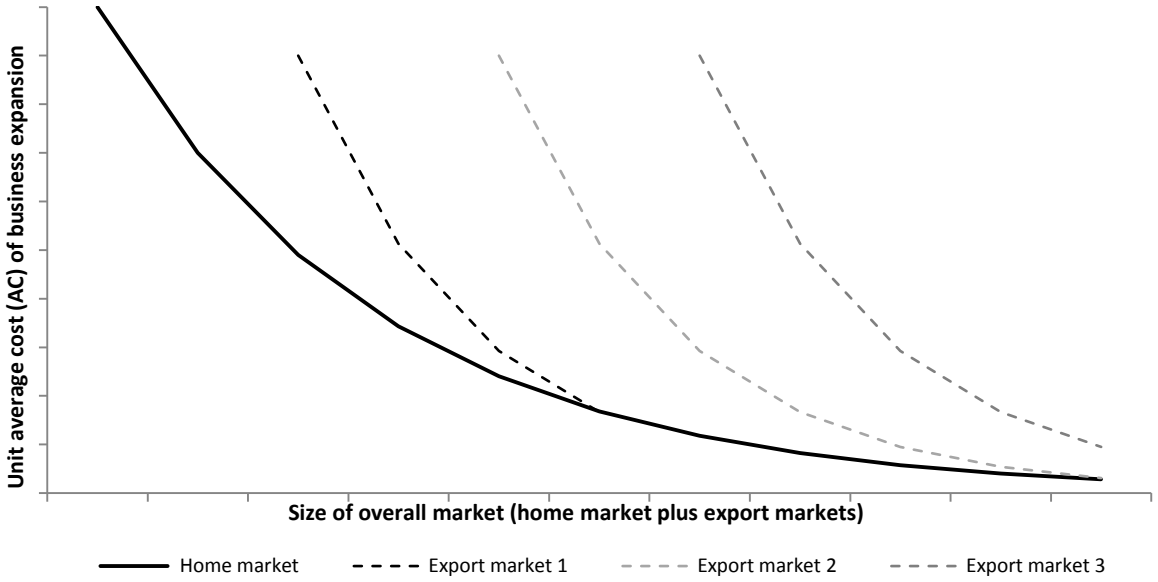
More specifically, the International Trade Centre (2015) provides a list of measures that impose high trade-related fixed costs on SMEs, implicitly accounting for SME underrepresentation in direct export activities. Trade-related fixed costs are:

- accessing information about export opportunities,
- overcoming nontariff measures (health, safety, and technical standards),
- coping with cumbersome border procedures,
- establishing transportation systems for delivery to foreign customers, and
- contracting for network infrastructure (information and communication technology, electricity, and water).

As a consequence of heterogeneous non-tariff trade barriers, many SMEs are effectively prevented from engaging in international trade with adverse consequences for intra-industry competition, cross-country innovation spill-overs, and economic convergence. For the services sector, for example, Kox and Lejour (2005) illustratively show that regulatory heterogeneity creates significant market-entry barrier services providers and negatively affects services exports. Their reasoning also holds for non-services sectors. As a consequence, as argued by Pelkmans and De Brito (2012), regulatory heterogeneity is not only costly to businesses; it is also to the detriment of consumers that are confronted with higher prices and less product variety.

For businesses to expand, the main barrier is not primarily the level of regulatory restrictiveness, but regulatory heterogeneity. Many regulatory measures in fact increase a company's fixed cost of market entry as companies need to set up resources and processes to comply with diverse country-specific provisions. Accordingly, and contrary to a functioning system of mutual recognition or regulatory harmonisation, the cost of market entry adversely affects firms' total average costs per unit of output, increasing it with every new non-domestic export market (for a graphical illustration see Figure 4).

Figure 3: Business expansion and the cost of regulatory heterogeneity



Note: the home market chart illustrates the evolution of average cost of supply in case of mutual recognition of country-specific regulatory provisions. See also Kox and Lejour (2005).

The importance of firm size and firm resources is reflected by the results of a recent survey on European SMEs conducted by Eurobarometer (2015).[52] Accordingly, the larger the SME, the more likely it is to engage in cross-national-border business activities inside the EU's internal market in the past three years. While only 29% of micro enterprises have exported to another EU country in the last three years, 43% and 59% of small and medium enterprises have exported to another EU country. The findings also apply for importing from abroad and subcontracting a company in another EU country.

Concerning European SMEs' engagement in international commerce, Eurobarometer data also indicate that 39% of all SME respondents have imported from another country, while 33% have exported. At the same time, 48% of all SME company respondents have not engaged in cross-border commercial activities inside the EU (see Figure 10 in the Annex on SMEs). Also, most of EU SMEs international business takes place within the EU's internal market. More than one third of surveyed SMEs (36%) have imported from another country within the EU, while 30% have exported to another EU country. In addition, business-to-business trade involving SMEs is generally more widespread than business-to-consumer trade of SMEs (see Table 22 in the Annex on SMEs).

Concerning European SMEs' engagement in extra-EU commerce, Eurobarometer data also indicate that only 20% of all SME respondents have imported from another country, while only 19% have exported. At the same time, 69% of all SME company respondents have not engaged in cross-border commercial activities incl. partnerships and the use of sub-contractors, outside the EU (see Figure 11 in the Annex on SMEs).

[52] Eurobarometer 2015, Flash Barometer 421, Internationalist in of Small and Medium-sized Enterprises.

For European SMEs, the authors of Eurobarometer (2015) show that SMEs can benefit from preferential trade agreements as removing trade and investment barriers would provide further opportunities for SMEs' internationalisation. For those SMEs that already engage in international business activities within or beyond the EU, the major barriers are "complicated administrative barriers", "complicated tax regulations abroad" and "difficulties in the management of complaints from abroad". Beyond several aspects related to idiosyncratic firm characteristics, those SMEs that do not yet engage in international commerce frequently reported that "administrative barriers are too complicated" and that it is "difficult for them to handle complaints from abroad" (see Figure 12 in the Annex on SMEs).

FTAs would improve SMEs abilities to access to new markets and international networking, as well as reducing SMEs administrative costs due to lower entry and operating costs. In addition, SMEs would indirectly benefit from trade and investment liberalization as they are part of various domestic (home region, home country) and global supply chains.

As a consequence, when negotiating with third countries, special attention should be given to those areas that potentially have a greater impact on SMEs and their ability to access third country markets. Thereby the focus of the analysis should be directed on regulatory differences customs procedures. In addition, a potential FTA must ensure that SMEs can handle rules of origin (ROOs) in order to be allowed to benefit from preferential treatment. ROOs are often complex and thus require administrative capacities to be dealt with.

The EU was already negotiating an SME chapter in the TTIP negotiations, which were put on hold in 2016. It also plans to include such a chapter in all future trade agreements. At the same time, Australia and New Zealand have already agreed to a dedicated chapter on SMEs in the TPP.[53]

Based on the European Commission's two liberalizations scenarios, two separate analyses of how EU SMEs would benefit from FTAs with Australia and New Zealand are presented in the country-specific chapters. The analyses account for the structural patterns within the EU's SME landscape and take into consideration those industries in which SMEs are predominant.

[53] For an overview of the TPP chapter on SMEs, see Australian Government (2016), "Chapter Summary: Small and Medium-Sized Enterprises", Fact Sheet on the Trans-Pacific Partnership Agreement (last updated: 14 July 2016), available on http://dfat.gov.au/trade/agreements/tpp/ and Australian Government (2015), "Outcomes: Small and Medium-Sized Enterprises", Fact Sheet on the Trans-Pacific Partnership Agreement (last updated: 12 October 2015), available on http://dfat.gov.au/trade/agreements/tpp/.

5. ANALYSIS OF SOCIAL IMPACTS

5.1. Direct Social impacts (Task 7)

5.1.1. Overview

The social impact of free trade agreements has long been a polarizing issue pitting advocates against critics of trade liberalization. Yet, passionate debates on the merits and perils of economic openness often exaggerated the effects that trade agreements can have on economies. This is even more the case when the negotiating parties are advanced economies with open markets.

This is even more the case when negotiating parties are developed economies with open markets. Building upon the results of the present study, this section combines quantitative and qualitative analysis to discuss potential welfare effects (job reallocation and income), as well as possible implications for ILO core labour standards. The social analysis takes into account the recent work done by Rueda-Cantuche and Sousa (2016), who by using the information contained in the latest release of the World Input-Output Database, have put forward a comprehensive set of indicators that shed light on effects of exporting to employment and income. This links to a growing research on the impact of non-discriminatory international trade liberalization on unemployment, job rents and other aspects of the labour market, on which the team can build to analyse the effects of the EU-AUS and EU-NZ FTAs on employment, wages and household income, while taking into account its preferential nature.

A major consequence of trade reforms is natural selection among firms: less efficient firms in a sector have to either downsize, improve efficiency or exit, whereas more productive firms expand their market shares. An implication is that total factor productivity tends to increase more in industries that liberalize more, especially in comparative advantage sectors (Berrnard, Redding and Schott 2007). Since there is increasing evidence of rent sharing within firms, this also implies higher average wages in the economy, at least for those employed in exporting firms. The productivity-enhancing effect of selection increases the incentives of firms to hire workers, as their contribution to firms' output is now larger. Hence, the efficiency gains of trade can also translate in larger aggregate employment. Conversely, trade liberalization can also cause social dislocation or increase pressure on wages for less competitive firms. Trade reforms can also accelerate restructuring trends with a specific sector, either by directly impacting market competition or by forcing economic actors to adapt their strategies to anticipate change.

As the analyses of Davidson, Martin and Matusz (1999) and of Helpman and Itskhoki (2010) stress, the impact of trade liberalization depends on the characteristics of the sectors that expand and contract as a result of the lower trade barriers. When a country enters into a trade agreement with another that has stronger comparative advantage in the high-search frictions sectors, it tends to experience a lower unemployment rate as a result—with the opposite happening in its trading partner.

In addition to the quantitative analysis, the qualitative analysis performed in Section 5.1 of Part 2-AUS and Part 3-NZ respectively first relies on desk research and numerous cited expert sources, academic literature, specific relevant studies on EU and Australia and EU New Zealand trade relations respectively, along with studies shedding light on the Australia and New Zealand's record within the context of the Australia-US FTA (2005) and the TPP. This includes ex-ante studies, committee reports and impact assessments

conducted by US government agencies (e.g. International Trade Commission, Congressional Research Service) and think tanks.

Second, to further appraise the potential effects of trade liberalization on labour markets, these sections include analyses of each party's compliance with core ILO conventions, relying primarily on reports from the ILO. This section briefly discusses the inclusion of provisions pertaining to labour standards in recent free trade agreements conducted by Australia and New Zealand (especially TPP) and by the European Union (e.g. Peru-Colombia, Korea).

The assessment feeds into the analysis of employment and labour issues linked to the two scenarios outlined in where the team studies the likely/possible compliance with provisions in the prospective agreement having a major impact on the employment effects of the agreement, such as those dealing with non-tariff barriers. In the spirit of previous EU FTAs, this study assesses the impact of including a trade and sustainable development chapter and consider different institutional mechanisms (governmental dialogue, civil society forum, technical cooperation with ILO etc.) to foster cooperation on labour standards and encourage the diffusion of best practices in workers' rights enforcement, including as the case may be in third countries, so as to avoid a race to the bottom where international labour standard infringements may distort trade and investment conditions in the EU, Australia and New Zealand.

5.1.2. EU approach to labour standards in FTAs

Over the past two decades, EU trade policy has become one of the main pillars of the EU's external efforts to promote ILO standards, whether at the unilateral, bilateral/regional or multilateral levels. At the unilateral (i.e. non-reciprocal) level, EU trade policy has designated the ratification and application of the ILO's eight fundamental conventions on labour rights as a precondition for obtaining GSP+ status.[54] In the mid-1990s, the EU Commission, EU members like France aa well as the US were leading advocates for the inclusion of a "social clause" pertaining to international labour standards in multilateral trade negotiations. Facing accusations of protectionism in disguise, the EU redirected its efforts to strengthen trade-labour linkages to the bilateral and plurilateral levels, as regional trade agreements gained more prominence in its trade strategy. In its 2015 Trade for All Strategy, the EU reasserted its ambition to "promote an ambitious and innovative sustainable development chapter in all trade and investment agreements", vowing to achieve "far-reaching commitments on all core labour rights" and to ensure "high levels of occupational health and safety and decent working conditions in accordance with the ILO Decent Work Agenda" (European Commission 2015b).

The scope granted to labor provisions in EU RTAs has considerably expanded since the first generation of agreements, growing from a simple focus on migrant workers' rights in the context of Euro-Mediterranean association agreements to the gradual development of a comprehensive framework aligned with ILO conventions, with broader and deeper content, governance and enforceability (ILO 2016 and European parliament 2016). The

[54] For more details on GSP+, see EU Commission, "'The EU Special Incentive Arrangement for Sustainable Development and Good Governance ('GSP+') covering the period 2014 – 2015", 28 January 2016, available at: http://trade.ec.europa.eu/doclib/docs/2016/january/tradoc_154178.pdf.

current framework draws upon the design of the EU-Korea free trade agreement, which includes a chapter on trade and sustainable development. Building upon labour provisions in previous RTAs (e.g. Central America, Colombia and Peru), the new approach has further raised the visibility of social and environmental issues in EU trade negotiations. Among the provisions contained in the trade and sustainable development chapter, the parties:

- state that "labour standards should not be used for protectionist trade purposes";
- reaffirm their "right to regulate" to labour standards;
- recognize, "under the 2006 Ministerial Declaration of the UN Economic and Social Council on Full Employment and Decent Work;
- full and productive employment and decent work for all as a key element of sustainable development for all countries;
- commit to "respect, promote and realise, in their laws and practices, the principles concerning the [ILO] fundamental rights";
- establish a Domestic Advisory Group(s) on sustainable development (environment and labour) with the task of advising on the implementation of this Chapter.
- commit to reviewing, monitoring and assessing the impact of the implementation of the FTA e.g. through sustainability impact assessments;
- with regard to enforcement, the EU relies on consultation and persuasion for enforcement, with the notable exception of the EU's CARIFORUM economic partnership agreement. This means that unlike in U.S. and Canadian RTAs, failure to enforce labour provisions are not subject to dispute settlement mechanisms and cannot be result in trade sanctions (ILO 2016). However, both chapter 13 and Annex 13 of the EU-Korea trade agreement defines cooperation mechanisms (government consultations, civil society forum, advice from ILO) to help parties fulfil their obligations with regard to the trade and sustainable development chapter.[55]

When it comes to labour (and environmental) provisions, the EU-Canada Comprehensive Economic and Trade Agreement (CETA) has generally followed the framework provided by the EU-Korea FTA with regard to its scope (ILO conventions), governance (civil society forum and government consultations) and enforcement (exhortatory language and cooperative approach), with the notable exception that labour provisions are dealt with in a separate chapter (chapter 23) from environmental issues (chapter 24) and from the trade and sustainable development (containing both exhortatory language on sustainability principles and provisions on institutional mechanisms for cooperation).

5.2. Impact on Consumers (Task 11)

This section provides an analysis of the potential impact of an FTA between the EU, Australia and NZ on consumers in the EU. The major aim of this Chapter is to evaluate both the quantitative and qualitative impact on consumers of EU FTAs with Australia and

[55] EU-Korea FTA (2011), available at: http://eur-lex.europa.eu/resource.html?uri=cellar:a2fb2aa6-c85d-4223-9880-403cc5c1daa2.0022.02/DOC_3&format=PDF.

New Zealand. Thereby, the analysis is based on the two liberalization scenarios envisaged by the European Commission.

5.2.1. Literature on impact on consumers of FTAs/Trade Agreements

Free trade agreements are not only measured by their capacity to encourage private sector economic activities, competition, employment, innovation and technological change; the merits of trade agreements also come with their capacity to increase consumer welfare. Consumer welfare is a general concept primarily reflecting accessibility to a broad variety of goods and services, the level and development of consumer prices and purchasing power, and goods' and services' quality characteristics.

Standard economic theory predicts that trade liberalization benefits consumers through lower prices, higher quality and greater product variety.[56] The major channels through which trade liberalization policies and free trade agreements affect one or several dimensions of consumer welfare are summarised below. It is important to note that the size of the impact arising from trade liberalization and its evolution over time depend on various factors such as the speed and sequence of eliminating trade barriers, domestic consumer tastes and preferences as well as the degree of competitive dynamism and industry-specific characteristics. The following mechanisms, which are backed by the empirical literature on trade liberalization, can therefore only provide an indication of how various aspects of consumer welfare are generally affected by trade liberalization:

1. The elimination of tariffs and non-tariff trade barriers entails lower trading costs, which effectively reduces producers' or exporters' prices of goods and services on foreign markets. Lower import prices cause downward pressure on the prices of intermediate goods and services, which reduce final consumer prices. Lower nominal consumer prices in the domestic market lead to an increase in the purchasing power of domestic income, which constitutes an important source of consumer welfare gains (WTO 2012). It should be noted, however, that CGE modelling projection for consumer prices usually deviate from real world implication of trade liberalization. This is true for the model applied in this study, which assumes that every country's labour supply is fixed. The "fixed labour market closure" implies that any increase in demand for labour will be met by wage increases, which will in turn push up firms' costs, and will be eventually be passed on to consumers as higher prices.
2. Improved access to foreign markets allows firms to benefit more from specialisation-induced economies of scale, which drives down the unit cost of production. In addition to increased specialisation, increased competition due the entry of new foreign companies that serve the domestic market through either exports or foreign direct investment (FDI) reduces prices on the domestic market.[57] Both effects potentially reduce domestic consumer prices.
3. Import-induced increases in competition for market shares encourages domestic suppliers to increase productivity and/or to lower sales prices and profit margins in order to remain competitive. These effects cause a reduction of average prices for

[56] See Krugman (1979); Krugman (1980); Helpman and Krugman (1985).
[57] See Breinlich, Dhingra and Ottaviano (2016) Edmond, Midrigan and Xu (2015); Krugman (1979).

domestic consumers, which are reflected in the development of aggregate consumer price indices (Edmond, Midrigan and Xu 2015).

4. Open markets increase the variety of goods and services available for consumption. In addition, trade liberalization stimulates firms' investments in quality-upgrading activities. Greater exposure to foreign competition and the ability to export to third countries also incite innovation and diversification in goods and services.[58]

5. Trade liberalization encourages domestic and international investment in research and development activities and building up knowledge-based capital (KBC), which is the major determinant of process innovation, product innovation and productivity growth. The liberalization of barriers to international trade and investment raises the returns to innovation by expanding market size and encouraging more efficient resource allocation. Openness to trade and investment also increases the scope for knowledge and technology diffusion across borders and raises the incentives for firms to incorporate foreign technologies. These effects, which are related to and also drive structural economic change, strongly contribute to the adoption of new technologies, product-upgrades, increased product variety and lower consumer prices.[59]

6. For some sectors that show low (temporary or permanent) elasticities of supply, increases in foreign demand may cause upward pressure on domestic prices. If domestic wages do not rise at the same rate as domestic prices, this effect can entail a decrease in domestic purchasing power. Some agricultural (and commodity) markets show low elasticities of supply causing researchers to analyse primarily the link between food security and trade liberalization. Most empirical studies on developing countries highlight that prices play a central role in effects on food security, but also state that there is no systematic pattern between adverse changes in food security as a result of trade liberalization (McCorriston, Hemming, Lamontagne-Godwin, Osborn, Parr and Robets 2013).

5.2.2. How FTAs impact(ed) on consumers

The literature on the consumer impact of FTAs primarily focuses on decreasing product prices and increasing product choice through the elimination or reduction of tariffs and non-tariff barriers. At the same time however, detailed and nuanced ex-post consumer impact assessments of FTAs concluded by the EU, Australia, New Zealand or other countries and jurisdictions are barely available. The available impact assessments indicate that overall consumer welfare, i.e. primarily consumer prices and consumer safety, has not deteriorated for countries that concluded and implemented FTAs in the past.

One very recent study conducted by Breinlich et al (2016) studies the impact of EU trade agreements on UK consumers. The authors study the direct impact of trade agreements on access to imported products of better quality, lower quality-adjusted prices and greater product variety. Accounting for quality-adjusted price changes, the authors

[58] See Breinlich, Dhingra and Ottaviano (2016); Fan, Li and Yeaple (2015); Mayer, Melitz and Ottiviano (2014); Sheu (2014); Mohler and Seitz (2012); Funke and Ruhwedel (2008); Broda and Weinstein; Feenstra and Kee (2004).
[59] See OECD (2015); IMF (2015); Dechezleprêtre and Glachant (2014); Andrews and Criscuolo (2013); Uy, Kei-Mu and Zhang (2013).

conclude that UK consumers benefited from EU trade agreements in terms of lower prices, higher qualities and greater product variety. The authors do not take into consideration the impact of FTAs on the prices, quality and accessibility of trades services.

The European Union's internal market itself, which is a modern, deeply integrated free trade area, provides a good starting point for an analysis of the impact of harmonisation of laws and greater degrees of mutual recognition in goods and services sectors. As consumer welfare is regularly monitored by the European Commission's DG Justice and Consumers, the performance of markets for consumers offers valuable insights about the merits of enhanced economic integration.

The EU's Consumer Markets Scoreboard, a comprehensive screening tool, provides useful insights into how European product and services markets are functioning from a consumers' perspective (EU Commission 2016d). Although, the European Commission's DG Justice and Consumers still sees scope for improving the functioning of a number of markets, it reports a constant improvement in consumers' assessment of the performance across the 42 goods and services markets surveyed. Summary information for goods and services markets is provided in Table 6.

The results are straightforward: the improvement in consumers' perception of the functioning of markets even accelerated since 2010. The authors of the latest report assign this trend to the EU's recent and on-going product and services markets reforms. In other words, the achievements for consumers can be linked to the EU's legislative achievements through a legal mix of harmonisation and mutual recognition in the Single Market by the means of EU Regulations and Directives – in parallel to the conclusion of FTAs with non-EU countries.

Table 6: Market Performance Indicator (MPI) - EU28, all markets

EU Consumer Markets' Scoreboard: Market Performance Indicator, index points					
	2015	**Diff 2015- 2013**	**Diff 2013- 2012**	**Diff 2012- 2011**	**Diff 2011- 2010**
All markets	79.8	+2.9	+0.4	+0.9	+0.1
Goods markets	82.4	+2.4	0	+1.0*	+1.0*
Services markets	78.5	+3.1	+0.6	+0.8	-0.1

Source: EU Commission DG Justice, Consumer Markets Scoreboard, 2016.

The EU continues to strive for deep and comprehensive trade and investment agreements and, according to the Commission's (2015b) recent "Trade for All" strategy, it continues to regard "reinforced international regulatory cooperation" to facilitate trade and higher, more effective global standards". In general, in its trade agreements the EU focuses on transparency and cooperation to enhance both consumer protection standards

and trade opportunities for member countries. However, in the light of the negotiations of the Transatlantic Trade and Investment Partnership Agreement (TTIP), issues related to regulatory cooperation and investment protection came under forceful criticism by a number of civil society organisations.[60]

With increased growth in food and agricultural products, SPS measures have generally assumed a growing importance and are now included in one form or another in all FTAs. Civil society organisations have recently claimed that EU trade agreements might undermine public health as well as legitimate consumer protection and environmental standards. Trade policy is based on that traded food and feed is safe and meet the necessary SPS and health standards. Trade policy must also ensure that regulatory cooperation on SPS, bilaterally or within international fora, will not undermine necessary SPS measures in the future. Trade in food and agricultural products accounts for an important share of EU trade with Australia and New Zealand. Typical concerns of consumer protection (and environmental protection) organisations are "regulatory chill" and a "race to the bottom" of consumer safety, health and environmental standards. However, the FTA partners' trade policy commitments emphasize not to lower these standards, effectively preventing a race to the bottom.

The FTA partners' approaches concerning regulatory cooperation on technical barriers to trade (TBT) measures have also been a focal point of critics from consumer organisations. For several industrial sectors, civil society organisations recently claimed that EU trade policy might undermine legitimate consumer protection and environmental standards. Trade in industrial products with various technical characteristics constitutes a significant part of EU trade with Australia and New Zealand, particularly EU exports to Australia and New Zealand.

A recent study commissioned by the European Parliament (2015), which offers an in-depth ex ante analysis of the potential arrangements for regulatory cooperation in TTIP, comes to different though credible conclusions. According to the authors of the study, "regulatory cooperation offers the opportunity of enhancing regulatory standards and that it is by no means axiomatic that regulatory cooperation will lead to lower standards". The authors lay out several direct and indirect opportunities for EU and non-EU consumers:

- reduced costs and more competitive markets
- shaping of international trade rules and standards
- increases in consumer welfare in terms of increased variety of goods and services for consumers, improved consumer protection
- exchange of information and mutual learning from improved regulatory cooperation
- more transparency on the use of both the precautionary principle and science-based risk assessment due to strengthened regulatory cooperation

[60] See, e.g., the consumer organisation BEUC's publications on TTIP and consumer protection, available at http://www.beuc.eu/general/tradettip, accessed on 14 October 2016.

In addition, the European Commission (2015b) points out clearly in its 2015 trade policy strategy communication "Trade for All – Towards a more responsible trade and investment policy" that it will "address regulatory issues as a priority in negotiations and steer greater cooperation in international regulatory fora, while maintaining high European standards" and "help to rise global standards".

As the EU, Australia and New Zealand are members of the WTO, regulatory cooperation in past FTAs builds on a number of existing international agreements, such as the WTO Agreements on Technical Barriers to Trade (TBT) and on Sanitary and Phytosanitary (SPS) measures, which have a proven track record of more than 20 years.

Table 7 summarises major provisions set out in those agreements that are relevant for the EU (EU-Korea FTA and EU-Canada FTA) and Australia and New Zealand (TPP). It turns out that these FTAs put in place several arrangements for regulatory cooperation that aim to improve regulatory outcomes of standards setting procedures in the TBT and SPS chapters, namely by the means of exchange of information (enhanced transparency in standard development and law making), notification obligations and the recognition and development of international standards. In addition, for investment protection, the EU's CETA agreement explicitly assures sovereign governments' "right to regulate within their territories to achieve legitimate policy objectives, such as the protection of public health, safety, the environment or public morals, social or consumer protection or the pro-motion and protection of cultural diversity".

Table 7: Major provisions concerning regulatory cooperation in past FTAs

FTA	Provision
EU-Korea FTA	Chapter 4 on Technical Barriers to Trade (TBT) and joint regulatory cooperation • Strengthening of cooperation in the field of standards, technical regulations and conformity assessment procedures with a view to increasing the mutual understanding of their respective systems • Encourages use of existing international standards as basis for technical regulations • Encourages cooperation between public and private standards and conformity assessment bodies • Marking and labelling requirements that are relevant for consumers explicitly allowed (but should be least trade-restrictive) Chapter 5 on Sanitary and Phytosanitary Measures • Reaffirmation of obligations under the existing SPS agreement and then adding detail provisions on how the SPS agreement should be applied • Encourages transparency as regards sanitary and phytosanitary measures applicable to trade • Encourages mutual understanding of each Party's sanitary and phytosanitary measures and their application • Enhanced cooperation in the development of international

FTA	Provision
	standards, guidelines and recommendations
EU-Canada FTA	Chapter 4 on Technical Barriers to Trade (TBT) • Broadly in line with that in the EU-Korea agreement • Strengthening of cooperation in the areas of technical regulations, standards, metrology, conformity assessment procedures, market surveillance or monitoring and enforcement activities • Each Party shall ensure that transparency procedures regarding the development of technical regulations and conformity assessment procedures allow interested persons of the Parties to participate at an early appropriate stage • Introduction of (voluntary) Code of Good Practice for Standards Making Bodies. Chapter 5 on Sanitary and Phytosanitary Measures • Similar approach as in EU–Korea FTA • Reaffirmation of obligations under the existing SPS agreement and then adding detail provisions on how the SPS agreement should be applied Chapter 24 on Trade and Environment • Recognition of the right of each Party to set its environmental priorities, to establish its levels of environmental protection SECTION D, Investment protection, Article 8.9, Investment and regulatory measures – reaffirmation of consumer rights • Reaffirmation of parties' right to regulate within their territories to achieve legitimate policy objectives, such as the protection of public health, safety, the environment or public morals, social or consumer protection or the promotion and protection of cultural diversity
Transpacific Partnership Agreement	Chapter 7 on Sanitary and Phytosanitary Measures (SPS) • Reaffirmation of obligations under the existing SPS agreement and then adding detail provisions on how the SPS agreement should be applied • Encourages cooperation (through a forum) to improve the Parties' understanding of sanitary and phytosanitary issues • Encourages exchange of information and opinions concerning risk and risk-related factors between risk assessors, risk managers, consumers and other interested parties Chapter 8 on Technical Barriers to Trade (TBT) • Encourages elimination of unnecessary technical barriers to trade, enhancing transparency, and promoting greater

FTA	Provision
	regulatory cooperation and good regulatory practice • Encourages recognition of the important role that international standards, guides and recommendations can play in supporting greater regulatory alignment, good regulatory practice and reducing unnecessary barriers to trade

Source: Texts of EU-KOR FTA, CETA, TPP

It can be concluded that none of the FTAs presented by Table 7 and the current FTA policies of the EU, Australia, and New Zealand contain provisions that put consumers at any risk whatsoever compared to the status quo of existing national regulations and current obligations arising from international treaties. On the contrary, mutual cooperation in regulatory matters can be regarded as an opportunity for both businesses and consumers to gain from more transparency and higher and less trade restrictive standards.

5.2.3. EU Consumer Checklist of the Better Regulation Toolbox

The EU, Australia and New Zealand are committed to negotiate and agree on high standards for consumers. Based on above considerations and the European Commission's CGE modelling results, the following conclusions can be drawn for the issues raised on the Consumer Checklist of the EU's Better Regulation Toolbox.

Table 8: Consumer Checklist, Better Regulation Toolbox

Would the option impact consumer's ability to benefit from the internal market?

Although both Australia and New Zealand account for low imports (by value of total EU imports, see chapters providing trade statistics) to the EU only, EU consumers are likely to benefit from a greater variety, better quality and lower prices for goods and services available in the EU's internal market. Based on past FTAs and commitments, there is no reason to assume that consumer protection standards will decrease as the result of an FTA with Australia or New Zealand.

Would the option affect the prices, quality, availability or choice of consumer goods and services?

Both Australia and New Zealand show similar levels of consumer protection as the EU. Although both Australia and New Zealand account for low imports to the EU only, EU as well as AUS and NZ consumers are very likely to benefit from a greater variety, better quality and lower prices (see also CGE modelling results) for goods and services available in the internal market. FTAs with Australia and New Zealand will not put pressure on consumer prices; nor can product quality be expected to deteriorate.

Would the option affect consumer information, knowledge, trust or protection?

Enhanced regulatory cooperation can be regarded as an opportunity for consumers to benefit from higher standards, not least as the result of greater transparency in standard setting and standard enforcement procedures.

Would the option impact the safety or sustainability of consumer goods and services?

Safety and sustainability will not be negatively affected by an EU FTA with Australia and/or New Zealand. For example, mutual recognition agreements of conformity assessment procedures or, more often, test results of accredited conformity assessment bodies are conditioned on the principle of equivalency in the level of protection.

Would the option impact vulnerable consumers?

Vulnerable consumers will not be worse off compared to the status quo. Harmonisation or mutual recognition of different regulations is conditioned on the principle of equivalency in the level of protection.

Source: Tool 28, Better Regulation Toolbox.[61]

5.2.4. Potential merits of enhanced stakeholder participation

EU FTAs with Australia and New Zealand may potentially contribute to the management of consumer protection issues from a government, consumer and stakeholder standpoint in the EU, Australia and New Zealand. For example, the Information-Sharing Agreement on Consumer Policy and Protection between the Australian Government and the European Commission, which was signed in 2002, currently excludes issues concerning food product safety.[62] The content of this arrangement concerns mainly the administrative cooperation and exchange of information as to the pursuit of more effective consumer protection law and policy and to avoid inconsistencies or conflicts between laws, standards and guidelines. It includes suggestions for education programs for consumer and traders as well exchange programs on staff development.

An FTA between the EU and Australia may lead to stronger consumer protection levels and at the same time creating new trade opportunities by allowing businesses to trade at lower cost and greater levels of legal certainty. The same could be envisaged for New Zealand.

F EU FTAs with Australia and New Zealand could also promote stakeholder participation including consumer protection organisations. The EU's FTA with Canada (CETA) already encourages the parties to invite heterogeneous interest groups to consultations on regulatory affairs. In CETA, for instance, a "Regulatory Cooperation Forum" is foreseen for frequent consultation on regulatory affairs that are of mutual interest.

According to Article 21.8 of the CETA agreement, "[i]n order to gain non-governmental perspectives on matters that relate to the implementation of this Chapter, each Party or the Parties may consult, as appropriate, with stakeholders and interested parties, including representatives from academia, think-tanks, non-governmental organisations, businesses, consumer and other organisations." In Article 24.7 of the Chapter on "Trade and Environment", whereby environment should be considered a dimension of consumer protection, the signatories commit to "promote public awareness of its environmental law, as well as enforcement and compliance procedures, by ensuring the availability of information to stakeholders."

[61] European Commission, 2015, Better Regulation 'Toolbox' complementing the Better Regulation Guideline presented in SWD(2015) 111.
[62] European Commission Decision: An administrative arrangement for information sharing on consumer policy and protection between the Government of Australia and the European Commission.

Obligations for transparency and civil society participation in consultations also find expression in other sections of the EU-Canada agreement as well as the EU-Korea FTA and can be regarded as an opportunity for consumer advocates to voice their views to regulators and law makers, and to inform the broader public on what is being discussesed and on specific outcomes of law making processes.

5.2.5. Conclusion

Both the quantitative and qualitative analyses come to the conclusion that consumers largely benefit from proposed EU FTAs with Australia and New Zealand. A great part of the academic literature on the impact of FTAs on consumers outlines positive implications for consumers. The issues addressed by the literature are largely confirmed by the respondents of the public stakeholder consultation of the European Commission, who generally see potential gains for consumers in various dimensions ranging from lower consumer prices to better information available to consumer.

CGE results point to aggregate welfare effects that are positive for all FTA partners under both liberalization scenarios. For the EU, the gain in aggregate welfare amounts to €4.8 billion in the increased liberalization scenario, and is almost twice as high as in the liberalization scenario at €2.6 billion. Depending on the degree of liberalization, aggregate welfare improvements range from €0.9 billion to €1.8 billion for Australia, and €0.4 billion to €0.6 billion for New Zealand.

In addition to pecuniary welfare gains, consumers can expect transparent consumer standard setting as well as up-to-date stakeholder participation procedures.

6. ANALYSIS OF ENVIRONMENTAL IMPACTS (TASK 8)

6.1. Introduction

The environmental analysis builds on both quantitative and qualitative elements. It is based, in part, on the CGE modelling produced by DG Trade. This report uses the data provided by DG Trade and expand on it. In addition, it relies on the construction of relevant statistics and the gathering of complementary qualitative information from a variety of internationally recognized sources such as the OECD, the International Energy Agency (IEA), and the United Nations Environmental Program (UNEP).[63]

The overall analysis lays a focus on the following environmental topics: climate change (GHGs); energy use; land use intensity[64]; resource use and efficiency; waste production; ecosystems and biodiversity; and trade in environmental goods and services. A parallel analysis is conducted for both countries, although some aspects receive different attention depending on their relevance for the country.

The quantitative analysis is mainly based on the construction of statistics using data from different sources including the input-output tables used in the CGE model, the IEA and the OECD. The topics of climate change (GHG emissions), energy use as well as resource use and efficiency is analysed in greater depth in the quantitative analysis section, while the topics of sustainable trade are studied in a more qualitative fashion.

Overall, the findings of our analysis point to a minor impact of both FTAs on the environment. The expected impact on global emissions is negligible as it is mitigated by the fact that the FTAs favours relatively less energy- and emission-intensive sectors leading to a reallocation of production towards cleaner sectors in the both the EU, Australia and New Zealand. Although some of the sectors that are likely to benefit most from the FTAs in Australia and New Zealand are environmentally sensitive, such as agricultural and animal activities and oil and coal production, the long-term impact is predicted to be limited even in the increased liberalization scenario. In the case of Australia the FTA is not likely to induce pressure on energy demand and waste production, nor constitute a concern for air pollution and natural resources such as forestry and fisheries. The only area of limited concern refers to a potential limited pressure on ecosystems and biodiversity exercised by the expected expansion of some agricultural sectors that are characterized by an inefficient use of inputs (e.g. nitrogen and water). As far as New Zealand is concerned, the impact on energy demand and air pollution is expected to be limited, even in the increased liberalization scenario. Areas of moderate concern refers to a potential pressure on ecosystems, biodiversity and forestry exercised by the expected expansion of the vegetable, fruit and animal sectors that are associated with an increase in land use intensity and are characterized by an increasingly inefficient use of inputs such as water, nitrogen, and pesticides. The expected contraction of other agricultural sectors, however, is likely to relax the pressure on the use of resources in agriculture.

[63] Internationally recognized sources are preferred over national sources both in terms of cross-country comparability of the indicators and criteria and because of the lack of direct partner stakeholder involvement in the issues under consideration.
[64] Land use intensity is measures by total land used over output. An increase in land use intensity can result from an expansion of or a shift towards more land intensive sectors.

The structure of the remaining environmental analysis is divided into two parts; the description of a baseline: the first step of the analysis provides a baseline of the different areas of analysis using relevant indicators and a background on the EU-AUS as well as EU-NZ environmental relationship.

The second part consists of the quantitative analysis of the environmental impact of an EU-NZ FTA as well as an EU-AUS FTA in Chapter 5 of the respective Parts, based on the CGE model results and statistics from other sources. This quantitative analysis is complemented, when relevant, by a upporting qualitative analysis.

6.2. Baseline: Background: the EU-Australia and EU-New Zealand environmental relationship

The baseline provides an outline of the current state of play of the above-mentioned environmental topics in the EU, Australia and New Zealand. Concerning climate change, the current emission levels of CO2 and of the most important types of GHG is outlined for both parties. The outline on energy, land and natural resources use relies on the use of historical data.

We also benchmark Australia and New Zealand's current environmental performance against other countries using internationally comparable indicators of environmental quality (such a the Environmental Performance Index) as well as examine trends in specific environmental outcomes over time. The analysis provides an overview of the current environmental regulations in Australia and New Zealand, as well as their obligations in relevant MEAs. This overview is based on the review of the existing regulations and agreements, and of relevant academic literature.

The EU, Australia and New Zealand are interconnected by a complex web of environmental and economic links. This subsection begins with a brief overview of the most significant policy areas entailed by this relationship, focusing on climate action, Multilateral Environmental Agreements (MEAs), environmental goods and clean energy. We then examine the ways in which each of these two parties has built in environmental objectives in its respective trade strategy.

6.2.1. Climate change and mitigation policies

The rising prominence of trade-environment linkages over the past two decades prepared the ground for acknowledging the interconnections between climate change and international trade. First, surging trade flows can indirectly lead to new sources of GHG emissions, whether through transportation or energy, whereas increasing technology transfers and trade in environmental goods and services can contribute to climate mitigation. Second, extreme weather patterns associated with climate change – whether floods in Europe or droughts in Australia or New Zealand – can severely impact trade flows, not least in the agricultural sector. These are only a few examples of the interconnections between trade and climate change. By committing to emission reduction targets as part of the 2015 Paris Agreement, the European Union, Australia and New Zealand demonstrated their common will to build a sustainable future where economic growth and environmental protection can be reconciled.

A key architect of the Kyoto Protocol and the Paris agreement, the European Union has long been a leading actor on climate mitigation. Over the past 40 years, thanks to a broad range of environmental legislation, the EU has built what it considers to be the most comprehensive environmental standards in the world. The combination of multi-level (i.e. local, national and European) environmental policies, technological progress

and economic transformations (declining share of manufacturing activities) has paved the way for a sustained reduction in GHG emissions over the past three decades.[65]

Australia's economic profile – and more specifically its strong dependence on the mining industry – makes its support for climate action far more divisive domestically. Yet, despite its mixed record in the environmental sphere, Australia finally rallied behind the historic Paris agreement by committing to GHG emission reductions and pledging $1 billion to help vulnerable nations cope with the consequences of climate change.[66]

Although the smaller size of the New Zealand economy makes it hard to compare it with the EU's contributions to GHG emissions, New Zealand has long shown great commitment to sustainable policies, as illustrated by its strong reliance on hydroelectric power and clean energies. Its vulnerability to rising sea levels, its unique but fragile native biodiversity and its strong reliance on agricultural exports (agriculture being the single biggest source of CO2 emmissions in New Zealand) mean that New Zealand has a strong interest in climate mitigation.

6.2.2. Trade and multilateral environmental agreements

Whether or not they are related to international trade, most environmental problems are inherently transnational or global and as such require international cooperation. To deal with the challenges of building a sustainable world economy, the European Union, New Zealand and Australia have collaborated through the negotiations, conclusion and ratification of Multilateral Environmental Agreements (MEAs). By providing a transparent and authoritative regulatory framework for environmental protection, MEAs not only ensure that sustainability issues find global solutions, but they in turn help create a predictable environment that is essential to the development of international trade. This explains why references to MEAs have now become common currency in free trade agreements as illustrated by the EU's inclusion of sustainable trade and development chapters in recent FTAs, or the commitments undertaken by Australia and New Zealand in this realm as part of the TPP negotiations.[67]

In its 7th Environment Action Programme to 2020, the EU re-emphasised its support for Multilateral Environmental Agreements and drew a parallel between its environmental objectives and the principles of the United Nations Conference on Sustainable Development ('Rio + 20'). As of January 2016, the EU was a contracting party or a signatory of nearly 50 multilateral environmental agreements[68] negotiated either under the aegis of the United Nations, or at the regional level and subregional levels (e.g. concerning transboundary rivers like the 1999 New Rhine Convention). Table 9 draws the list of the main multilateral environmental agreements that are directly or indirectly affected by international trade flows.

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[65] Trends in emissions in the EU, Australia and New Zealand are analysed in greater depths in the baseline scenario.
[66] This financial pledge drew criticism for reallocating expenses from the foreign aid budget.
[67] Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 'Living well, within the limits of our planet.' Text with EEA relevance. Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013D1386&from=EN (thereafter 7th Environment Action Programme).
[68] The full list of MEAs is available at: http://ec.europa.eu/environment/international_issues/pdf/agreements_en.pdf.

Table 9: Multilateral Environmental Agreements signed by the EU

Treaty	Signature	Status
Basel Convention	18-Dec-89	Ratification
The Cartagena Protocol on Biosafety	24-May-00	Approval
CBD	12-Jun-92	Approval
CITES	9-Apr.-15	Accession
CMS	01-Oct-83	Party
Kyoto Protocol	22-May-98	Approval
Minamata Convention on Mercury	10-Oct-13	Signatory
Montreal Protocol	16-Sep-87	Approval
Nagoya Protocol	11-May-11	Approval
Rotterdam Convention	11-Sep-98	Approval
Stockholm Convention	23-May-01	Approval
UNCCD	14-Oct-94	Ratification
UNFCCC	13-Jun-92	Approval
Vienna Convention	22-Mar-85	Approval

Source: https://www.informea.org/en/countries/NZ/parties

The effects of the FTAs according to CGE model are shown in Chapter 9 of the documents of Australia and New Zealand respectively.

6.2.3. Environmental goods agreement

Beyond Multilateral Environmental Agreements, another prominent realm of cooperation between the EU and Australia and New Zealand on trade and environment issues is the Environmental Goods Agreement (EGA). Launched in July 2014 and chaired by Australia, these trade negotiations between the EU and 16 other WTO trade partners incl NZ (representing between 85% of global trade in environmental goods) aim to remove barriers to trade in a wide range of green goods that directly contribute to environmental protection and climate change mitigation by:

- helping clean the air and water, e.g. carbon dioxide scrubbers;
- helping manage waste, e.g. recycling machinery;
- contributing to energy efficiency, e.g. heat pumps, thermostats;
- controlling air pollution, e.g. measuring equipment;
- generating renewable energy such as solar, wind, or hydroelectric, e.g. wind turbines, solar panels.

This agreement being subject to the Most Favoured Nation (MFN) clause, its benefits can be extended to all WTO members once a consensus is reached among negotiating partners. At the G20 summit in September 2016, leaders welcome the achieved landing zone in EGA negotiations and reasserted their commitment to conclude the negotiations by the end of 2016. Negotiations are still ongoing and parties hope to design a "living agreement" that could over the years expand its list in accordance to the development of new clean technology. The EU is particularly keen on liberalizing environmental services (e.g. maintenance of green goods) and removing non-tariff barriers (e.g. local content requirements or restrictions on investments).[69] The EU, Australia and New Zealand have a vested interest in the liberalization of trade in environmental goods and services, a market expected to expand to around USD3 trillion by 2020. The dramatic increase in the share of renewal energies in each country is a clear sign that there are great prospects to reinforce the EU-Australia-New Zealand environmental relationship through international trade in the next decade. The EGA's SIA foresees that the agreement will have both economic and environmental benefits. Econometric modelling conducted by DG Trade estimates an increase in trade value by up to €21 billion, with SMEs reaping the greatest benefits from the reduction of NTBs. On the environmental side, the SIA also anticipates positive impacts in many spheres, including climate change, green urbanisation, and ocean governance.[70]

6.2.4. The EU's approach to sustainability in trade policymaking

In its 7th Environment Action Program (2013) to 2020, the EU reasserted its determination to become "a low-carbon and resource-efficient economy" and vowed to "take further action to mainstream environmental and climate-related considerations in its trade and development policies."[71]

In the trade policy sphere, the European Union has long shown commitment to environmental protection: first, by deploying a broad range of trade policy tools incorporating sustainability objectives; and second, by showing consideration for trade-environment linkages at different stages of the policy process. Thus, over the past three decades, the EU has integrated environmental objectives in many of its trade policy instruments. At the unilateral (i.e. non-reciprocal) level, EU trade policy has designated sustainable policies – especially with regard to forest management – as one criterion for obtaining GSP status. At the multilateral level, it has been actively involved both in the work of the WTO Committee on Trade and Environment and the recent negotiations of the Environmental Goods Agreement. In bilateral and plurilateral trade negotiations, the EU has developed an approach to incorporate social and environmental objectives within each trade agreement under its trade and sustainable development chapter. Developed within the EU-Korea Free Trade Agreement, this new approach has considerably raised the visibility of social and environmental issues in EU FTAs and has served as a basis for subsequent negotiations (e.g. Colombia-Peru, CETA, Vietnam). In the provisions contained in the EU's trade and sustainable development chapter, the parties:

[69] DG Trade, "The Environmental Goods Agreement (EGA): Liberalising trade in environmental goods and services," July 2016. Available at: http://trade.ec.europa.eu/doclib/press/index.cfm?id=1116.
[70] Development Solutions, "Trade Sustainability Impact Assessment on the Environmental Goods Agreement," conducted for DG Trade, March 2016, available at: http://trade.ec.europa.eu/doclib/docs/2016/june/tradoc_154619.pdf.
[71] 7th Environment Action Programme, cited above.

- reaffirm their "right to regulate" to protect the environment;
- emphasize their commitment to uphold their environmental laws and effectively implement the multilateral environmental agreements (MEAs) to which they are party;
- stress their support for climate action within the framework of the UN Framework Convention on Climate Change;
- commit to promote long-term conservation and management measures and sustainable exploitation of marine living resources;
- commit to protect natural resources such as forests, wildlife etc.
- agree to share information and experience in a wide range of policy spheres (carbon emissions, deforestation, renewable energy, biodiversity etc.)
- commit to reviewing, monitoring and assessing the impact of the implementation of the FTA through sustainability impact assessments; establish a Specialised committee on Trade and Sustainable Development in charge of reviewing the implementation of the chapter with the help of Domestic Advisory Groups.[72]

If sustainability objectives are embedded in many aspects of EU trade policy, some trade policy tools are also built-in in several environmental measures, whether they be trade restrictions allowed under MEAs (pertaining to biodiversity, ozone layer depletion etc.), Timber Regulation or issues related to Illegal Unreported and Unregulated (IUU) fishing.[73]

Finally, environmental concerns are integrated in many phases of the policy process. In accordance to the "Better Regulation" agenda, all FTAs are subject to impact assessments (IAs) before negotiations are undertaken. Once the EU Commission has obtained a negotiating mandate, sustainable impact assessments (SIAs) are conducted during trade negotiations, providing knowledge on the potential environmental consequences of trade agreements. The negotiation of the above-mentioned chapter on sustainable trade and development ensures that environmental protection is integral part of trade negotiations. In addition, the EU's environmental concerns are not confined to the sustainable trade and development chapter of trade negotiating texts. In its "Trade for All" strategy, the EU expressed its will to incorporate sustainable development considerations "in all relevant areas of FTAs" such as energy, raw materials or public procurement provisions.[74]

[72] The current list draws from the EU-Korea FTA: http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L:2011:127:FULL&from=EN ; and the agreed text of the Vietnam Free Trade Agreement as of January 2016: http://trade.ec.europa.eu/doclib/docs/2016/february/tradoc_154229.pdf.
[73] DG Environment, "Environment and Trade and External Relations," available at: http://ec.europa.eu/environment/integration/trade_en.htm.
[74] DG Trade, "Trade for All. Towards a more responsible trade and investment policy," 2015: http://trade.ec.europa.eu/doclib/docs/2015/october/tradoc_153846.pdf.

7. ANALYSIS OF HUMAN RIGHTS (TASK 12)

7.1. Introduction

The human rights analysis builds on the quantitative and qualitative analysis, conducted for the rest of the tasks in the study, and further qualitative analysis of the human rights impacts on the EU, Australia and New Zealand. Since previous chapters look at overall social and environmental impacts, which may have implications for human rights here we focus on other human rights impacts. In the previous sections, the team covers:

- impact of the two liberalization scenarios on the **right to adequate standard of living** and in particular on reallocation of workers, differences between skilled and unskilled workers in the Analysis of social impacts;
- impact of the two liberalization scenarios on rights of children and prohibition of child labour and protection of young people at work, women, people with disabilities in Chapter 5 here and 4 in Parts 2 and 3 respectively;
- impact of the two liberalization scenarios on right to consumer protection;
- impact on **freedom of expression, association and peaceful assembly, and right to participate in public and political life** of the Commission's proposal of the Investment Court System, as well as comparison to investment provisions in FTAs signed by Australia in the Market Access and Regulatory Obstacles to Investment.

Gender issues are also predominantly tackled in the Social chapter. The analysis uses the indicators listed in the methodology and relies on qualitative information from a variety of internationally recognized sources. Further to the existing Guidelines[75], the sources for this data include:

- Australia-EU Partnership framework[76], placing the promotion of human rights as an area of cooperation, and the joint declaration announcing the conclusion of negotiations on a legally binding Framework Agreement to develop bilateral relationship across all areas of cooperation, including trade and investment;[77]
- Partnership agreement on relations and cooperation between the European Union and its Member States, of the one part, and New Zealand, of the other part, signed on the 5 October 2016 as well as previous joint declarations on relations and cooperation;78

[75] European Commission's Guidelines on conducting analysis of human rights impact in impact assessments for trade-related policy initiatives.
[76] See full text at: http://dfat.gov.au/geo/europe/european-union/Pages/australia-european-union-eu-partnership-framework.aspx.
[77] Delegation of the European Union to Australia, 2016. Towards a closer EU-Australia Partnership: Joint Declaration of the EU's High Representative for Foreign and Security Policy / Vice President of the Commission and the Australian Foreign Minister. Available at: http://eeas.europa.eu/archives/delegations/australia/press_corner/all_news/news/2015/2015_2304_en.htm.
[78] See full text at: https://eeas.europa.eu/sites/eeas/files/eu_new_zealand_partnership_agreement_on_relations_and_cooperation.pdf/.

- UN reports from Treaty-based or Charter-based procedures, including Universal Periodic Review submissions and Reports from the Office of the Commissioner for Human Rights;
- the assessment also relies on important international civil society reports, including by the International Trade Union Confederation (ITUC); the International Federation for Human Rights (FIDH), and Human Rights Watch, and local sources such as the Australia Human Rights Commissions and the New Zealand Human Rights Commission.

In terms of the screening, scoping and detailed assessment, we rely on information from the structure of previous FTAs, signed or being in the process of negotiation by the EU, Australia and New Zealand, the literature review, presented in the inception report and information from the stakeholder consultations conducted in the EU, Australia and New Zealand. The overall analysis looks at a range of specific human rights: right to a fair hearing; right to privacy; freedom of expression, association and peaceful assembly, and right to participate in public and political life; right to an adequate standard of living; right to highest attainable standard of physical and mental health; right to take part in cultural life; right to property; indigenous peoples; migrants, refugees and asylum seekers; right to water. The study also addresses the issues relating to gender, transparency and inclusiveness of the assessment process, as well as the impact of changes in EU's approach to investment.

In the current study we also put a stronger focus on the process of conducting IAs in Australia, New Zealand and the EU. The study explores the impact on the parties' obligations in ensuring that "the conclusion of any trade agreement does not impose obligations inconsistent with their pre-existing international treaty obligations, including those to respect, protect and fulfil human rights" (De Schutter 2011, p.6).

The structure of the analysis is composed of the following parts: baseline in terms of the existing legal framework for Australia (Part 2) and for New Zealand (Part 3) respectively, commitments and human rights records of Australia, New Zealand and the European Union (Section 7.2 of Part 1), and analysis of the indicators provided above with reference to the two scenarios: liberalization and increased liberalization. In each of the part, we conclude by analysing the impact of two scenarios on human rights.

7.2. Baseline: Human Rights in the EU

7.2.1. Existing commitments

The framework guiding the treatment of human rights considerations in the European Union is enshrined in Art 21(1) of the Treaty on European (TEU) and Art 207(1) of the Treaty on the Functioning of the European Union. The commitment to strengthen human rights in the Union's external activities is further integrated in the Charter of Fundamental Rights of the European Union, given binding legal effect equal to that of the Treaties following the entry into force of the Lisbon Treaty. The EU Strategic Framework on Human Rights and Democracy further underlines that the European Union is 'founded on a shared determination to promote peace and stability and to build a world founded on respect for human rights, democracy and the rule of law'. These principles are equally

applicable to the internal and policies of the European Union.[79] Such commitment is extended to the international human rights normative framework, including core UN human rights conventions[80] and other regional human rights conventions. The EU also promotes universal human rights through funding the European Instrument for Democracy and Human Rights. For the period 2014-2020, €1,332,752,000 has been allocated to cover the objectives of the EIDHR.[81] Internally, in 2007 the Council established a European Union Agency for Fundamental Rights. The current Multiannual Framework (2013-2017), contributes to strengthening of fundamental rights in all areas of Union and Member States activies.[82]

EU Member States are parties to several international human rights treaties. They all have ratified the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, the Convention on the Elimination of All Forms of Discrimination against Women, the Convention on the Rights of the Child, and various conventions of the International Labour Organisation, as discussed in the section on social impacts of this study.

7.2.2. Human rights record of the EU

The migration and refugee crisis facing the European Union has led to discussions of human rights protection for those seeking to come to the EU. The EU is also combating continued discrimination and social exclusion of minority groups, such as the Roma.

Below we outline some of the issues highlighted vis-à-vis EU's human rights track record.

Rights of migrants, refugees and asylum seekers

Further to requests by Member States and European institutions, in 2015 the EU Agency for Fundamental Rights (FRA) provided 122 opinions on the protection to fundamental rights within the EU. The majority of the findings relate to the asylum/migrant crisis and focused on four themes[83]: "unaccompanied children; safety and protection at reception facilities; impact on local communities; and violence and hate speech against migrants. Each of these continues to require priority action by the Member States".[84] Specific issues have further been identified in Bulgaria, Greece, Hungary and Spain, relating to

[79] Council of the European Union (2012). *EU Strategic Framework and Action Plan on Human Rights and Democracy.* Available at: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/EN/foraff/131181.pdf.
[80] International Convention on the Elimination of All Forms of Racial Discrimination (ICERD); International Covenant on Economic, Social, and Cultural Rights (ICESCR); International Covenant on Civil and Political Rights (ICCPR); Convention on the Elimination of All Forms of Discrimination against Women (CEDAW); Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT); Convention on the Rights of the Child (CRC); International Convention on the Rights of Persons with Disabilities (ICRPD); and International Convention for the Protection of All Persons from Enforced Disappearance (ICPED).
[81] EuropeAid, What is EIDHR? See: http://www.eidhr.eu/whatis-eidhr. See also: Instrument for Democracy and Human Rights Worldwide Multiannual Indicative Programme (2014-2017): http://eeas.europa.eu/human_rights/docs/eidhr-mip-2014-2017_en.pdf.
[82] COM (2016) 442 final.
[83] FRA, 2016. Annual activity report 2015. Available at: http://fra.europa.eu/sites/default/files/fra_uploads/fra-2016-annual-activity-report-2015_en.pdf.
[84] FRA, 2016. Key migration issues: one year on from initial reporting, page 2. Available at: http://fra.europa.eu/sites/default/files/fra_uploads/fra-october-2016-monthly-migration-focus-key-issues_en.pdf.

the increase in refugees being pushed back to the external EU border.[85] Further problems have included poor conditions of the first aid and reception centres as well as overcrowding.[86]

Sexual and gender based violence poses a risk due to overcrowded centres, shared sleeping facilities and poor lighting and sanitary facilities. In this respect, report published by UNHCR, the United Nations Population Fund (UNFPA) and the Women's Refugee Commission (WRC) on a an assessment mission in Greece and Former Yugoslav Republic of Macedonia in 2015 summarized that "female refugees and migrants face grave protection risks.

Rights of vulnerable groups especially child rights

According to the 2016 FRA report on fundamental rights in the EU, there is still a high proportion of children at risk of social exclusion or poverty. In 2010, 27.5% were reported at risk, while in 2014 – 27.8%. Furthermore the study outlined that children are at higher risk of social exclusion or poverty than adults (23,7%).[87] An additional vulnerability identified is that children are now more likely to encounter hate messages (20% in 2014 compared to 13% in 2010) and cyberbullying (12% in 2014 compared to 7% in 2010).[88]

Freedom of expression, association and peaceful assembly, and right to participate in public and political life

A survey on discrimination and hate crime conducted by the EU Fundamental Rights Agency identified rising antisemitism in Europe. In this respect, 73% of those asked had the impression that antisemitism had increased in the past 5 years.[89] The increase in online hate speech has led to the EU Commission's Annual Colloquium on Fundamental Rights focusing on "Tolerance and respect: preventing and combating Anti-Semitic and anti-Muslim hatred in Europe" in October 2015.[90] The report outlined that discrimination against Roma is found through "structural barriers" which contradict the core values of equality of the European Union and which prevent further progress in Roma integration. The stakeholders agreed that promoting equal rights and opportunities for Roma was key to moving forward.[91]

These issues are widely recognised by the EU institutions and Member States form part of the current developments in addressing human rights of the most vulnerable, including migrants, refugees and asylum seekers.

[85] FRA, 2016. Fundamental Rights Report 2016, page 19. Available at: http://fra.europa.eu/sites/default/files/fra_uploads/fra-2016-fundamental-rights-report-2016-2_en.pdf.
[86] FRA, 2016. Fundamental Rights Report 2016. Available at: http://fra.europa.eu/sites/default/files/fra_uploads/fra-2016-fundamental-rights-report-2016-2_en.pdf.
[87] Ibid at page 137.
[88] Ibid at page 143
[89] European Commission, 2016. 2015 report on the application of the EU Charter of Fundamental Rights, page 61. http://ec.europa.eu/justice/fundamental-rights/files/2015_charter_report_full_version_en.pdf.
[90] Ibid at page 90.
[91] Ibid at page 93.

8. IMPACT ON REST OF THE WORLD, LDCS (TASK 9)

Changes in trade flows and resulting production structures because of these FTAs can be seen in other economies of the world. The EU-AUS and EU-NZ FTAs could create a negative trade diversion for the Rest of the World (RoW). In terms of percent change, the effect on exports for third countries (for instance, the US, Japan, LDCs, China, RoW) are negative but small as a result of trade diversion effects because of these two FTAs. Except for the welfare measure that is shown in millions of Euros, all numbers shown here are in per cent changes.

Table 10 shows the macro results for all countries and regions in this analysis pertaining to the increased liberalization scenario of increased tariff liberalization, for the FTAs between EU and Australia and well as between EU and New Zealand. GDP results estimated for the LDCs, not party to these two FTAs, suggest a negligible effect on their GDP, as shown in Table 10. The GDP of LDCs is expected to decline marginally by 0.001% in the increased liberalization scenario.

In contrast, the estimated change in GDP in the long run is strongest for other Pacific Island countries (PACER Plus) which could experience a decline in their GDP by 0.18% in the long term probably as a result of some trade diversion effects. In the increased liberalization scenario, a negative pressure is expected on the total exports from Pacific countries with their exports declining by 0.21%. Results also suggest a modest decline in the output in most of the sectors, which mainly include rice, sugar, dairy, and textiles, among others. Since the EU will certainly not replace PACER countries rice or textile exports (to give a couple of example), these results have to be interpreted with some caution.

The dismantling of trade barriers within the EU-Aus FTA and the EU-NZ FTA respectively leads to an increase in imports in both planned FTAs. The EU, AUS and NZ expand their mutual trade, while the trade in the rest of the world falls due to the lack of price reduction in imports in RoW, as shown in Table 18. This is because of the trade diversion away from these countries in RoW, in favor of the three countries that reduce their tariffs (EU, AUS and NZ). Import expansion in some countries would eventually lead to export expansion in others, since it opens new market opportunities for countries at large. Therefore, lack of import market expansion in rest of the world may restrict the extent of global trade market expansion, which happens solely because of increased import demand by EU, AUS and NZ.

Such an increase in import demand in these three regions may lead to rise in exports in different parts of the world – potentially in two broad sets of regions:

a. The two FTAs i.e., EU, Australia and New Zealand

b. The Rest of the World and LDCs

If exports in RoW increas, there is no case for trade diversion. If we observe a considerable increase in exports from RoW, it may indicate that, while the reduction in import demand by RoW happens, it is still able to increase its exports to these three regions that increase their imports overall. This may be the case if enerprises from third countries are deeply integrated into the same value chains as enterpriseses from one or both planned FTAs.

In terms of welfare, RoW may experience a negligable negative impact. In total, the welfare losses faced by the rest of the world are around €1 billion, while the welfare gains in the EU, AU and NZ total to €7.2 billion. Therefore, there is a net gain in global

welfare, but at the cost of a considerable absolute – but not relative – welfare loss faced by the rest of the world, mainly on account of trade diversion.

Trade diversion stemming from the FTAs in consideration here, has the potential of causing losses in exports and GDP to the third party countries, i.e., the rest of the world, to the extent to which they economically depend on EU, Australia and/or New Zealand. This analysis if some of the key individual countries other than the EU, Australia and New Zealand, is the focus of this remaining part of this section.

In relative terms, PACER Plus is the region that gets most negatively affected because of these FTAs. Its reduction in imports by 0.43%, is much higher than the increase in EU imports (0.11%); its reduction in exports is 0.21%, which is again higher than the EU's increase in exports (0.07%), while its reduction in GDP is 0.18%, higher than both the EU and Australian gains in GDP. This is because EU, AUS and NZL together comprise about 28% of PACER Plus's imports and 43% of PACER Plus's exports. Therefore, PACER Plus is quite dependent on these three countries/regions for trade. If they plan to implement a mutual trade agreements between themselves, trade diversion arising out of it adversely affects thePACER Plus region.

This is because of their Economic Partnership Agreements with the EU, which have given them privileged access to the EU markets, now under threat of competition from Australia and New Zealand. The relationship between LDCs and the two envisaged FTAs is asymmetric. Whereas the EU, AUS and NZ are important trading partners for many developing countries, LDCs are only responsible for 1.6% of all imports by the EU. At the same time, Australia and New Zealand together make up less than 0.4% of the EU imports. So while the gains within an EU-AUS FTA and an EU-NZ FTA respectivley may be visible but small, the losses for LDCs are felt but small. Against these effects, one has to consider likely second-round effects because of higher dynamism in the EU and the two countries.

Table 10: Macro results for RoW (Increased liberalization scenario)

Country/Region	% change in GDP	% change in Exports	Welfare (bn €)	% changes in imports
EU	0.02	0.07	4.8	0.11
Australia	0.20	0.72	1.8	0.91
New_Zealand	0.52	0.38	0.6	2.47
ASEAN	-0.017	-0.01	-0.4	-0.07
PACER Plus	-0.181	-0.21	-0.7	-0.43
LDC	-0.001	0.001	-0.01	-0.01
ROW	-0.009	-0.01	-0.2	-0.03

Source: GTAP analysis conducted by the European Commission

In terms of different sectors, we find a small reduction in overall output in almost all sectors in all regions in the rest of the world with the exceptions of the following, wherein the output actually increase in the long term: few agricultural and food processing sectors in countries with FTAs with EU, LDCs, ASEAN countries, PACER Plus.

Table 11 shows that prices increase in all sectors except gas, minerals and metal products in LDCs – these are the sectors in which LDCs' major sources of imports include EU, Australia and New Zealand; together, they constitute about 4.2%, 8.6% and 9.3% of all imports by LDCs in gas, minerals and metal product sectors respectively. For example, in metal products, this share (9.3%) is higher than that of LDCs' own import shares (8.7%), i.e., the imports within the LDCs as a share of LDCs' total imports of metal products. Further these industries are also quite intensive on imported intermediate inputs. As a result of these relatively high shares in both final products and intermediate inputs imported from EU, Australia and New Zealand, the price reduction in those countries as a result of these FTAs have a visible reducing effect of prices in LDCs, in these sectors. Other sectors face higher prices, because of trade diversion away from LDCs to EU, Australia and New Zealand as import markets, making it more expensive to import and/or produce these commodities in the LDCs.

As a result of these changes in prices, exports from LDCs largely become less competitive abroad in many sectors; however, some of the manufacturing sectors that use considerable amount of gas, minerals and metal products, which are becoming cheaper in these countries, do see an increase in exports. Imports decrease in many sectors, since as discussed in the previous paragraph, they get diverted away from LDCs and towards countries that are reducing tariffs, namely EU, Australia and New Zealand. Output has mixed results in different sectors; it falls in most sectors that have increasing prices and decreasing exports and rises in other sectors where proces fall and exports rise. Overall, we see that LDCs benefit in terms of some manufacturing and services sectors, while they predominantly lose in agricultural sectors, in terms of both exports and output.

Table 11: Sectoral results for LDCs in percentage terms (Increased liberalization scenario)

No	Sector	Prices	Exports	Imports	Output
1	rice	0.003	-0.044	0.02	-0.004
2	cereals	0.005	-0.038	-0.025	0.002
3	veg_fruit	0	-0.046	-0.01	-0.007
4	oil_seeds	0.002	-0.02	0.004	-0.011
5	sugar	0.005	-0.135	0.004	-0.032
6	fiber_crop	0.003	-0.01	-0.004	0.002
7	bovine_meat	0.005	-0.054	-0.006	-0.004
8	other_meat	0.007	0.001	-0.017	0.001
9	dairy	0.013	0.23	-0.179	0.037
10	wood_paper	0.009	0.008	-0.006	0.002
11	fishing	0.016	-0.078	0.038	0
12	coal	0.009	-0.107	0.012	-0.04
13	oil	0.001	-0.007	0	-0.006

14	gas	-0.01	-0.126	-0.031	-0.053
15	minerals	-0.037	-0.014	-0.002	-0.002
16	other_food	0.01	-0.019	-0.009	0
17	bev_tob	0.012	-0.024	-0.013	-0.002
18	textile	0.006	0.018	0.025	0.009
19	chemicals	0.006	0.037	0.001	0.014
20	oil_pcts	0.001	0.009	-0.001	0.003
21	metal_pcts	-0.001	0.007	-0.007	0.005
22	no_metal_pct	0.003	-0.016	-0.004	-0.005
23	motor_equip	0.007	0.027	0.001	0.009
24	machinery	0.006	-0.073	-0.004	-0.034
25	ele_other	0.005	-0.064	0.003	-0.018
26	electricity	0.004	0.032	-0.023	0.007
27	utility	0.006	0.053	-0.035	-0.002
28	transport	0.007	-0.036	-0.018	-0.007
29	communicatio	0.01	0.047	-0.028	0.016
30	financial	0.01	0.026	-0.028	0.004
31	other_serv	0.01	-0.005	-0.018	-0.002

In sum, our analysis indicates that there is a potential for trade diversion away from the rest of the world as well as LDCs, due to reduction in exports and output in several of their sectors. PACER Plus is among the regions with greatest losses in relative terms, while USA and China are the countries with biggest absolute losses. The degree of negative impact arising from trade diversion on individual countries and regions depends on the extent to which they are integrated with and/or are dependent on the EU, Australia and/or New Zealand in terms of exports and imports.

LDCs are quite dependent on the EU, Australia and New Zealand, for both their exports and imports in different sectors. Therefore, the trade diversion effects are non-negligible, but the countries do see a fall in prices in a couple of key extraction and manufacturing sectors, which in turn, raise some other sectors' exports and output, thereby increasing their overall exports marginally. Agricultural sectors seem to lose in LDCs, in terms of exports and output, owing to increased prices resulting from the trade diversion effects.

However, since no model can accurately not measure dynamic effects, the trade diversion effect may well be reduced or even reversed when the expected positive effects of the potential EU-AUS FTA and EU-NZ FTA respectively materialize. Demand from both free trade zones for goods and services of the rest of the world may well increase again. These effects can only be guessed but must not be ignored.

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ANNEX 1: SME CHAPTER

Table 12*:* EU definition of types of SMEs

Type	Employees	Turnover	Balance Sheet Total
Micro SME	< 10	< 2 million Euros	< 2 million Euros
Small SME	< 50	< 10 million Euros	< 10 million Euros
Medium-sized SME	< 250	< 50 million Euros	< 43 million Euros

Source: EU Commission, annual report on SMEs, 2015.92

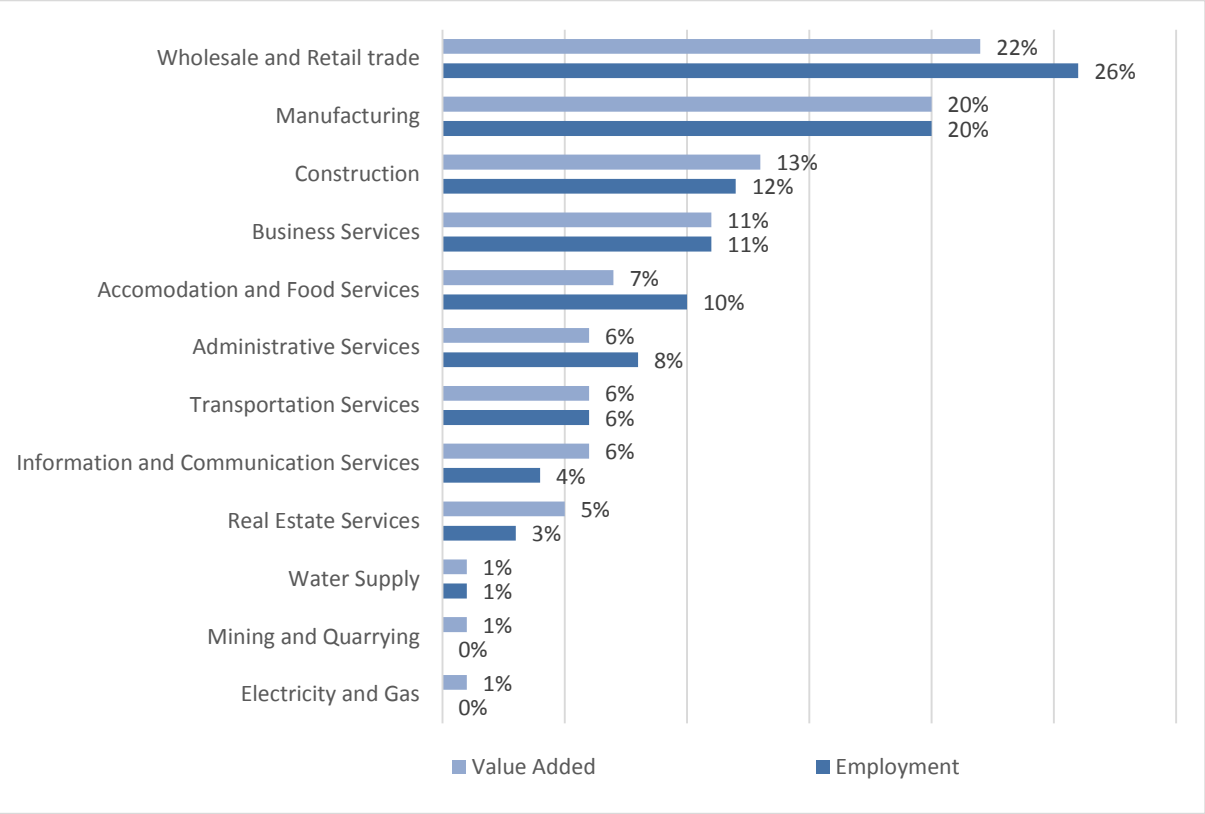
Table 13*:* SMEs and large enterprises in the EU: number of enterprises, employment, and value added in the EU28 in 2014

	Micro	.Small	.Medium	SMEs	.Large	Total
Enterprises (Number)	20,710,324	1,373,365	224,811	22,308,500	43,766	22,352,260
in percent	92.7%	6.1%	1.0%	99.8%	0.2%	100%
Persons Employed (Number)	39,274,088	27,452,716	23,257,412	89,984,216	44,438,724	134,422,944
in percent	29.2%	20.4%	17.3%	66.9%	33.1%	100%
Value Added (in billion Euro)	1,358	1,169	1,188	3,715	2,710	6,425
in percent	21.1%	18.2%	18.5%	57.8%	42.2%	100%

Source: EU Commission, annual report on SMEs, 2015.[93]

[92] European Commission SBA Report (2015), Annual Report on European SMEs 2014/2015 – SMEs hiring again, SME Performance Review, Final Report, November 2015.
[93] European Commission SBA Report (2015), Annual Report on European SMEs 2014/2015 – SMEs hiring again, SME Performance Review, Final Report, November 2015.

Figure 4: Major industries for SMEs in the EU



Source: EU Commission, annual report on SMEs, 2015.[94] Measured in terms of total SME value added and total SME employment.

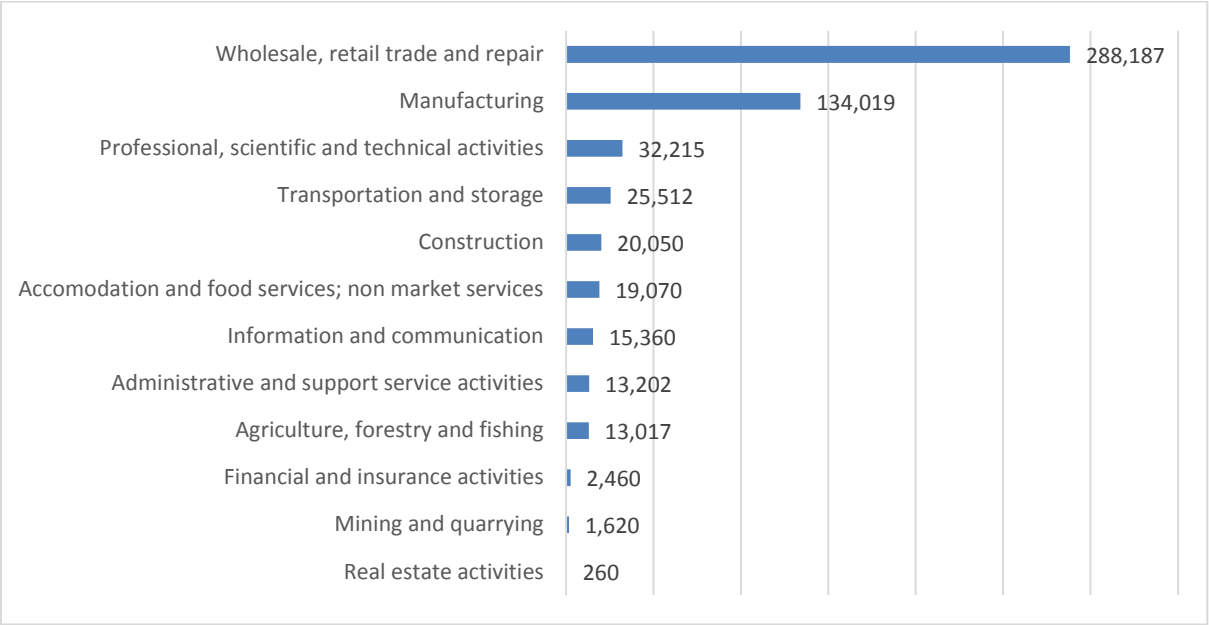
[94] European Commission SBA Report (2015), Annual Report on European SMEs 2014/2015 – SMEs hiring again, SME Performance Review, Final Report, November 2015.

Figure 5: Sector-specific export intensity levels

Source: EU Commission, annual report on SMEs, 2015.[95] *The following sector identifiers apply: 1 = Very low (exports over total sales between 0 and 5%), 2= Low (exports over total sales between 5 and 10%), 3 = Medium (exports over total sales between 10 and 20%), 4 = High (exports over total sales between 20 and 40%), 5= Very high (exports over total sales above 40%).*

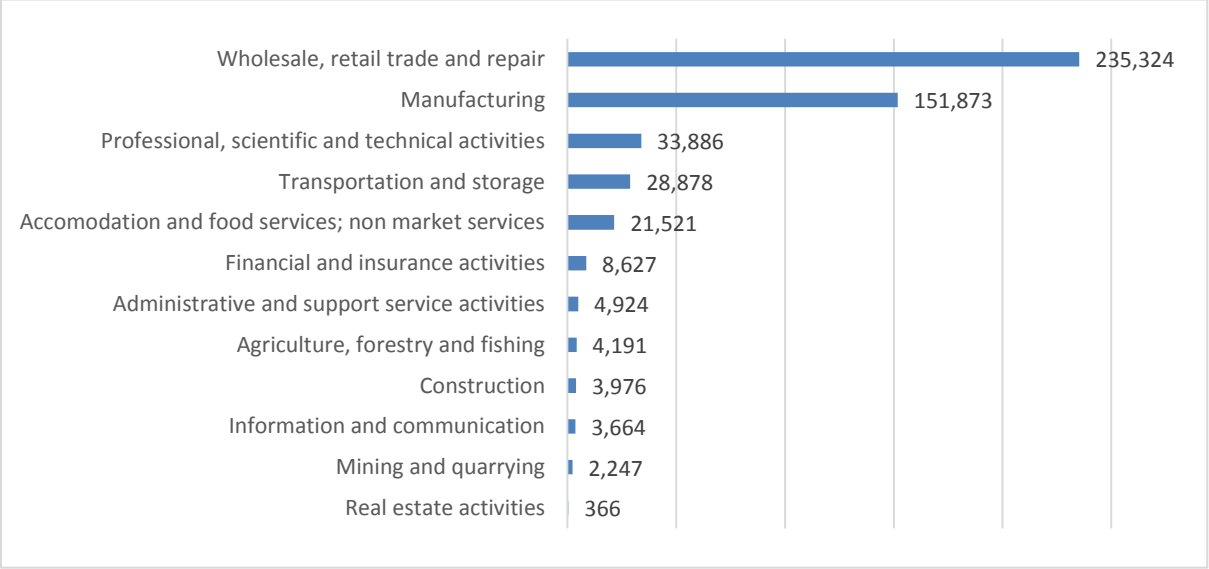
[95] European Commission SBA Report (2015), Annual Report on European SMEs 2014/2015 – SMEs hiring again, SME Performance Review, Final Report, November 2015.

Figure 6: Number of SME enterprises exporting beyond the EU's borders, by sector



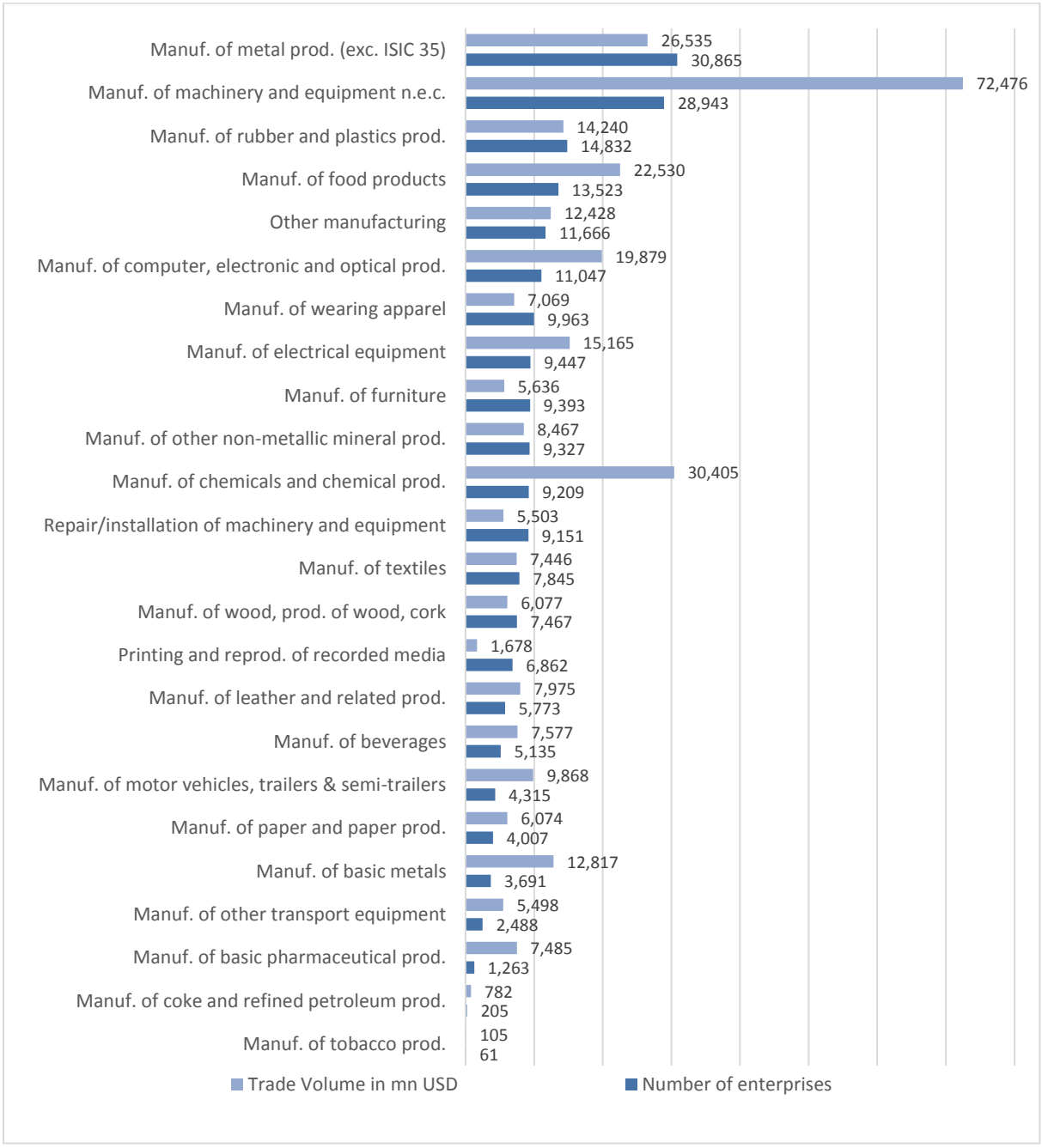
Source: Eurostat/OECD Trade in Enterprise Characteristics Database, 2013.

Figure 7: Total EU extra export trade volume of SME enterprises, by sector



Source: Eurostat/OECD Trade in Enterprise Characteristics Database, 2013.

Figure 8: Number of SME enterprises engaged in extra-EU exports in manufacturing sectors



Source: Eurostat/OECD Trade in Enterprise Characteristics Database, 2013.

Table 14: Number of SME enterprises engaged in extra-EU exports in manufacturing sectors

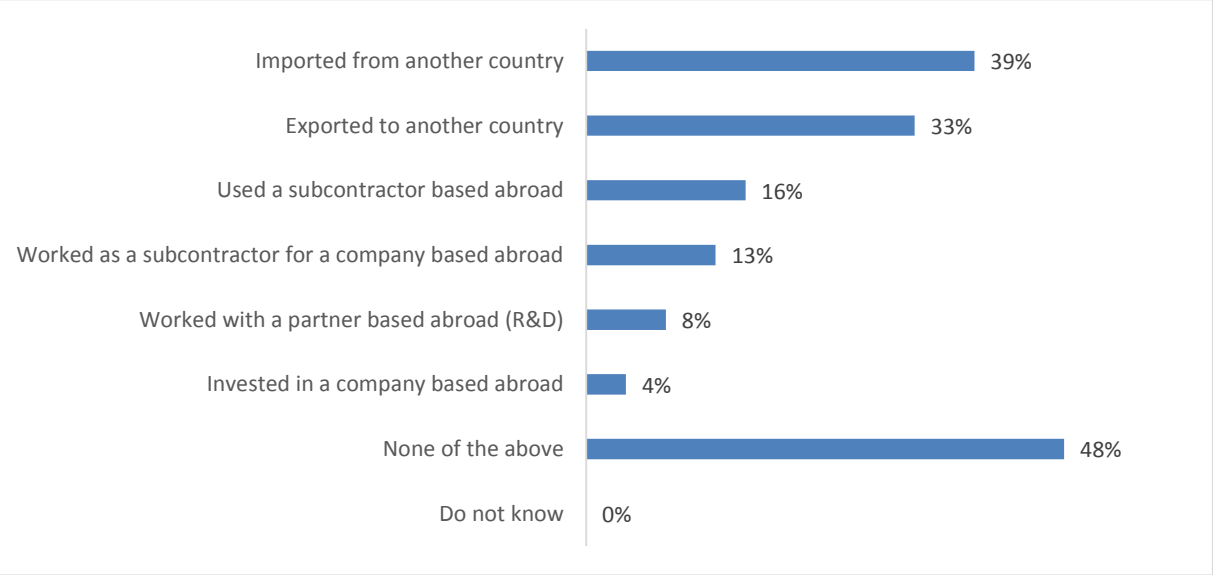
Total Extra-EU Exports			
	Total SMEs < 249 Employees	SMEs as percent of total	SMEs as percent of total of large enterprises

	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD
ISIC sector (revision 4)						
Manuf. of food products	13,523	22,530	89%	43%	81%	81%
Manuf. of beverages	5,135	7,577	93%	39%	71%	71%
Manuf. of tobacco prod.	61	105	39%	5%	7%	7%
Manuf. of textiles	7,845	7,446	95%	61%	162%	162%
Manuf. of wearing apparel	9,963	7,069	95%	54%	121%	121%
Manuf. of leather and related prod.	5,773	7,975	96%	54%	158%	158%
Manuf. of wood, prod. of wood, cork	7,467	6,077	94%	67%	152%	152%
Manuf. of paper and paper prod.	4,007	6,074	89%	35%	37%	37%
Printing and reprod. of recorded media	6,862	1,678	96%	57%	127%	127%
Manuf. of coke and refined petroleum prod.	205	782	70%	1%	1%	1%
Manuf. of chemicals and chemical prod.	9,209	30,405	92%	28%	38%	38%
Manuf. of basic pharmaceutical prod.	1,263	7,485	72%	10%	11%	11%
Manuf. of rubber and plastics prod.	14,832	14,240	93%	46%	84%	84%
Manuf. of other non-metallic mineral prod.	9,327	8,467	92%	43%	77%	77%
Manuf. of basic metals	3,691	12,817	85%	20%	25%	25%
Manuf. of metal prod. (exc. ISIC 35)	30,865	26,535	96%	56%	130%	130%
Manuf. of computer, electronic and optical prod.	11,047	19,879	93%	27%	35%	35%
Manuf. of electrical equipment	9,447	15,165	91%	23%	29%	29%

Total Extra-EU Exports						
	Total SMEs < 249 Employees		SMEs as percent of total		SMEs as percent of total of large enterprises	
	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD
Manuf. of machinery and equipment n.e.c.	28,943	72,476	93%	36%	54%	54%
Manuf. of motor vehicles, trailers & semi-trailers	4,315	9,868	79%	4%	4%	4%
Manuf. of other transport equipment	2,488	5,498	88%	7%	7%	7%
Manuf. of furniture	9,393	5,636	96%	57%	135%	135%
Other manufacturing	11,666	12,428	95%	50%	104%	104%
Repair/installation of machinery and equipment	9,151	5,503	95%	28%	52%	52%

Source: Eurostat/OECD Trade in Enterprise Characteristics Database, 2013.

Figure 9 : EU SMEs engagement in international commercial activities inside the EU



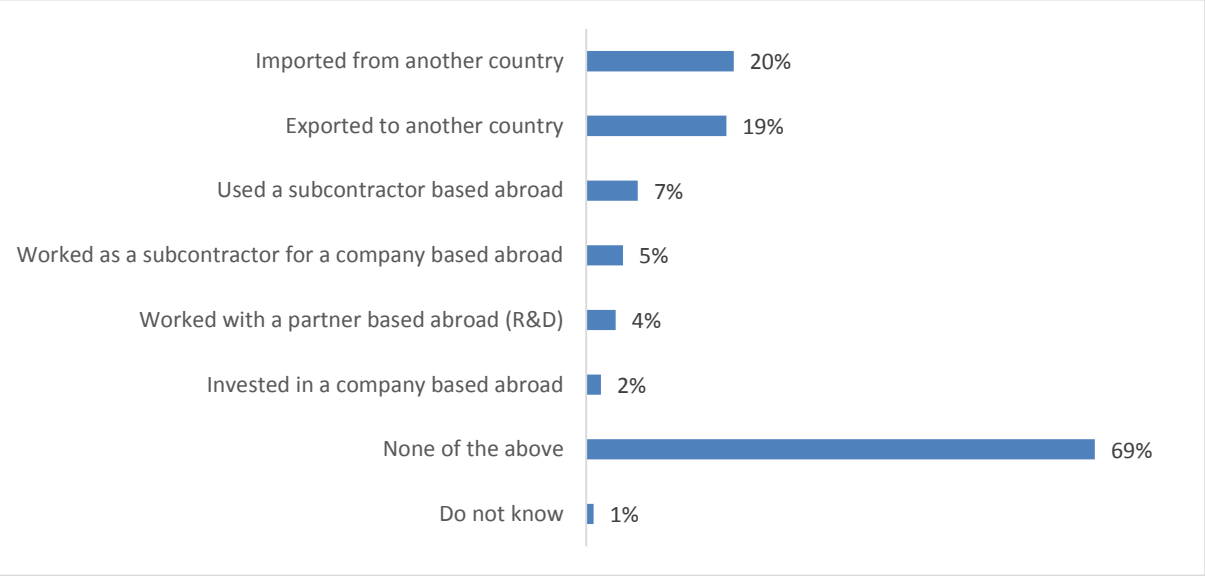
Source: Eurobarometer 2015. Question: In the last three years, has your company done any of the following inside the EU? (multiple answers possible).

Table 15*:* Characteristics of EU SMEs' commercial activities outside the EU28

	Exported to another country	Imported from another country	Uses a sub-contractor based abroad	Worked for a sub-contractor company based abroad	Worked with a partner based abroad in R&D	Invested in a company based abroad
EU28 Total	20%	19%	7%	5%	4%	2%
Firm Size						
1-9 employees	19%	18%	7%	5%	3%	2%
10-49 employees	30%	28%	9%	6%	6%	4%
50-249 employees	45%	40%	18%	16%	9%	8%
NACE Sectors						
Manufacturing	36%	30%	9%	10%	5%	3%
Retail	26%	28%	7%	4%	3%	2%
Services	15%	12%	9%	7%	5%	2%
Type of Market						
Goods to consumer	16%	18%	4%	3%	2%	1%
Goods to companies	33%	31%	9%	7%	5%	3%
Services to consumer	9%	10%	4%	2%	2%	1%
Services to companies	20%	17%	9%	7%	5%	2%

Source: Eurobarometer 2015. Question: In the last three years, has your company done any of the following inside the EU? (multiple answers possible).

Figure 10: EU SMEs engagement in international commercial activities outside the EU



Source: Eurobarometer 2015. Question: In the last three years, has your company done any of the following outside the EU? (multiple answers possible).

Figure 11: Major export barriers for SMEs

Source: Eurobarometer 2015.

Table 16: Number of Enterprises and Trade Volumes in Extra-EU Exports by Enterprise Size

Number of Enterprises and Trade Volumes by Enterprise Size										
	Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports	
	All Enterprises		0-9 Employees		10-49 Employees		50-49 Employees		250+ Employees	
	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD
ISIC sector (revision 4)										
Total economy	834,210	2,194,055	389,103	150,058	195,068	186,122	72,100	347,949	23,861	1,247,470
Industry (exc. construction)	239,574	1,351,014	87,331	29,988	92,946	84,301	42,782	219,656	12,789	1,027,847
Mining and quarrying	1,769	11,102	696	292	639	1,011	285	944	120	9,260
Manufacturing	219,618	1,166,542	52,176	3,549	52,836	53,630	29,007	94,694	7,589	551,318
Manuf. of food products	15,181	52,851	4,126	929	5,799	5,688	3,598	15,913	1,413	27,666
Manuf. of beverages	5,518	19,551	2,792	610	1,785	2,273	558	4,694	199	10,624
Manuf. of tobacco prod.	158	2,045	14	2	22	27	25	76	33	1,472
Manuf. of textiles	8,238	12,234	3,312	567	3,256	2,425	1,277	4,454	228	4,610
Manuf. of wearing apparel	10,501	13,165	5,293	776	3,656	2,694	1,014	3,599	204	5,835
Manuf. of leather and related prod.	5,987	14,811	2,539	701	2,550	3,009	684	4,266	101	5,053
Manuf. of wood, prod. of wood, cork	7,984	9,074	3,507	514	2,923	1,764	1,037	3,800	259	3,989
Manuf. of paper and paper prod.	4,481	17,523	937	184	1,787	938	1,283	4,952	435	16,283
Printing and reprod. of recorded media	7,120	2,964	2,894	184	2,938	478	1,030	1,016	149	1,326
Manuf. of coke and refined petroleum prod.	293	63,323	69	46	78	115	58	621	60	53,675
Manuf. of chemicals and chemical prod.	10,063	109,147	3,104	1,619	3,834	6,438	2,271	22,348	721	79,073
Manuf. of basic pharmaceutical prod.	1,755	78,616	274	1,172	428	623	561	5,690	375	70,020
Manuf. of rubber and plastics prod.	15,882	30,902	4,034	578	7,050	3,107	3,748	10,555	825	17,010
Manuf. of other non-metallic mineral prod.	10,128	19,745	4,246	532	3,504	2,275	1,577	5,661	595	10,967
Manuf. of basic metals	4,357	64,901	772	2,314	1,585	3,422	1,334	7,081	605	51,168
Manuf. of metal prod. (exc. ISIC 35)	32,210	46,979	10,275	1,674	14,678	7,525	5,912	17,336	1,036	20,462
Manuf. of computer, electronic and optical prod.	11,859	74,311	4,746	1,238	4,347	5,290	1,954	13,351	577	56,692
Manuf. of electrical equipment	10,393	66,004	3,185	661	4,080	3,611	2,182	10,893	781	52,193
Manuf. of machinery and equipment n.e.c.	31,010	199,375	9,943	3,055	13,042	17,581	5,958	51,839	1,538	134,957

Number of Enterprises and Trade Volumes by Enterprise Size										
	Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports	
	All Enterprises		0-9 Employees		10-49 Employees		50-49 Employees		250+ Employees	
	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD
Manuf. of motor vehicles, trailers & semi-trailers	5,457	241,472	1,193	4,364	1,667	1,150	1,455	4,353	1,028	231,723
Manuf. of other transport equipment	2,826	84,026	1,021	394	911	1,228	556	3,875	311	78,958
Manuf. of furniture	9,803	9,840	3,969	431	3,920	2,092	1,504	3,113	316	4,174
Other manufacturing	12,320	24,944	7,008	1,160	3,546	4,067	1,112	7,201	267	11,926
Repair/installation of machinery and equipment	9,662	19,432	5,123	694	3,076	1,851	952	2,958	278	10,484
Electricity, gas, steam and air conditioning	185	1,690	49	143	19	5	10	40	27	1,400
Electricity, gas, steam and air conditioning	185	1,690	49	143	19	5	10	40	27	1,400
Water supply; sewerage, waste/remediation	3,203	6,827	1,406	601	1,093	1,255	381	2,002	119	2,773
Wholesale, retail trade and repair	307,996	390,212	204,610	94,898	67,504	76,757	16,073	63,669	4,257	109,551
W/sale, retail trade and repair of motor vehicles	45,933	29,486	28,142	12,374	9,020	4,226	2,679	3,788	550	5,859
W/sale trade (exc. ISIC 53)	202,297	331,021	132,504	76,295	49,019	67,119	11,205	56,000	2,175	90,236
Retail trade (exc. ISIC 53)	59,930	29,728	43,948	6,860	8,663	5,412	1,956	3,732	1,334	13,005
Other Sectors										
Agriculture, forestry and fishing	13,528	5,658	10,516	1,007	2,070	1,847	431	1,337	88	1,203
Construction	21,262	7,360	12,742	1,079	5,596	1,293	1,712	1,604	696	3,285
Transportation and storage	27,532	42,591	15,750	4,444	7,217	5,419	2,545	19,015	1,016	12,557
Information and communication	16,692	6,753	8,563	997	4,744	1,424	2,053	1,243	962	2,447
Financial and insurance activities	3,063	79,821	1,680	1,660	478	3,000	302	3,967	368	70,406
Real estate activities	2,879	3,893	214	146	36	72	10	148	2	0
Professional, scientific and technical activities	35,230	53,496	21,814	10,254	7,627	9,286	2,774	14,347	1,179	14,855
Administrative and support service activities	14,518	12,306	9,031	2,113	3,072	1,566	1,099	1,244	442	1,966
Unspecified	245,549	409,115	0	0	0	0	0	0	0	0

Number of Enterprises and Trade Volumes by Enterprise Size										
	Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports	
	All Enterprises		0-9 Employees		10-49 Employees		50-49 Employees		250+ Employees	
	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD
Accommodation and food services; non market services	24,859	33,446	13,870	1,433	3,401	920	1,799	19,169	1,928	2,804

Source: Eurostat/OECD Trade in Enterprise Characteristics Database, 2013.

Table 17*:* Percentage Shares of Number of Enterprises and Total Trade Volumes by Enterprise Size Category, as of total number of enterprises/total trade volumes

Percentage Shares of Number of Enterprises and Total Trade Volumes								
	Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports	
	0-9 Employees		10-49 Employees		50-49 Employees		250+ Employees	
	Enterprises	Trade Volume	Enterprises	Trade Volume	Enterprises	Trade Volume	Enterprises	Trade Volume
ISIC sector (revision 4)								
Total economy	47%	7%	23%	8%	9%	16%	3%	57%
Industry (exc. construction)	36%	2%	39%	6%	18%	16%	5%	76%
Mining and quarrying	39%	3%	36%	9%	16%	9%	7%	83%
Manufacturing	24%	0%	24%	5%	13%	8%	3%	47%
Manuf. of food products	27%	2%	38%	11%	24%	30%	9%	52%
Manuf. of beverages	51%	3%	32%	12%	10%	24%	4%	54%
Manuf. of tobacco prod.	9%	0%	14%	1%	16%	4%	21%	72%
Manuf. of textiles	40%	5%	40%	20%	16%	36%	3%	38%
Manuf. of wearing apparel	50%	6%	35%	20%	10%	27%	2%	44%
Manuf. of leather and related prod.	42%	5%	43%	20%	11%	29%	2%	34%
Manuf. of wood, prod. of wood, cork	44%	6%	37%	19%	13%	42%	3%	44%
Manuf. of paper and paper prod.	21%	1%	40%	5%	29%	28%	10%	93%

Percentage Shares of Number of Enterprises and Total Trade Volumes								
	Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports	
	0-9 Employees		10-49 Employees		50-49 Employees		250+ Employees	
	Enterprises	Trade Volume	Enterprises	Trade Volume	Enterprises	Trade Volume	Enterprises	Trade Volume
Printing and reprod. of recorded media	41%	6%	41%	16%	14%	34%	2%	45%
Manuf. of coke and refined petroleum prod.	24%	0%	27%	0%	20%	1%	20%	85%
Manuf. of chemicals and chemical prod.	31%	1%	38%	6%	23%	20%	7%	72%
Manuf. of basic pharmaceutical prod.	16%	1%	24%	1%	32%	7%	21%	89%
Manuf. of rubber and plastics prod.	25%	2%	44%	10%	24%	34%	5%	55%
Manuf. of other non-metallic mineral prod.	42%	3%	35%	12%	16%	29%	6%	56%
Manuf. of basic metals	18%	4%	36%	5%	31%	11%	14%	79%
Manuf. of metal prod. (exc. ISIC 35)	32%	4%	46%	16%	18%	37%	3%	44%
Manuf. of computer, electronic and optical prod.	40%	2%	37%	7%	16%	18%	5%	76%
Manuf. of electrical equipment	31%	1%	39%	5%	21%	17%	8%	79%
Manuf. of machinery and equipment n.e.c.	32%	2%	42%	9%	19%	26%	5%	68%
Manuf. of motor vehicles, trailers & semi-trailers	22%	2%	31%	0%	27%	2%	19%	96%
Manuf. of other transport equipment	36%	0%	32%	1%	20%	5%	11%	94%
Manuf. of furniture	40%	4%	40%	21%	15%	32%	3%	42%
Other manufacturing	57%	5%	29%	16%	9%	29%	2%	48%
Repair/installation of machinery and equipment	53%	4%	32%	10%	10%	15%	3%	54%
Electricity, gas, steam and air	26%	8%	10%	0%	5%	2%	15%	83%

Percentage Shares of Number of Enterprises and Total Trade Volumes								
	Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports	
	0-9 Employees		10-49 Employees		50-49 Employees		250+ Employees	
	Enterprises	Trade Volume	Enterprises	Trade Volume	Enterprises	Trade Volume	Enterprises	Trade Volume
conditioning								
Electricity, gas, steam and air conditioning	26%	8%	10%	0%	5%	2%	15%	83%
Water supply; sewerage, waste/remediation	44%	9%	34%	18%	12%	29%	4%	41%
Wholesale, retail trade and repair	66%	24%	22%	20%	5%	16%	1%	28%
W/sale, retail trade and repair of motor vehicles	61%	42%	20%	14%	6%	13%	1%	20%
W/sale trade (exc. ISIC 53)	65%	23%	24%	20%	6%	17%	1%	27%
Retail trade (exc. ISIC 53)	73%	23%	14%	18%	3%	13%	2%	44%
Other Sectors								
Agriculture, forestry and fishing	78%	18%	15%	33%	3%	24%	1%	21%
Construction	60%	15%	26%	18%	8%	22%	3%	45%
Transportation and storage	57%	10%	26%	13%	9%	45%	4%	29%
Information and communication	51%	15%	28%	21%	12%	18%	6%	36%
Financial and insurance activities	55%	2%	16%	4%	10%	5%	12%	88%
Real estate activities	7%	4%	1%	2%	0%	4%	0%	0%
Professional, scientific and technical activities	62%	19%	22%	17%	8%	27%	3%	28%
Administrative and support service activities	62%	17%	21%	13%	8%	10%	3%	16%
Unspecified	0%	0%	0%	0%	0%	0%	0%	0%
Accommodation and food services; non market services	56%	4%	14%	3%	7%	57%	8%	8%

Source: Eurostat/OECD Trade in Enterprise Characteristics Database, 2013.

Table 18*:* Percentage Shares of Number of Enterprises and Total Trade Volumes by Enterprise Size Category, as of number of total number of enterprises/ total trade volumes per category

Number of Enterprises and Trade Volumes as percentage Shares of Total by Enterprise Size										
	Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports		Total Extra-EU Exports	
	All Enterprises		0-9 Employees		10-49 Employees		50-49 Employees		250+ Employees	
	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD	Enterprises	Trade Volume in mn USD
ISIC sector (revision 4)										
Total economy (number, volume)	834,210	2,194,055	389,103	150,058	195,068	186,122	72,100	347,949	23,861	1,247,470
Industry (exc. construction)	28.72%	161.95%	10.47%	3.59%	11.14%	10.11%	5.13%	26.33%	1.53%	123.21%
Mining and quarrying	0.21%	1.33%	0.08%	0.04%	0.08%	0.12%	0.03%	0.11%	0.01%	1.11%
Manufacturing	26.33%	139.84%	6.25%	0.43%	6.33%	6.43%	3.48%	11.35%	0.91%	66.09%
Manuf. of food products	1.82%	6.34%	0.49%	0.11%	0.70%	0.68%	0.43%	1.91%	0.17%	3.32%
Manuf. of beverages	0.66%	2.34%	0.33%	0.07%	0.21%	0.27%	0.07%	0.56%	0.02%	1.27%
Manuf. of tobacco prod.	0.02%	0.25%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.18%
Manuf. of textiles	0.99%	1.47%	0.40%	0.07%	0.39%	0.29%	0.15%	0.53%	0.03%	0.55%
Manuf. of wearing apparel	1.26%	1.58%	0.63%	0.09%	0.44%	0.32%	0.12%	0.43%	0.02%	0.70%
Manuf. of leather and related prod.	0.72%	1.78%	0.30%	0.08%	0.31%	0.36%	0.08%	0.51%	0.01%	0.61%
Manuf. of wood, prod. of wood, cork	0.96%	1.09%	0.42%	0.06%	0.35%	0.21%	0.12%	0.46%	0.03%	0.48%
Manuf. of paper and paper prod.	0.54%	2.10%	0.11%	0.02%	0.21%	0.11%	0.15%	0.59%	0.05%	1.95%
Printing and reprod. of recorded media	0.85%	0.36%	0.35%	0.02%	0.35%	0.06%	0.12%	0.12%	0.02%	0.16%
Manuf. of coke and refined petroleum prod.	0.04%	7.59%	0.01%	0.01%	0.01%	0.01%	0.01%	0.07%	0.01%	6.43%
Manuf. of chemicals and chemical prod.	1.21%	13.08%	0.37%	0.19%	0.46%	0.77%	0.27%	2.68%	0.09%	9.48%
Manuf. of basic pharmaceutical prod.	0.21%	9.42%	0.03%	0.14%	0.05%	0.07%	0.07%	0.68%	0.04%	8.39%

Manuf. of rubber and plastics prod.	1.90%	3.70%	0.48%	0.07%	0.85%	0.37%	0.45%	1.27%	0.10%	2.04%
Manuf. of other non-metallic mineral prod.	1.21%	2.37%	0.51%	0.06%	0.42%	0.27%	0.19%	0.68%	0.07%	1.31%
Manuf. of basic metals	0.52%	7.78%	0.09%	0.28%	0.19%	0.41%	0.16%	0.85%	0.07%	6.13%
Manuf. of metal prod. (exc. ISIC 35)	3.86%	5.63%	1.23%	0.20%	1.76%	0.90%	0.71%	2.08%	0.12%	2.45%
Manuf. of computer, electronic and optical prod.	1.42%	8.91%	0.57%	0.15%	0.52%	0.63%	0.23%	1.60%	0.07%	6.80%
Manuf. of electrical equipment	1.25%	7.91%	0.38%	0.08%	0.49%	0.43%	0.26%	1.31%	0.09%	6.26%
Manuf. of machinery and equipment n.e.c.	3.72%	23.90%	1.19%	0.37%	1.56%	2.11%	0.71%	6.21%	0.18%	16.18%
Manuf. of motor vehicles, trailers & semi-trailers	0.65%	28.95%	0.14%	0.52%	0.20%	0.14%	0.17%	0.52%	0.12%	27.78%
Manuf. of other transport equipment	0.34%	10.07%	0.12%	0.05%	0.11%	0.15%	0.07%	0.46%	0.04%	9.46%
Manuf. of furniture	1.18%	1.18%	0.48%	0.05%	0.47%	0.25%	0.18%	0.37%	0.04%	0.50%
Other manufacturing	1.48%	2.99%	0.84%	0.14%	0.43%	0.49%	0.13%	0.86%	0.03%	1.43%
Repair/installation of machinery and equipment	1.16%	2.33%	0.61%	0.08%	0.37%	0.22%	0.11%	0.35%	0.03%	1.26%
Electricity, gas, steam and air conditioning	0.02%	0.20%	0.01%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.17%
Electricity, gas, steam and air conditioning	0.02%	0.20%	0.01%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.17%
Water supply; sewerage, waste/remediation	0.38%	0.82%	0.17%	0.07%	0.13%	0.15%	0.05%	0.24%	0.01%	0.33%
Wholesale, retail trade and repair	36.92%	46.78%	24.53%	11.38%	8.09%	9.20%	1.93%	7.63%	0.51%	13.13%
W/sale, retail trade and repair of motor vehicles	5.51%	3.53%	3.37%	1.48%	1.08%	0.51%	0.32%	0.45%	0.07%	0.70%
W/sale trade (exc. ISIC 53)	24.25%	39.68%	15.88%	9.15%	5.88%	8.05%	1.34%	6.71%	0.26%	10.82%
Retail trade (exc. ISIC 53)	7.18%	3.56%	5.27%	0.82%	1.04%	0.65%	0.23%	0.45%	0.16%	1.56%
Other Sectors	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Agriculture, forestry and fishing	1.62%	0.68%	1.26%	0.12%	0.25%	0.22%	0.05%	0.16%	0.01%	0.14%
Construction	2.55%	0.88%	1.53%	0.13%	0.67%	0.15%	0.21%	0.19%	0.08%	0.39%
Transportation and storage	3.30%	5.11%	1.89%	0.53%	0.87%	0.65%	0.31%	2.28%	0.12%	1.51%
Information and communication	2.00%	0.81%	1.03%	0.12%	0.57%	0.17%	0.25%	0.15%	0.12%	0.29%
Financial and insurance activities	0.37%	9.57%	0.20%	0.20%	0.06%	0.36%	0.04%	0.48%	0.04%	8.44%
Real estate activities	0.35%	0.47%	0.03%	0.02%	0.00%	0.01%	0.00%	0.02%	0.00%	0.00%
Professional, scientific and technical activities	4.22%	6.41%	2.61%	1.23%	0.91%	1.11%	0.33%	1.72%	0.14%	1.78%
Administrative and support service activities	1.74%	1.48%	1.08%	0.25%	0.37%	0.19%	0.13%	0.15%	0.05%	0.24%
Unspecified	29.43%	49.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Accommodation and food services; non market services	2.98%	4.01%	1.66%	0.17%	0.41%	0.11%	0.22%	2.30%	0.23%	0.34%

Source: Eurostat/OECD Trade in Enterprise Characteristics Database, 2013.

ANNEX 2: OVERVIEW OF EU-AUSTRALIA AND EU-NEW ZEALAND TOP 15 TRADED GOODS PRODUCTS, 2015

Table 19 EU-Australia imports, top 15 products, 2015 (by HS 4, million Euros)[96]

Most traded products	Value
2701 -- Coal; briquettes, ovoids and similar solid fuels manufactured from coal.	1866
1205 -- Rape or colza seeds, whether or not broken.	541
2204 -- Wine of fresh grapes, including fortified wines; grape must other than that of heading 20.09.	529
2608 -- Zinc ores and concentrates.	448
7801 -- Unwrought lead.	406
2603 -- Copper ores and concentrates.	337
7108 -- Gold (including gold plated with platinum) unwrought or in semi-manufactured forms, or in powder form.	305
7102 -- Diamonds, whether or not worked, but not mounted or set.	266
9019 -- Mechano-therapy appliances; massage apparatus; psychological aptitude-testing apparatus; ozone therapy, oxygen therapy, aerosol therapy, artificial respiration or other therapeutic respiration apparatus.	258
9021 -- Orthopaedic appliances, including crutches, surgical belts and trusses; splints and other fracture appliances; artificial parts of the body; hearing aids and other appliances which are worn or carried, or implanted in the body, to compensate for a defect.	248
0802 -- Other nuts, fresh or dried, whether or not shelled or peeled.	241
5101 -- Wool, not carded or combed.	214
0201 -- Meat of bovine animals, fresh or chilled.	187
2614 -- Titanium ores and concentrates.	182
3004 -- Medicaments (excluding goods of heading 30.02, 30.05 or 30.06)	179

[96] UN Comtrade; Data retrieved in USD. Average historical exchange rate calculated for 2015 using www.oanda.com, available at: https://www.oanda.com/lang/de/currency/average. HS4 has been selected as the aggregation to allow for an analysis on the specific level of broader product groups that are larger than individual HS6 codes.

consisting of mixed or unmixed products for therapeutic or prophylactic uses, put up in measured doses (including those in the form of transdermal administration systems).	

Table 20 Australia-EU imports, top 15 products, 2015 (by HS 4, million Euros) [97]

Most traded products	Value
8703 -- Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 87.02), including station wagons and racing cars.	4291
3004 -- Medicaments (excluding goods of heading 30.02, 30.05 or 30.06) consisting of mixed or unmixed products for therapeutic or prophylactic uses, put up in measured doses (including those in the form of transdermal administration systems).	2994
3002 -- Human blood; animal blood prepared for therapeutic, prophylactic or diagnostic uses; antisera and other blood fractions and modified immunological products, whether or not obtained by means of biotechnological processes; vaccines, toxins, etc.	800
9018 -- Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments.	482
9021 -- Orthopaedic appliances, including crutches, surgical belts and trusses; splints and other fracture appliances; artificial parts of the body; hearing aids and other appliances which are worn or carried, or implanted in the body, to compensate for a defect.	397
8708 -- Parts and accessories of the motor vehicles of headings 87.01 to 87.05.	392
8704 -- Motor vehicles for the transport of goods.	381
8481 -- Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves.	379
8479 -- Machines and mechanical appliances having individual functions,	359

[97] UN Comtrade; Data retrieved in USD. Average historical exchange rate calculated for 2015 using www.oanda.com, available at: https://www.oanda.com/lang/de/currency/average. HS4 has been selected as the aggregation to allow for an analysis on the specific level of broader product groups that are larger than individual HS6 codes.

not specified or included elsewhere in this Chapter.	
2208 -- Undenatured ethyl alcohol of an alcoholic strength by volume of less than 80 % vol; spirits, liqueurs and other spirituous beverages.	291
2937 -- Hormones, prostaglandins, thromboxanes and leukotrienes, natural or reproduced by synthesis; derivatives and structural analogues thereof, including chain modified polypeptides, used primarily as hormones.	289
8411 -- Turbo-jets, turbo-propellers and other gas turbines.	271
8517 -- Electrical apparatus for line telephony or line telegraphy, including line telephone sets with cordless handsets and telecommunication apparatus for carrier-current line systems or for digital line systems; videophones.	263
8431 -- Parts suitable for use solely or principally with the machinery of headings 84.25 to 84.30.	261
8422 -- Dish washing machines; machinery for cleaning or drying bottles or other containers; machinery for filling, closing, sealing or labelling bottles, cans, boxes, bags or other containers; machinery for capsuling bottles, jars, tubes and similar containers.	258

Table 21 EU-New Zealand imports, top 15 products, 2015 (by HS 4, million Euros)[98]

Most traded products	Value
0204 -- Meat of sheep or goats, fresh, chilled or frozen.	969
2204 -- Wine of fresh grapes, including fortified wines; grape must other than that of heading 20.09.	379
0810 -- Other fruit, fresh.	296
0808 -- Apples, pears and quinces, fresh.	170
3501 -- Casein, caseinates and other casein derivatives; casein glues.	163
5101 -- Wool, not carded or combed.	133

[98] UN Comtrade; Data retrieved in USD. Average historical exchange rate calculated for 2015 using www.oanda.com, available at: https://www.oanda.com/lang/de/currency/average. HS4 has been selected as the aggregation to allow for an analysis on the specific level of broader product groups that are larger than individual HS6 codes.

4104 -- Tanned or crust hides and skins of bovine (including buffalo) or equine animals, without hair on, whether or not split, but not further prepared.	104
0405 -- Butter and other fats and oils derived from milk; dairy spreads.	91
0208 -- Other meat and edible meat offal, fresh, chilled or frozen.	81
9019 -- Mechano-therapy appliances; massage apparatus; psychological aptitude-testing apparatus; ozone therapy, oxygen therapy, aerosol therapy, artificial respiration or other therapeutic respiration apparatus.	79
7601 -- Unwrought aluminium.	65
1209 -- Seeds, fruit and spores, of a kind used for sowing.	51
0304 -- Fish fillets and other fish meat (whether or not minced), fresh, chilled or frozen.	49
0409 -- Natural honey.	46
0202 -- Meat of bovine animals, frozen.	44

Table 22 New Zealand-EU imports, top 15 products, 2015 (by HS 4, million Euros) [99]

Most traded products	Value
8703 -- Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 87.02), including station wagons and racing cars.	769
8802 -- Other aircraft (for example, helicopters, aeroplanes); spacecraft (including satellites) and suborbital and spacecraft launch vehicles.	365
3004 -- Medicaments (excluding goods of heading 30.02, 30.05 or 30.06) consisting of mixed or unmixed products for therapeutic or prophylactic uses, put up in measured doses (including those in the form of transdermal administration systems).	248
8701 -- Tractors (other than tractors of heading 87.09).	105

[99] UN Comtrade; Data retrieved in USD. Average historical exchange rate calculated for 2015 using www.oanda.com, available at: https://www.oanda.com/lang/de/currency/average. HS4 has been selected as the aggregation to allow for an analysis on the specific level of broader product groups that are larger than individual HS6 codes.

8704 -- Motor vehicles for the transport of goods.	98
8411 -- Turbo-jets, turbo-propellers and other gas turbines.	97
3002 -- Human blood; animal blood prepared for therapeutic, prophylactic or diagnostic uses; antisera and other blood fractions and modified immunological products, whether or not obtained by means of biotechnological processes; vaccines, toxins, etc.	93
8603 -- Self-propelled railway or tramway coaches, vans and trucks, other than those of heading 86.04.	82
0203 -- Meat of swine, fresh, chilled or frozen.	70
9018 -- Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments.	69
8708 -- Parts and accessories of the motor vehicles of headings 87.01 to 87.05.	68
8422 -- Dish washing machines; machinery for cleaning or drying bottles or other containers; machinery for filling, closing, sealing or labelling bottles, cans, boxes, bags or other containers; machinery for capsuling bottles, jars, tubes and similar containers;	60
8803 -- Parts of goods of heading 88.01 or 88.02.	55
8433 -- Harvesting or threshing machinery, including straw or fodder balers; grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce, other than machinery of heading 84.37.	54
8716 -- Trailers and semi-trailers; other vehicles, not mechanically propelled; parts thereof.	54

ANNEX 3: MAPPING OF TASKS

Tasks	Location
Comprehensive description and short analysis of EU-AUS and EU-NZ trade in goods and services, investment and public procurement flows and legal/policy framework: Evolution of trade in goods and services, investment and public procurement flows since 2004 to most recent data available; Comparison of EU-AUS and EU-NZ flows in goods and services, investment and public procurement with a reference group of countries in light of parallel FTAs.	Part 1, Chapter 2 Part 2-AUS, Chapter 1 Part 3-NZ, Chapter 1
Literature review of previous studies looking at the effect of FTAs of AUS and NZ (esp. those based on CGE).	Part 1, Chapter 3 Part 2-AUS, Chapter 2 Part 3-NZ, Chapter 2
Assessment of barriers in **agricultural goods and food** and analysis for particular sectors (e.g. processed food, alcoholic beverages, meat, dairy).	Part 1, Section 4.2 Part 2-AUS, Section 3.2 Part 3-NZ, Section 3.2
Identification of market access and regulatory obstacles to investment and **impact of this initiative on investment flows** as well as the potential impact on existing or future stocks of investment.	Part 1, Section 4.3 Part 2-AUS, Section 3.3 Part 3-NZ, Section 3.3
Identification of market access and regulatory obstacles to the respective **public procurement markets,** at central and sub-central level; quantitative evaluation of economic potential for increased investment and international public procurement between EU and AUS and EU and NZ, respectively; identification of sectors with investment potential.	Part 1, Section 4.4 Part 2-AUS, Section 3.4 Part 3-NZ, Section 3.4
Summary of economic impacts of removing or **reducing barriers to trade in goods and services** for the different scenarios in the CGE modelling results provided by DG Trade.	Part 1, Section 4.1 Part 2-AUS, Section 3.1 Part 3-NZ, Section 3.1
Quantitative and qualitative analysis of **social impacts** of different policy options, particularly employment, household income and gender.	Part 1, Section 5.1 Part 2-AUS, Section 4.1 Part 3-NZ, Section 4.1

Detailed analysis of the types of **environmental costs and benefits** of different scenarios.	Part 1, Chapter 6 Part 2-AUS, Chapter 5 Part 3-NZ, Chapter 5
Analysis of impacts on the **Rest of the World** (especially LDCs);	Part 1, Chapter 8
Impact on EU **SMEs** especially for those sectors where they are predominant.	Part 1, Section 4.5 Part 2-AUS, Section 3.5 Part 3-NZ, Section 3.5
Impact on **consumers** in terms of prices and welfare in EU, AUS, NZ.	Part 1, Csection 5.2 Part 2-AUS, Section 4.2 Part 3-NZ, Section 4.2
Assessment of **human rights** issues for each scenario, particularly gender equality; literature review of existing studies and on AUS and NZ FTAs impact on human rights.	Part 1, Chapter 7 Part 2-AUS, Chapter 6 Part 3-NZ, Chapter 6

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1. DESCRIPTIVE ACCOUNT OF THE EU-AUSTRALIA TRADE AND INVESTMENT FLOWS AND BARRIERS TO TRADE (TASK 1)

1.1. Introduction

This chapter provides a comprehensive overview and analysis of the EU-Australia trade in goods, services and investment flows. It focuses on the evolution of trade and investment flows from 2004 to 2015 at a detailed sectoral level. In addition, it outlines the trade and investment relation between the European Union (EU) and Canada as a reference country. Canada has been selected as reference country as it is comparable with Australia with regard to the analysis of its role as trading partner of the EU.

It also provides a comparison of these trade and investment relations in light of the partners' parallel Free Trade Agreements (FTAs) with third countries. Accordingly, this Chapter will also provide a brief overview of the trade and investment flows of Australia with the USA as a selected reference country. The USA was also selected as a result of its importance as a trading partner and as it is comparable to the other trading partners analysed.

The descriptive analyses of EU-AUS trade and investment patterns are followed by a streamlined summary of major trends in the EU's trade in goods and services relationships and investment flows with Australia. The final Sections of this Chapter provide an overview and analysis of the most important tariff and non-tariff barriers to trade and investment in Australia.

1.2. Overview of EU's Trade in Goods with Australia and Other Selected Partners

In 2015 total trade between the EU and Australia amounted to €41 billion (rank 20 in total EU trade values). The EU's 2015 trade surplus with Australia amounts to €22.1 billion. In 2015, total EU imports from Australia amounted to €9.6 billion. The EU's major sector imports from Australia were commodity driven: coal, minerals, metal and machinery products. EU imports of chemicals products were significant too. Australia's imports from the EU were to the largest extent composed of high-value-added products, i.e. machinery, chemicals and motor equipment sectors, together accounting for almost €25 billion of €31 billion of total EU exports to Australia. The EU's trade in goods surplus with Australia amounted to €22.1 billion in 2015.

1.2.1. Diversification patterns

Figure 1 allows for a first glance at trade diversification patterns. The numbers represent concentration ratios as calculated by the standard Hirschman Index. The Hirschman Index is a widely used measure of trade concentration. It is the index that would result if a country's export receipts were divided evenly among different products. Similar to alternative measures of concentration, the explanatory power of the Hirschman-Index is limited when detailed information is needed to derive sector-specific policy recommendations. However, the measure provides a first indication about the concentration of exports (and imports) on a range of export categories and a trading country's comparative advantages respectively. It can be written as follows:

$$H_1 = \sqrt{\sum_{i=1}^{N} \left[\frac{x_i}{X}\right]^2},$$

where x_i is the export value of a specific commodity i, X the country's total export. A higher H_1 indicates greater concentration of exports/imports on a few commodities.

EU exports to Australia are relatively highly concentrated on three sectors: chemicals (23% of total EU exports), machinery equipment (30%) and motor equipment (20%). The EU's imports from Australia are less concentrated than the EU exports to Australia. EU imports from Australia are somewhat concentrated in coal (19%), minerals (16%), metal products (13%) and machinery equipment (12%).

Australia's coal sector exports still account for a large share of EU imports from Australia, but decreased by more than 60 % since 2011. The volume of Australia's exports of metal products decreased by 38% from 2011 to 2015, while oil seeds exports decreased by 33%, and beverages/tobacco exports by almost 50%, respectively. Australian ruminant meat exports increased slightly by 10%, while vegetables/fruits exports more than doubled over the period 2011 to 2015.

Figure 1: Diversification patterns for EU trade flows with Australia, New Zealand and Canada (Hirschman Index)[1]

1.2.2. Overview of Australia's public procurement markets

The final report also provides a detailed overview of public procurement market of Australia. In 2013, general government procurement accounted for a share of total government expenditures of 33.9% in Australia. This figure is above the OECD countries' unweighted average of 29.1, illustrating the relative potential of Australia's public procurement market for foreign companies. General government procurement accounted for 12.4% of GDP in Australia in 2013, which is below OECD countries unweighted average of 13%.

In addition, note that the value of total procurement contracts reported in Australia has increased from €17,427.7 million during financial year 2006/7 to €41,368 million in financial year 2014/15. Out of this total value of contracts, a value of €5,259.1 million was awarded to overseas entities in financial year 2014/15. Out of the total number of contracts reported, 7.9% were awarded to overseas entities. These figures again

[1] Own calculations.

illustrate the potential of the Australian public procurement sector for foreign companies (Department of Finance, 2016).[2]

1.2.3. Overview of evolution of trade flows

Concerning the evolution of trade flows over time, Table 1 provides a short overview of selected indicators for all goods traded between the EU and Australia from 2004 to 2015. As outlined by Table 1, the EU as a whole ran consistent trade surpluses with Australia for the period 2004 to 2015. In 2015, Australia accounted for 0.6% of the EU's total imports (similar to Tunisia) and 1.8% of total EU exports (similar to Mexico). By comparison, Canada accounted for 1.6% of total EU imports and 2% of EU total exports in 2015.

Table 1: Overview of EU-Australia total trade in goods, 2004-2015 (EUROSTAT, 2016)[3]

Indicators	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
EU trade balance with Australia (million Euro)	11,092	10,949	8,664	10,446	12,909	12,019	14,512	16,216	19,391	21,880	20,366	22,076
EU exports to Australia (million Euro)	19,910	20,887	21,763	23,907	26,700	21,948	26,972	31,174	33,924	32,052	29,560	31,643
EU imports from Australia (million Euro)	8,818	9,938	13,099	13,461	13,791	9,928	12,461	14,958	14,533	10,172	9,194	9,567
EU imports from Australia as share of total EU imports (%)	0.9	0.8	1.0	0.9	0.9	0.8	0.8	0.9	0.8	0.6	0.5	0.6
EU exports to Australia as share of total EU exports (%)	2.1	2.0	1.9	1.9	2	2	2	2	2	1.8	1.7	1.8

[2] Department of Finance, 2016. Statistics on Australian Government Procurement Contracts. Available at: https://www.finance.gov.au/procurement/statistics-on-commonwealth-purchasing-contracts/. Data retrieved in AUD. Average historical exchange rate calculated for Australian financial years 2006/7 and 2014/2015 using www.oanda.com, available at: https://www.oanda.com/lang/de/currency/average.
[3] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.

1.3. Analysis of evolution of trade flows on the sectoral level

Furthermore, the detailed trade in goods relation between the EU and Australia and Canada is presented at the sectoral level. The analysis lays a focus on the top 10 imported sectors in 2015, and their development from 2004 to 2015. Figures are provided for both imports by the EU from partner countries and imports by partner countries from the EU.

1.3.1. Canada

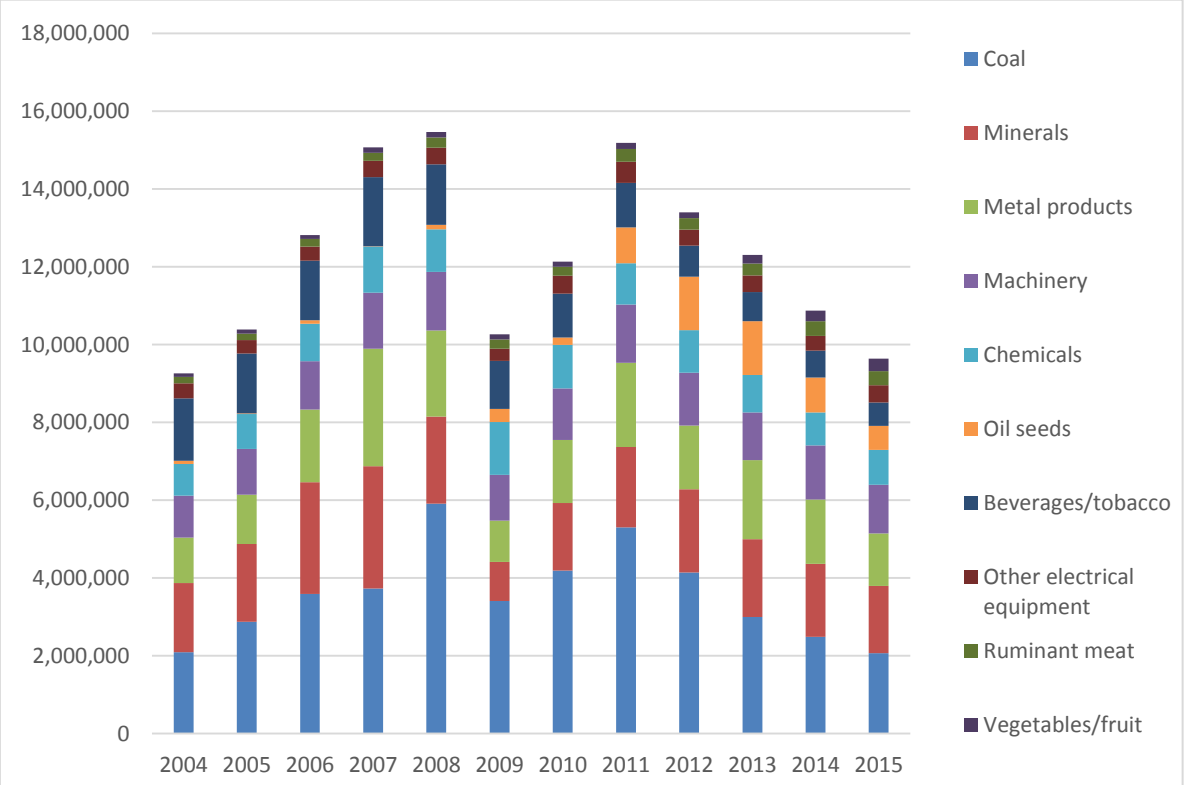
In order to allow for a comparison of EU trade flows with third countries, we start with a brief sketch of trade in goods relations between the EU and Canada. EU imports from Canada have increased since 2004 up to 2015, but are now at 2011 levels. The composition of EU imports from Canada changed relatively significantly after 2011. Between 2011 and 2015, EU imports of metal products, motor equipment, other food products and cereals increased by 140%, 49%, 27% and 38% respectively, while imports of minerals, other electrical equipment, wood/paper products and oil seeds decreased by 33%, 34%, 18% and 37% respectively. Canada's imports from the EU have increased overall since 2004, but remained rather steady after 2011. The sectoral composition of exports has remained relatively stable since 2011. As of 2015, machinery, motor equipment and chemicals account for the largest parts of overall imports. Between 2011 and 2015, EU exports of motor equipment increased by 19% and exports of textiles products by 7% respectively. In the same period, EU exports of metal products, oil products and other electrical equipment decreased by 18%, 51% and 14% respectively.[4]

1.3.2. Australia

For EU imports from Australia since 2004 (Figure 2), the total level of import values rose until 2008, decreased in 2008 and 2009, picking up again in 2011, but decreasing since then (-37%). Concerning the sectoral composition of the top 10 sector imports from Australia, coal, minerals, metal and machinery products have continuously constituted the majority of imports. Note that especially the coal sector accounts for a large share of imports, with peaks in 2008 and 2011, but decreased by more than 60% since the 2011 peak. The value of Australia's exports of metal products decreased by 38% from 2011 to 2015, while oil seeds exports decreased by 33%, and beverages/tobacco exports by almost 50%, respectively. Australian ruminant meat exports increased slightly by 10%, while vegetables/fruits exports more than doubled over the period 2011 to 2015.

[4] Corresponding figures with additional detail on EU-Canada and Australia-USA trade in goods flows are provided in annex 1.

Figure 2: Top 10 EU-Australia sector imports of goods, 2004-2015 (thousand Euros)[5]



Concerning Australia's top 10 imports from the EU (Figure 3), a general trend of increasing imports can be observed since 2004, with, however, relatively significant drops in 2009 and 2015. The sectoral composition of Australia's imports has remained relatively stable since 2004. Machinery, chemicals and motor equipment were Australia's most imported goods from the EU. Sectors that are generally seen as lower value-added industries, i.e. textiles, beverages and tobacco, and other food products, contribute relatively low volumes to the EU's exports to Australia. While EU exports of machinery, chemicals and motor equipment decreased by 31%, 26% and 20% respectively, EU exports of other food products, textiles, and non-metallic mineral products moderately increased by 12%, 9% and 9%, respectively. As EU exports of high value-added products still dominate EU exports to Australia, the composition of trade highlights the importance of Australia as one of the EU manufacturing sectors' major trading partners.

[5] UN Comtrade, own calculation on the basis of the sectoral aggregation used in the CGE model.

Figure 3: Top 10 Australia-EU sector imports of goods, 2004-2015 (thousand Euros)[6]

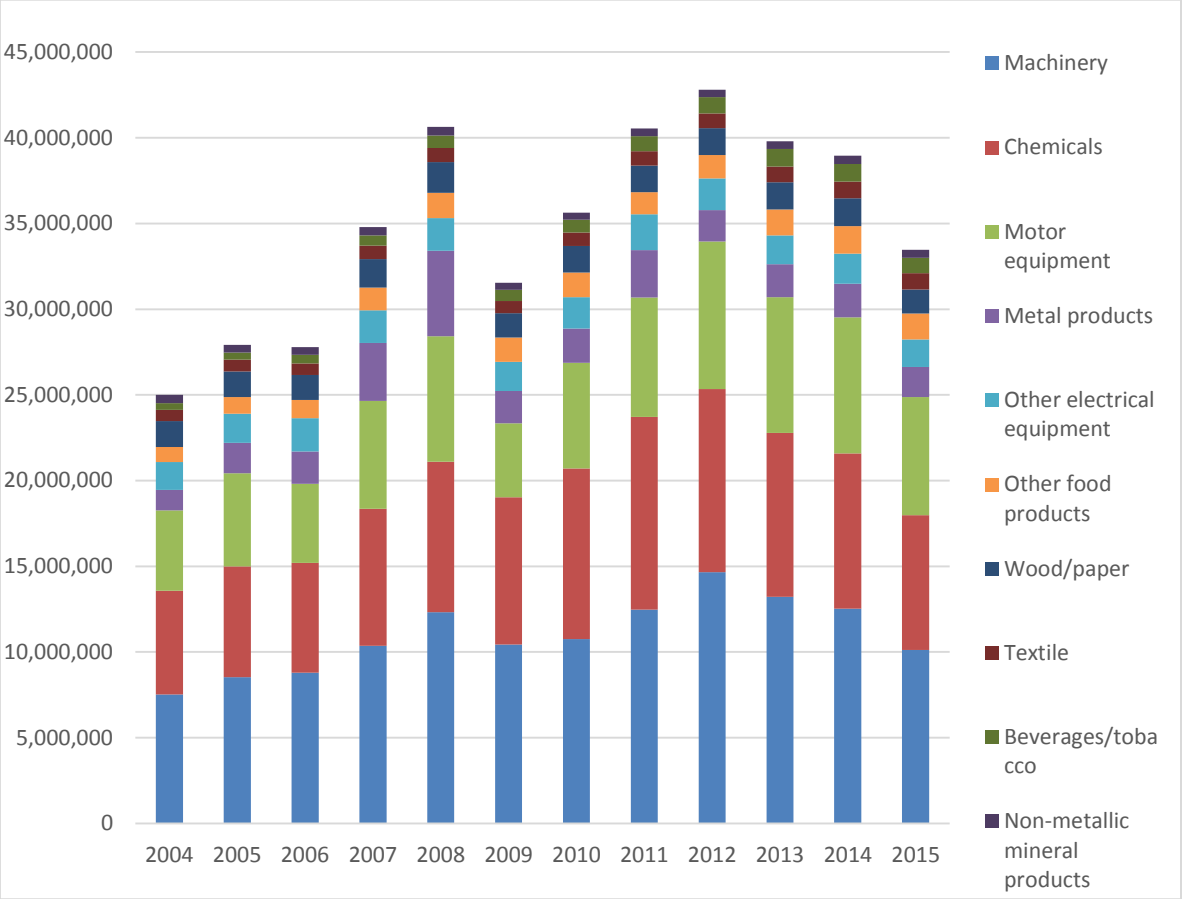


Figure 47 and Figure 48 respectively in Annex 1 outline the top ten sector imports between Australia and the USA. Australia's imports from the USA have generally increased from 2004 to 2015. After peaking in 2012, however, USA exports to Australia decreased by 24%. The sectoral composition has remained stable overall. Machinery is by far the largest Australian import sector. Also, chemicals and motor equipment constantly accounted for large shares of imports from 2004 to 2015. Between 2012 and 2015, US exports of machinery, chemicals and oil products decreased comparatively strongly by 41%, 20%, and 25% respectively. In the same period USA exports of motor equipment, other electrical equipment, and other food products increased by 12%, 4% and 18% respectively. The USA's imports from Australia have strongly increased from 2004 to 2015. Between 2011 and 2015 Australia's total exports to the US increased by 7%. The sectoral composition has remained rather stable. Ruminant meat, machinery, and metal products were the most important import sectors in 2015. Between 2011 and 2015, US imports of ruminant meat, motor equipment, other food products, and wood/paper products increased by 149%, 52%, 21% and 64% respectively. Over the same period, US imports of machinery, metal products and other electrical equipment decreased by 9%, 45% and 38% respectively.

1.3.3. EU-AUS trade in 2015

Finally, in addition to the sectoral trade flows analysed above, we also provide an overview of EU-Australia trade at the more detailed product group level in 2015. In

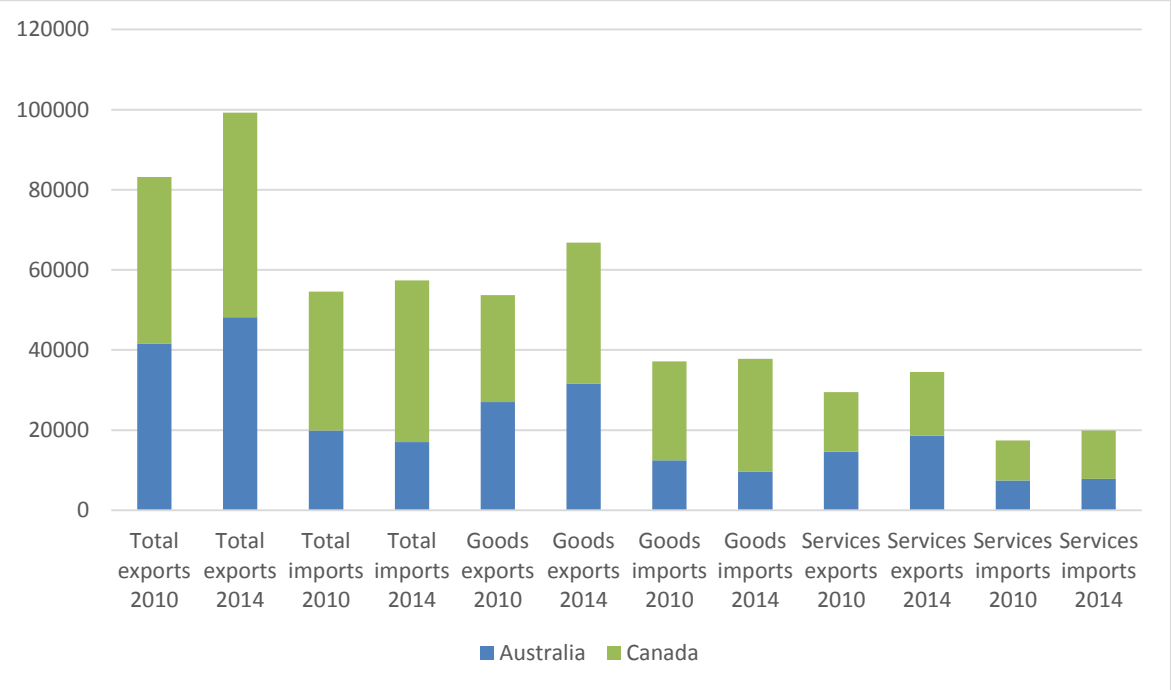
[6] UN Comtrade, own calculation on the basis of the sectoral aggregation used in the CGE model.

2015, the EU's major import product group was coal, by a large margin, as well as briquettes, ovoids and similar solid fuels manufactured from coal (with a value of €1,866 million), followed by rape or colza seeds (€541 million) and wine of fresh grapes, including fortified wines as well as grape must (€529 million).[7] The most imported product group by Australia from the EU was cars (with a value of €4,291 million), followed by medicaments (€2,994 million).

1.4. Overview of EU's Trade in Services with Australia and Canada

The following section provides an overview of total EU trade in services with Australia and Canada for data available since 2010; Australia is the focus (Figure 4). The EU is one of the world's major services trade exporters. The EU's current comparative advantage in trading services is reflected by volume of services trade vis-à-vis Canada and Australia. EU services exports continuously increased since 2010. On the other hand, EU services imports from these countries remained rather steady.

Figure 4: Comparison of EU total goods and services trade flows with Australia and Canada, 2010 and 2014 (million Euros) (EUROSTAT, 2016)[8]



In 2010, EU services exports accounted for 36% of total EU exports to Canada (31% in 2015), 35% of total exports to Australia (39% in 2014). As concerns EU imports in 2010, services constituted 29% of total imports from Canada (30% in 2015) and 37% of total imports from Australia (46% in 2014).

[7] Grape must other than that of HS 4 heading 2009.
[8] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database. For Canada, the data provided is from 2015.

Figure 5: EU trade balances with Australia and Canada, 2014 (million Euros)(EUROSTAT, 2016)[9]

In 2014 (the year for which data are consistently available for all countries), the EU's trade surplus in services amounted to €5.1 billion for Canada and €10.8 billion for Australia. In the case of Canada where data is available for 2015, the services trade balance was €3.8 billion in 2015. Figure 5 shows EU trade balances vis-à-vis all of these countries, illustrating the relative significance of services trade for the total trade balances of the EU.

Tables 2-4 provide a detailed overview of the EU's services exports to these countries, the EU's services imports from these countries, as well as a detailed overview of the services trade balances from 2010 to 2015.

Table 2: EU total international services trade credit (exports) with selected partners (BPM6, million Euros) (EUROSTAT, 2016)[10]

Partner	2010	2011	2012	2013	2014	2015
Canada	14,848.4	15,687.0	17,414.2	17,664.0	16,480.7	15,914.7
Australia	14,637.9	16,152.3	18,805.9	19,116.3	18,621.1	n/a

Table 3: EU total international services trade debit (imports) with selected partners (BPM6, million Euros)(EUROSTAT, 2016) [11]

Partner	2010	2011	2012	2013	2014	2015
Canada	10,026.7	10,386.0	11,642.3	11,659.4	11,390	12,110.7

[9] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database. For Canada, the data provided is from 2015.
[10] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.
[11] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.

Australia	7,405.8	7,898.0	8,619.0	8,174	7,811.6	n/a

Table 4: EU total international services trade balance with selected partners (BPM6, million Euros)(EUROSTAT, 2016)[12]

Partner	2010	2011	2012	2013	2014	2015
Canada	4,821.7	5,301.0	5,771.8	6,004.6	5,090.6	3,804
Australia	7,232.1	8,254.3	10,187	10,942.3	10,809.6	n/a

EU services exports to Australia were characterized by relatively high values of transport services, other services, communication services and financial services accounting for 45%, 22%, 15% and 11% of total EU services exports respectively in 2014 (Table 5).

Concerning EU services imports from Australia in 2014, transport services, other services and financial services were the most important sectors accounting for 57%, 29% and 7% of total EU services imports respectively (Table 6).

Table 5: EU international services trade credit (exports) with Australia by sector (BPM6, million Euros) (EUROSTAT, 2016)[13]

Sectors	2010	2011	2012	2013	2014
Total services	14,637.9	16,152.3	18,805.9	19,116.3	18,621.1
Communication	1815	1,896.9	2,381.3	2,511.8	2,740.7
Financial	2,597.6	2,344.8	2,983	2,243.9	2,019.8
Other services	3315	3,593.2	3,830	4,274.1	4,018.5
Transport	6,625.9	7,857.9	8,392	9,047.9	8,439.4
Utility	276.7	462	772.8	573	912.6

Table 6: EU international services trade debit (imports) with Australia by sector (BPM6, million Euros) (EUROSTAT, 2016) [14]

Sectors	2010	2011	2012	2013	2014
Total services	7.405.8	7.898	8.619	8.174	7.811.6
Communication	500	336	443.1	399.4	318.5
Financial	352.2	392.2	484.8	372.5	547.6

[12] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.
[13] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database. BPM6. Individual BoP items have been classified according to the sectoral aggregation used for the CGE model.
[14] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database. BPM6. Individual BoP items have been classified according to the sectoral aggregation used for the CGE model.

Other services	2.169.7	2.285.5	2.580.5	2.533.6	2.296.9
Transport	4.196.4	4.663.9	4.847.2	4.732.6	4.488.2
Utility	183	213.8	252.1	126.4	144.9

For comparison, the EU-Canada trade in services relations are briefly outlined below (Tables 7 and 8). EU services exports to Canada in 2014 were characterized by relatively high values of transport services, other services and communication services at 49%, 30% and 11% of total EU services exports respectively. Concerning EU services, imports from Canada, transport services and other services are the most important sectors accounting for 46% and 44% of total EU services imports respectively.

Table 7: EU international services trade credit (exports) with Canada by sector (BPM6, million Euros) (EUROSTAT, 2016) [15]

Sectors	2010	2011	2012	2013	2014	2015
Total services	14,848.4	15,687	17,414.2	17,664	16,480.7	15,914.7
Communication	1,256.7	1,236	1,368.8	1,495.2	1,325.6	1,695.4
Financial	2,649.9	3,328	3,930.5	2,453.6	2,057.1	1,434
Other services	4,525.2	4,074	4,125.8	4,668.7	4,434.4	4,722.2
Transport	6,311.9	6,939.1	7,374.2	8,322.3	7,767.4	7,872.4
Utility	100.4	109.9	183.9	128.3	290	178.2

Table 8: EU international services trade debit (imports) with Canada by sector (BPM6, million Euros) (EUROSTAT, 2016) [16]

Sectors	2010	2011	2012	2013	2014	2015
Total services	10,026.7	10,386	11,642.3	11,659.4	11,390	12,110.7
Communication	922	881.1	1,086.8	1,002.7	752.4	863.7
Financial	561.5	695	842.6	661.3	533.4	254.2
Other services	3,605.4	4,013.4	4,247.6	4,328.3	4,642	5,342.8
Transport	4,839.8	4,706.4	5,318.5	5,507.5	5,407.4	5,555.6
Utility	98.3	86.3	137.1	154.5	48.7	55.9

[15] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database. BPM6. Individual BoP items have been classified according to the sectoral aggregation used for the CGE model.
[16] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database. BPM6. Individual BoP items have been classified according to the sectoral aggregation used for the CGE model.

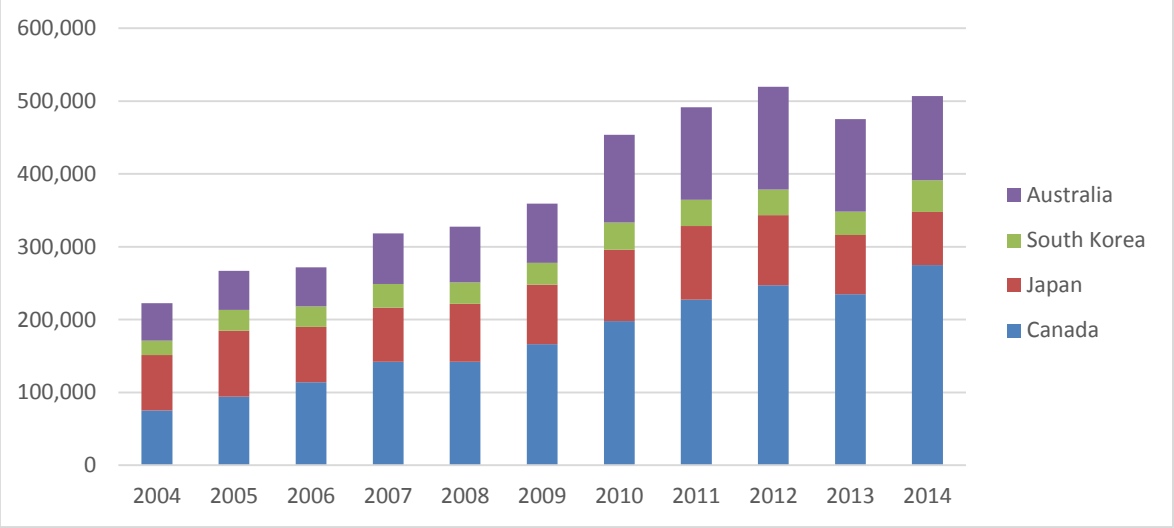
Trade in services has become a consistently significant part of the EU's trade relations with Australia. Since 2010, however, there has only been limited (or no) growth. One of the sectors that experienced an increase in EU exports and a decrease in EU imports is communication services, pointing to an increasing competitive position of European providers. Growing exports and imports in transportation reflect the importance of trade in goods as well as tourism flows; transportation has been the strongest trade item throughout the period of investigation. Trade in financial services remained relatively small and at comparable levels in both EU-Australia and EU-Canada trade.

1.5. Overview of the EU's Investment Stocks, Flows and Income with Selected Partners

This section depicts EU investment stocks, flows and income with/from selected partner countries from 2004-2014.[17] South Korea, Canada and Japan have been added as reference countries as they are among Australia's major Asia-Pacific and OECD trading partners with which the EU has concluded or is seeking to conclude FTAs. They compete with Australia for European investors.

Foreign Direct Investment (FDI) stocks in Australia have strongly increased from €51.6 billion in 2004 to €115.3 billion in 2014. The data also show that EU FDI stocks in Canada have been increasing since 2004 amounting to €274.7 billion in 2014. Given that the EU's total outward FDI stock was €12.9 trillion in 2014, Australia and Canada accounted for 0.89% and 2.13% of total EU outward FDI respectively (Figure 6).

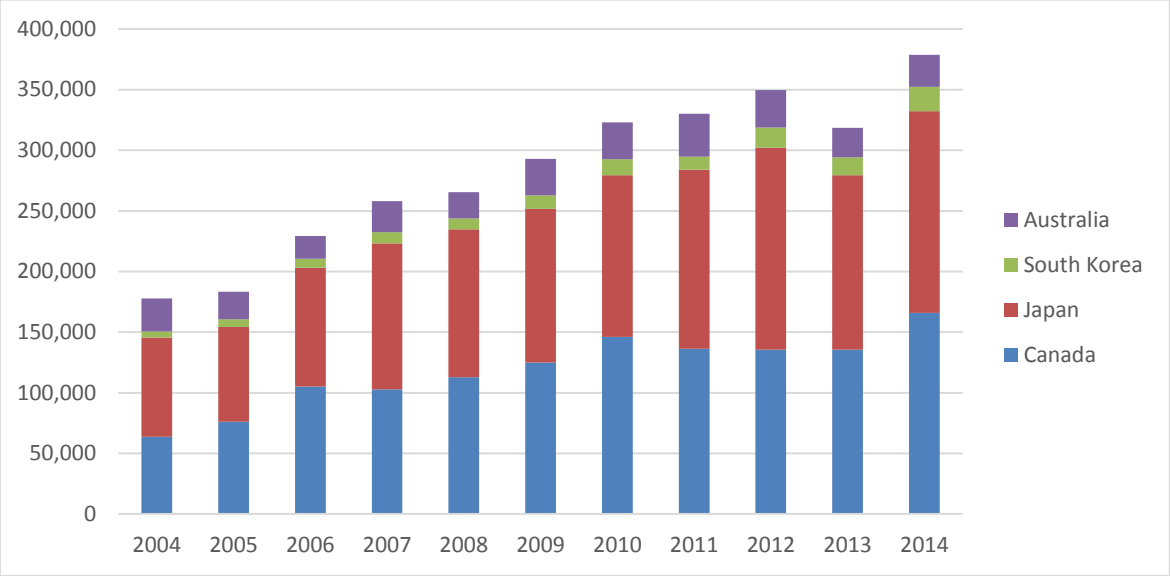
Figure 6: EU foreign direct investment stocks abroad in selected countries (million Euros) (EUROSTAT, 2016) [18]



Australia's investment stock amounted to €26.4 billion in 2014. FDI stocks of Japan and Canada in the EU are at a significantly higher level and have also been increasing since 2004. Compared to EU direct investment stocks held in Australia, Australia's investment stocks in the EU are significantly lower, amounting to 22.9% of the EU's FDI stock held in Australia (Figure 7).

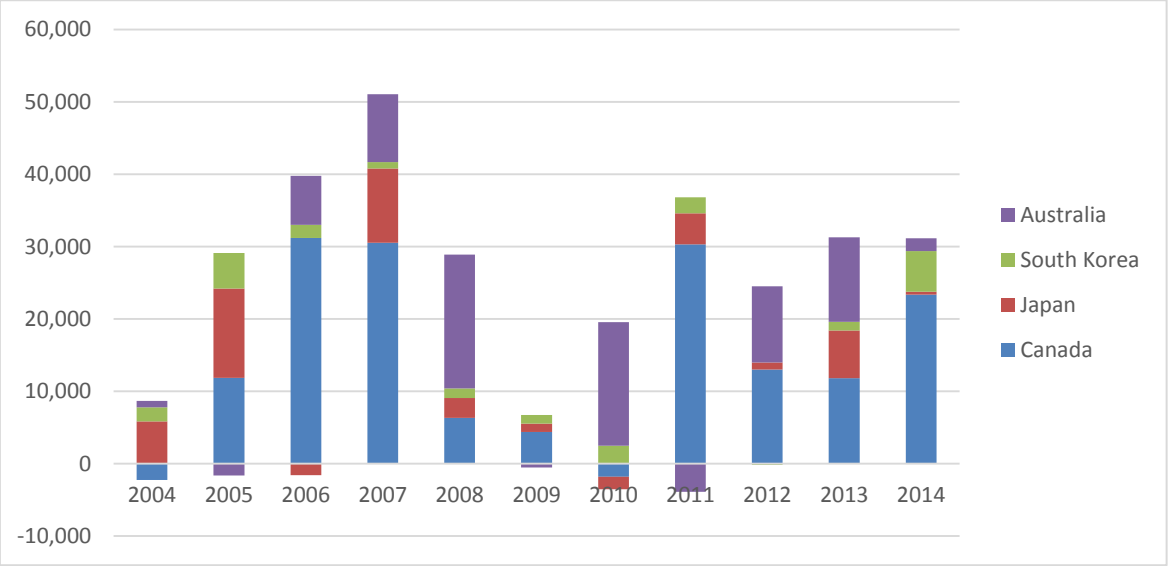
[17] At this stage, the analysis lays a focus on investment stocks, flows and income of the EU with selected countries.
[18] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.

Figure 7: Direct investment stocks of selected countries in the EU (million Euros) (EUROSTAT, 2016)[19]



EU direct investment flows to Australia have been fluctuating, but remained at an overall positive level with €1.8 billion of direct investment flows in 2014. At the same time, the EU had generally strong positive investment outflows to Canada (Figure 8).

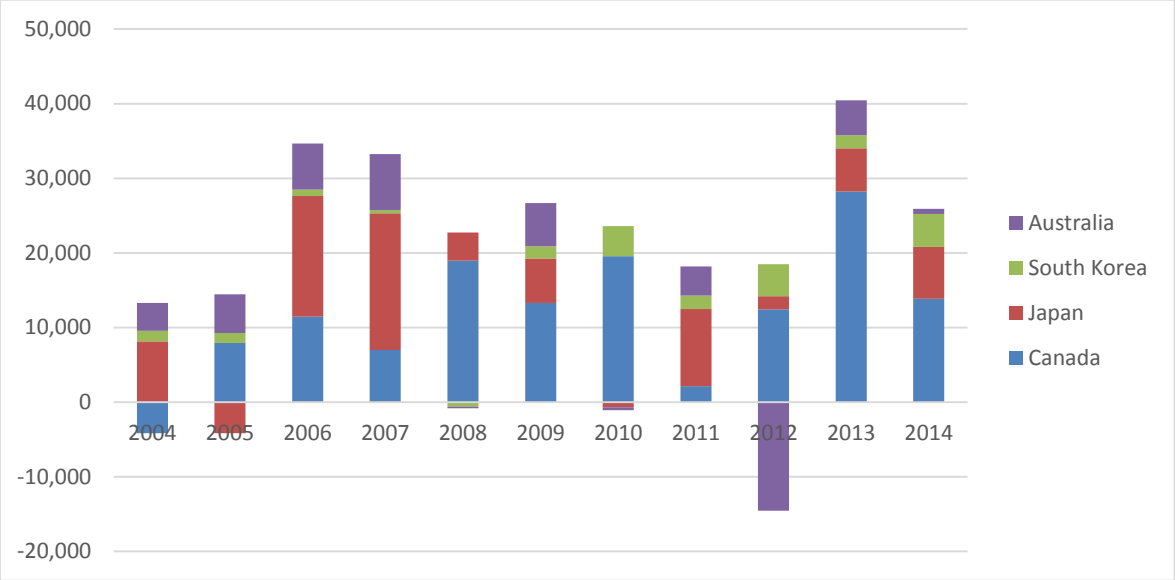
Figure 8: EU direct investment flows to selected countries (million Euros) (EUROSTAT, 2016)[20]



Australia's direct investment flows to the EU fluctuated relatively strongly in the past, showing FDI outflows from Australia of €656.5 million in 2014. On the other hand, Canada shows an almost constantly positive and generally high level of direct investment flows to the EU (Figure 9).

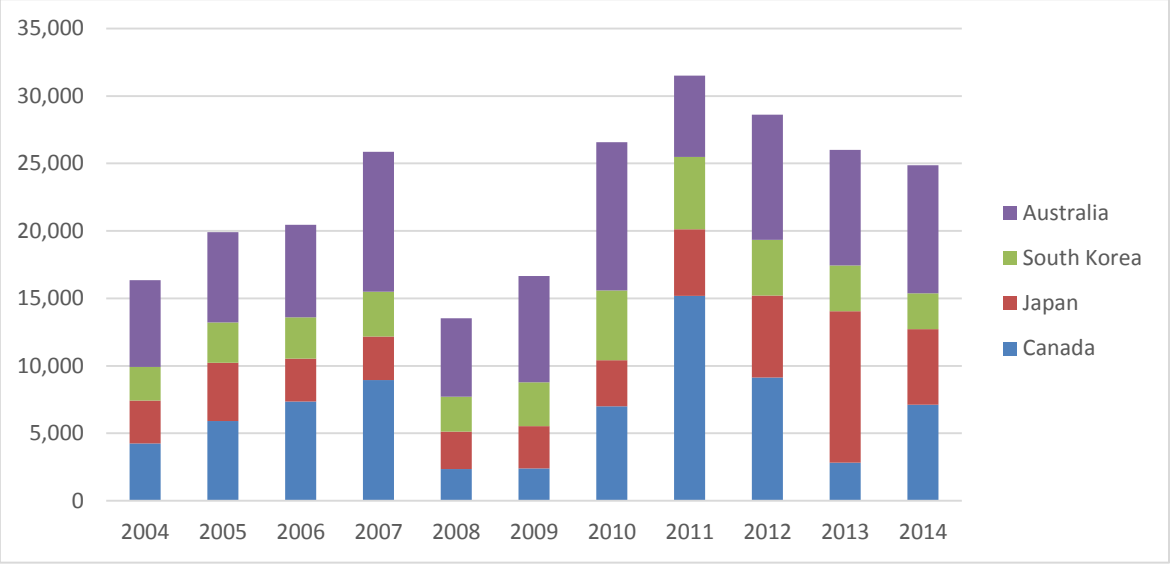
[19] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.
[20] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.

Figure 9: Direct investment flows from selected countries to the EU (million Euros)[21]



The countries' investment profiles result in corresponding levels of direct investment income. In 2014, EU investment income from FDI held in Australia amounted to €9.5 billion. EU direct investment income from Canada was also relatively high (Figure 10).

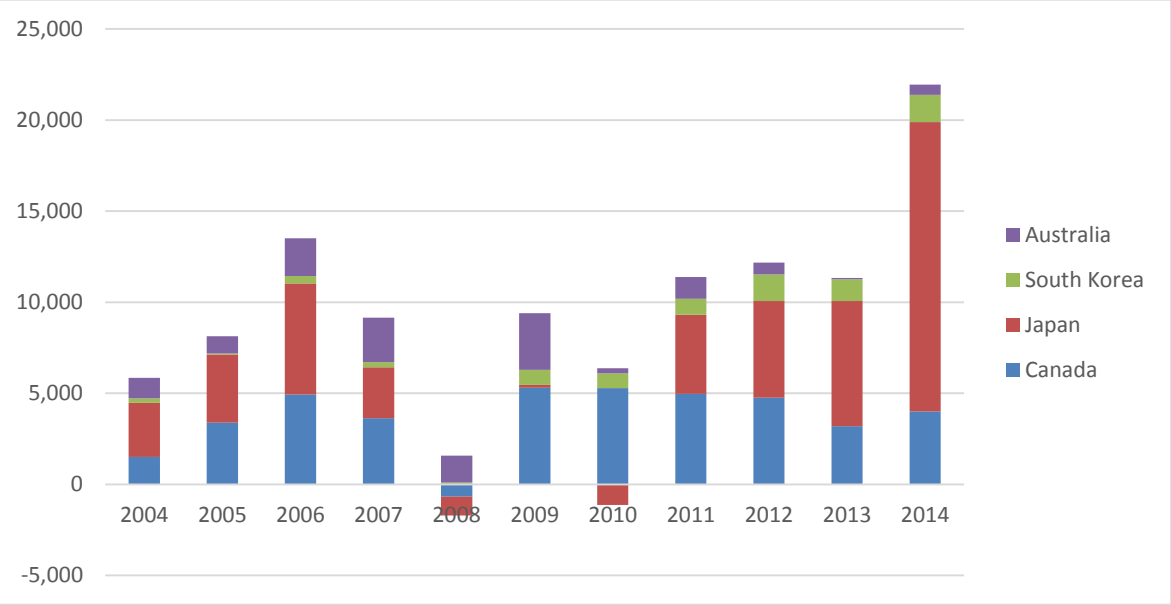
Figure 10: EU direct investment income in selected countries (million Euros) (EUROSTAT, 2016)[22]



Australia's level of FDI income from its investments in the EU has been generally low in comparison to the other reference countries (for example, €556.8 million in 2014). At the same time, Canada's direct investment income has been at a higher level since 2009, with an income of €4 billion in 2014 (Figure 11).

[21] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.
[22] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.

Figure 11: Selected countries' direct investment income in the EU (million Euros) (EUROSTAT, 2016) [23]



1.6. Overview of Barriers to Trade and Investment in Australia

The following section presents an overall description and analysis of the existing tariff and non-tariff barriers in Australia.

1.6.1. Tariff Profiles of Australia

As concerns agricultural products, Australia has relatively high final bound duties in several product groups. The highest average tariffs apply for beverages & tobacco (10.3%, followed by sugars and confectionary (6.8%). The highest ad valorem duty or calculated AVE within these product groups were 16% (dairy products). Dairy products (3.4%) and coffee, tea (3.9%) as well as fruit, vegetables, plants (3.7%) show high average bound tariffs too. In the case of fruit, vegetables and plants, individual duties are as high as 29%. Note that currently Most Favoured Nation (MFN) applied duties are lower for these product groups. However, in the case of dairy products, the highest duties remain at 16%.[24]

Concerning non-agricultural products, especially clothing (41.4%), followed by textiles and leather, footwear products have high average final bound duties. Tariff peaks in these products reach 55%. In addition, electrical machinery and transport equipment products show relatively high duties. Applied average MFN tariffs are lower, but remain at a level of 4.6% in the case of clothing and 4.7% in the case of transport equipment. Individual MFN duties in the case of transport equipment reach up to 126%.[25] A detailed overview of both bound and applied duties is provided in Table 9 below.

[23] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.
[24] Non-ad valorem duties are converted into ad valorem equivalents by the WTO and the methodology of the conversion is outlined in Technical Annex B of World Tariff Profiles 2006 (see: https://www.wto.org/english/tratop_e/tariffs_e/tariff_profiles_2006_e/tariff_profiles_2006_e.pdf). This maximum value in italics for the dairy products sector is based on a WTO estimate of the corresponding ad valorem equivalent.
[25] Non-ad valorem duties are converted into ad valorem equivalents by the WTO and the methodology of the conversion is outlined in Technical Annex B of World Tariff Profiles 2006 (see:

Table 9: Australia's product groups with highest final bound and MFN applied duty rates, in percent[26]

	Final bound duties		MFN applied duties	
Product groups	**AVG**	**Max**	**AVG**	**Max**
Dairy products	3.4	*16*[27]	2.8	*16*[28]
Fruit, vegetables, plants	3.7	29	1.4	5
Coffee, tea	3.9	17	1	5
Sugars and confectionery	6.8	15	1.8	5
Beverages & tobacco	10.3	25	3.5	5
Textiles	18.2	55	4.2	5
Clothing	41.4	55	4.6	5
Leather, footwear, etc.	15.2	55	4.1	5
Electrical machinery	11	45	2.9	5
Transport equipment	12.5	40	4.7	*126*[29]

1.6.2. Barriers to Trade and Investment in Australia and other Selected Partners

This section presents an overview of product market regulations, state control, barriers to entrepreneurship, and barriers to trade and investment using indices provided by the OECD Product Market Regulation Database. The OECD Product Market Regulation Database provides a set of indicators that measure the extent to which policies inhibit competition in product markets. The indicators are consistent across time and countries, and cover the following areas: state control of business enterprises; legal and

https://www.wto.org/english/tratop_e/tariffs_e/tariff_profiles_2006_e/tariff_profiles_2006_e.pdf). This maximum value in italics for the transport equipment sector is based on a WTO estimate of the corresponding ad valorem equivalent.

[26] WTO, 2016. *WTO Tariff Profiles.* Available at: http://stat.wto.org/TariffProfile/WSDBTariffPFHome.aspx?Language=E

[27] Non-ad valorem duties are converted into ad valorem equivalents by the WTO and the methodology of the conversion is outlined in Technical Annex B of World Tariff Profiles 2006 (see: https://www.wto.org/english/tratop_e/tariffs_e/tariff_profiles_2006_e/tariff_profiles_2006_e.pdf). This maximum value in italics for the dairy products sector is based on a WTO estimate of the corresponding ad valorem equivalent.

[28] Non-ad valorem duties are converted into ad valorem equivalents by the WTO and the methodology of the conversion is outlined in Technical Annex B of World Tariff Profiles 2006 (see: https://www.wto.org/english/tratop_e/tariffs_e/tariff_profiles_2006_e/tariff_profiles_2006_e.pdf). This maximum value in italics for the dairy products sector is based on a WTO estimate of the corresponding ad valorem equivalent.

[29] Non-ad valorem duties are converted into ad valorem equivalents by the WTO and the methodology of the conversion is outlined in Technical Annex B of World Tariff Profiles 2006 (see: https://www.wto.org/english/tratop_e/tariffs_e/tariff_profiles_2006_e/tariff_profiles_2006_e.pdf). This maximum value in italics for the transport equipment sector is based on a WTO estimate of the corresponding ad valorem equivalent.

administrative barriers to entrepreneurship; barriers to international trade and investment. The information used to construct the indicators are mainly responses of national governments to the OECD Regulatory Indicator Questionnaires in the following years: 1998, 2003, 2007 and 2013. The index scores from 0 – 6, where 0 is the least restrictive and 6 is the most restrictive (Wölfl et al., 2010).[30]

As before in the analysis of FDI, we compare the non-tariff restrictions on trade and investment in Australia and New Zealand with Canada, Japan and Korea. When it comes to the restrictiveness of overall product market regulation, numbers for both Australia and New Zealand have continuously decreased from 1998 to 2013. It is noticeable that Australia and New Zealand's indicators are mostly lower than those of Canada, Japan, and especially Korea (Table 10).

Table 10: Product market regulation of Australia, New Zealand and other selected countries[31]

Indicator	Product market regulation			
Country	**1998**	**2003**	**2008**	**2013**
Australia	1.72	1.34	1.46	1.29
Canada	1.91	1.64	1.53	1.42
Japan	2.11	1.37	1.43	1.41
Korea	2.56	1.95	1.94	1.88
New Zealand	1.45	1.29	1.23	1.26

Concerning indicators for the level of state control, Australia has maintained a relatively stable level from 2.28 in 1998 to 1.99 in 2013. By contrast, New Zealand's indicators for the level of state control in the economy has strongly increased from 1.18 in 1998 to 2.06 in 2013. By comparison, levels of state control in Australia and New Zealand in 2013 were similar to those of Canada and Japan, and lower than that of Korea (Table 11).

Table 11: State control in Australia, New Zealand and other selected countries (OECD, 2016)[32]

Indicator	State control

[30] Wölfl, et al. (2010) state: "The qualitative information on which the indicators are based is mainly derived from answers to a questionnaire by national administrations, the results of which are subject to peer review, thereby guaranteeing a high level of comparability across countries. This information is coded by assigning a numerical value to each of the possible responses to a given question. The coded information is normalised over a scale of zero to six, reflecting increasing restrictiveness of regulatory provisions for competition and aggregated into low-level indicators at the bottom of the indicator tree. At each step up the indicator tree, higher-level (composite) indicators are calculated as weighted averages of their lower-level indicators using equal weights for aggregation." In addition, the paper mentions that "growth regressions provide evidence that less restrictive product market regulation is conducive to growth. An improvement of ½ index points of barriers to entrepreneurship would translate into approximately a 0.4% higher average annual rate of GDP per capita growth."

[31] OECD, 2016. *Product Market Regulation 2013*. Available at: https://stats.oecd.org/index.aspx?DataSetCode=PMR.

[32] OECD, 2016. *Product Market Regulation 2013*. Available at: https://stats.oecd.org/index.aspx?DataSetCode=PMR.

Country	1998	2003	2008	2013
Australia	2.28	1.59	2.21	1.99
Canada	2.15	2.08	1.96	1.92
Japan	1.87	1.66	1.9	1.85
Korea	2.6	2.1	2.44	2.47
New Zealand	1.18	1.55	1.93	2.06

Barriers to entrepreneurship (Table 12) have decreased in both Australia and New Zealand from 1998 to 2013. In the case of Australia, the level of barriers to entrepreneurship decreased from 1.94 to 1.69. In New Zealand, the level of barriers to entrepreneurship almost halved from 2.06 to 1.18. By comparison, the barriers in Japan and Korea are still relatively high in 2013 (1.67 and 1.87 respectively).

Table 12: Barriers to entrepreneurship in Australia, New Zealand and other selected countries (OECD, 2016)[33]

Indicator	Barriers to entrepreneurship			
Country	**1998**	**2003**	**2008**	**2013**
Australia	1.94	1.76	1.65	1.69
Canada	1.82	1.44	1.36	1.34
Japan	3.22	1.69	1.65	1.67
Korea	2.63	2.4	2.16	1.87
New Zealand	2.06	1.64	1.09	1.18

A significant decrease of barriers to trade and investment (Table 13) can be registered for both Australia and New Zealand between 1998 and 2013. Australia's barriers to trade and investment decreased from 0.95 to 0.19, while New Zealand's level of barriers to trade and investment halved from 1.1 to 0.53. Both Australia's and New Zealand's barriers are much lower than those of the other selected countries, especially in comparison to Korea (level of 1.3).

Table 13: Barriers to trade and investment in Australia, New Zealand and other selected countries (OECD, 2016) [34]

Indicator	Barriers to trade and investment			
Country	**1998**	**2003**	**2008**	**2013**
Australia	0.95	0.67	0.53	0.19

[33] OECD, 2016. *Product Market Regulation 2013*. Available at: https://stats.oecd.org/index.aspx?DataSetCode=PMR.
[34] OECD, 2016. *Product Market Regulation 2013*. Available at: https://stats.oecd.org/index.aspx?DataSetCode=PMR.

Canada	1.75	1.4	1.27	1.01
Japan	1.24	0.75	0.74	0.71
Korea	2.44	1.37	1.23	1.3
New Zealand	1.1	0.66	0.66	0.53

Next we offer an analysis of the trade in services barriers in Australia. This section is based on the OECD Services Trade Restrictiveness Index (STRI) results for both countries. The OECD STRI indexes measure the restrictiveness to services trade of the regulatory environment in the specific countries. The index takes values between zero and one, one being the most restrictive (OECD, 2016).[35]

Overall, Australia's regulatory environment can be considered favourable. Out of the 22 sectors analysed by the STRI database, 18 show values below the OECD average. Sectors with high scores are courier (STRI index of 0.316) and the logistics cargo-handling sectors (0.253). In the courier sector, roughly 42% of the barriers result from restrictions on foreign entry, while about 26% of the barriers result from general barriers to competition. In addition, the level of regulatory transparency accounts for a large share of the barriers (17.6%). In the logistics cargo-handling sub-sector, the main barriers result from restrictions to foreign entry (33.2%) and from barriers to competition (30.6%). In addition, the air transport sub-sector shows high barriers, with a STRI index of 0.248. These are mainly due to restrictions on foreign entry (53.6%) and barriers to competition (28.1%).

[35] OECD, 2016. *Services Trade Restrictiveness Index*. Available at: http://www.oecd.org/tad/services-trade/services-trade-restrictiveness-index.htm.

2. LITERATURE REVIEW AND PREVIOUS ANALYSIS ON AUSTRALIA (TASK 2)

Plaisier et al. (2009) present the only quantitative study on an EU-AUS FTA. It deals with a joint EU-AUS/NZ FTA, taking an explicit perspective from the Netherlands. Having said this, they also consider the EU-27 (in 2009, Croatia was not a member of the EU) as well as Australia and New Zealand, however in a rather cursory way. They use an own Computable General Equilibrium (CGE) model based on the Global Trade Analysis Project (GTAP) 7 database. The model is dynamic in that it captures investment and the distinction between the long run and the short run effects. Australia and New Zealand jointly gain about a quarter per cent in nominal Gross Domestic Product (GDP) in the short run, which is reduced to almost zero in the long run. Distribution effects between the two are not reported. The gains for the EU in the short run are below 0.1% of nominal GDP and twice as much in the long run. It is interesting to note that in the EU some sub-sectors of the agricultural sector is estimated to lose, while almost all other European industries could gain. The study conducted by DG Trade largely confirms these results in principle.

Gosper (2013) takes an Australian perspective and argues that both partners can gain from an EU-AUS FTA because of the extent of trade already reached and due to prospects that currently different stances towards agriculture on both sides may converge. In addition to a standard old-type FTA, issues such as mutual recognition of regulation and movement of people could successfully be addressed.

Wilson (2013) argues in a similar way. The analysis is based on 18 in-depth interviews with stakeholders from the business community (firms and industry groups), government as well as individual specialists from both Australia and the EU. According to the analysis, trade should be covered by an FTA while labour mobility is considered important. Differences in the Australian and European perspectives are displayed for political issues such as human rights. In this vein, Kerneis (2013) makes the general case for increased services liberalization.

This generally positive perspective is backed by Abbott (2013), who takes a European perspective. He argues that Europe as the "cradle of regionalism" has little to gain from light FTAs, but can benefit from looking closer into the Pacific region. Moreover, Australia is considered a natural partner because of joint interests, shared values and a common cultural heritage. He also stresses the point that Australia might have a higher interest in an agreement than the EU.

Mc Naughton (2013) picks up the matter of mutual recognition of regulation particularly in services trade and points to the difficulties of a mutual recognition agreement (MRA). Transferring European Law to International Law is considered difficult.

3. ECONOMIC IMPACT OF REMOVING OR REDUCING BARRIERS TO TRADE IN GOODS AND SERVICES: AUSTRALIA

3.1. General Findings (Task 6)

3.1.1. Change in GDP in the scenarios (long term impact)

The national income effects from the EU-AUS FTA are presented in the figure below based on both liberalization scenarios. The FTA is estimated to have a positive impact on the GDP of both the EU and Australia. However, the results suggest that with respect to a long-term (2030) change of GDP, the benefits are comparatively small for the EU in percentage terms. Australia is estimated to gain somewhat more compared to EU in percentage terms, which can be expected as the smaller partner in an FTA has more to gain.

In scenario I (liberalization), GDP is estimated to marginally increase by 0.01% i.e. by €2.1 billion in the EU, and 0.13% in Australia by 2.7 billion by 2030. The respective figures are higher in the scenario II (increased liberalization scenario) with GDP increasing by 0.02% in the EU (by €4.9 billion) and 0.20% in Australia (by €4.2 billion), see Figure 12 and 13.

Figure 12: EU-Australia Percentage change in GDP in the scenarios (long term impact) in 2030

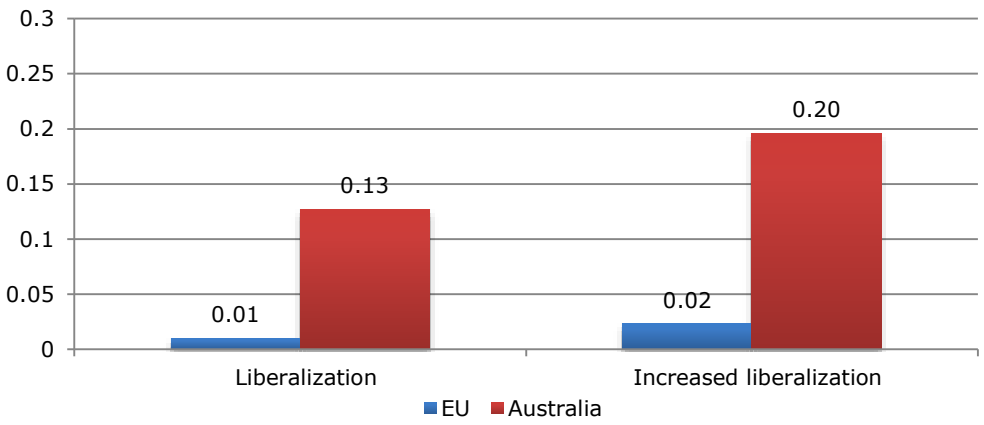
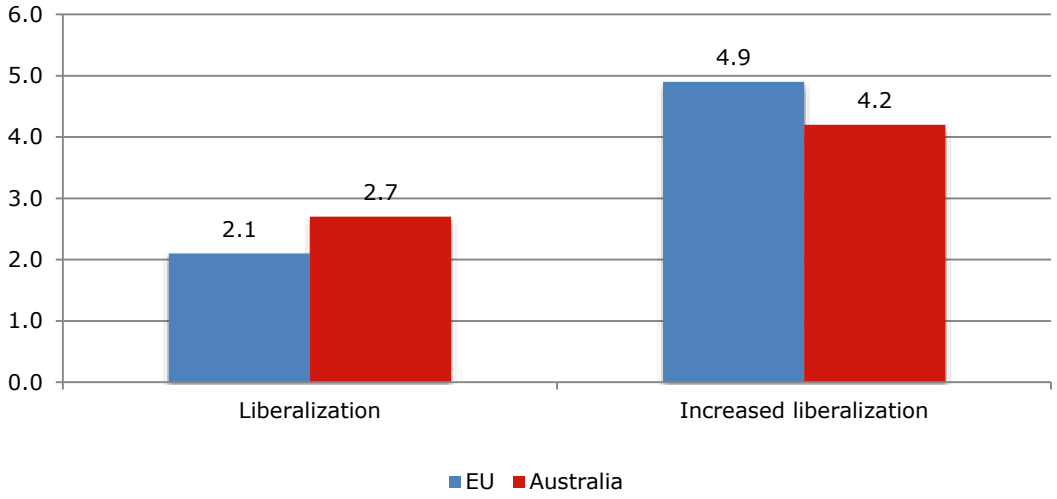


Figure 13: EU and Australia-Value Change in GDP (Long Term, €Billion)



3.1.2. Total trade

Tariff liberalization has a deeper impact on the trade of the sectors that were most protected with high tariffs before liberalization. Since import prices would go down in many sectors subsequent to tariff liberalization, this would lead to increasing demand for imports in those sectors. Also, lower costs of goods for both firms and end consumers could lead to increased trade and production for the partner countries.

The simulation results indicate that the FTA would lead to increased exports and imports for both the EU and Australia; however, the impact on the EU's total trade is marginal compared to Australia. Moreover, for Australia, imports show a much more pronounced increase than exports. As illustrated in Figure 14 below, in the liberalization scenario, the EU's total exports could increase by 0.04% and imports by 0.05%, while for Australia exports and imports rise by 0.47% and 0.5%, respectively. In the increased liberalization scenario, the increase in the EU's exports is estimated to be at 0.07%, while the increase in its imports is at 0.11%. Likewise, Australian exports could rise by 0.79% and imports by 0.91% in the long term.

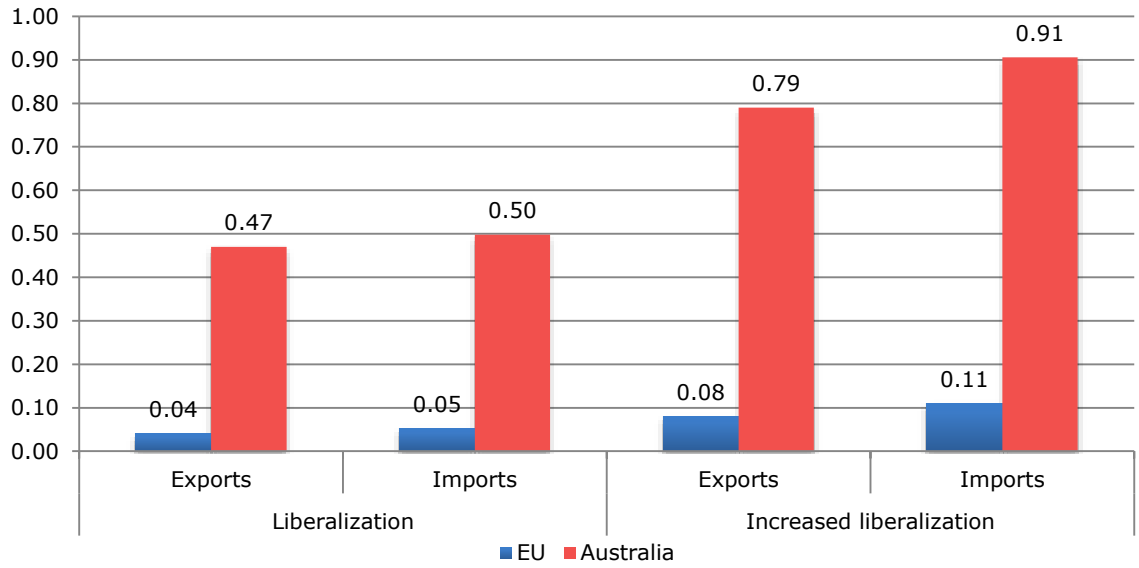
The simulation results indicate that the FTA would lead to increased exports for both the EU and Australia. We analyse the resulting changes in bilateral export flows between the EU and Australia at an aggregate level in both the liberalised and increased liberalization scenarios. The results for bilateral export flows between the EU and Australia at an aggregate level indicate that changes in bilateral export flows for both partners are positive and quite substantial for the EU in the increased liberalization scenario. EU exports to Australia are expected to rise by 16.4% in the liberalization scenario and increase by 33.3% in the increased liberalization scenario.

In the increased liberalization scenario, the per cent increases of exports from the EU in volume terms are concentrated mainly in gas (2926%), textiles (104%), coal (96.3%), machinery (60.6%), other electrical (58.5%), non-metals (58.2%), metals (54.4%), motor vehicles (52.1%), dairy (49%), and wood and paper (21.3%). However, in export value terms, sectors such as coal with base value of zero, and gas with relatively low base values, would not gain much.

Likewise, Australia's exports to the EU are expected to increase by 6.9% in the liberalization scenario and by 11.1% in the increased liberalization scenario (Figure 15). The sectors where Australian exports to the EU are expected to show the highest per

cent increases in volume terms include ruminant meat (536%), sugar (123%), rice (113%), dairy (86.9%), other food products (74.5%), cereals (52.6%), and textiles (38.3%). However, expected gains in exports of rice and sugar would not be high as they have very low base export values.

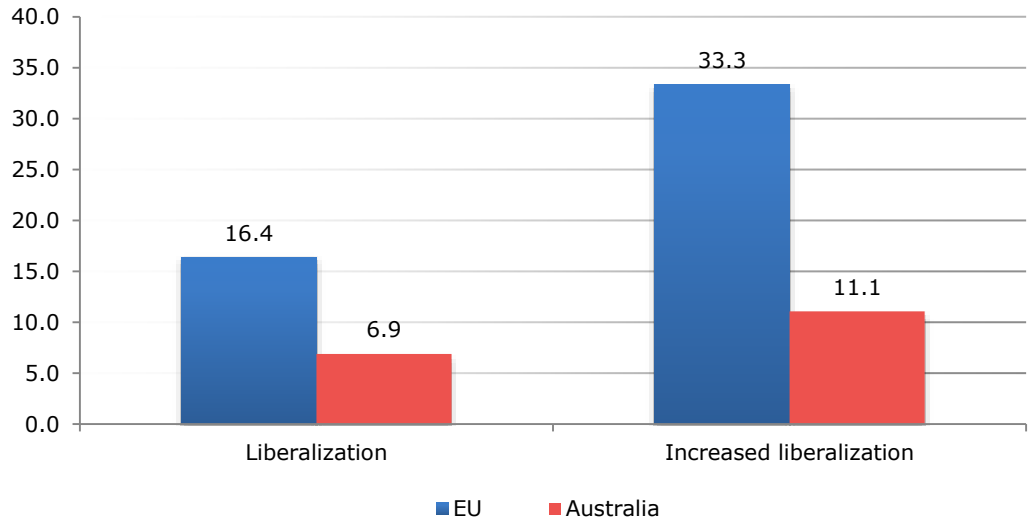
Figure 14: EU-Australia: Percentage change in Total Trade (long term impact)



It is interesting to note that the EU's bilateral services exports are concentrated in sectors such as transport, communication, utility, financial and other services. In terms of services exports, the percentage gains are almost same in both the scenarios. In the liberalization scenario, the EU's exports of services to Australia in communications are projected to increase by (7.0%), transport services (6.2%), financial services (6.8%), utility from € (7.5%), and other services (7.1%).

Australia's gain in service sector exports for transport, communication, utility, financial and other services are expected to be slightly higher in the increased liberalization scenario compared to the liberalization scenario. In the increased liberalization scenario, Australia's services exports to the EU in communications are projected to increase by 9.4%, transport services by 9.3%, financial services by 9.2% and utility by 11.1%

Figure 15: EU-Australia: Percentage Change in Bilateral Exports



3.1.3. Sectoral Output

Figure 16 highlights the sectors for which the largest positive and negative percentage changes in output are observed for the EU in the long run for both liberalization scenarios. The results indicate that the impact on EU sectoral output is negligible for the majority of sectors. In the increased liberalization scenario, by far the highest output decline at sector level for the EU is estimated to occur for the ruminant meat sector (-1.2% in the long run) while gas shows an expansion by 0.7%. The motor vehicles sector shows an expansion in the output by +0.2% and +0.3% for both liberalization scenarios respectively. While machinery and equipment also gains (+0.1%) only in the increased liberalization scenario. In the dairy sector, output effects run in opposite directions for both scenarios, being expected to expand by (+0.1%) in the liberalization scenario or decline by (-0.1%) in the increased liberalization scenario. As regards services output in the EU, expected gains are negligible in all the sectors, with less than 1% increases forecast in both the scenarios.

In the liberalization scenario, output is estimated to expand mainly for beverages and tobacco (0.5%) in Australia (Figure 17), while motor vehicles and machinery are expected to contract. In the increased liberalization scenario, gains in output for Australia are expected mainly in ruminant meat (2.4%) and sugar (0.7%). This effect can be explained by the high import tariff barriers in the EU for Australian imports in these sectors. As regards services output, in both scenarios Australia's projected gains are minimal in all the sectors, with less than 1% increases forecast.

Figure 16: Percentage Change in Sectoral Output in EU

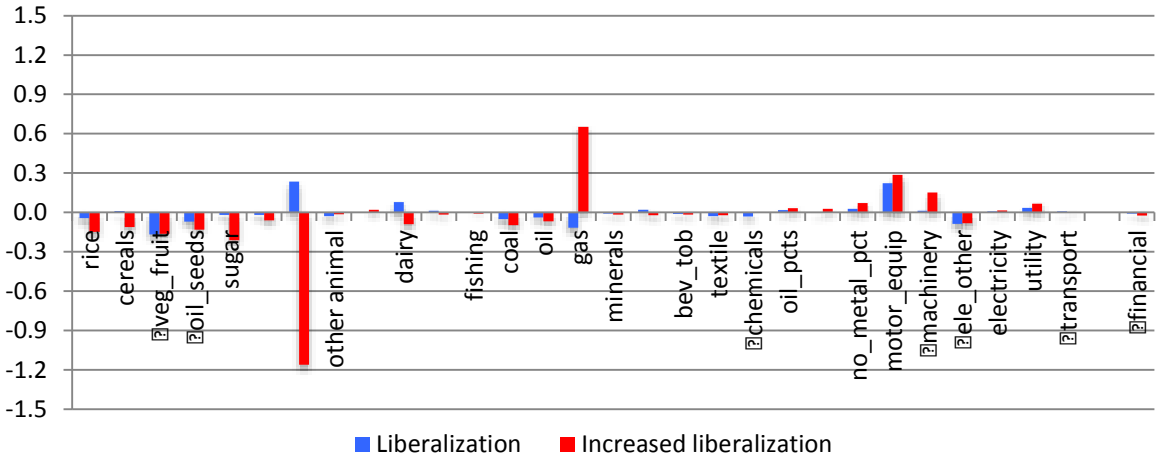
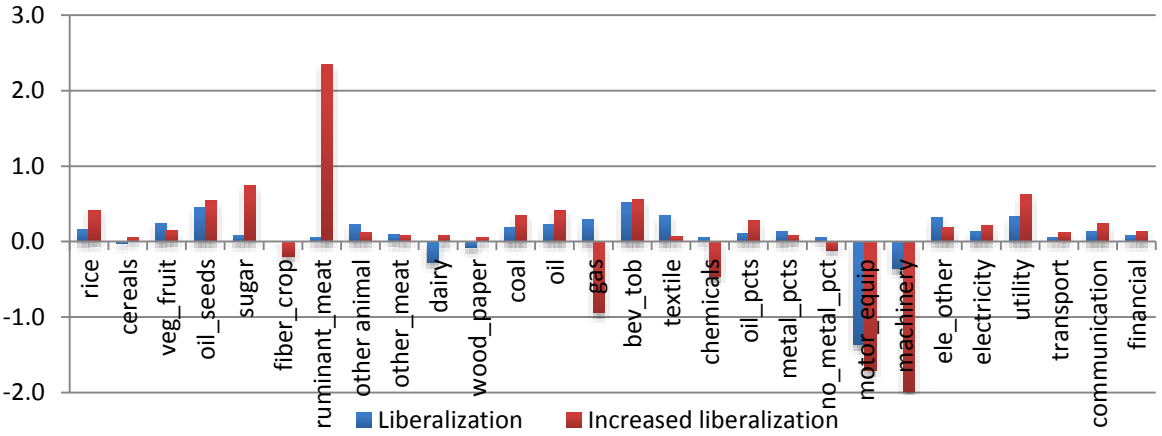


Figure 17: Percentage Change in Sectoral Output in Australia



The shifts across sectors as a result of this FTA are not so pronounced except for the few sectors such as machinery and motor vehicles, which are expected to witness declines in production in Australia as a result of trade liberalization and mirror the top expanding sectors observed in the EU, reflecting trade specialization between the two trading blocs. Moreover, the tariff cuts modelled are expected to benefit Australia in terms of higher exports and output, while potentially benefitting the EU in terms of downward pressure on consumer prices.

3.1.3.1. Coal

Coal is one of the major commodities exported by Australia to the EU, while the EU is mainly an importer of coal. According to 2011 data the EU's applied tariff rate on coal imports from Australia is nearly zero. On the other hand, Australia imposes applied tariff rates of 11.8% on imports of coal from the EU. For the EU, the estimated percentage changes of total output of coal are below the perception threshold for both scenarios. For Australia, the estimated percentage change of total output of coal is expected to be marginal at 0.3% for the increased liberalization scenario. The relatively high 96% increase in EU exports of coal to Australia in this scenario can be attributed to the low current value. Australia's exports of coal would increase by about 0.7%. For both the EU and Australia, changes in average import prices are below the perception threshold.

3.1.3.2. Machinery

Trade in machinery products is important for both the EU and Australia. At the same time, EU exports to Australia are significantly higher than Australia's exports to the EU. Machinery remains one of the major EU exports to Australia and is also an important sector where the EU will significantly gain in terms of increase in exports to Australia, especially in the increased liberalization scenario, by 61%. For the EU, the estimated percentage change of total output of machinery is 0.2% while output for Australia is estimated to decrease by 2% under the increased liberalization scenario. Aggregate average import prices for machinery products would not change (below the perception level) for the EU, however, for Australia import prices are expected to fall by 0.47% and 1.35% in the liberalization and increased liberalization scenarios, respectively.

3.1.3.3. Motor Vehicles/ Transport Equipment

Another important sector for trade between the EU and Australia is motor vehicles. EU exports to Australia are significantly higher than Australia's exports to the EU. Motor vehicles is a main sector where the EU will significantly gain in terms of increase in exports to Australia and more so for the increased liberalization scenario, being expected to rise by 52%. For the EU, the estimated percentage increase in total output of machinery is 0.29% under the increased liberalization scenario, whereas output for Australia is estimated to fall by 1.7% in the same scenario. Aggregate average import prices for motor vehicle products would not change (below the perception level) for the EU, however, for Australia import prices are expected to fall by 1.34% and 1.84% respectively for the liberalization and increased liberalization scenarios.

3.1.4. Services

In the remaining part of this section, we focus on all the services sectors in this analysis. In all services sectors, the EU has a trade surplus with Australia in the base data. For utility services, output in the EU rises slightly in both scenarios, Australia's output increases more steeply, relatively speaking, because Australia is not a major exporter or importer to/from the EU, but the EU is an important source as well as destination for Australian utility services, as in many of our results in this analysis. Nevertheless, the EU is expected to import more from Australia than the baseline. At the same time, the EU is expected to export more.

Transport services form a major part of the EU's services exports to Australia. Output in the EU rises slightly in both scenarios, whereas Australia's output is predicted to increase more than ten times the percentage change in the EU transport services sector. Australia's import prices are expected to decline by almost 1%, while EU import prices could decline very slightly because, while Australia forms a negligible part of EU's import sources of transport services, the EU forms an important part of Australia's import sources of transport services. Still, the EU could increase imports considerably from Australia (9-9.3%) and increase its exports to Australia even more in absolute terms, since the initial level of exports is much higher than imports.

In the case of the communication service sector, EU's import prices are expected to increase slightly, thereby making Australia's exports to the EU more competitive. Therefore, the EU is expected to import a lot from Australia, so much so that its output has to decline slightly, despite an increase in exports. Australia's import prices are expected to decline quite a bit (-0.69 to -0.68%), but still its output is projected to increase slightly, since it continues to export more to the EU.

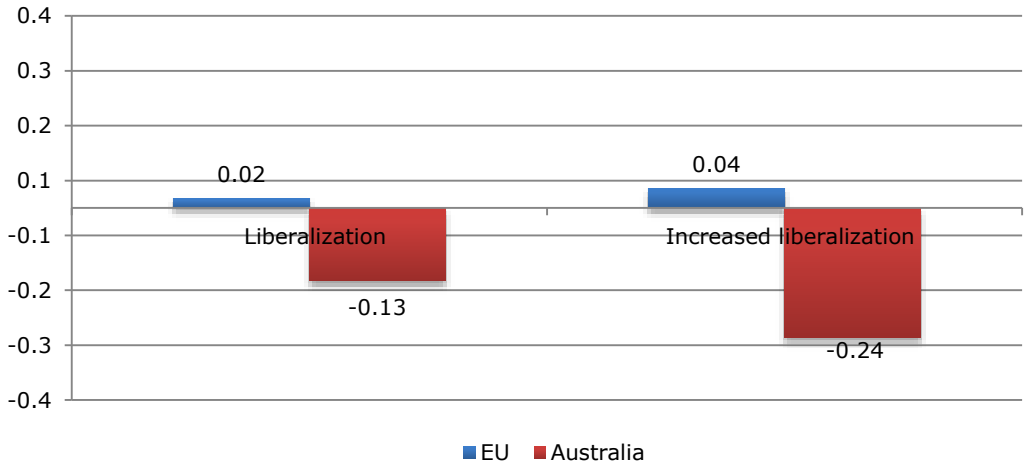
For financial services that are very similar to those for the communication services sector. The EU faces increasing imports from Australia, resulting in slightly lower output, despite increasing import prices. The EU is still expected to export more, while Australia's output is projected to increase, partly offset by reduction of import prices. Australia's projected output growth is partly attributable to reduced import prices, since the financial services sector can now import cheaper intermediate inputs, which may be contained within the same sector. This is an important aspect that explains most of the counter-intuitive results in a CGE model that has aggregate sectors, with a lot of self-consumption. For example, the financial services sector may contain sectors like banking and insurance, each of which may consume the services provided by the other for production, while the aggregate financial services sector would appear to be consuming itself in our model and data. In such cases, reduction of import prices in a given sector means two opposite things for the same sector – reduction of intermediate input prices, thereby boosting output, and reduction of output due to competition from cheaper imports.

Other service sectors aggregated as a single sector in our model show pretty obvious and intuitive results: increased demand for imports coming from declining prices, boosting output and exports at the same time, due to cheaper intermediate inputs, in both the EU and Australia; extents of increase, relatively speaking, are much higher for Australia than for the EU.

3.1.5. Terms of Trade

Concerning the terms of trade, the results indicate that there are no significant effects of the FTA on the EU though they are positive (Figure 18). For Australia, in both liberalization scenarios terms of trade effects are negative (-0.13% in the less liberalized scenario compared to -0.24% in the increased liberalization scenario).

Figure 18: EU and Australia Percentage Change in Terms of Trade

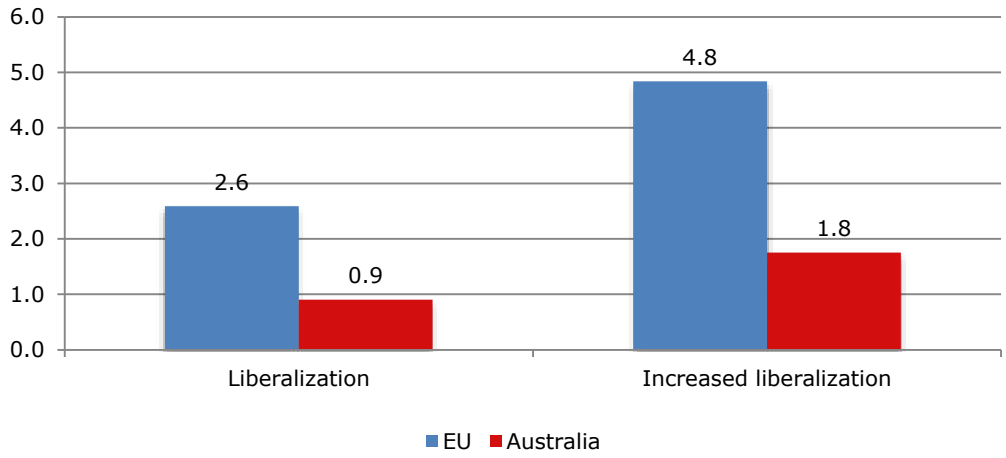


3.1.6. Welfare Impact

Aggregate welfare effects are positive for both the EU and Australia under both liberalization scenarios (Figure 19). In the GTAP model, the welfare effect represents a money metric equivalent of the utility change that arises, for example, from terms of trade changes and improvements in a countries resource allocation. In the model, welfare is calculated by measuring "equivalent variation" (EV) which summarizes regional welfare changes and is translated in Euro values (For the EU, the projected gain

in aggregate welfare amounts to €4.8 billion in the increased liberalization scenario, and in the liberalization scenario at €2.6 billion Depending on the degree of liberalization, aggregate welfare improvements range from €0.9 billion €1.8 billion for Australia.

Figure 19: EU-Australia Absolute Change in Welfare (Long Term, € Billion)



The general effects of the potential EU-AUS FTA are positive. In this Section 3.1., we discussed the sectoral effects on production and trade as well as the welfare implications. There are more detailed results. In the following, we deal with the estimated effects on agricultural goods (Section 3.2), investment (Section 3.3), real wages (Section 4.1), prices (Section 4.2) and the environment (Chapter 5).

3.2. Analysis of Agricultural Goods and Food (Task 3)

3.2.1. Effects of an EU Australia FTA

Focusing on EU-AUS trade relations, this section provides a qualitative analysis of existing tariff and non-tariff barriers for trade in agricultural goods and food sectors between the EU and Australia. We also present the results of the CGE modelling that was conducted by DG Trade.

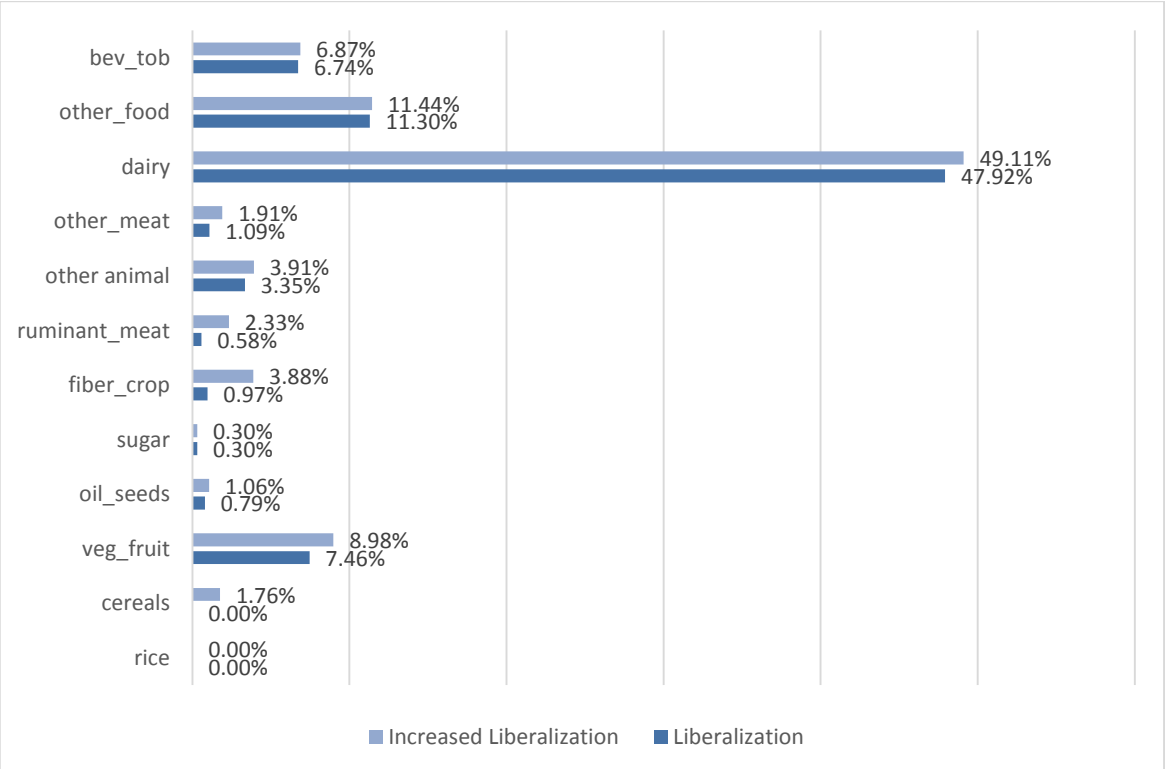
3.2.1.1. The Results of the CGE Model: An overview

The CGE modelling conducted by DG Trade is based on two scenarios, which are based on different assumptions underlying the liberalization of agricultural markets. Before we continue with the discussion of the potential impacts of trade liberalization on a sector-by-sector basis, we provide an overview of projected changes in EU output of agricultural commodities and food sectors, changes in exports and imports, and changes in commodity import prices. The aim is to get an understanding about the relative magnitude of the impacts on key indicators under the two liberalization scenarios for the whole range of agricultural and foodstuff sectors.

3.2.1.2. Changes in EU Exports to Australia

As discussed above and shown in Figure 20, the changes in EU exports to Australia are most significant for dairy products, other food products, beverages and tobacco products as well as vegetable and fruits products. For all other sectors the relative changes in exports are rather insignificant for both liberalization scenarios.

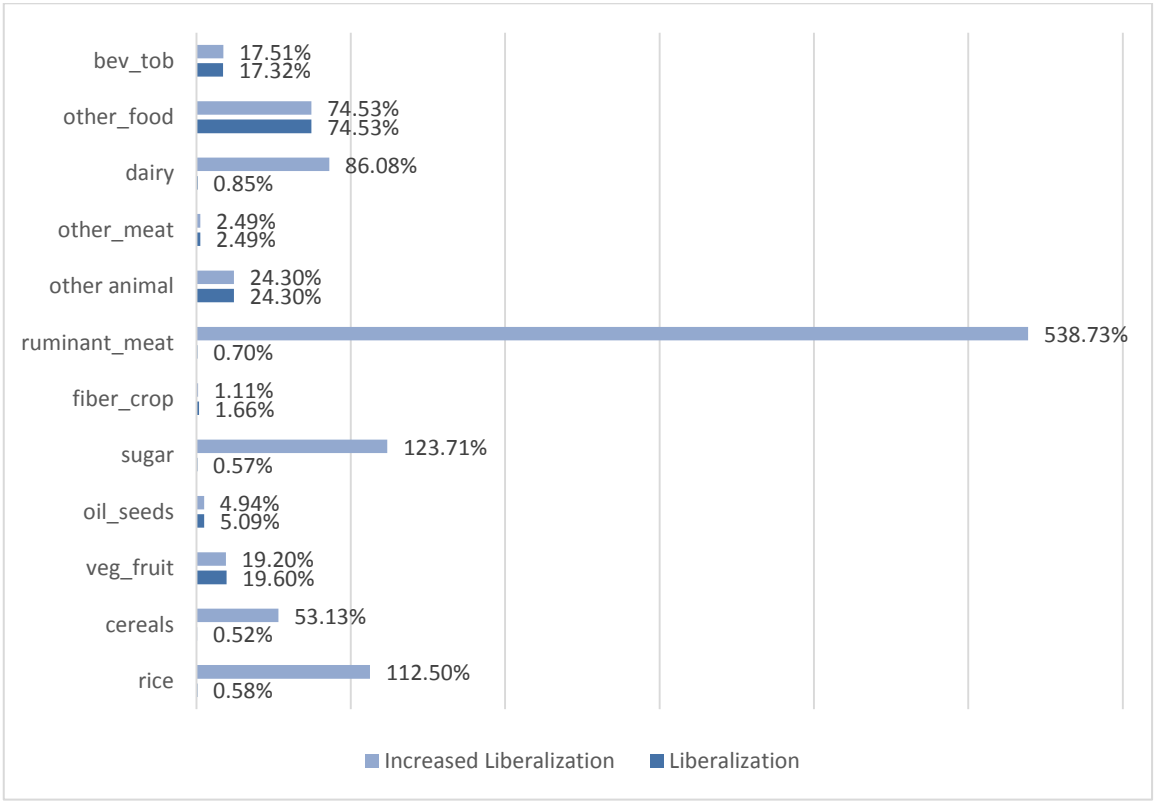
Figure 20: Changes in EU Exports to Australia, based on simultaneous EU-AUS- and EU-NZ FTA (long term)



3.2.1.3. Changes in EU imports from Australia

As concerns EU imports from Australia, the largest relative changes in Australian exports are estimated for rice, sugar and in particular for other ruminant meat products (beef and sheep), whereby it should be taken into consideration that Australia's total exports to the EU of rice and sugar products are rather low compared with other commodity categories.[36] Dairy products, other food products, cereals, ruminant meat and other animal products are also estimated to show relatively significant changes in export volumes, followed by lower, though still significant rises in exports of beverages and tobacco products and vegetables and fruits products (see Figure 21).

Figure 21: Changes in EU Imports from Australia, based on simultaneous EU-AUS- and EU-NZ FTA (long-term)



3.2.1.4. Changes in EU sectoral output

As concerns total sectoral output, percentage changes in output are generally low and often below the perception threshold. For the increased liberalization scenario, the largest change in sectoral output is estimated for the EU's ruminant meat sector, where output losses are estimated to be 1.16%. On the other hand, in the increased liberalisation scenario, Australia's ruminant meat sector would gain most in output volumes (2.35%), followed by sugar and oil seeds beverages and tobacco and other meat sector (see Figures 22 and 23).

[36] The estimated 113% increase in EU rice imports from Australia under the increased liberalisation scenario is in fact not significant taking into account the comparatively low base value. A discussion is provided below.

Figure 22: Changes in Sectoral Output in the EU, based on simultaneous EU-AUS- and EU-NZ FTA (long-term)

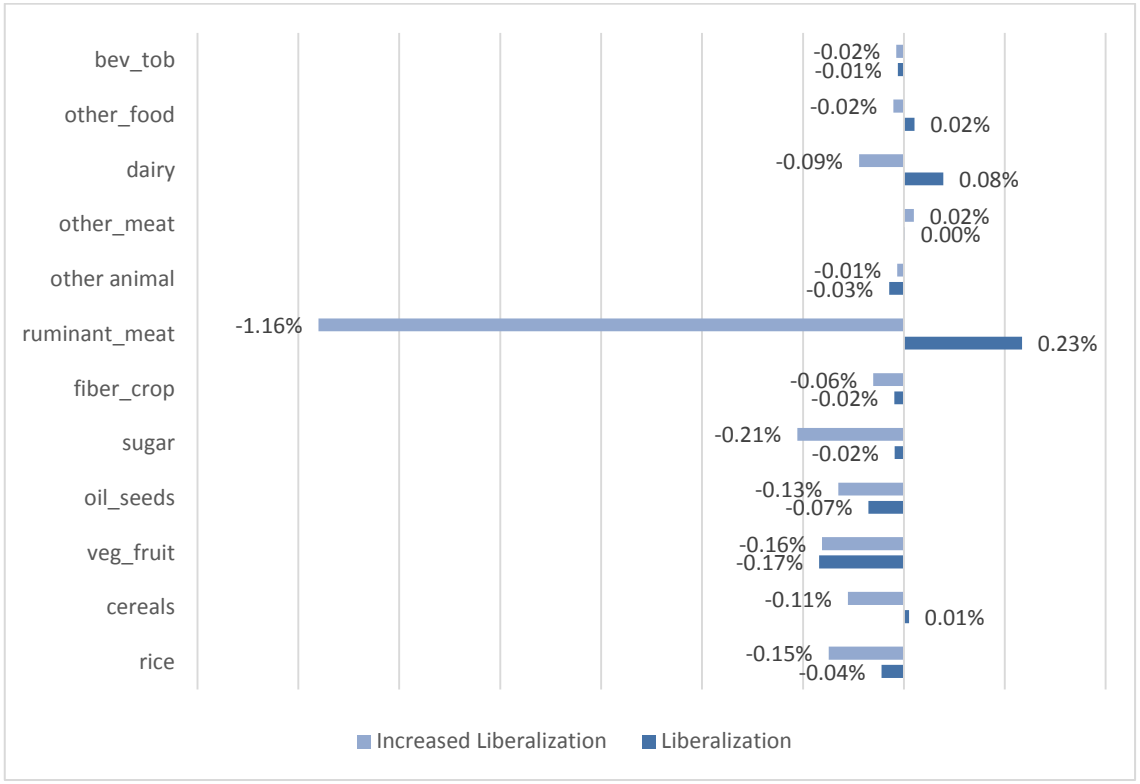
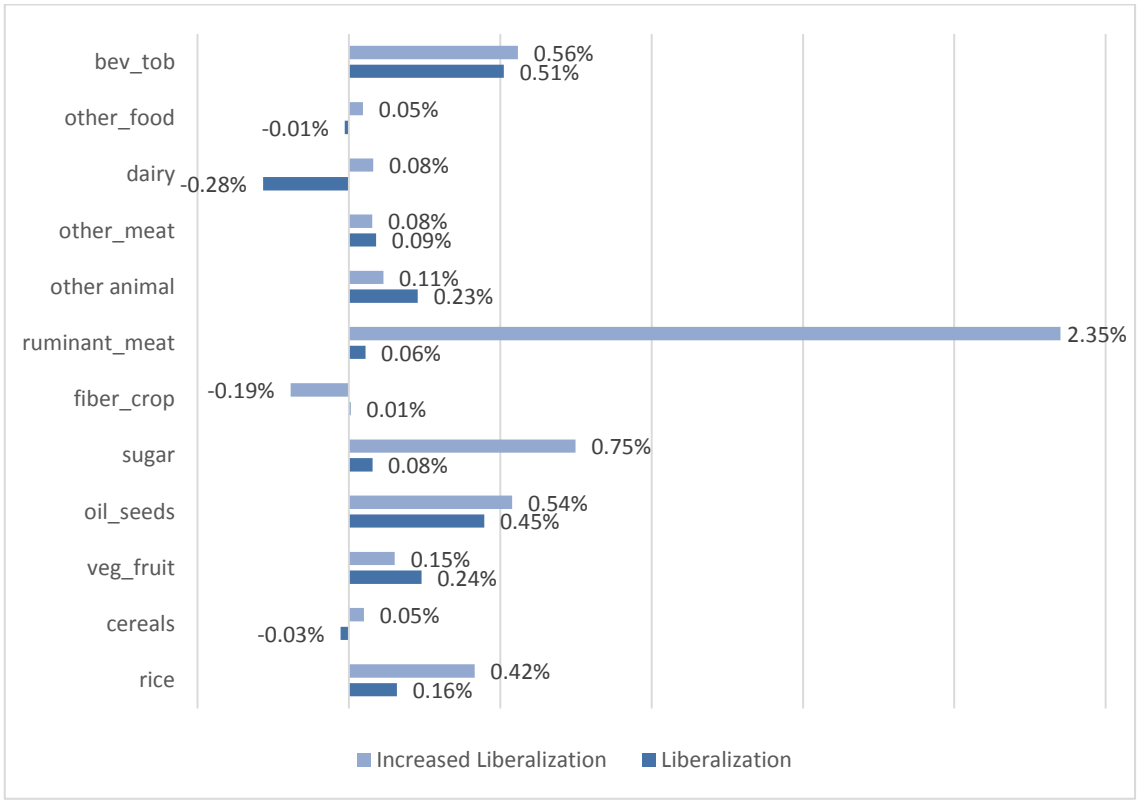


Figure 23: Changes in Sectoral Output in Australia, based on simultaneous EU-AUS- and EU-NZ FTA (long-term)



In the following, we analyse the main specific Australian and EU non-tariff barriers (NTBs), namely Sanitary and Phytosanitary Measures (SPS), Technical Barriers to Trade (TBT) and other issues in our sectoral and product analysis.

3.2.2. The effects by products[37]

3.2.2.1. Rice

As of 1 January 1996, the EU extended access by AUS to two TRQs for rice totalling 83,000 tons, including allocation to traditional suppliers.[38] However, compared to other agricultural commodities, rice does not play an important role in EU-AUS trade relations. The estimated 113% increase in EU rice imports from Australia under the increased liberalization scenario is in fact not significant in terms of trade volumes taking into account the comparatively low base value: in 2015, Australia's rice imports from the EU amounted to about €4.35 million ($4.83 million).

3.2.2.2. Cereals

According to Eurostat statistics, EU28 cereals exports to Australia have been rather low (average 2006-2015: 7.65 million tonnes). Since 2012, AUS exports essentially consist of durum wheat (average 2012-2015: 165 million tons of a total average for cereals exports of 171.25 million tons).

Trade policy measures

The major constraint for AUS cereals exports (besides transport distances especially in comparison with North American or Black Sea suppliers) is a relatively high import tariff in the EU of 9.4%. EU exports to AUS are relatively low: in 2015, EU cereals exports exceeded a volume of 1m tons for common wheat (7.3m tons) and for barley (3.5m tons). On the other hand, all EU cereals exports enter AUS duty-free.

As concerns SPS measures, Australia's National Residue Survey, a combined government and industry strategy to minimise chemical residues and environmental contaminants, is equally applied to imports and domestic production. For other non-tariff issues, the only significant change would be the approval of genetically-modified cereals by either party, for different end uses with a significant trade effect. Such a decision is, however, not presently envisaged.

CGE model results

As indicated above, EU exports of cereals to Australia do not play an important role in EU-AUS trade relations. Cereals exports of Australia to the EU are relatively more significant. Estimated percentage changes in EU exports, imports and total output of cereals are below the perception threshold for both liberalization scenarios. On the other hand, Australia's exports of cereals products could increase by about 53.1% under the increased liberalization scenario. Aggregate average import prices for cereals products would not change (below the perception level) for both jurisdictions under both scenarios.

3.2.2.3. Fruit and Vegetables

Despite numerous trade barriers in most countries, global fruit and vegetables trade is expanding rapidly, with public health, food security and economic benefits especially in developing countries. For the bilateral EU-AUS trade in horticultural products, a number of tariff and non-tariff barriers exist.

[37] For $ to € conversion, the exchange rate used throughout the report is 0.901 based on 2015 average.
[38] 63,000 tonnes of semi-milled and wholly milled rice (1006 30 00) at €0/t (erga omnes), and 20,000 tonnes of husked (brown) rice (1006 20 55) at €88/t (erga omnes). Source: Official Journal L 334 , 30/12/1995 P. 0040 – 0045.

EU fruit and vegetable imports are relatively high. Australian fruit exports to the EU (fresh or dried, including nuts and citrus & tropical fruit) amounted to €231 million[39] in 2015. AUS vegetable exports to the EU (fresh, chilled and dried) showed little changes throughout the period 2011-2015, with a slight increase of 3.4% in 2015.

EU fruit exports to AUS (fresh or dried, incl. nuts but excl. citrus & tropical fruit) amounted to €31 milion in 2015, but did not reach the 20 top EU Agrifood exports to AUS in the years 2011–2015. At the same time, vegetables exports (fresh, chilled and dried) stagnated at around €24 million.

Trade policy measures

The EU's tariff structure is relatively complex. Import duty rates may consist in so-called seasonal, mixed, or compound tariffs (e.g. €5/100kg+10% of the product value). The EU also applies additional import duties (within its WTO limits). Australia imposes relatively low applied tariffs on EU imports of vegetables and fruits products, standing at an average of 1.84%.

In the EU's Common Market Organisation (CMO) of the EU, the EPS is the main tool for regulating fruit and vegetable imports, and even for some processed foods.[40] According to EU Council Regulation No 1035/72 of 18 May 1972 on the common organization of the market in Fruits and Vegetables, the objectives of the entry price system (EPS) are to (i) "stabilize the Community market by preventing the price level in non-EU countries and fluctuations thereof from having repercussions on prices within the Community", (ii) achieve "a balance between supply and demand at fair prices to the producer" and (iii) "protect Community participation in international trade".

For all products subject to the EPS, the veracity of the declared entry price of a consignment is to be checked using a flat-rate import value. In addition, for certain products the lodging of a security is required.[41] This and a number of additional issues, including tariffs, have been signalled by some EU and AUS horticultural stakeholders (that are exporting to or importing into the EU) as trade constraints.

This being the case, fruits and vegetables production is undergoing rapid developments. New field management and irrigation technologies have allowed a considerable production expansion in AUS and many other countries that benefit from preferential market access in the EU (Argentina, Chile, South Africa, and Peru), both for quantities and for extending the traditional harvest period.

The EU maintained the EPS in all recent FTAs including the Comprehensive Economic and Trade Agreement with Canada (CETA) and the Vietnam–EU FTA. By comparison, under the Trans-Pacific Partnership Agreement (TPP) cherries from the USA would obtain (reciprocally) free market access to Viet Nam and other TPP countries.

As concerns AUS trade barriers for vegetables and fruits products, various trade instruments and measures in place negatively affect certain EU fruit and vegetable exports to Australia. Australia not only has very strict phytosanitary import regulations

[39] https://ec.europa.eu/agriculture/sites/agriculture/files/trade-analysis/statistics/outside-eu/countries/agrifood-australia_en.pdf
[40] Cf. Agrosynergie (Groupement Européen d'Intérêt Economique), Evaluation of the system of entry prices and export refunds in the fruit and vegetables sector (Framework contract no 30-CE-0035027/00-37 Evaluations fruit and vegetables, April 2008).
[41] Regulation (EU) No 1308/2013 dated 17 December 2013 (L 347/671): Article 181 (Entry price system for certain products of the fruit and vegetables, processed fruit and vegetables and wine sectors) foresees that the entry price of a consignment shall be equal to its customs value calculated in accordance with Council Regulation (EC) No 2913/92 (40) (the Customs Code) and Commission Regulation (EC) No 2454/93.

for fresh fruits and vegetables, even without roots; a number of measures under the Imported Food Control Act 1992 and the Biosecurity Act 2015 also limit access to the country as a whole, e.g. the Australian Quarantine and Inspection Service (AQIS) and Biosecurity Import Conditions system (BICON) or to the Fruit Fly Quarantine Zones.

Commercial importers of certain fresh fruit and vegetables need to obtain an import permit. Moreover, AUS applied or applies antidumping measures against EU horticultural products: processed dried currants from Greece (minimum import prices) and on prepared or preserved tomato products from Italy (ad valorem duties from 0% to 26.35%). For concerned countries and producers respectively, these constitute serious export constraints, not only for the time these measures are in place but also because of their non-transparent and non-foreseeable application affecting long-term production and export strategies.

CGE model results

For the EU and Australia, the estimated percentage changes of total output of vegetables and fruits products are below the perception threshold for both liberalization scenarios. Australia's exports of vegetables and fruits products are estimated to increase by about 1% under both liberalization scenarios. EU exports of vegetables and fruits products could increase by 7.5% under the liberalization scenario and 9% under the increased liberalization scenario. For both liberalization scenarios, EU output of fruits and vegetables products is expected to decrease slightly by 0.2%. Similarly, Australia's output of fruits and vegetables products is estimated to increase slightly by 0.2% under both liberalization scenarios. Aggregate average import prices for vegetables and fruits products would not change (below the perception level) for both jurisdictions under both liberalization scenarios.

3.2.2.4. Oil Seeds

Among the EU's top agrifood imports from AUS (2011-2015) oilseeds rank first. Its 2015 share in total agrifood imports was 24.5% amounting to an average €722 million, followed by wines (2015 share 23.3%, average €481 million).

Trade policy measures

AUS imposes low applied tariffs on EU imports of oils seeds products, standing at 0.17%. As concerns non-tariff matters, the only significant impact factor would be the approval of GM oil seeds by either party, for different end uses with a significant expected trade effect. Such a decision is not presently envisaged.

As illustrated in the submission of the Australian grain producer association GrainGrowers (February 2016, with data from the DFAT publication Composition of Trade Australia 2014-15), an important oil seed for AUS exports, namely canola, may face new challenges under rapid trade liberalization. With 2.5 million tons annually, AUS is the world's second biggest canola exporter, slightly ahead of the Ukraine (2 million tons), but still far behind Canada with 9 million tons. It enjoys a price premium of AUD50/t (€45[42]), inter alia because it is basically compatible with the EU's Renewable Energy Directive (RED). However, the EU is still to recognise the application of Australian legislation to limit land clearing, which would constitute a country-wide satisfaction of EU RED reporting requirements instead of individual operator certification).

[42] For AUS to € conversion, the exchange rate used throughout the report is 0.901 based on 2015 average.

More importantly, AUS supplies non-GMO canola, while Canada's production is 90% genetically-modified production. Hence, tariff concessions under CETA as well as the EU's GM opt-out provision enabling its member states to prohibit EU-approved biotech products may easily change the present market equilibrium.

CGE model results

In view of the already very low applied tariffs, trade liberalization under both scenarios is expected to moderately increase exports of both parties, without major output or price changes on either side. For the EU, the estimated percentage changes of total output of oil seeds commodities are below the perception threshold for both liberalization scenarios. For Australia, the estimated percentage changes of total output of oil seeds commodities is estimated to be between 0.4% and 0.5%. Australia's exports of oils seeds products could increase by about 5% under both liberalization scenarios. The EU's exports of oil seeds products could increase by about 1% under both liberalization scenarios. Aggregate average import prices for oil seeds products are not expected to change (below the perception level) for both jurisdictions under both liberalization scenarios.

3.2.2.5. Sugar

World sugar production increased from 86 million tons in 1990 to 93 million tons in 2000 and 132 million tons in 2014. Currently, 156 million tons of sugar (raw sugar equivalent) is produced in approximately 120 countries. While sugar beet production keeps declining, sugar cane cultivation in recent decades has undergone strong growth, basically led by rising demand for sugar in food consumption and as a raw material for ethanol production.

A high rate of about 25% of global sugar production is traded annually. France is the world's largest sugar beet producer, followed by the Russian Federation, Germany and the United States. As concerns sugar cane, Brazil, India and China are the world's most important producers. The traditionally large trade surpluses of developing countries have diminished rapidly since the early 1990s, and several developing countries became major importers.

The EU is the world's biggest producer of beet sugar and the principal importer of raw cane sugar for refining. According to the European Commission, the EU is the world's leading producer of beet sugar, with around 50% of world production. However, beet sugar represents only 20% of the world's sugar production. The remaining 80% is produced from sugar cane. Today the EU is a net importer of sugar. Imports are mainly in the form of cane sugar for refining from the ACP and LDC benefitting from quota-free, duty-free access to the EU market.

Australia, for which sugar is the second largest agricultural export earner after wheat, produces around 5 million tons of sugar, 70% of which are exported.[43] According to FAO, AUS exports of sugar and honey declined from 4,161 to 3,384 million tons between 2000 and 2010. For Europe as a whole (including Russia) the exports slightly increased from 13,592 to 13,824 million tons.

While Australia is not a major sugar beet producer, the country ranks 11th in global production of sugar cane (most up-to-date data based on FAO agricultural statistics).[44]

[43] USDA Foreign Agricultural Service (2015), Sugar Annual for Australia, published on 22 April 2016.
[44] FAOSTAT, http://www.fao.org/faostat/en/#data/QC, accessed on 2 March 2017.

In 2015, AUS exports in "cane or beet sugar" (HS 1701) amounted to some €232.4 million ($258 million) in value. Accordingly, AUS trade deficit in cane or beet sugar amounted to about €63 million ($70 million) in 2015 (World Bank ITS).[45]

EU "cane or beet sugar" (HS 1701) exports to AUS amounted to €294.6 million ($327 million) in 2015. Accordingly, the EU's trade surplus in cane or beet sugar with AUS was about €63 million ($70 million) in 2015 (Word Bank ITS).

Trade policy measures

The EU sugar market is regulated by production quotas, a minimum beet price and trade mechanisms. The EU presently applies relatively high tariff rates (AVE 16%) and a small bilateral tariff-rate quota.[46] The EU sugar regime is set to change in 2017, with the phase-out of its main market instrument for sugar: the production quota system, the reference price, and the minimum price of presently €26.29 per ton for sugar beet for the production of quota sugar in nineteen Member States. Income support for EU sugar beet farmers has been integrated into the direct payment system.

The Australian sugar industry was deregulated in 2006 with the abolition of the 'single desk' arrangement under which sugar was compulsorily acquired and sold by Queensland Sugar (QSL). Subsequently, most growers retained marketing links with QSL in order to reduce unit costs through pooling sugar production for export. Today QSL still markets about 85% of Australia's raw sugar.[47] Although AUS keeps seeking increased market access under all its trade agreements, neither its FTA with the USA nor the signed TPP abolish all tariffs for Australian sugar exports although under the TPP the US agreed to a specific sugar quota for imports from Australia.

CGE model results

For the EU and Australia, the estimated changes in total output of sugar as well as changes in average import prices of sugar are below the perception level for both liberalization scenarios. EU exports of sugar would not change significantly for both liberalization scenarios. On the other hand, Australia's exports of sugar to the EU would increase by 124% under the increased liberalization scenario.

3.2.2.6. Ruminant Meat (beef, sheep and goat meat)

Between 2011 and 2015, Australian exports of beef meat to the EU roughly doubled to 31,000 tons. In the same period, Australia's exports of for sheep and goats remained stable at about 19,000 tons.[48] In 2015/16, Australia produced approximately 2.34 million tons cwt of beef and veal of which 74% were exported.[49] AUS exports of ruminant meat to the EU are important for Australia. While Australia's exports of ruminant meat amounted to €211 million in 2015, the EU exports were almost zero.

Trade policy measures

[45] Due to data gaps in Eurostat's trade volume data at HS-4 and HS-6 level, we present more comprehensive trade data of the World Banks's ITS database.
[46] For its sugar exports to the EU AUS benefits from a tariff-rate quota of 10'000 tonnes at reduced duty. The EU's other import quotas (outside EPA and EBA sugar) are about 1 million tons, mainly for the Balkans and Brazil.
[47] Sources: (i) Statistical Yearbooks of the Food And Agricultural Organization 2013 and 2014 (ii) FAO Statistical Pocketbook 2015 (iii) European Commission, Agriculture and rural development, Factsheet on Sugar, downloaded 22 February 2017 at https://ec.europa.eu/agriculture/sugar_en (iv) USDA/FAS GAIN Report on Australia, dated 22 April 2016.
[48] Source: EUROSTAT – COMEXT Extraction date 30 June 2016.
[49] MLA (2016), Meat and Livestock Australia, Australia's beef industry, https://www.mla.com.au/globalassets/mla-corporate/prices--markets/documents/trends--analysis/fast-facts--maps/mla_beef-fast-facts-2016.pdf, accessed on 10 March 2017.

Australia enforces restrictions and cumbersome approval processes on imports of bovines and products relating to Bovine Spongiform Encephalopathy (BSE). These restrictions are not science-based as prescribed in Article 2 of the SPS Agreement. Moreover, Australia's regulations are not based on the present BSE status of the EU Member States as established and published by OIE, nor do Australia's approval procedures take into account agreed OIE guidelines and deadlines.

Under Australia's Imported Food Control Act 1992, beef and beef products for human consumption are considered a risk food for the likely presence of BSE agent. Such beef can only be sourced from countries that have had their BSE food safety risk assessed and a satisfactory BSE risk status. According to the website of the Australian Government's Department of Agriculture and Water Resources, only five EU member states figured on the list of countries approved for trade in beef and beef products for human consumption.[50]

Australia tried to get various import measures for its own beef exports lifted under the TPP agreement. The Department of Agriculture and Water Resources of Australia (DA) follows a cumbersome approval process to allow imports from countries that have reported an indigenous case of BSE. Under Australia's requirements (since 2010), Food Standards Australia New Zealand (FSANZ) conducts an individual country risk assessment. In addition to this review, the DA conducts a separate import risk assessment for each exporting country to address animal quarantine issues. The risk assessment procedures significantly delay imports of bovine products and are not fully aligned with the BSE requirements of the OIE or the OIE's official status, namely for safe commodities, e.g. deboned meat.

As a consequence, even though Australia imposes zero tariffs on EU imports of ruminant meat products, import into Australia is not yet possible. If Australia's regulations were lifted, EU market access for fresh/frozen, deboned meat, would improve.

EU market access for ruminant meat is determined by relatively high tariffs, and TRQs offering low tariff-based market access for limited quantities only. In addition, access to TRQs may be reserved to one country or „shared" between suppliers from different countries, within a FTA or iunder the WTO.[51] For example, the EU offers a (shared) access to a 48,200 ton grain-fed beef quota with a 0% in-quota tariff. There is an additional TRQ of 7,150 tons for Australian "high quality" beef, subject to a 20% in-quota tariff. For out-of-quota imports the tariff is 12.8% plus up to €3/kg.

As for sheep and goat meat, the 19,186 ton country specific quota enjoys a zero in-quota duty; above this quota, duties of 12.8% plus up to €3.1/kg apply. In addition, offal, by-products and prepared meat face tariffs of up to 16.6% or €3/kg.[52]

CGE model results

[50] Information on Bovine Spongiform Encephalopathy food safety requirements for imported beef and beef products for human consumption, accessed on 17 November 2016 at http://www.agriculture.gov.au/import/goods/food/inspection-compliance/bse_food_safety_requirements_for_beef#other-countries-not-listed. For BSE protection measures under the Food Standards Code see http://www.foodstandards.gov.au/industry/bse/Pages/default.aspx accessed on 18 November 2016.

[51] Article XIII of the GATT, as applied since 1995 and interpreted namely in *EC – Bananas,* determines the maximum quantities which can in this way be reserved for country suppliers (and in other words denied to MFN suppliers from outside the FTAs).

[52] Source: A-EUFTA Red Meat and Livestock Industry Taskforce, Submission to DFAT, Europe Division (February 2016).

For the EU, total output of ruminant meat is estimated to decrease by 1.2% under the increased liberalization scenario. For Australia, the estimated percentage change of total output of ruminant meat is 2.4% for the increased liberalization scenario. The increase in Australia's exports of ruminant meat to the EU is considerable: +539%. EU exports of ruminant meat products could increase by 2.3% for the increased liberalization scenario. Aggregate average import prices for ruminant meat products are not predicted to change (below the perception level) for Australia under both liberalization scenarios, but are expected to decrease by about 0.21% for the EU.

3.2.2.7. Other Meat (including pork and poultry)

The EU is the world's second-biggest pork producer after China, with the world's largest (and growing) trade surplus and about €6 billion of exports mainly to East Asia. EU suppliers also offer a highly diversified range of pork meat products.[53] Among the EU's top agri-food exports to Australia, pork meat (fresh, chilled and frozen) ranked fourth in 2015. EU exports of pork meat almost doubled between 2011 and 2015 when it reached €226 million. Accordingly, half of Australia's pork imports of around €428 million are from the EU (81% from Denmark and the Netherlands). Import penetration is an exceptionally high 45%.

With a mere €4.3 million in 2015, AUS exports of pork meat to the EU are comparatively low. EU-AUS trade of poultry meat products is marginal.

Trade policy measures

Australia imposes almost zero tariffs on EU imports of other meat products, but a number of considerations applying to pork meat may be of interest in the FTA negotiations.

Major exporters like the EU and the USA see an important trade barrier in the fact that, for animal health reasons, all pork meat imports must be cooked (Pork Biosecurity Import Risk Assessment). One reason for this requirement is a number of diseases absent in Australia but allegedly endemic in some European countries. In 2003, Australian pork producers claimed a "unique high health status" as the "principle competitive advantage of the Australian pig industry", and opposed "the importation of uncooked pig meat from PMWS[54] or PRRS[55] affected countries as these allegedly pose a significant threat to the future viability of the Australian pork industry."[56]

As concerns poultry imports, Australia has in place a number of unjustified import restrictions on chicken meat relating to Infectious Bursal Disease IBD (Gumboro Disease). Currently New Zealand is the only country to which Australia has set specific conditions for the import of cooked chicken meat, i.e. to access the Australian market. All the other exporting countries must meet multiple requirements that are set out in Australia's 2008 chicken meat Import Risk Analysis.[57]

CGE model results

For the EU, total output of other meat products would not change significantly under either liberalization scenarios. For Australia, the estimated percentage change of total output of other meat is 0.1% for the increased liberalization scenario. Australia's exports

[53] Source: Australian Pork, European Union Free Trade Agreement. Kingston, 5 July 2015.
[54] Post Weaning Multisystemic Wasting Syndrome
[55] Porcine Reproductive & Respiratory Syndrome
[56] Australian Pork Limited, Review of the Generic Import Risk Analysis for Pig Meat. Draft Import Risk Analysis Report. Submission dated 13 October 2003.
[57] http://www.daff.gov.au/biosecurity/risk-analysis/ira/final-animal/chicken-meat

of other meat products to the EU are estimated to increase by about 2.5% under the increased liberalization scenario. EU exports of other meat products could increase by about 1.9% under the increased liberalization scenario. Aggregate import prices for other meat products are not predicted to change (below the perception level) for both the EU and Australia.

3.2.2.8. Dairy Products

Eurostat figures for 2015 show that the EU produced 168.2 million tons of milk. In 2015, the production of milk in all Member States was still subject to production quotas. The EU's main producers are Germany, France, the United Kingdom, Poland, the Netherlands and Italy which together account for almost 70% of the EU production though milk is produced in every single Member State. In the EU's 2015 final agricultural production "milk" ranks second with 14.1%, after "fruit and vegetables" (23%) and before "cereals incl. seeds" (13.3%). Yet this sensitive sector faces serious structural problems.

The EU shows a surplus in trade in dairy products with Australia, partly due to the existing high EU tariffs. 2015 trade values for major dairy product categories are as follows (according to World Bank ITS data):[58]

(1) EU exports of dairy products to AUS, 2015:

- Casein, caseinates and other casein: €3.38 million
- Cheese: €145.1 million
- Milk and cream, concentrated: €28.9 million
- Milk and cream, not concentrated: €0,6 million
- Butter: €6 million
- Buttermilk: €0.86 million
- Whey, whether or not concentrated: €21.7 million

(2) AUS exports of dairy products to EU, 2015:

- Casein, caseinates and other casein: €0.07 million
- Cheese: €0.8 million
- Milk and cream, concentrated: €0.32 million
- Milk and cream, no concentrated: almost zero exports
- Butter: €6,757
- Buttermilk: €331.8
- Whey, whether or not concentrated: €0.1 million

Trade policy measures

The EU runs a system of non-AV tariffs for almost all raw and processed milk products (30 HS6 product lines in total), regarded as complex but overall "relatively satisfactory, compared with those of other countries."[59]

[58] Due to data gaps in Eurostat's trade volume data at HS-4 and HS-6 level, we present more comprehensive trade data of the World Banks's ITS database.
[59] See Jean-Christophe Bureau and Stefan Tangermann, Tariff Rate Quotas in the EU. *Agricultural and Resource Economics Review* 29/1 (April 2000) 7, p.80.

As agreed in the Uruguay Round negotiations, AUS benefits from two EU export dairy quotas, for cheddar cheese and for cheese for processing. Quotas are made available, via an allocation system to Australian companies wishing to export dairy products to the EU. Quotas which are not allocated through this process are made available on a first-come, first-served (FCFS) basis.[60] The TRQ quantities for cheddar from Australia were increased by 750 tonnes as a result of the EU enlargement negotiations under GATT-Article XXIV:6, applying as of 1 January 1996.[61]

According to the WTO tariffs database, the EU grants a number of dairy TRQs and compound tariffs applied to suppliers from all WTO Members:

- [12.9 EUR/100 kg] [13.8 EUR/100 kg] for "Milk and cream of a fat content by weight of <= 1%, not concentrated nor containing added sugar or other sweetening matter",
- [1.81 EUR/kg/lactic matter + 19.4 EUR/100 kg] [1.08 EUR/kg/lactic matter + 18.5 EUR/100 kg] [1.08 EUR/kg/lactic matter + 19.4 EUR/100 kg] [57.2 EUR/100 kg] [1.81 EUR/kg/lactic matter + 18.5 EUR/100 kg] for "Milk and cream, concentrated and sweetened (excl. in solid forms)",
- [8.3 % + 26.6 EUR/100 kg] [8.3 % + 12.4 EUR/100 kg] [8.3 % + 168.8 EUR/100 kg] [8.3 % + 130.4 EUR/100 kg] [8.3 % + 17.1 EUR/100 kg] [8.3 % + 95 EUR/100 kg] [0.54 EUR/kg/lactic matter + 21.1 EUR/100 kg] [0.2 EUR/kg/lactic matter + 21.1 EUR/100 kg] [0.17 EUR/kg/lactic matter + 21.1 EUR/100 kg] [59.2 EUR/100 kg] [24.4 EUR/100 kg] [20.5 EUR/100 for "Yogurt, whether or not flavoured or containing added sugar or other sweetening matter, fruits, nuts or cocoa".

AUS does not impose tariffs on imports of manyh dairy products (although some dairy products have AVE 16% according to the WTO data base as also noted in Table 9 of Page 30 of this study). In addition, for the following cheese products, AUS imposes a compound tariff of $1.220/kg:

- Fresh cheese "unripened or uncured cheese", incl. whey cheese, and curd
- Grated or powdered cheese
- Processed cheese, not grated or powdered
- Blue-veined cheese and other cheese containing veins produced by "Penicillium roqueforti" Cheese (excl. fresh cheese, incl. whey cheese, curd, processed cheese, blue-veined cheese and other cheese containing veins produced by "Penicillium roqueforti", and grated or powdered cheese)
- Cheese (excl. fresh cheese, incl. whey cheese, curd, processed cheese, blue-veined cheese and other cheese containing veins produced by "Penicillium roqueforti", and grated or powdered cheese)

Australia has a number of SPS and TBT measures in place. All four examples listed here are general, but also apply to dairy products.[62]

[60] Source: Australian Department of Agriculture and Water Resources, at http://www.agriculture.gov.au/export/from-australia/quota last accessed 10 March 2017.
[61] Source: Official Journal L 334, 30.12.1995, p. 40–45.
[62] Information gleaned on 18 November 2016 at the website of the Department of Agriculture and Water Resources: http://www.agriculture.gov.au/import/goods/plant-products/importing-plant-products-for-human-consumption For the *Imported Food Inspection Scheme* see http://www.foodstandards.gov.au/consumer/importedfoods/Pages/default.aspx.

- The Imported Food Inspection Scheme operates under the Imported Food Control Act 1992 and the Imported Food Control Regulations 1993. This risk-based border inspection program is administered by the Department of Agriculture and Water Resources. For a single consignment made up of multiple food lines subject to the Scheme, the consignment clearance fee will be applicable for each separate clearance that is granted.
- The new Biosecurity Import Conditions System (BICON) is also administered by the Department of Agriculture and Water Resources. It foresees a six month maximum assessment period for permit applications. Additional import conditions, and import permits, may apply for products containing any material of animal, microbial or biological origin (such as meat, egg or milk).
- On 1 March 2016 a new Country of Origin Food Labelling System brought country of origin labelling requirements under Australian Consumer Law.
- The revised Food Standards Code (applying to all food offered for sale in Australia, whether produced domestically or imported) also came into effect on 1 March 2016.

With the end of dairy quotas in 2016, an EU-AUS FTA may offer new opportunities not only for Australian dairy products but also for competitive EU producers of certain products, under both liberalization scenarios. This is likely to be the case even if dairy imports on either side should remain subject to a double-tariff system with lower preferential out-of-quota tariffs and higher in-quota quantities (similar to the above-described TRQ system for ruminant meat).

CGE model results

For the EU and Australia, total output of dairy products would not change significantly for both liberalization scenarios. Australia's exports of dairy products to the EU could increase by about 86% under the increased liberalization scenario, and EU exports of dairy products by about 49%. Aggregate average import prices for dairy products are not expected to change (below the perception level) for the EU. For Australia, aggregate average import prices for dairy products could fall by about 2.6% in the liberalization scenario and 2.5% in the increased liberalization scenario.

A recent study commissioned by DG JRC on the trade impact of twelve envisaged FTAs, including Australia, suggests a generally positive overall impact for EU farmers.[63] The authors conclude that increasing liberalization of EU dairy sector trade is likely to improve the EU's overall trade balance for dairy products.

3.2.2.9. Alcoholic Beverages (Note: in CGE modelling "Beverages & Tobacco")[64]

The EU is the world's biggest wine producer in volume terms. France, Italy and Spain alone account for nearly 50% of world wine production. Wine, vermouth, cider and

[63] European Commission, JRC Science for Policy Report, Cumulative economic impact of future trade agreements on EU agriculture (2016) (http://publications.jrc.ec.europa.eu/repository/bitstream/JRC103602/lb-na-28206-en-n_full_report_final.pdf)

[64] We focus on beverages, since the data are not separated and tobacco is not a major crop in either Australia or the EU.

vinegar are in the 5 top EU agrifood lines with significant growth rates and market shares in total food exports to Australia of between 8.0% and 9.5% in 2015.

After oilseeds, Australian wines are the second most important export to the EU by in terms of value. Between 2011 and 2015, both product lines somewhat declined in volumes, but together they still represent almost 50% of all exports. According to the Australian Grape and Wine Authority, Australian alcoholic beverages, including beer, have long been successful in Europe, principally in the UK and Ireland but also throughout the rest of the EU.[65]

In addition to wine, a wide range of alcoholic products is traded between the two regions, whereby total trade in alcoholic beverages is relatively balanced. For the EU and AUS, 2015 bilateral export values for major alcoholic beverages product categories are as follows (World Bank ITS data):[66]

(1) EU exports to AUS, 2015:

- Wine of fresh grapes: €251.4 million
- Beer made from malt: €81.5 million
- Other fermented beverages: €24.6 million
- Undenatured ethyl alcohol (spirits, including whisky): €291 million
- Vermouth and other wine of fresh grapes: €1.5 million

(2) AUS exports to EU, 2015:

- Wine of fresh grapes: €528 million
- Beer made from malt: €1.7 million
- Other fermented beverages: €0.8 million
- Undenatured ethyl alcohol (spirits, including whisky): €8.1 million
- Vermouth and other wine of fresh grapes: €17,119

Trade policy measures

The envisaged EU-AUS FTA could improve the trade opportunities, especially if the elimination of import tariffs foreseen under both liberalization scenarios is accompanied by an equalisation of excise tax rates for whisky and other spirits products.

The EU's average MFN applied tariff on beverages and spirits is 3.9%. The average applied tariff imposed on wine imports by the EU is 32%, whereas tariffs imposed on spirits are mostly zero. The EU also applies a complex system of compound tariffs based on hectolitre volumes and alcohol content, e.g.:

- [32 EUR/hl] for "Sparkling wine of fresh grapes",
- [0.9 EUR/% vol/hl + 6.4 EUR/hl] [10.9 EUR/hl] for „Vermouth and other wine of fresh grapes, flavoured with plants or aromatic substances, in containers of <= 2 l",
- [0.6 EUR/% vol/hl] [0.6 EUR/% vol/hl] [0.6 EUR/% vol/hl + 3.2 EUR/hl] [0.6 EUR/% vol/hl + 3.2 EUR/hl] for „Rum and other spirits obtained by distilling

[65] Source: Australian Grape and Wine Authority, Impact of tariffs on Australian wine in the European Union. Adelaide, 12 February 2015, the equivalent in Euro is 40 million.
[66] Due to data gaps in Eurostat's trade volume data at HS-4 and HS-6 level, we present more comprehensive trade data of the World Banks's ITS database.

fermented sugar-cane products". EU tariff rates that depend on alcohol content and container type range from €0.131 per litre of bottled wines to €0.209 for bulk wines. The total cost of EU import duty on Australian wine exports in 2014 was €40 million. Australian exports of grape concentrate to the EU were subject, for Brix values exceeding 67, to a tariff of 40% + €20.60/100kg.

The high tariff rates of over 20% for bulk wine exports are seen as the main reason for a trade diversion, because wine from main competitors like Chile and South Africa already enters the EU duty-free. In the eventuality of a successful conclusion of TTIP and the EU-Mercosur FTA, Australia and New Zealand would remain the only countries among the top ten suppliers that would have to pay MFN tariff rates for wine in the EU.

Australia's average MFN applied tariff on beverages and spirits is 4%. The average applied tariff on AUS wine imports is 5%. The same rate applies for a wide range of spirits, e.g. whiskies, rums, vodkas and other liqueurs.

Australia still applies a wine equalisation tax (WET) with a discriminatory impact on foreign producers. Australia operates a 29% value-based Wine Equalisation Tax (WET) on wine consumed in Australia, but provides a capped rebate which effectively exempts over 90% of domestic producers from the WET. Other producers from third countries are technically eligible for the rebate, if they retain ownership of the wine until it enters the Australian market (and are registered for domestic tax purposes) but this is rarely the case. An exception is New Zealand, which had the rebate extended to its producers in 2005, even if they no longer own the wine at point of import, in accordance with Australia's obligations under the Australia-New Zealand Closer Economic Relations Trade Agreement 1983 (Article 7(2)). The rebate makes EU wine less price competitive vis-à-vis smaller Australian and New Zealand producers and denies national treatment to EU wines.

The bilateral Agreement on Trade in Wine (1994) provided for the mutual recognition of winemaking practices as well as recognition of geographical indications and traditional expressions. The Agreement also required Australia to phase-out the use of names from certain European regions. Another immediate benefit was the reduction in analytical requirements for the European Import Certificate. It does not provide for any tariff concessions. In 2010, this agreement was replaced by a new agreement, guaranteeing and improving reciprocal access for Australian wine producers to the European market and European wines vice versa. It recognises winemaking techniques, and it simplifies the requirements covering everything from labelling and blending rules to alcohol levels. It also foresees a simplified procedure for the recognition of future standards. Registered GIs in both partners are mutually recognised. This implied a phase-out of European regional denominations used in Australia, and an extension of the protection for traditional expressions and names (e.g. Bordeaux, Burgundy, Champagne, and Chablis, with more flexible phase-outs for Port, Sherry, and Tokay).

As part of the measures to control problem drinking and alcohol abuse at young age (notably binge drinking), Australia increased the tax on spirit-based "ready-to-drink" (alcopops, which designates sweetened alcoholic beverages) to the same as the excise rate applying to spirits to increase the prices of such spirit-based drinks and other alcoholic beverages that mimic those alcopops, and made new definitions of beers and wines. Thus, beer-based drinks that mimic "alcopops" became taxed at the same rate as the latter. The changes were introduced by the Excise Tariff Amendment (2009 Measures No. 1) Act 2009 and the Customs Tariff Amendment (2009 Measures No. 1) Act 2009, amending the Excise Tariff Act 1921 and the Customs Tariff Act 1995.

CGE model results

For the EU, total output of beverages and tobacco products would not change significantly for both liberalization scenarios. For Australia, total output of beverages and tobacco products would go up by about 0.6% for both liberalization scenarios. Australia's exports of beverages and tobacco products to the EU are estimated to increase by about 18% under both scenarios. EU exports of beverages and tobacco products could increase by about 7% under both liberalization scenarios. Aggregate average import prices for beverages and tobacco products would not change significantly (below the perception level) for the EU. For Australia, aggregate average import prices for beverages and tobacco products could fall by about 1.5% for both liberalization scenarios. It should be noted, however, that NTBs were not modelled for the agricultural sector, including beverages and tobacco products.

3.3. Market Access and Regulatory Obstacles to Investment and Impact on Investment Flows (Task 4)

3.3.1. Introduction

This chapter sets out, first, the major obstacles to foreign direct investment existing in Australia, second, the baseline level of international investment protection in place between Australia and individual EU members. Then, third, it assesses Australia's recent investment treaty practice, focussing on the ways in which that practice differs from recent EU FTA practice, with a view to ascertaining the likely contours of the investment chapter of a prospective EU-AUS FTA. This will in turn inform our subsequent analysis, in a later chapter, of its potential impact on the identified barriers to investment in each country.

3.3.2. Obstacles to foreign direct investment in Australia

3.3.2.1. Introduction

This section begins by providing a macro view of existing levels of foreign direct investment in Australia. It then describes the most significant and obvious barrier, namely Australia's foreign investment screening system. The final section highlights certain specific obstacles at the sectoral level.

The primary data sources include a number of different global indices and data sources relevant to foreign direct investment, including the OECD's Foreign Direct Investment Regulatory Restrictiveness, and the World Bank Doing Business, reports. Specific Australian measures affecting investment are identified primarily by reference to existing lists and catalogues of investment restrictions, obtained from country-specific reservations under the OECD Code of Liberalization of Capital Movements and Code of Liberalization of Current Invisible Operations; OECD-UNCTAD Reports on G20 Investment Measures (2008); GATS Schedules; and lists of Non-Conforming Measures under recent Australian FTAs. We have focussed on those types of measures which are typically identified as the most commercially significant for foreign investors, and which are intentional and regulatory in nature, including: sectoral equity limits; screening; restrictions on key personnel; branching limitations; capital repatriation; and land ownership. Content analysis of the relevant Australian legislation has been performed for the most significant of these measures.

3.3.2.2. Overview

The OECD's Foreign Direct Investment Regulatory Restrictiveness Index measures obstacles to FDI in 58 OECD and non-OECD countries. It is primarily intended to

measure the extent to which a country's regulatory regime departs from the principle of national treatment. As a consequence it focuses on four types of measure: foreign equity restrictions; screening and prior approval requirements; rules for key personnel; and 'other restrictions on the operation of foreign enterprises', the latter category including for example restrictions on branching, capital repatriation, acquisition of land, and access to local finance. Rules on state ownership and state monopolies are not included.[67]

Based on this index, Australia would appear to have a relatively restrictive environment for foreign direct investment (Table 14). For 2015, Australia's overall FDI Index score was 0.14, compared to an OECD average of 0.07. This is higher than countries such as the UK (0.06), the US (0.09), Spain (0.02), Switzerland (0.08) and Japan (0.05), broadly equivalent to Korea (0.135) but lower than Canada (0.166). It appears that Australia's higher index score largely reflects its foreign investment screening system, as well as its foreign equity limits in specific sectors, both of which are dealt with in more detail below.

Table 14: Foreign Direct Investment Regulatory Restrictiveness Index, 2015

Country*	2015 Index Score
Australia	0.14
Brazil	0.10
Canada	0.166
Denmark	0.03
Ireland	0.04
Japan	0.05
Korea	0.135
Netherlands	0.01
New Zealand	0.24
Norway	0.09
Spain	0.02
Switzerland	0.08
United Kingdom	0.06
United States	0.09

Source: OECD FDI Regulatory Restrictiveness Index, 2015

[67] See generally, Kalinova, B., A. Palerm and S. Thomsen (2010), "OECD's FDI Restrictiveness Index: 2010 Update", *OECD Working Papers on International Investment*, 2010/03, OECDPublishing. http://dx.doi.org/10.1787/5km91p02zj7g-e; see also Section 1.6.

Looking historically, however, Australia's score is lower than it has been in the past, largely reflecting changes to Australia's foreign investment screening regime over the last decade. The OECD Index scored Australia as high as 0.266 in 1997, and as low as 0.128 in the years between 2010 and 2014 (Table 15).

Table 15: FDI Regulatory Restrictiveness Index: Australia

Year	Index Score
2015	0.14
2014	0.128
2013	0.128
2012	0.128
2011	0.128
2010	0.128
2006	0.237
2003	0.246
2007	0.266

Source: OECD FDI Regulatory Restrictiveness Index, 2015

On a sectoral basis, the most restrictive sectors are air transport, media and telecommunications, maritime transport, banking, agriculture and forestry (Table 16). Sectors that score relatively well include retail and wholesale distribution, hotels and restaurants, electricity generation and distribution, fisheries, machinery, and business services.

Table 16: FDI Regulatory Restrictiveness Index per sector

Sector	2015 Index Score
Air transport	0.455
Telecommunications	0.400
Maritime transport	0.250
Banking	0.200
Media	0.200
Agriculture and forestry	0.200
Financial services	0.133

Source: OECD FDI Regulatory Restrictiveness Index, 2015.

By contrast, looking at FDI stocks and flows themselves as an indicator of the presence or absence of major barriers to investment yields a relatively positive picture. FDI stocks

as a share of GDP have remained broadly steady over the last 15 years, at somewhat over a third.[68] This figure is not particularly high by international standards, but nor is it particularly low. It is, for example higher than that experienced by Germany, Canada, the US and Japan over the last 5-10 years, and higher than the OECD average, but somewhat lower than both the UK and New Zealand.[69] Inward FDI flows also compare favourably to the OECD average over the last decade, and in 2014, Australia was in the world top 10 of FDI recipients.[70] Although the sectoral make up of its FDI flows varies considerably over time, historically strong sectors for inward FDI include mining, energy, manufacturing, real estate and finance and insurance.[71] This may suggest that the Australian regime is less restrictive in practice than its OECD index scores would suggest (Table 17).

Table 17: FDI Stock and Inward FDI Flow as % of GDP

Year	FDI Stocks as % GDP	Inward FDI Flow as % GDP
2014	38.28	3.52
2013	36.67	3.54
2012	38.72	3.54
2011	36.14	3.72
2010	40.85	2.82
2009	43.46	3.13
2008	29.15	4.44

Source: UNCTADstat.

Furthermore, the business environment in Australia is rated by virtually all measures as highly attractive for foreign investors. Australia was ranked 13th in the world for its business climate in the World Bank's Doing Business 2016 report.[72] In 2012, Australia was ranked 5th in the world on UNCTAD's Inward FDI Potential Index, which is based on measures of market attractiveness, availability of low cost and skilled labour, natural resources, and infrastructure capacity.[73] In a comprehensive report on investment restrictions across the Asia Pacific Economic Cooperation (APEC) region, which took into account survey data on foreign investor perceptions, Australia was rated highly on such measures as regulatory predictability, quality of human capital, access to relevant utilities and infrastructure, market openness, physical security, corruption, political stability, and absence of government price controls.[74] The evidence from this report

[68] UNCTADstat, FDI statistics, http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx.
[69] ibid.
[70] ibid.
[71] Australian Bureau of Statistics, 2011-2015.
[72] See http://www.doingbusiness.org/data/exploreeconomies/australia.
[73] UNCTAD, Inward FDI Potential Index, 2012.
[74] Foreign Direct Investment Across APEC: Impediments and Opportunities for Improvement (USC Marshall School of Business, 2013), see also UNCTAD, Assessment of Liberalization and Facilitation of FDI in Thirteen APEC Economies (UNCTAD, 2010).

suggested that such factors are significantly more likely to affect investment decisions than formal regulatory restrictiveness.

3.3.2.3. The Australian Foreign Investment Screening Process

The entry of foreign investment into Australia is regulated at the federal level by the Foreign Acquisition and Takeovers Act 1975 (Cth), the Foreign Acquisition and Takeovers Regulations 2015 (Cth) and the Australian government's Foreign Investment Policy. The general rule is that all investment is permitted unless it is determined by the Treasurer to be contrary to the "national interest". This term is undefined, but relevant investments are stated to be reviewed in relation to issues related to national security, competition policy, community impact, tax implications, as well as others. There is some duplication with other domestic regulatory review processes: approval from the Australian Competition and Consumer Commission, for example, does not prevent competition issues being taking into account during foreign investment screening. As a result of the screening process, relevant foreign investments may be permitted, permitted subject to conditions, or disallowed.

Only foreign investments above certain defined thresholds are subject to screening. These subjects have been modified and became more complex over time. The general threshold for foreign acquisitions of an interest of 15% or more in an Australian business is AUD252 million (€227 million), below which they are not subject to government approval. A threshold of AUD55 million (€49 million) applies in relation to investments in Australian agribusiness. In addition, foreign non-residents generally need to apply for and receive foreign investment approval before purchasing any residential property, vacant commercial land, or commercial property valued at above AUD252 million (€227 million), subject to some qualifications. In late 2015, a lower threshold of AUD15 million (€13.5 million) was also introduced for purchases of rural agricultural land, and in the media sector there is no threshold at all – all foreign acquisitions are subject to screening.

However, Australia has agreed to the application of higher thresholds for some countries in the context of its recent FTA negotiations. Thus, a higher threshold of AUD1,094 million (€986 million) applies to general business acquisitions by private investors from the US, New Zealand, Chile, Japan, Korea, China and soon Singapore, other than in sensitive sectors. For these countries, in sensitive sectors, the threshold remains at AUD252 million (€227 million), other than media, where the threshold is 0 AUD. If the Trans-Pacific Partnership enters into force, this higher threshold will be extended to all TPP countries. The threshold for investments in agribusiness are increased to AUD1,094 million (€986 million) for Chile, New Zealand and the United States. In respect of the thresholds for agricultural land purchases, investors from Chile, the US and New Zealand currently benefit from an increased threshold of AUD1,094 million (€986 million). Investors from Singapore and Thailand enjoy a threshold for purchases of Australian agricultural land of AUD50 million (€45 million), though for Singapore this is shortly to be reduced to AUD15 million (€13.5 million).[75]

Importantly, additional screening applies in such sensitive sectors as media, real estate, defence, telecommunications, air transport and airports, encryption and security, and nuclear. The higher thresholds negotiated with FTA partners do not cover these sectors. Furthermore, all screening thresholds caps apply only to private investors. Business investments by foreign government-related entities must be approved, regardless of

[75] See generally, https://firb.gov.au/resources/guidance/gn34/.

their size. An entity is a government entity if it is at least 20% government owned, directly or indirectly.

The fees for making a foreign investment application range from AUD10,000 (€9,010) to AUD100,000 (€90,100) depending on the nature of the application.

Opinions as to the practical impact of this system on FDI flows differ. On one hand, outright rejections of proposed acquisitions are relatively rare, and by far the majority relate to real estate transactions. The Foreign Investment Review Board (FIRB) Annual Report for 2014-15 noted no rejections, compared to three in 2013-14, none in 2012-13, 13 in 2011-12, 43 in 2010-11 and none in 2009-10 (Table 18).[76] Rejections represent less than 0.5% by value of all proposed investments, even in the years that contain most rejections. Of the years just cited, the two years in which a significant number of proposals were rejected (2010-12) all but one related to proposed real estate transactions. Over the last few years, political sensitivities around large-scale foreign investment have focussed on four main issues: acquisition and exploitation of natural resources, especially by global integrated firms; acquisition of agricultural land; acquisition of urban land, precipitated by the influx of Chinese and other foreign buyers into the Australian real estate market; and the impact of the proposed investment on local employment. Examples of high profile rejections include Shell's proposed acquisition of Woodside Petroleum in 2001; a proposed takeover of the Australian Securities Exchange by the Singapore Stock Exchange in 2011; the proposed acquisition of S Kidman & Co in 2015, and the proposed acquisition of Graincorp by Archer Daniels Midland in 2013.

Table 18: Rejections reported by Foreign Investment Review Board

Year	Approvals	Rejections (total)	Non-real estate rejections
2014-15	37,953	0	0
2013-14	24,102	3	1
2012-13	12,731	0	0
2011-12	10,703	13	0
2010-11	10,293	43	1
2009-10	4,401	3	0

Source: Foreign Investment Review Board, Annual Reports 2009-2015

The relatively low level of rejections may suggest that the impact of this system is not as great as it may first appear. That said, it is important also to take into account investment proposals that are withdrawn before being rejected, those that are modified before submission to improve the chances of approval, as well as those which are never made. In this respect, the vagueness of the "national interest" test has been subject to criticism, a problem that the guidance provided in the government's Foreign Investment Policy does not fully address. The FIRB review process has been said unnecessarily to replicate domestic regulatory review, for example in relation to competition policy. It is

[76] Foreign Investment Review Board, Annual Reports, 2009-2015.

also worth noting that, while outright rejections are rare, the attachment of conditions to foreign acquisitions is not uncommon. 40% of approvals had conditions of some kind attached in 2014-15, relating on occasion to such matters as requirements for Australian-based management, employment and on-going development. In addition, the review process itself, even where it results in approvals, can add risk, cost and delay to foreign investment projects.

3.3.2.4. Sectoral issues

It was noted above that the FIRB screening process singles out for special attention proposed investment in such sensitive sectors as media, real estate, defence, telecommunications, air transport and airports, encryption and security, and nuclear. In addition to the lower screening thresholds applied in these sectors, there are also caps on foreign equity participation relevant to certain sectors. For example, total foreign investment in Qantas cannot exceed 49%. Similarly, majority foreign ownership of Australian airports offered for sale by the Commonwealth is prohibited. Ownership of Telstra is subject to similar restrictions as Qantas: a 35% cap on total foreign ownership with a 5% cap for any single foreign investor. Australian flagged maritime vessels must be majority Australian owned.

While the banking and financial services sector is not identified as a sensitive sector for the purposes of FIRB, it has been identified by some as one of the more restricted sectors of the Australian economy for foreign investors. As noted above, banking is scored 0.200 in the OECD index for 2015, which places it below only air transport, telecommunications, and maritime transport in terms of restrictiveness.[77] Foreign investment in the banking sector must not only be consistent with the *Banking Act 1959 (Cth)* and the *Financial Sector (Shareholdings) Act 1998 (Cth)* – which prohibits generally shareholdings of more than 15% in Australian financial institutions without approval – as well as with the bipartisan "four pillars" policy, which prevents mergers between the four major domestic banks. This makes the approval of a foreign takeover of one of Australia's four major banks highly unlikely. Foreign banks seeking entry to the Australian market may do so either by incorporating an Australian subsidiary or by establishing an Australian branch. Historically, the latter has been preferred by foreign service providers. At least two directors of public financial services companies must be ordinarily resident in Australia.

The sensitivity of foreign investment in agricultural land, described above, should be put in the context of the high underlying potential for foreign investment in Australian agricultural land and agribusiness. This is a strategic sector for the Australian economy, enjoying strong demand particularly from Asian markets. Although recent reliable data is hard to gather, the Australian Bureau of Statistics has estimated that 99% of Australian agribusinesses were entirely Australian owned, and around 90% of Australian agricultural land. This may suggest an underlying potential for a higher level of foreign investment in this sector, in the absence of existing regulatory restrictions.

The difficulty of obtaining visas for management, service professionals and their families has also been mentioned as an obstacle for some foreign actors seeking to invest in Australia.[78] Furthermore, Australia's List of Non-Conforming Measures, contained in its Schedules to the Trans-Pacific Partnership Agreement, provides an indication of areas in which the Australian government foresees actual or potential measures that may

[77] OECD FDI Regulatory Restrictiveness Index, 2015.
[78] See, for example, Foreign Direct Investment Across APEC: Impediments and Opportunities for Improvement (USC Marshall School of Business, 2013).

conflict with obligations under the TPP investment chapter. For example, in accordance with those Schedules, Australia maintains the right to adopt or maintain non-conforming measures with respect to:

- education services;
- preferences for indigenous persons or organisations;
- the initial transfer of government-owned entities or assets to Australian persons;
- public services such as correctional services, income security or insurance, social security or insurance, social welfare, public education, public training, health, child care, public utilities, public transport and public housing;
- local content on broadcasting and other media;
- preferential co-production arrangements for film and television;
- the creative arts and cultural heritage;
- maritime cabotage and offshore transport services; and
- federal airports, and services related to air transportation.

3.3.3. The existing baseline for EU-AUS international investment protection

Australia is a party to 21 bilateral investment treaties remaining in force. The bulk of these were negotiated during the 1990s, alongside a handful in the 2000s (Table 19). Five of these BITs are with EU member states: the Czech Republic; Hungary; Lithuania; Poland; and Romania.

Table 19: Existing BITs with EU Member States

European BIT partner	Date of entry into force
Czech Republic	29 June 1994
Hungary	10 May 1992
Lithuania	10 May 2002
Poland	27 March 1992
Romania	22 April 1994

The remainder of EU Members, including the United Kingdom, Belgium, the Netherlands and Luxembourg, who are among the top 10 biggest investors by the total value of stocks, invest in Australia relying exclusively on the quality of its domestic legislation and juridical system, or structuring their investments in such a way as to take advantage of BITs between Australia and other countries.

The BITs with the Czech Republic (1993), Hungary (1991), Lithuania (1998), Poland (1991), and Romania (1993) reflect the old generation of investment treaties. These five BITs make use of terms and concepts which provide protections that are very broad and open-ended. To begin with, "investors" are generally defined as any individual or legal entity of the contracting-home country party having assets abroad in the contracting host country. "Investments", in turn, refer to "every kind of asset, owned or controlled by investors." This definition also includes an open-ended list of five categories of assets (movable and immovable property, various types of interests in

companies, claims to money and claims under a financial contract, intellectual property rights, and business concessions). Two BITs (with Lithuania and Poland) limit the protection to only investments made in compliance with domestic/local/national laws of the host country. All of these BITs contain a denial of benefits clause, requiring home and host countries to jointly agree with denying such benefits where a company of a Contracting Party is owned or controlled by a citizen or a company of any third country.

The core standards of protection and treatment contained in these agreements are generally not defined precisely. None of these BITs accord national treatment protection, but only grant most-favoured-nation treatment. Except for the Bilateral Investment Treaty with Lithuania, the MFN obligation is limited to investments made only after the BIT entered into force. All of them exclude from the application of the MFN treatment obligations the advantages accorded by either economic integration agreements or taxation treaties. Furthermore, the fair and equitable treatment norm, while contained in all of these treaties, is not clarified or defined as it is in more contemporary agreements. The lack of clear meaning allows for a significant degree of subjective judgment. Finally, all these BITs accord full protection and security to investors subject to host countries' domestic law and regulation. They also grant protection to investors against direct and indirect expropriation through dispossession, nationalisation, or confiscation. Such provisions are essential elements of the investment protection; however, they lack clarity and precision, particularly as regards indirect expropriation. The Australia-Poland BIT contains a provision akin to an umbrella clause.

These BITs do not include any of the exceptions we tend to see in more recent agreements. For instance, there is no exception allowing host states to change or pass new regulation to protect their essential security interests, address serious economic crises, maintain international peace and security, prevent arms or nuclear trafficking and so on.

Regarding investor-state dispute settlement, all these BITs establish an Investor State Dispute Settlement (ISDS) mechanism that covers any conflict relating to foreign investment. It provides that if an investment dispute was not resolved amicably, investors enjoy private right to submit a claim to arbitration against the host state. The BITs do not exclude any policy area or provision from the scope of ISDS.

If a new EU-AUS FTA were to be agreed, these BITs would almost certainly be terminated, and replaced with the new FTA arrangements.

3.3.4. Recent Australian and EU investment treaty practice compared

3.3.4.1. Introduction

The purpose of this section is to compare recent Australian and EU FTA practice, in respect of investment issues, in order to determine the likely contours of an agreement, and to highlight areas of particular uncertainty or likely controversy.

In respect of Australia's treaty practice, the analysis relies on more recent, new generation FTAs, which are more indicative of the potential content of an EU-AUS FTA. These include FTAs with Malaysia, China, Korea and Japan, and – most significantly – the Trans-Pacific Partnership. The Australia-US FTA is also referenced where appropriate. Amongst recent EU treaties, the most important point of comparison is the CETA, but reference is also made where appropriate to the EU's proposals in the TTIP negotiations, as well as other EU-level FTAs.

The content of these treaties is investigated under the following headings: rules on establishment; standards of protection; right to regulate; exceptions, arbitration and dispute settlement.

3.3.4.2. Australia's investment and investment-related agreements

Australia is a party to 10 FTAs currently in force. While one of these – the CER with New Zealand – entered into force as long ago as 1983, all others have entered into force in the years since 2003. These include FTAs with countries across the Asia-Pacific including Singapore, Thailand, Chile, ASEAN/New Zealand, Malaysia, Korea, Japan, China, as well as an agreement with the United States. In addition, Australia is a party to the Trans-Pacific Partnership, which has yet to enter into force. Current FTA negotiations involving Australia include bilateral deals with Indonesia and India, as well as plurilaterals such as PACER, RCEP, TiSA and a potential deal with the Gulf Cooperation Council (currently paused). Australia has no current FTAs with European countries (Table 20).

Table 20: Investment and investment-related agreements

FTA partner	Date of entry into force
NZ (CER)	1 Jan 1983
Singapore (SAFTA)	28 July 2003
US (AUSFTA)	1 Jan 2005
Thailand (TAFTA)	1 Jan 2005
Chile (ACIFTA)	6 March 2009
ASEAN/NZ (AANZFTA)	1 Jan 2010 (for Australia)
Malaysia (MAFTA)	1 Jan 2013
Korea (KAFTA)	12 Dec 2014
Japan (JAEPA)	15 Jan 2015
China (ChAFTA)	20 Dec 2015
TPP	Not yet entered into force

3.3.4.3. Rules on establishment

Australia's early bilateral investment treaties, including those with European partners, apply only in the post-establishment phase of investment. However, in its more recent practice, it has adopted a consistent position of including pre-establishment non-discrimination obligations. In the investment chapter of the KAFTA, the non-discrimination obligations of most-favoured nation and national treatment are expressed to apply to the establishment of investments. A long list of specific performance requirements is also prohibited in relation to the establishment of investments. The same is true of Australia's FTAs with Malaysia and Japan. In the ChAFTA, both non-discrimination obligations apply pre-establishment, but there is no obligation regarding performance requirements. The TPP's non-discrimination requirements are drafted to apply pre-establishment, and it also contains a comprehensive prohibition of listed performance requirements, including in relation to establishment.

Of course, wherever Australia has agreed to pre-establishment liberalization obligations, it has also secured its ability to continue to maintain its foreign investment screening system, described above. Recall from above, however, that in a number of agreements, it has agreed to raise the screening thresholds for investments from certain FTA partners. Importantly, as a result of the MFN obligations contained in a number of these agreements, any further increase in these thresholds, granted in future FTAs, will have to be extended to prior FTA partners benefitting from an MFN obligation.

In its recent FTAs, the EU also tends to favour the inclusion of pre-establishment non-discrimination norms. CETA contains a relatively full list of obligations applicable to measures that affect the establishment of an enterprise (not just the operation of an investment, once made). These include the core non-discrimination norms of most favoured nation treatment and national treatment, as well as a market access obligation for services and non-services, which prohibits the adoption of certain forms of restriction, including: limitations on the number of enterprises; limitations on the total value of transactions or assets; limitations on the total number of operations or quantity of input; limitations on the participation of foreign capital; limitations on the total number of natural persons that may be employed; and measures which restrict or require specific types of legal entity. A long list of specific performance requirements is also prohibited in relation to the establishment of investments. Measures relating to most air transport and related services, and to audio-visual services, as well activities carried out in the exercise of governmental authority, are exempted from the obligations regarding market access, non-discrimination and performance requirements with respect to the establishment or acquisition of a covered investment.

The European Commission's textual proposal for the TTIP Investment chapter contains a similar list. However, a positive list approach is adopted for the market access obligation. The EU-Vietnam FTA also contains non-discrimination and market access obligations prohibiting the sorts of quantitative or non-discriminatory restrictions listed above. However, pre-establishment national treatment and market access obligations apply only in respect of sectors in which specific commitments are undertaken. Performance requirements in connection with establishment are again prohibited, in sectors in which specific commitments are undertaken. However, in addition to the flexibility inherent in these so-called "specific commitments", there are carve outs from these obligations in respect of a substantial list of specified sectors. The EU-Singapore FTA has a chapter on "Establishment" which contains positive-list national treatment and market access obligations, which apply to "establishments and entrepreneurs" rather than "investors and investments'".

These pre-establishment obligations generally do not apply to the measures and sectors set out in each Party's lists of non-conforming measures, the content of which is a matter for negotiation.

On the basis of this practice, acknowledging that it is impossible to predict with any certainty the content of a future FTA, the analysis proceeds on the basis that the EU will seek to have a comprehensive set of pre-establishment obligations contained in its FTA with Australia, including both non-discrimination norms, obligations regarding performance requirements, as well as market access. Furthermore, it will be assumed that the prospective FTA secures for EU investors the benefit of the highest screening thresholds Australia has already agreed with its other major FTA partners, but no further increase in those thresholds.

3.3.4.4. Post-establishment standards of treatment and protection

As regards the standard of protection contained in its recent investment agreements, Australia's recent practice conforms relatively closely to standard international practice. All of its recent FTAs, including those with Japan, Malaysia, and Korea, as well as the TPP, aim to constrain the host countries' regulatory discretion through the adoption of some of the most widely recognized standards of investment protection: non-discrimination (national treatment and most-favoured nation treatment), fair and equitable treatment, full protection and security, expropriation, and transfers. The content of these standards tend to be based more or less broadly on the language of both traditional BITs and the WTO agreements, modified as needed. These standards broadly accord with the recent European FTA practice.

National treatment

All recent FTAs concluded by Australia contain a post-establishment national treatment norm, applicable in respect of both investors and investments of the other Party, in relation to the "expansion, management, conduct, operation, and sale or other disposition of investments in its territory." This standard has been one of the core components of Australia's foreign investment policy, and its purpose is to protect foreign investors and foreign investments against discriminatory practices vis-à-vis comparable domestic investors and domestic investments in relation to the operation of their investment. Similarly, the EU has also widely adopted national treatment in its FTAs. Since the post-establishment national treatment obligation is mostly seen as an uncontroversial protection, it is very likely to be accepted by both parties, even if, as noted above, none of the existing, older BITs between Australia and EU members states accord national treatment.

Most favoured nation treatment

The most-favoured-nation clause prevents discrimination between comparable investors from different foreign nationalities. Post-establishment MFN is a standard feature of Australian FTAs, from the AUSFTA of 2004 (Article 11.4) to the most recent FTAs with China (Article 9.4), Japan (Article 14.4) and TPP (Article 9.5). It is also included in Australia's early BITs with European partners. There are, however, two novelties in its recent investment policy. First, some FTAs have set out an explicit exclusion of the dispute settlement issues from the effects of the MFN treatment. For instance, Article 14.4 of Australia-Japan FTA sets out that the most-favoured-nation clause "does not apply to dispute settlement procedures or mechanisms under any international agreement." Second, some FTAs have limited the reach of the MFN obligation through reservations. For instance, Australia's FTA with China authorises the adoption of discriminatory measures in favour of a non-party in the sectors of aviation, fisheries and maritime matters (Table 21).

Table 21: MFN Clauses in Australian FTAs

FTA Partner	Most-Favoured-Nation Clause				
	Pre and Post-establishment	Exception: economic integration agreement	Exception: sectoral reservations	Exception: Tax agreements	Exception: Dispute Settlement
China	Yes	Yes	Yes	Yes	Yes
Japan	Yes	No	No	Yes	Yes

Korea	Yes	No	Yes	No	Yes
TPP	Yes	No	Yes	Yes	Yes

Likewise, the investment chapters of recent EU FTAs have also included standard MFN clauses applying both before and after establishment, but with some limitations. For example, the EU has limited the effects of MFN clauses by adopting reservations, notably to exclude the dispute settlement matters and country-specific sectors. For instance, CETA's MFN obligation contains two important reservations: one excludes the application of MFN treatment to mutual recognition agreements with third parties, while the other carves out procedures for investment dispute resolution.

Thus, the recent practices of Australia and EU regarding the most-favoured-nation clause are broadly convergent, notably as regards the exclusion of dispute settlement provisions from their scope. On the other hand, depending on the approach taken by the EU and Australia, sector specific carve-outs from the MFN obligation may become a point of difference in the negotiations.

Fair and equitable treatment

The fair and equitable treatment obligation appears in the vast majority of Australia's investment agreements. Australia's early BITs negotiated in the 1990s, including those with European partners, contain a traditional, succinct fair and equitable treatment (FET) norm, which provides simply that each Party "shall ensure fair and equitable treatment in its own territory to investments and associated activities." Since the interpretation of FET clauses has been challenged in investment disputes due to the lack of precision of the definitions of "fairness" or "equity", Australian recent practice has sought to reduce uncertainties and preserve its right to regulate, which could be indirectly limited by an unqualified FET, either by excluding FET entirely (though this remains rare), granting only qualified FET, and/or by clarifying its content. The FTA with China, for example, does not set out a FET clause. In JAEPA, Article 14.5 sets forth a qualified FET clause, which makes clear in an explanatory note that it does not require treatment beyond that required by the international minimum standard under customary international law. It is a matter of some debate whether this has the effect of limiting the content of that obligation, since the minimum standard is usually understood to have evolved in light of recent treaty practice, and could evolve further.

The TPP and the Australia-Korea FTA go one step further, mirroring the US Model BIT practice by setting out qualified FET clauses that constrain their effects not only through the reference to the customary international law minimum standard, but also by elaborating its content. For example, the TPP specifies that the FET obligation "includes the obligation not to deny justice in criminal, civil or administrative adjudicatory proceedings in accordance with the principle of due process embodied in the principal legal systems of the world." Importantly, the TPP limits the doctrine of legitimate expectations by providing that the mere fact that a host State's act or omission is "i*nconsistent with an investor's expectations*" does not constitute a violation of the standard *even if there is loss or damage as a result*. It further provides that "*the mere fact that a subsidy or grant has not been issued, renewed or maintained, or has been modified or reduced, by a Party*" does not constitute a violation of the standard (Table 22).

Table 22: FET Clauses

Australia's FTA Partner	Fair and Equitable Treatment				
	No FET	FET Unqualified	FET Qualified	Customary International Law Minimum Standard of Treatment	Listing Specific Elements
China	Yes	No	No	No	No
Japan	No	No	Yes	Yes	No
Korea	No	No	Yes	Yes	Yes
TPP	No	No	Yes	Yes	Yes

EU practice is different in material respects. Recent EU FTA practice has included a number of clarifications of the FET obligation that make its approach somewhat distinct. For example, and very importantly, CETA sets out an exhaustive list of ways in which the FET obligation might be breached including: denial of justice; a fundamental breach of due process; manifest arbitrariness; targeted discrimination on manifestly wrongful grounds; and abusive treatment of investors. A procedure is set out for the Parties to agree further elements should they choose to do so. The same provisions are set out in the EU-Vietnam FTA, the EU-Singapore FTA and in the EU's TTIP proposal. This language represents an important development of the FET norm.

Broadly speaking, it seems that Australian and EU practices are converging towards a policy preference for a qualified and well-defined FET obligation, but they have adopted quite different means of achieving this. The main difference between their current investment policies is on how to limit the effects of FET in order to maintain governments' domestic regulatory space. Australia, on the one hand, has sought (like the US) to constrain FET by combining the reference to customary international law minimum standard with a non-exhaustive list of more specific obligations; the EU has, on the other hand, tried to impose restrictions on FET by exclusively listing the obligations protected by it. The negotiations between Australia and the EU, will represent an important moment in which the negotiating parties will be required to try to reconcile their different textual approaches.

Full protection and security

Most, but not all, recent Australian FTAs specify an obligation to provide full protection and security (FPS) to the majority of investments made by investors of its FTA partners. The TPP and Australia FTAs with Japan and Korea note that the obligation of full protection and security requires each Party only to provide the level of police protection required under customary international law. The ChAFTA does not contain a FPS obligation.

The EU has included a reference to a specific obligation to provide full protection and security in CETA, the EU-Vietnam FTA, its TTIP investment proposal, as well as the EU-Singapore FTA. As compared to the FET standard, it has expended considerably less effort in defining the content of this less controversial norm, noting simply that it refers to parties' obligations with respect to the physical security of investors and covered investments.

The inclusion of an FPS obligation, and its content, is unlikely to be controversial. Australian and EU practices are not very divergent. Some may argue that the Australian policy still leaves more room for interpretation since its qualification lacks a precise definition, while the EU framework proscribes far-reaching interpretation by limiting the protection of FPS to the physical security of investors and covered investments.

Expropriation

The prohibition of expropriation without compensation is a standard provision of international investment agreements, and it is included in some form in the vast majority of FTAs globally. Like the FET standard, however, its precise scope and effect have been interpreted differently by different arbitral tribunals, with the result that states have, over at least the last decade, sought to define its contours with more precision in their investment agreements.

As regards recent Australian practice, the TPP (Article 9.8) and the FTAs with Japan (Article 14.11) and Korea (Article 11.7) set forth a very similar qualified version of expropriation clause. The expropriation provision in each of these FTAs is expressed to cover indirect expropriation, provided that it interferes with a tangible or intangible property right or property interest in an investment. But, importantly, and following the US approach, a definition of indirect expropriation is included, and a number of principles are established which limit the potential reach of the concept. For example, it is noted that, except in rare circumstances, non-discriminatory regulatory actions of a host country that are designed and applied to protect legitimate public welfare objectives, such as the protection of public health, safety, and the environment, do not constitute indirect expropriations. Furthermore, the fact that an action or series of actions by a Party has an adverse effect on the economic value of an investment, standing alone, does not establish that an indirect expropriation has occurred. Finally, these FTAs also carve out from the notion of expropriation the issuance, revocation or limitation of compulsory licenses in relation to intellectual property rights, to the extent such measures are consistent with WTO law. Therefore, Australia's approach seeks to preserve domestic regulatory discretion vis-à-vis expropriation by setting out clarifications, requirements and reservations. More radically, the FTA with China does not contain an expropriation clause at all, though it is highly unusual in that regard (Table 23).

Table 23: Expropriation: AUS FTAs

Australia's FTA Partner	Expropriation				
	Protection against expropriation clause	Protection against indirect Expropriation	Requirement for indirect Expropriation	Carve-outs for general regulatory measures	Carve-outs for compulsory licenses under WTO law
China	No	No	No	No	No
Japan	Yes	Yes	Yes	Yes	Yes
Korea	Yes	Yes	Yes	Yes	Yes
TPP	Yes	Yes	Yes	Yes	Yes

The EU's approach to indirect expropriation in its recent FTAs is very similar to that adopted in the TPP, though with some important additions (Table 23). For example,

CETA Article 8.12 provides, in the standard form, that a Party shall not expropriate an investment, except for a public purpose, under due process of law, in a non-discriminatory manner, and on payment of prompt, adequate and effective compensation. An Annex then specifies, in similar language to the TPP, that except in a rare circumstance, non-discriminatory regulatory actions of a host country that are designed and applied to protect legitimate public welfare objectives, such as the protection of public health, safety, and the environment. However, importantly, the CETA further specifies that this "rare circumstance" is "when the impact of a measure or series of measures is so severe in light of its purpose that it appears manifestly excessive."

Table 24: Expropriation: EU FTAs

EU/EU-Member FTAs	Expropriation				
	Protection against expropriation clause	Protection against indirect Expropriation	Requirement for indirect Expropriation	Carve-outs for general regulatory measures	Carve-outs for compulsory licenses under WTO law
CETA	Yes	Yes	Yes	Yes	Yes
TTIP	Yes	Yes	Yes	Yes	Yes
France-Colombia BIT (2014)	Yes	Yes	Yes	Yes	Yes
Netherlands-UAE BIT (2013)	Yes	Yes	No	No	No
Austria-Nigeria BIT (2013)	Yes	Yes	No	Yes	No
EU-Colombia-Peru (2012)	No	No	No	No	No
EU-Iraq (2012)	No	No	No	No	No
UK-Colombia BIT (2010)	Yes	Yes	Yes	Yes	Yes
Belgium-Luxembourg Economic Union - Colombia BIT (2009)	Yes	Yes	Yes	Yes	Yes

France-Kenya BIT (2007)	Yes	Yes	No	No	No
UK-Mexico (2006)	Yes	Yes	No	No	No

The EU's TTIP proposal is similar, but contains a broader list that includes additional legitimate objectives in the illustrative list, including notably public morals, social or consumer protection or and promotion and protection of cultural diversity. Both CETA and the EU's TTIP proposal make clear, like the TPP, that the fact that an action or series of actions by a Party has an adverse effect on the economic value of an investment, standing alone, does not establish that an indirect expropriation has occurred. And both adopt certain protections to preserve host countries' rights to undertake general regulatory measures in the public interest.

Table 25 contrasts this position with the position taken by some EU member states in their BIT practice.

Table 25: Expropriation in EU member states' BITs

EU/EU-Member FTAs	Expropriation				
	Protection against expropriation clause	**Protection against indirect Expropriation**	**Requirement for indirect Expropriation**	**Carve-outs for general regulatory measures**	**Carve-outs for compulsory licenses under WTO law**
CETA	Yes	Yes	Yes	Yes	Yes
TTIP	Yes	Yes	Yes	Yes	Yes
France-Colombia BIT (2014)	Yes	Yes	Yes	Yes	Yes
Netherlands-UAE BIT (2013)	Yes	Yes	No	No	No
Austria-Nigeria BIT (2013)	Yes	Yes	No	Yes	No
EU-Colombia-Peru (2012)	No	No	No	No	No
EU-Iraq (2012)	No	No	No	No	No
UK-Colombia BIT (2010)	Yes	Yes	Yes	Yes	Yes
Belgium-Luxembourg Economic Union - Colombia BIT (2009)	Yes	Yes	Yes	Yes	Yes
France-Kenya BIT (2007)	Yes	Yes	No	No	No

UK-Mexico (2006)	Yes	Yes	No	No	No

The current approaches undertaken by Australia in its FTAs and by the European Union in CETA and TTIP are very similar and so unlikely to pose a major impediment to reaching a common agreement on expropriation protection.

Umbrella clause

Australia has a consistent recent practice and clear policy of not including umbrella clauses in its FTAs, including with China, Japan, Malaysia and Korea. TPP contains no umbrella clause, though it does provide access to ISDS for certain types of investment agreements and investment authorisation. For its part, the EU's practice on umbrella clauses is mixed. The final CETA text contains no umbrella clause. The EU's FTA with Singapore, however, does contain an umbrella clause (Article 9.4.5). The EU proposed to include one in its TTIP textual proposal.[79] Given Australia's current policy, it is likely that the EU would encounter resistance to the inclusion of an umbrella clause in the investment chapter of an EU-AUS FTA.

Right to regulate

TPP Article 9.15 provides that "[n]*othing in this Chapter shall be construed to prevent a Party from adopting, maintaining or enforcing any measure otherwise consistent with this Chapter that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental, health or other regulatory objectives"*. The inclusion of the language "otherwise consistent with this Chapter" limits the practical effect of this provision. No other Australian investment agreement contains an explicit "right to regulate".

This contrasts with the most recent EU FTA practice. In the CETA final text, Article 8.9, the Parties "reaffirm their right to regulate within their territories to achieve legitimate policy objectives, such as the protection of public health, safety, the environment or public morals, social or consumer protection or the promotion and protection of cultural diversity." In addition, the more recent EU-Vietnam FTA contains a textual reference to a right to regulate in Article 13bis, in the same terms. The EU has expressed its intention to propose including such specific and explicit language in its FTAs going forward.

Exceptions

Australia's recent FTAs tend to include exceptions to the obligations contained in the investment chapter relating to: national security; public morals or public order; the protection of human, animal or plant life or health; environmental measures; and cultural heritage. These tend to be based more or less broadly on the language of GATT Article XX, GATT Article XXI and GATS Article XIV, modified as needed. As noted above, all of its recent FTAs, including those with China, Japan and Malaysia, as well as the TPP, purport to exclude their application to taxation measures, with some exceptions. These agreements also contain an exception for temporary safeguard measures relating to capital movements in the context of balance of payments crises and external financial difficulties, including threats thereof. All of Australia's recent FTAs contain a prudential carve-out based broadly on the GATS.

In the TPP, the general exceptions based on the GATT and GATS language do not apply to the investment chapter, but there is an additional exception, which provides that

[79] http://trade.ec.europa.eu/doclib/docs/2015/september/tradoc_153807.pdf. Section 2, Article 7.

nothing in the Investment chapter (as well as some other specified chapters) "shall apply to non-discriminatory measures of general application taken by any public entity in pursuit of monetary and related credit policies or exchange rate policies." The TPP also includes the "tobacco carve-out" which provides that, on the election of any party to the agreement, claims challenging the tobacco control measures of that party shall not be submitted to investor-state arbitration under that agreement, as well as a number of more specific exceptions.

Many of these exceptions broadly accord with recent European FTA practice, and are unlikely to be controversial. Two potentially significant divergences from current EU-level practice are noteworthy. First, while CETA contains the standard exceptions for measures to protect public morals, health, the environment, and so on, they are expressed only to apply to those aspects of the CETA investment chapter which deal with non-discriminatory treatment, and the establishment of investments. The absolute standards of protection, contained in Section D of the chapter, are not covered by these general exceptions. The second concerns the content of the prudential carve-out. Certain potentially significant elaborations have been included in CETA, and other recent EU FTAs. For example, in some recent FTAs, the language of the prudential carve-out has been expanded to: (a) explicitly include measures to maintain the safety, soundness, integrity or financial responsibility of individual financial service suppliers; (b) include prohibitions of particular financial services or activities for prudential reasons, provided such prohibitions are applied on a non-discriminatory basis; and (c) to remove the qualification that the prudential measure not be used to avoid commitments or obligations under the Agreement. Furthermore, in CETA, a new Annex was added, primarily on the request of Canada, which contains a set of high-level principles to guide the interpretation of the prudential carve-out, including that interpreters ought to defer "to the highest degree possible" to the decisions and determinations of domestic financial regulatory authorities. It also provides that a measure shall qualify for protection where it "has a prudential objective" and "is not so severe in light of its purpose that it is manifestly disproportionate to the attainment of its objective". These recent developments in EU practice are not reflected in recent Australian FTAs.

Importantly – though unsurprisingly, given the time at which these agreements were drafted – none of these exceptions listed above is contained in any of the BITs Australia has signed with European partners.

3.3.4.5. Arbitration and dispute settlement

International commercial arbitrations in Australia are governed by the International Arbitration Act 1974. This act expressly incorporates the UNCITRAL Model Law on International Commercial Arbitration, updated in light of 2006 revisions. It reflects also the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, and the ICSID Convention. Australia is a party to the New York Convention on the recognition and Enforcement of Foreign Arbitral Awards, and a signatory to the ICSID Convention. Enforcement of foreign arbitral awards is permissible in domestic courts, typically within a month of commencing the process.

Australia's policy and practice regarding international investment arbitration has evolved significantly over the past fifteen years, and has been very much in the public eye. Until recent years, Australia has historically shown strong support for ISDS, and some form of ISDS is included in all FTAs and BITs concluded prior to 2011, other than the 2003

FTA with the United States, and the 1982 FTA with New Zealand. In 2011, after a lengthy review process, and at roughly the same time as the first arbitral proceeding was initiated against Australia, the Australia government announced it would no longer include ISDS provisions in its international trade and investment agreements. Two years later, after a change in government, the policy was changed again, such that now ISDS provisions are considered on a case by case basis in relation to each agreement.

As a result, Australia's recent practice is mixed. There is no provision for ISDS in Australia's FTAs with the US, Malaysia, Japan and New Zealand. However, ISDS of some sort is included in FTAs with Korea, China, Singapore, Thailand and ASEAN. In the latter case, the scope of claims is limited to the provisions on national treatment, compensation for losses, transfers and expropriation. One innovation included in the ISDS provisions in Australia's FTA with China is the possibility of state parties issuing a "public welfare notice" within 30 days of receiving a request for consultation, triggering mandatory state-state consultations regarding the dispute. Furthermore, Australia has ISDS provisions in is 21 bilateral investment agreements in force.

The Trans-Pacific Partnership, to which Australia is a party, includes comprehensive ISDS provisions, modified to respond to some of the criticisms which have been made of the system in recent years. For example, transparency of proceedings is increased, through requirements on governments to publish all pleadings and other written documentation, as well as open hearings to the public. Tribunals have clearer authority to receive amicus curiae submissions from the interested public. A mechanism (borrowed from other FTAs) is included, permitting parties to issue decisions on how particular provisions are to be interpreted, which will be binding on arbitral tribunals. A number of procedural and other safeguards have been included to reduce the incidence of duplicative, frivolous or sham proceedings. Provision is made for counterclaims and set-off defences. No appellate tribunal is provided for, though mention is made of the possibility of developing such a mechanism in the future. As a result of carve-outs from the scope of the relevant substantive obligations, the ISDS provisions will not apply to disputes concerning foreign investment screening, public services, and tobacco. Importantly, Australia and New Zealand have agreed not to apply these ISDS provisions in their relations with each other.

In its most recent trade agreements, the EU has introduced a new investment court system to replace the traditional model of investor state dispute settlement contained in many BITs and FTAs. This system has so far been incorporated into the EU-Vietnam FTA and in CETA. It has been proposed by the EU in the context of its TTIP negotiations with United States.

The EU developed this system to respond to concerns raised over the last decade, and more, about the nature, operation and legitimacy of traditional ISDS. It is an order of magnitude greater in terms of its judicialisation than the model it seeks to replace. The key features of this new system include:

- just as under traditional ISDS, claims may be brought by private investors directly;
- while in traditional ISDS, tribunals are composed specifically for the case at hand, the new system has a permanent and institutionalized dispute settlement tribunal;
- while in traditional ISDS tribunals, arbitrators are appointed on an ad hoc, case by case basis, in the investment system, members of the new system's Tribunal of First Instance (called "judges") are appointed for a fixed term by the states

party to the agreement on the basis of criteria similar to judicial appointments and cases are allocated randomly to a division of the Tribunal;

- as compared to traditional ISDS, the investment court system contains more detailed commitments on ethics to avoid conflicts of interest and other matters which have historically been a cause for concern in international investment arbitration;
- importantly, the new investment court system contains a procedure for the review of arbitral awards by a standing Appeal Tribunal, as opposed to the limited grounds for annulment proceedings in traditional ISDS;
- just as in the modified ISDS system contained in the TPP and other recent agreements, proceedings are more open and transparent than has traditionally been the case in ISDS; and
- certain provisions have been included to limit forum-shopping, frivolous claims and parallel proceedings.

It will be clear that none of the BITs that Australia has signed with individual EU partners contains the investment court system, or the modified and enhanced version of ISDS seen in more recent FTAs such as the TPP. All of them contain bare provisions for traditional ISDS, typical of BITs of that era.

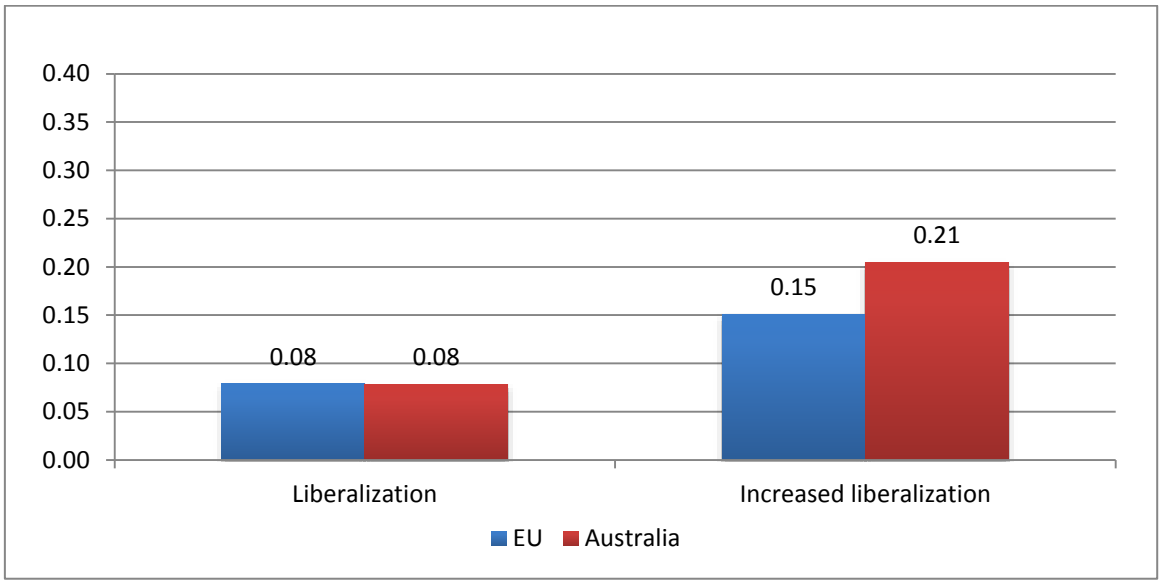
3.3.5. Impact assessment: investment flows and stocks

In this section, we briefly assess the impact of the investment chapter of a prospective EU-AUS FTA on investment flows and stocks between the two parties. It is important to note the limited scope of this chapter: it does not purport to be a full assessment of the costs and benefits of a prospective investment chapter, but instead an assessment of the extent to which, and the means by which, the inclusion of an investment chapter in this form may affect the EU-Australia investment relationship.

Foreign capital is of crucial importance for the positive impacts of the FTA because it can boost sectors in ways that are not possible with (limited) amounts of domestic capital. FDI can contribute to technology upgrades and more efficient and cleaner production methods using less energy in metallurgy, chemicals, and machinery.

The results suggest that the FTA will lead to mildly increased levels of foreign investment for both the EU and Australia. For the liberalization scenario, both the EU and Australia have relatively low levels of change in foreign capital invested at 0.08%.While, in the increased liberalization scenario, the EU is projected to experience increased foreign capital invested at 0.15%, with the corresponding figure for Australia at 0.21% (Figure 24).

Figure 24: EU-Australia Percentage Change in Foreign Capital Invested in Domestic Firms



3.3.5.1. Nature of effects

Following and modifying Copenhagen Economics (2012), it is useful to distinguish between three different kinds of impacts which barriers to investment may have:

- Increased risk: Governmental measures may impose barriers to investment by increasing the risk associated with particular investment projects. This may apply to many different kinds of risk, including political, commercial and regulatory risk.
- Increased cost: Governmental measures may restrict investment by imposing additional costs which otherwise would not have been incurred. These costs may be the costs associated with establishing the investment (such as approval procedures, requirements of specific legal entities, and so on) or the on-going costs of operation, where such costs are not equally incurred across the relevant market (such as discriminatory regulatory compliance costs, performance requirements, insurance costs, and so on).
- Decreased volume: Investment barriers might reduce the volume of investment directly, by prohibiting particularly foreign acquisitions on a sectoral or project-level basis. It may also, or alternatively, limit the volume of business activity conducted by foreign investors, for example by limiting the number of branches of foreign banks, or reducing the scope for expansion in the domestic market through measures to favour domestic competitors.

There is evidence to suggest that measures affecting the risk profiles of investment are far more significant, in terms of their impact on firms' decision-making, than measures that merely increase cost (APEC, 2013).

3.3.5.2. The relative importance of changes to foreign investment screening

A number of studies which have assessed (both ex ante and ex post) the impact of the AUSFTA on inward FDI flows into Australia have concluded that the largest effect on inward FDI is likely to have come from the relaxation of screening limits in the Australian

FIRB process (Kirchner, 2012; Armstrong, 2015; CIE, 2004). The same is likely to be true for an EU-AUS FTA.

Assessing the size of that impact is difficult without knowing the content of any prospective relaxation, and in the absence of better quality information about the effects of the current system. One 2012 study of the impact of Australia's foreign investment screening process found little evidence that it was preventing foreign investment in practice (Daley, McGannon and Ginnivan 2012). However, it is important to take into account both investment proposals that are withdrawn before being rejected, those that are modified before submission to improve the chances of approval, as well as those which are never made. In addition, the review process itself, even where it results in approvals, can add risk, cost and delay to foreign investment projects. It is also worth noting that the potential impact of any change to the current thresholds may be significantly affected by the inclusion of carve-outs.

3.3.5.3. Investment protection

From the analysis above, it is clear that the investment chapter of an EU-AUS FTA would significantly extend the content and reach of existing international investment protections applying to investment flows between Australia and EU member states. An extensive literature has developed over the last 15-20 years, empirically assessing whether or not the existence of investment protections in international treaties lead to increased investment flows between parties to those agreements.[80] A majority of extant studies finds some correlation between the conclusion of an international investment agreement between countries, and an increase in FDI flows between those countries, even if the effect is small.[81] That said, there are some important papers that have found little – or no – such correlation, and the matter remains highly contentious.[82]

In the case of an EU-AUS FTA, there are considerations which point both ways. On the one hand, Australian judicial and regulatory institutions are strong by world standards, and the incidence of overtly discriminatory or arbitrary treatment of foreign investors by domestic regulatory bodies is relatively low. On the other hand, it has been argued by some that the additional clarity provided by more modern investment agreements, as compared to earlier BITs, may be more effective in promoting investment flows, and that increased FDI is typically achieved through the combined and interdependent effect of changes to many economic and political determinants of FDI at the same time, including international investment protection.

3.3.5.4. Economy-wide impacts of increased FDI

To the extent that international investment treaties facilitate increased investment flows between the parties to them, a number of different general economic benefits can follow. In respect of increased inward FDI, these potentially include:

- reduced operating costs for domestic firms, as a result of downward pressure on the costs of capital;

[80] For useful surveys, see UNCTAD, 2014: 4-9; Sachs and Sauvant, 2009: lii-lvii; Copenhagen Economics, 2012; Poulson, 2010.
[81] *eg* Neumayer and Spess, 2005; Büthe and Milner, 2004; Egger and Pfaffermayr, 2004; Berger et al., 2013; Oh and Fratianni, 2010; Guerin, 2010; Kerner, 2009; Banga, 2008; Siegmann, 2008; Tobin and Rose-Ackerman, 2006; and Grosse and Trevino, 2005.
[82] UNCTAD, 1998; Hallward-Driemeier, 2003; Tobin and Rose-Ackerman, 2003; Peinhardt and Allee, 2008; Gallagher and Birch, 2006; OECD, 2006; London Economics, 2011

- increased access to firm-specific assets, including expertise and know-how, technology, and best business practices;
- increased competitive pressure, driving productivity improvements, lower prices and innovation;
- increased employment, especially in the context of greenfield investments.[83]

Quantifying the full economy-wide effects of inward investment is highly controversial.[84] Moreover, the extent to which they are realised will depend on a number of other facts, including for example the scope for learning spillovers between international and domestic firms, the employment practices of the foreign investor, and the extent of forward and backward linkages between foreign and domestic firms. Some of these matters, it may be noted, are at times addressed through the conditionality attached to approved foreign acquisitions through the FIRB process, further complicating any assessment of the precise consequences of its modification.

In respect of increased outward FDI, existing studies of its broader general economic effects suggest that the primary benefit to the source economy is that the global competitiveness of firms involved in outward FDI is improved, resulting in increased productivity generally in the source economy. In relation to employment, some studies have concluded that the aggregate impact of outward FDI on employment in the source country is small, in net terms across the economy as a whole, though it is clear that skilled workers tend gain in relation to unskilled workers as a result of outward FDI in advanced markets like the EU.[85]

3.3.6. Conclusion

This chapter has surveyed the existing investment climate in Australia, finding a broadly facilitative and encouraging environment for foreign investment, and identifying the foreign investment screening system to be the most significant cross-sectoral limitation on FDI in Australia. It has also surveyed the relevant treaty practice of Australia and the EU, in order to determine the extent to which the proposed FTAs may include provisions that effectively address the barriers identified. Broadly speaking, the content of recent Australian and EU FTAs is relatively congruent, with important divergences of textual practice as regards umbrella clauses, the definition of the standard of fair and equitable treatment, and investor-state dispute settlement.

The investment chapter of a prospective EU-AUS FTA will be only one part of a comprehensive agreement covering many aspects of the trade, investment and regulatory relationship between the two parties. Such agreements tend to work, synergistically, with the result that it is impossible to isolate and quantify the precise impact of each chapter or provision of the agreement. The largest part of any impact of the investment chapter on investment flows is likely to come through changes to Australia's foreign investment review process.

[83] Copenhagen Economics (2006).
[84] See generally, Australian Government Productivity Commission and the New Zealand Productivity Commission, 'Strengthening trans-Tasman economic relations', Final Report, November 2012, http://productivity.govt.nz/sites/default/files/trans-tasman.pdf; also Copenhagen (2012) covers a good deal of the literature.
[85] Copenhagen Economics (2012).

3.4. Market Access and Regulatory Obstacles to Public Procurement (Task 5)

3.4.1. Australian legal framework/policy review

There are three tiers of government in the Australian federal system: the Federal Government, six state and two mainland Territory Governments, and more than 560 local councils. Each of Australia's three levels of government has its own procurement framework and policies, but, there are additional, mandatory Federal rules for all procurements above certain thresholds, combined with blanket exclusions to these rules in key strategic sectors, inter alia, accommodation, R&D services, and motor vehicles.

3.4.1.1. Commonwealth

At the Commonwealth level, the overall government procurement policy framework consists of three primary elements, all under the responsibility of the Department of Finance: the Commonwealth Procurement Rules (CPRs), Resource Management Guidance, and online guidance. The CPRs, issued under section 105B(1) of the *Public Governance, Performance and Accountability Act 2013* (PGPA Act), represent the core of the Government Policy Framework; they embody both good practice and Australia's international obligations. The Resource Management Guidance, in turn, offers advice on important changes and developments in the procurement framework, whilst the purpose of the web-based guidance is to assist agencies in their implementation of the procurement framework.[86]

A commitment to "value for money" is at the heart of the Australian procurement framework across every level of government. At the same time, LCRs/preferences in favour of SMEs and indigenous communities are widespread; examples of the programs at each level of government will be presented below. In addition, many procurement-connected policies are administered by agencies other than Finance. A 2013/14 Senate Finance and Public Administration Committee Hearing on Commonwealth Procurement Procedures reported that there were some 24 procurement-connected policies of this nature relating to different industry groups.[87] Examples include, inter alia: the Australian Industry Participation Plans for Government Procurement and the Energy Efficiency in Government Operations, administered by the Department of Industry, along with the Smart Cities Program of the Cities Division of the Department of the Prime Minister and Cabinet.

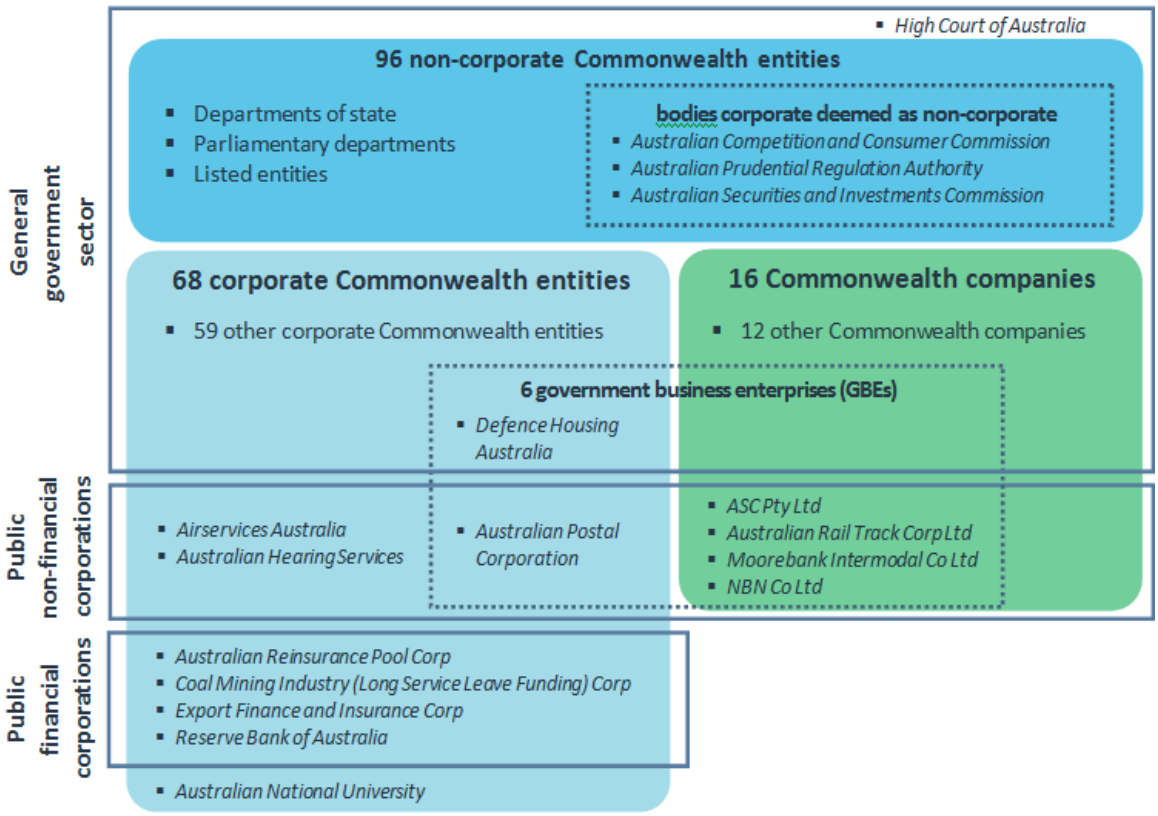
Commonwealth policy stipulates that all federal agency/entity procurement contracts with an estimated contract value of AUD80,000 (€72,080) or more must be listed on the AusTender website, the Australian Government's procurement information system. The platform also supports a system of electronic tendering; agencies planning/awarding/amending contracts over the value of AUD10,000 (€9,010) are equally required to publish this information.

There are, in general, three high-level groupings of bodies within the Australian public sector: 1) "non-corporate Commonwealth entities", or Commonwealth entities that are

[86] Commonwealth of Australia, Department of Finance. "Guidance on the Procurement Framework," available at:. www.finance.gov.au/procurement/procurement-policy-and-guidance/commonwealth-procurement-rules/cprs-procurement-framework.html#procfram, downloaded 1 October 2016.
[87] Commonwealth of Australia, Senate Finance and Public Administration Committee. "Hearing on Public Procurement Procedures", First sitting day in March 2014: available at: www.aph.gov.au/Parliamentary_Business/Committees/Senate/Finance_and_Public_Administration/Commonwealth_procurement_procedures/Report/c02.

not legally separate from the Commonwealth; 2) "corporate Commonwealth entities", i.e. bodies corporate that are legally separate from the Commonwealth, and; 3) "Commonwealth companies". The Commonwealth *Procurement* Rules generally apply to the first two groupings.[88] In the interest of "competitive neutrality", a separate set of rules apply to the latter.

Figure 25: Commonwealth procurement framework



Source: Ministry of Finance, available at:

https://www.finance.gov.au/resource-management/governance/overview/

Notwithstanding the explicit carve-outs that generally exist for public procurement by state-owned enterprises (SOEs) in international instruments to which Australia is a party, e.g. Art 17.2.7 of the recently-agreed TPP and the fact that the SOE issue has not previously been dealt with in trade agreements, the architecture of the WTO GPA – to which Australia is currently in the process of acceding - allows for disciplines to be imposed on SOEs. Indeed, Australia has, itself, undertaken a series of commitments of

[88] Procurements funded by grants and sponsorship payments from Commonwealth entities such the Department of Infrastructure and Regional Development's Financial Assistance Grant Programme are specifically excluded from the CPRs. See Appendix A "Exemptions" to Commonwealth Procurement Rules, available at: https://www.finance.gov.au/sites/default/files/2014%20Commonwealth%20Procurement%20Rules.pdf. The Department of Finance is currently in the process of developing a whole-of-government, web accessible, electronic grants advertising, application, and reporting system, much like AusTender. "Grants.gov.au" will not supersede existing government entities' grants management systems, but it will be mandatory for all non-corporate government entities/optional for corporate government entities. See the discussion at: http://www.finance.gov.au/sites/default/files/grants-news-august-2014.pdf.

this nature in the context of the procurement provisions of its FTA with the US.[89] All of these entities are at the central level of government.

At the same time, in the context of the TPP's previously-mentioned chapter on SOEs, the participating countries have agreed to undertake further negotiations on extending the application of disciplines to the activities of state-owned enterprises that are owned or controlled by a sub-central level of government, as well as designated monopolies "designated" by a sub-central level of government (within five years of the date of entry into force of this Agreement.)[90] Although aggregate data regarding the respective sizes of the markets in question remains difficult to obtain at this time (see States and Territories discussion below), important market access opportunities for the EU could exist in this context. The overall Commonwealth government procurement market for goods and services is estimated at AUD48.9 billion (€44.1 billion) or 3.1% of GDP.[91]

Potential Barriers

Irrespective of the previously mentioned commitment to the principle of value for money and Australia's growing web of bilateral FTA obligations, Australia maintains a target of sourcing at least 10% of Commonwealth purchases by value from SMEs. In addition, for major procurement of information and communication technology (ICT) products and services with an expected contract value of AUD20 million (€18 million) or more, government agencies must ensure that "whole of government" tenders meet the minimum SME participation levels set at 10% of contract value for hardware, and 20% of contract value for software/services.[92]

The previously mentioned Australian Industry Participation (AIP) National Framework generally requires that companies bidding for Commonwealth procurements over $20 million submit an AIP plan, designed to familiarize them with the capabilities of Australian small and medium enterprises and identify suitable local suppliers. While this policy does not cover "corporate" Commonwealth entities, these entities may apply this policy to procurements valued at AUD20 million (€18 million) or more. Similarly, although the Department of Defense has its own procurement policies and programme, they are analogous.[93]

There is also an indigenous procurement policy mandating, inter alia, time-bound, "set-asides" targeting 3% of the annual federal procurement market for indigenous enterprises, as well as Workplace Gender Equality Procurement Principles that are mandatory for tenderers with 100 or more employees.[94] The latter is not a set-aside programme, but, rather, a mechanism to incentivise implementation of the Workplace Gender Equality Act and, in particular, its minimum standards for the promotion of gender quality in the workplace. Detailed calculations for the value of domestic

[89] See "List A" for Section 3 Schedule for Australia: Government Enterprises, available at http://dfat.gov.au/about-us/publications/trade-investment/australia-united-states-free-trade-agreement/Pages/chapter-fifteen-government-procurement.aspx, last visited on 8 November 2016.
[90] See: http://dfat.gov.au/trade/agreements/tpp/official-documents/Documents/17-state-owned-enterprises-and-designated-monopolies.pdf.
[91] WTO Secretariat. "Trade Policy Review on Australia: Secretariat Report," WT/TPR/S/312/Rev.1, July 2015, p. 62.
[92] ibid, p. 63.
[93] Commonwealth of Australia, Department of Defense. See http://www.defence.gov.au/casg/DoingBusiness/ProcurementDefence/.
[94] Ministry of Finance. "Procurement-connected policies", available at https://www.finance.gov.au/procurement/procurement-policy-and-guidance/buying/policy-framework/procurement-policies/principles/, last viewed on 1 October 2016.

contracting opportunities potentially affected by the indigenous set-asides are set out in Commonwealth Indigenous Procurement Policy (2015)[95].

3.4.1.2. States and Territories

The second tier of Australian Government is the six states (New South Wales, Victoria, Queensland, Western Australia, South Australia and Tasmania) and two mainland territories (Northern Territory along with the Australian Capital Territory). As stated previously, each entity has its own procurement regime, the up-to-date coordinates of which are summarized at the following federal government website: http://www.australia.gov.au/information-and-services/business-and-industry/government-contracts-and-tenders/states-and-territories. Each jurisdiction, similarly, has its own reporting requirements; the Federal Procurement regime does not obligate State, Territory and Local Government entities/agencies to publish procurement contracts on the AusTender website.[96]

Along similar lines, because State, Territory and local governments are key players in shaping and managing Australian cities, related governance and institutional arrangements to promote better decision-making in project selection, funding, financing and the delivery of services from new and existing infrastructure remain fragmented. In particular, comparison of major project construction costs between Australia and other countries suffers from a range of methodological and data problems; for this reason, it is beyond the scope of this project to provide information on the potential value of procurement by States and Territories, as well as that of the major cities. A comprehensive overhaul of processes for assessing and developing public infrastructure projects was recently completed, however, in the form of a Productivity Commission enquiry into Public Infrastructure.[97] A series of procurement-related reforms at the sub-national level are emerging in this context.

Although a number of the state government procurement regimes have been moving towards more transparent and simplified systems similar to arrangements at the federal level, they have not adopted non-discrimination as a key principle, and retain measures aimed at boosting domestic suppliers and local content, particularly SMEs.[98] A survey of the nature of key potential state-level market access barriers follows.

Potential Barriers

New South Wales (NSW), for example, applies an SME policy framework aimed at maximizing opportunities for SME participation in government procurement through SME targeted supplier panels, prequalification schemes, and government exemptions to purchase directly from SMEs. Contracting processes and contracts themselves are simplified to maximize accessibility for SMEs, and SME opportunity statements and SME participation plans further increase accessibility. For larger contracts, tenderers have to

[95] Department of the Prime Minister and Cabinet. "Commonwealth Indigenous Procurement Policy", pp. 13-14, 2015, available at https://www.dpmc.gov.au/sites/default/files/publications/indigenous_procurement_policy.pdf, last visited 9 November 2016.
[96] Department of Finance. Frequently Asked Questions, available at: https://webcache.googleusercontent.com/search?q=cache:Is0YXTn7TE4J:https://www.finance.gov.au/sites/default/files/austender-reporting.docx%3Fv%3D1+&cd=9&hl=fr&ct=clnk&gl=ch.
[97] Department of Infrastructure and Regional Development. See the Statement on Infrastructure Reforms, available at http://investment.infrastructure.gov.au/funding/projects/infrastructurestatement.aspx, last visited on 9 November 2016. Also the Productivity Commission Inquiry Report: http://www.pc.gov.au/__data/assets/pdf_file/0007/205549/infrastructure-overview.pdf.
[98] European Commission. "Market Access Barriers Database – Entry on Australian Government Procurement", November 2016, available at: http://madb.europa.eu/madb/barriers_details.htm?barrier_id=095278&version=6.

prepare SME participation plans and demonstrate how the tender supports local industry.

In Queensland, the Procurement Policy 2013 enabled direct engagement of SMEs for purchases in the ICT sectors of less than AUD500,000 (€450,500) based on innovation.

Several states apply "buy local" policies. "Buy local" policies can include preferential scoring criteria for local suppliers, price preferences for local goods or an advantage for local content. Such policies include, for example:

- The Tasmanian Government has implemented a local benefits test for all procurements with a value of more than AUD50,000 (€45,050). The test requires potential suppliers to provide information on the impact on local SME industry should they be awarded the contract and Government entities to take that information into account in the evaluation process through the inclusion of a specific evaluation criterion. The weighting to be applied to the criterion must be at least 10%.
- The Victorian Industry Participation Policy (VIPP), encouraging the involvement of domestic suppliers for contract awards in regional Victoria and Melbourne at the local level. The Victorian Government Purchasing Board (VGPB) allows regional government offices to purchase goods and services (in aggregate up to AUD25,000/€22,525) from regional suppliers if better value for money can be demonstrated.

In South Australia, there is an indigenous procurement policy, the Aboriginal Business Procurement Policy; it allows agencies of the state government to involve eligible Aboriginal businesses as suppliers of procurement up to the value of AUD220,000 (€198,2220).

3.4.1.3. Local Governments

More than 560 local councils make up the third tier of government in Australia. Established by the state or territory in which they are located, they can be called cities, shires, towns, or municipalities. Comparable to New Zealand's city councils and district councils, they are typically responsible for community needs such as waste collection, public recreation facilities and town planning.[99]

Potential Barriers

The Council of the City of Gold Coast (QLD) supports the development of local competitive business and industry via an active "buy local program" involving, inter alia, application of competitive local business and industry preferential factors; weightings and pricing advantages.[100]

[99] New Zealand Trade and Enterprise. "Guide to Winning Government Business in Australia", available at: https://www.nzte.govt.nz/media/5439818/handco-794_nzte-igb_booklet_a4_online_aus_v5.pdf
[100] City of Gold Coast (QLD). "Procurement Policy and Contract Manual," 2016, available at: http://www.goldcoast.qld.gov.au/procurement-policy-guidelines-12293.html, p4.

3.5. The Impact on EU SMEs from EU-AUS FTA (Task 10)[101]

The impact of an EU-Australia FTA on EU SMEs is assessed on the basis of the analysis presented in Section 4.5 of the general part, which outlines those sectors where EU SMEs are predominant in terms of employment, value added and extra-EU exports. Statistics available for EU SMEs show that SMEs are prevalent in "wholesale and retail" services, "manufacturing", "construction services", "business services" as well as "accommodation and food services". EU SME exporters are prevalent in "wholesale, retail trade and repair" services, "manufacturing", "professional, scientific and technical activities", "transportation and storage" services, "construction" services, "accommodation and food" services, "information and communication" services, "administrative and support" services, and "agriculture, forestry and fishing" sectors.

As concerns the quantitative impact of an EU-AUS FTA on SMEs in the EU, both changes in sectoral output as well as changes in sectoral exports are rather insignificant for the liberalization scenario estimated by the European Commission. SMEs producing dairy products, wood and paper products, food products, textiles products as well as producers of a whole range of manufacturing products are likely to benefit strongest (see Table 26). SME services providers in transport services, communications services and business services are also likely to see rising exports as the result of an EU-AUS FTA.

Although total sectoral output (SMEs plus large enterprises) does not change much for the increased liberalization scenario, sectoral changes in bilateral exports are significant for a number of sectors in which EU SMEs are strong exporters. Accordingly, EU SMEs active in the manufacturing of wood and paper products, textiles, chemicals products, metal products, non-metal products, but also motor equipment, machinery and electrical/electronic components are likely to benefit most from liberalization measures that go beyond tariff eliminations and effectively aim at reducing regulatory differences. The size and direction of the estimates is in line with the literature on (heterogeneity of) non-tariff trade barriers and how NTBs particularly hinder the internationalisation of SMEs.

[101] For SME's public procurement is covered in the Chapter on public procurement.

Table 26: Overview of sectoral impact of EU-AUS FTA for sectors in which EU SMEs are predominant, based on EU Commission projections

EU-AUS FTA						
	Liberalization		Increased Liberalization		Sector where SMEs are predominant in the EU (in terms of value-added)	Sector where EU SMEs are strong exporters
	EU Sectoral Output	EU Exports to Australia	EU Sectoral Output	EU Exports to Australia		
	long-term	long-term	long-term	long-term		
	%-change in volume	%-change in volume	%-change in volume	%-change in volume		
rice	0.0	-0.2	-0.1	-0.3		
cereals	0.0	0.0	-0.1	1.8	yes	
veg_fruit	-0.2	7.4	-0.1	9.1	yes	
oil_seeds	-0.1	0.9	-0.1	1.2		
sugar	0.0	0.1	-0.2	0.3	yes	
fiber_crop	0.0	0.7	0.0	4.0		
ruminant_meat	0.2	0.1	-1.2	2.4	yes	
other animal	0.0	2.9	0.0	3.6	yes	
other_meat	0.0	1.2	-0.1	1.9	yes	
dairy	0.1	47.9	-0.1	49.0	yes	
wood_paper	0.0	20.8	0.1	21.3	yes	yes
fishing	0.0	5.0	0.0	5.0	yes	
coal	-0.1	-0.3	-0.1	96.3		
oil	0.0	-0.0	-0.1	15.0		
gas	-0.1	1.5	0.7	2926.0		
minerals	0.0	0.7	0.0	8.0		
other_food	0.0	11.2	0.0	11.4	yes	yes
bev_tob	0.0	6.7	0.0	6.8	yes	yes
textile	0.0	47.8	0.0	104.0	yes	yes
chemicals	0.0	6.5	0.0	20.4	yes	yes

EU-AUS FTA						
	Liberalization		Increased Liberalization		Sector where SMEs are predominant in the EU (in terms of value-added)	Sector where EU SMEs are strong exporters
	EU Sectoral Output	EU Exports to Australia	EU Sectoral Output	EU Exports to Australia		
	long-term	long-term	long-term	long-term		
	%-change in volume	%-change in volume	%-change in volume	%-change in volume		
oil_pcts	0.0	0.0	0.0	4.3	yes	yes
metal_pcts	0.0	22.8	0.1	54.4	yes	yes
no_metal_pct	0.0	22.4	0.0	58.2	yes	yes
motor_equip	0.2	37.7	0.3	52.1	yes	yes
machinery	0.0	21.1	0.2	60.6	yes	yes
ele_other	-0.1	12.7	-0.1	58.5	yes	yes
electricity	0.0	-0.3	0.0	-0.6	yes	yes
utility	0.0	7.6	0.0	7.6		
transport	0.0	6.2	0.0	6.1	yes	yes
communication	0.0	7.0	0.0	7.0	yes	yes
financial	0.0	6.8	0.0	6.7	yes	yes
other_serv	0.0	7.1	0.0	7.0	yes	yes

Note: negative relative changes presented in grey-shaded fields.

As SMEs generally lack the financial and human resources to deal with regulatory differences (see discussion in the general part of this study), Table 27 depicts a number of manufacturing sectors in which EU SMEs are currently facing disadvantages in dealing with different AUS regulations compared to large enterprises.

Table 27: Cross-cutting Overview of sectoral impacts for selected manufacturing sectors

Sector where EU SMEs are strong exporters (see identification as provided in the general part of the study)	AUS Average Tariff rates	Tariff and potential non-tariff trade barriers (NTBs) imposing direct (cost) and indirect (administrative) burden on (EU) SMEs
Wood and paper products	Average MFN: 3.3 percent	Tariffs: • MFN tariffs already relatively low Potential NTBs: • All imported timber, wooden articles, bamboo and related products must comply with the import conditions as stated on the Department of Agriculture's BICON system • The import conditions set out in BICON include various requirements for importers to demonstrate that pest risks are mitigated through the manufacturing process or through approved treatments
Textiles	Average MFN: 4.3 percent	Tariffs: • Average MFN tariffs already relatively low; peak tariffs of 10 percent applied to a great number of textiles categories Potential NTBs: • All imported textiles have to be labelled according to the Australian Standard for Textiles, regulating the labelling of clothing, household textiles and furnishings
Chemicals products	Average MFN: 1.8 percent	Tariffs: • Average MFN tariffs already relatively low Potential NTBs: • All importers of bulk chemicals as well as packaged cosmetics, consumer, industrial and commercial products must register their business with NICNAS, Australia's National Industrial Chemicals Notification and Assessment Scheme • Specific import conditions apply for those chemicals depending on whether specific products are available on NICNAS or not • Some products require an import permit from the Australian Safeguards and Non-Proliferation Office (ASNO)
Minerals and metal products	Average MFN: 2.7 percent	Tariffs: • Average MFN tariffs already relatively low Potential NTBs: • No specifically trade distorting measures in place for iron and steel products

Sector where EU SMEs are strong exporters (see identification as provided in the general part of the study)	AUS Average Tariff rates	Tariff and potential non-tariff trade barriers (NTBs) imposing direct (cost) and indirect (administrative) burden on (EU) SMEs
Transport equipment	Average MFN: 5.0 percent	Tariffs: • Average MFN tariffs already relatively low Potential NTBs: • Several inspection procedures apply for the import of new and used vehicles • Machinery and parts used in agriculture, mining, earthmoving, construction, animal farming, timber felling, horticulture, fruit handling and food processing are all subject to specific import conditions • Several fees charged for documentation processing, import permit applications and all inspections
Non-electrical machinery	Average MFN: 2.9 percent; Max MFN	Tariffs: • Average MFN tariffs already relatively low Potential NTBs: • All goods are subject to biosecurity control upon arrival in Australia • Machinery and parts used in agriculture, mining, earthmoving, construction, animal farming, timber felling, horticulture, fruit handling and food processing are all subject to specific import conditions • Import permit requirements apply to both break-bulk and containerised machinery products • Several fees charged for documentation processing, import permit applications, certification and all inspections
Electrical machinery & electrical equipment	Average MFN: 2.9 percent	Tariffs: • Average MFN tariffs already relatively low Potential NTBs: • All electrical equipment imported and sold in Australia must be proven to be electrically safe • Australia's and New Zealand's Electrical Equipment Safety System (EESS) applies • EESS out various testing, documentation and certification procedures for electrical equipment • Specific fees apply

Table 27 exhibits a number of regulations set in place by Australia for importers of manufacturing products. For a great number of manufactured products ranging from wood products to machinery and electrical components, Australia applies different customs procedures. Although tariffs are already generally low for most manufacturing products, the obligation to fulfil complex customs procedures is a particular obstacle for

EU SMEs, and this obstacle would continue to prevail even if tariffs are completely eliminated. In addition, Australian regulators require specific product conditions and requirements for many manufactured products including wood products, textiles, chemical and (electrical) machinery products. Although the difficulty to overcome language differences weights much lower on EU SMEs compared to other export destinations, these regulations are generally more difficult to fulfil by SMEs compared to large enterprises. That said, the obligation to meet various testing, certification and documentation procedures implicitly puts potential SME exporters with their in general lower sales volumes at a comparative disadvantage due to the higher impact of the related costs per unit. Accordingly, EU SMEs would generally benefit from a comprehensive FTA between the EU and Australia that aims for greater degrees of mutual recognition of standards and procedures and harmonisation in cases where standards are equivalent.

EU SMEs would primarily benefit in those sectors where 1) EU SMEs are relatively strong exporters (see general part of this study) and 2) where Australia's tariffs and NTBs are relatively high (see above). Accordingly, EU SMEs that operate in various manufacturing sectors would largely benefit from an EU-AUS FTA. Thereby SMEs in manufacturing sectors would show increased direct exports due to improved market access conditions. At the same time, EU SMEs that operate as suppliers in EU downstream sectors in manufacturing would also benefit from an EU-AUS FTA. As concerns the latter, SMEs that operate in sectors that go beyond manufacturing, i.e. construction sectors and other non-manufacturing suppliers, would benefit from increased production and increased investment activity in manufacturing sectors.

4. ANALYSIS OF SOCIAL IMPACTS (TASK 7)

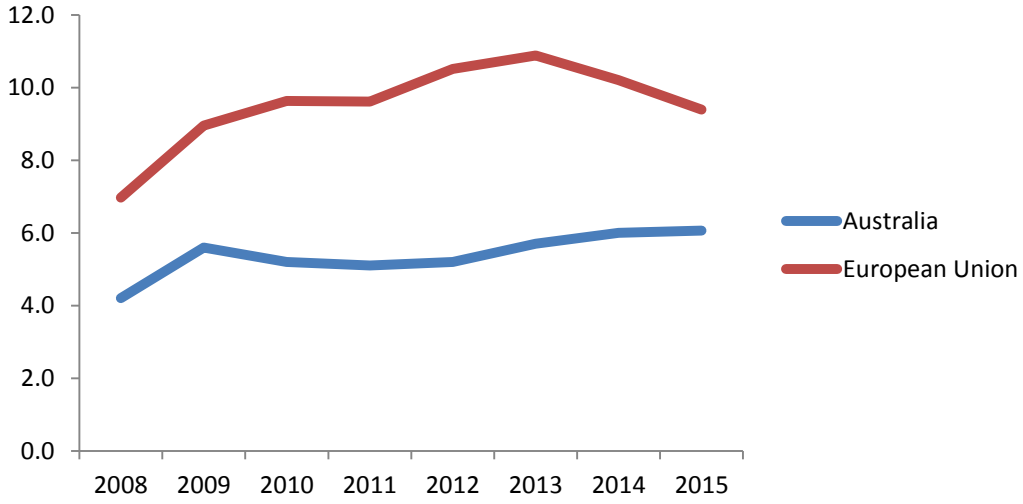
4.1. Direct social impacts (Task 7)

4.1.1. Baseline

4.1.1.1. Trade, employment and wages

Since the financial crisis of 2008-2009 and the subsequent European sovereign debt crisis, the European economy has struggled to regain its pre-crisis GDP level.[102] In contrast with the Australian economy, which labour market proved resilient amidst the tumult of the financial crisis, EU unemployment gradually rose to peak at 11% in 2013 before slightly receding until today (Figure 26).

Figure 26: EU and Australian labour markets after the 2008 financial crisis

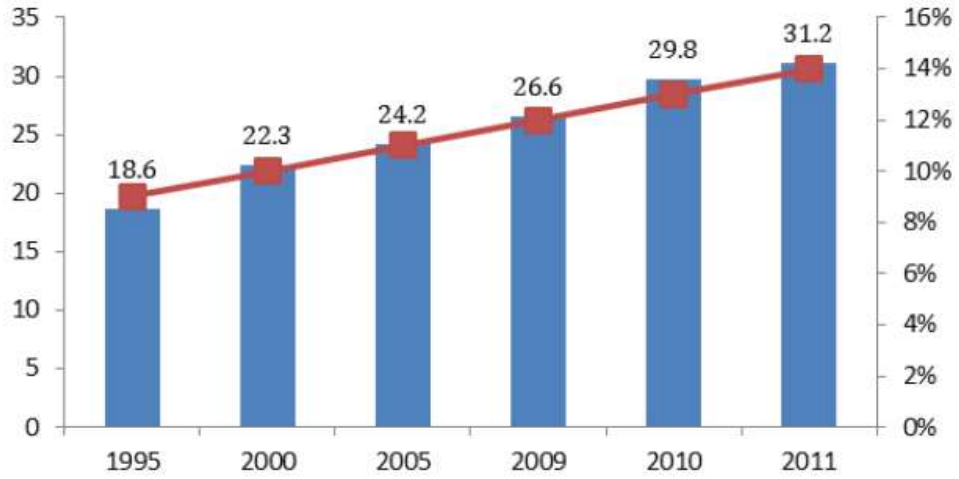


Source: OECD, 2016.

In a context of slow domestic demand, tapping external sources of growth has become a crucial pillar of the EU's strategy to boost job creation and prop up incomes. The Commission's focus on external trade as employment policy stems from the growing significance of export-related jobs for European labour markets. According to DG Trade's estimates, the proportion of jobs supported by extra-EU exports of goods and services has dramatically increased, rising from 1 in 11 jobs in 1995 to 1 in 7 jobs in 2011 (see Figure 27).[103] This is linked to the increasing weight of exports in EU GDP, a ratio that surged from 34.6% in 2000 to 42.9% in 2015 (OECD data). In 2012, another report by the EU Commission estimated that an "ambitious external trade agenda" could add an additional 2 million jobs and increase EU GDP by 2%.[104]

[102] See World Bank data (2016), available at: http://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=EU.
[103] Rueda-Cantuche and Nuno Sousa (2016), "EU Exports to the World: Overview of effects on employment and income."
[104] EU Commission (2012), "External sources of growth. Progress report on EU trade and investment relationship with key economic partners." Available at: http://trade.ec.europa.eu/doclib/docs/2012/july/tradoc_149807.pdf.

Figure 27: EU employment supported by extra-EU exports: number of jobs in millions (left axis) and in % of total employment (right axis)



Source: Rueda Cantuche & Sousa, 2016.

Manufacturing still represents close to 60% all jobs supported by extra-EU exports although the share of services exports has steadily increased.[105] EU merchandise exports to Australia are dominated by machinery and transport equipment (46%), chemicals and related products (19%), followed by miscellaneous manufactured goods (13%). Together, these three categories represent nearly 4/5 of all European goods exported to Australia and will likely remain a main component of EU export-related jobs in the near future – with or without any Australia-EU FTA.[106]

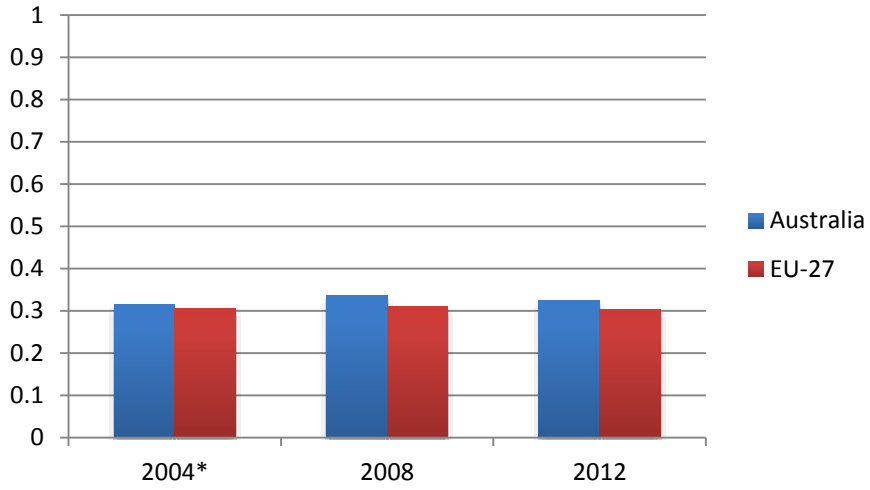
However, the rapid increase of EU services exports to Australia over the past few years – a 27% increase between 2010 and 2014 – shows that there is considerable potential for job creation in what some have described as the "sleeping giant"[107] of the EU economy. Although these vigorous trends have occurred outside the context of an FTA, services exports commonly face a variety of NTBs that would be best addressed under bilateral trade negotiations if the EU is to maximize its competitive potential in the services industry. The trend toward the growing scale of services exports does not mean, however, that services should be fully dissociated from manufacturing and agricultural exports. Whether they're affiliated with the services or manufacturing sector, export-related jobs are known for being high-skilled and better paid than

[105] Rueda-Cantuche and Nuno Sousa (2016), "EU Exports to the World: Overview of effects on employment and income."
[106] For an overview of EU-Australia trade, see General report, section 3.1.
[107] Daniel Hamilton & Joseph Quinlan (2015), "The Transatlantic Economy 2015: Annual Survey of Jobs, Trade and Investment between the United States and Europe," Center for Transatlantic Relations, Johns Hopkins University.

average wages. This is even more the case for so-called "North-North" FTAs, like an EU-Australia trade agreement.[108]

While this argument is commonly used to justify the need for greater trade openness, it has also provided fodder for trade critics in Europe and America denouncing the widening gap between winners and losers of globalization. In the EU, the protracted period of economic slowdown that followed the financial crisis has brought social inequality to the forefront of political debates. In reality, however, Gini coefficient[109] trends at the EU level do not indicate a clear and consistent rise in inequality across the continent; nor is this the case for Australia (Figure 28).

Figure 28: Income inequality. Changes in Gini coefficient in EU27[110] and Australia

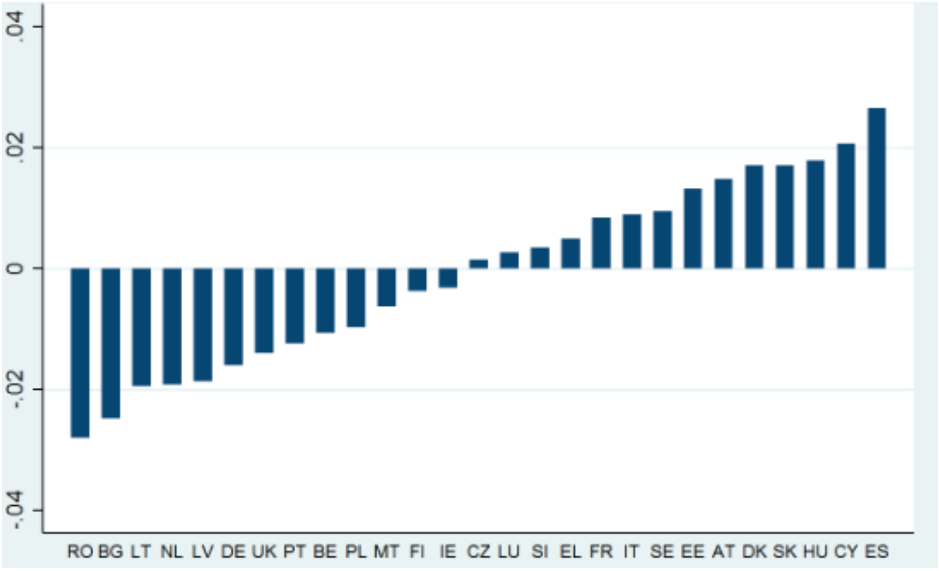


*Source: OECD & Eurostat data. *EU-27 figure is 2005 estimate.*

Additionally, a closer examination of Gini coefficients reveals very diverse trends on the European continent. Here, the rise in inequality in some countries was balanced out by a narrowing income concentration in others (Figure 29).

[108] Using data from 164,000 workers, a recent study by the US International Trade Commission reveals that contrary to what people might expect, the wage earnings premium is not only greater for blue-collar workers than for white collars but also more significant in the manufacturing sector than in the services industry. David Riker (2015), "Export-Intensive Industries Pay More on Average: An Update," US International Trade Commission, available at: https://www.usitc.gov/publications/332/ec201504a.pdf.
[109] The Gini coefficient is a measure of inequality. It is defined as a ratio with values between 0 and 1. A low Gini coefficient indicates more equal income or wealth distribution, while a high Gini coefficient indicates more unequal distribution. 0 corresponds to perfect equality (everyone having exactly the same income) and 1 corresponds to perfect inequality (where one person has all the income, while everyone else has zero income).
[110] EU27 does not include Croatia, for which 2005 figures were not available.

Figure 29: Gini coefficient trends between 2007 and 2011 in EU countries



Source: EU Parliament, DG for Internal Policies, 2015.

It is important to note that these conflicting trends have occurred within a context of increasing trade openness (measured by the sum of exports and imports as a percentage of GDP) for both individual members and the EU has a whole.[111]

Of course, this should not be interpreted as dismissing the link between trade and social inequality. Today, few economists contest that trade plays a role in economic polarization. However, at the aggregate level, many regard the impact of trade as secondary to technological (skill-biased technological change) and political factors (e.g. tax policies, financial deregulation and labour market institutions).[112] In addition, to the extent that the European Union and Australia enjoy comparable standards of living, the potential polarizing effects of trade will likely remain limited, whether under the baseline scenario or under the two liberalization scenarios.

4.1.1.2. Overview of core labour standards, Fundamental Conventions and Decent Work in the EU and Australia

In its 1998 Declaration on Fundamental Principles and Rights at Work, the International Labour Organisation (ILO) established four core labour standards that are deemed universal and have since served as a benchmark for the protection of workers' rights: 1) freedom of association and the effective recognition of the right to collective bargaining; 2) the elimination of all forms of forced or compulsory labour; 3) the effective abolition of child labour; 4) and the elimination of discrimination in respect of employment and occupation. These four core labour standards are protected by the following eight fundamental conventions:

[111] See Eurostat, "Exports of goods and services in % of GDP", available at: http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tet00003&plugin=1.
[112] On technological change, see Autor, D., L. Katz and A. Krueger (1998). "Computing Inequality: Have Computers Changed the Labor Market?" *Quarterly Journal of Economics* 113, 1169-1213; Goldin, C. and L.M. Katz 1998. "The Origins of Technology-Skill Complementarity." *Quarterly Journal of Economics* 113, 693-732. On political factors, see e.g. Stiglitz, Joseph, (2012), *The Price of Inequality: How Today's Divided Society Endangers Our Future*. New York: W. W. Norton & Co.; Piketty, Thomas (2014). *Capital in the Twenty-First Century*. Belknap Press/Harvard Press; Jaumotte, Florence & Carolina Osorio Buitron (2015), "Inequality and Labor Market Institutions", International Monetary Fund SDN 15/14, available at: https://www.imf.org/external/pubs/ft/sdn/2015/sdn1514.pdf.

1. Freedom of Association and Protection of the Right to Organise, 1948 (Convention 87);
2. Right to Organise and Collective Bargaining, 1949 (Convention 98);
3. Forced Labour, 1930 (Convention 29);
4. Abolition of Forced Labour, 1957 (Convention 105);
5. Minimum Age, 1973 (Convention 138);
6. Worst Forms of Child Labour, 1999 (Convention 182);
7. Equal Remuneration, 1951 (Convention 100);
8. Discrimination (Employment and Occupation), 1958 (Convention 111).

Before discussing the ratification of ILO conventions and issues of compliance/non-compliance among trading partners, three caveats must be raised. First, it must be noted that the ratification of conventions is by itself no guarantee for strict compliance with international labour standards as the cases below clearly illustrate. Second, and conversely, non-ratification does not necessarily mean that labour standards are not met in practice. Indeed, the devolution of labour regulation to subnational actors like states or provinces can be obstacles to ratification. Third, comments and requests provided by the ILO Committee of Experts on the Application of Conventions and Recommendations (thereafter CEACR or Committee of Experts) on issues of compliance may not always reflect higher levels of non-compliance in one country but rather greater attachment or activism in certain spheres like non-discrimination.

Before all, the EU promotes labour standards internally through the EU Charter of Fundamental Rights. The latter concerns primarily human rights but also contains language referring directly or indirectly to workers' rights: Chapter IV on solidarity, but also art. 5 (compulsory and forced labour), art. 12 (freedom of association), art. 21 on non-discrimination, art. 23 on equality between men and women etc.

When it comes to ILO standards, all EU members have ratified the eight fundamental conventions since 2007, as well as the priority convention on labour inspection since 2009. Most of them have also ratified the main social governance conventions (e.g. employment policy and tripartite consultation) while many have ratified other conventions supporting the four strategic objectives of the Decent Work Agenda: employment, social protection, social dialogue and tripartism and fundamental principles and rights at work.[113] The EU has progressively intensified its support in its internal and external policies and actions for ILO standards, frameworks and initiatives such as: support for core labour standards (2001, 2012), social dimension of globalization (2004), decent work (2006), global jobs pact (2009) and social protection floors (2012). Additionally, the EU has played an instrumental role in the development of many ILO initiatives, among which the Maritime Labour Convention (2006) and the joint EU-ILO Tackling Child Labour through Education (TACKLE) program.[114] Finally, the EU promotes international labour standards as part of its trade strategy (see below).

[113] International Labour Organisation, "Declaration on Social Justice for a Fair Globalization", Geneva, 10 June 2008, available at: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/genericdocument/wcms_371208.pdf.
[114] ILO, "The ILO and the EU, partners for decent work and social justice. Impact of ten years of cooperation." November 2012, available at: http://www.ilo.org/wcmsp5/groups/public/@europe/@ro-geneva/@ilo-brussels/documents/publication/wcms_195135.pdf.

The general convergence of EU and ILO policy goals must not obscure national differences in compliance with ILO standards across the EU. A close analysis of the ILO 2016 report on the "Application of International Labour Standards" [115] and the latest data available (2015) from the NORMLEX information system reveals a wide range of compliance issues among EU members. Several fundamental labour conventions feature among the most common conventions subject to direct requests from the ILO. In 2015, the conventions subject to the greatest number of cases pertain to freedom of association and the effective recognition of the right to collective bargaining (conventions 87 and 98) and have involved many different EU members among which Portugal, Germany, Romania, Poland and Hungary. Direct requests by the ILO were also brought with regard to the effective abolition of child labour (conventions 138 and 182) (e.g. Greece, Hungary), and the elimination of discrimination in respect of employment and occupation (e.g. Denmark). Beyond core labour standards, the 2006 Maritime Labour Convention has been also frequently subject to compliance issues, as have Governance conventions like Convention 81 Labour Inspection Convention and Convention 129 on Labour Inspection.

Like the EU, Australia has a strong commitment to international labour standards. It was a founding member of the ILO. The government has ratified almost all ILO fundamental conventions with the exception of Convention 138 concerning Minimum Age for Admission to Employment, even though child labour is strictly regulated under both federal and state laws. The government in Canberra has ratified three out of four Governance Conventions (all but Convention 129 on Labour Inspection in Agriculture). Australia is a significant donor to the ILO and has played a leading role promoting international labour standards both at home and abroad. It has been particularly active in Asia, funding various labour rights programs like the Empowering Indonesian Women for Poverty Reduction Programme (MAMPU) and the Tripartite Action to Protect Migrant Workers within and from the Greater Mekong Sub region from Labour Exploitation (GMS Triangle project) operating in six countries (Cambodia, Lao People's Democratic Republic, Malaysia, Myanmar, Thailand and Viet Nam).

Over the past four years, the ILO Committee of Experts has addressed a number of direct requests to the Australian government with regard to compliance with ILO conventions, including the implementation of core labour standards like freedom of association and the effective recognition of the right to collective bargaining (conventions 87 and 98), the elimination of discrimination in respect of employment and occupation (conventions 100 and 111), and the effective abolition of child labour (Convention 182, as Convention 138 is not ratified).

4.1.2. Impact of the EU-Australia FTA

4.1.2.1. Impact through trade and economic channels

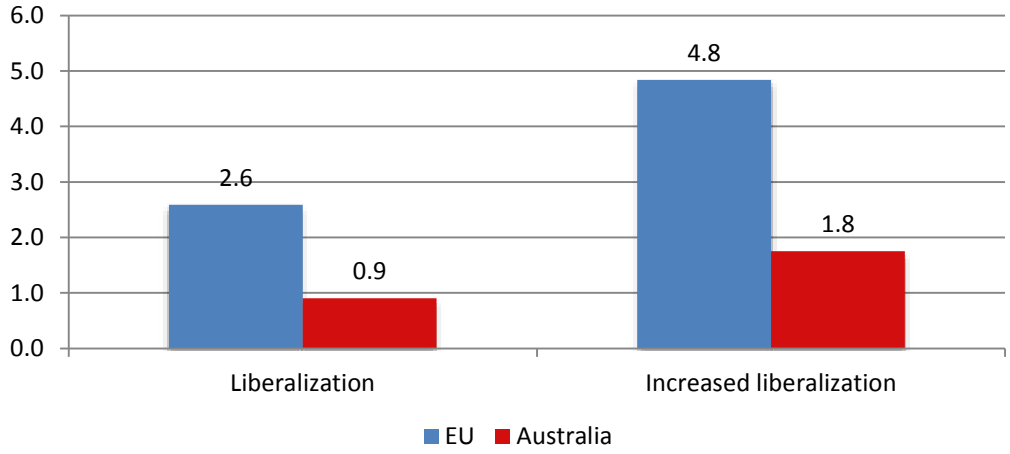
Welfare effects, employment, wages and inequality

A common indicator of the social impact of FTAs consists of measuring welfare effects. In the GTAP model, the welfare effect represents a money metric equivalent of the utility change that arises, for example, from terms of trade changes and improvements in a countries resource allocation. In the model, welfare is calculated by measuring "equivalent variation" (EV) which summarizes regional welfare changes and is translated in money values (million €).

[115] ILO, "Application of International Labour Standards" (up to 31st December 2015), Report 3 part II, available at: http://www.ilo.org/public/libdoc/ilo/P/09661/09661(2016-105-2).pdf.

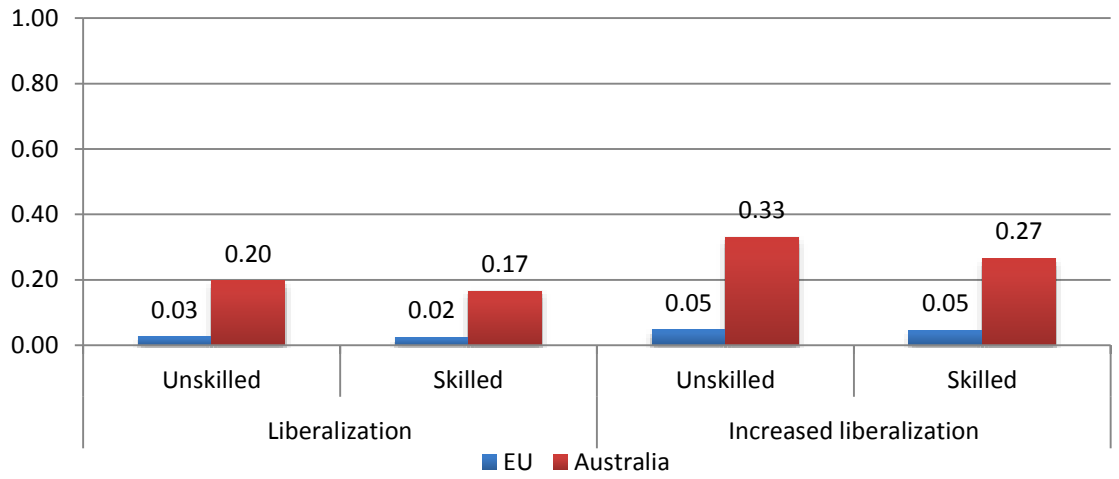
In case of the EU-Australia FTA, aggregate welfare effects are positive for both the EU and Australia under both liberalization scenarios. For the EU, the gain in aggregate welfare amounts to €4.8 billion in the increased liberalization scenario, and at €2.6 billion in the liberalization scenario. Depending on the degree of liberalization, aggregate welfare improvements range from €0.9 billion to €1.8 billion for Australia (Figure 30).

Figure 30: EU-Australia change in welfare (long term, billion €)



The impact of an FTA on wages and employment is contingent upon workers' skill level and sector. Yet, in the case of the EU-Australia FTA, CGE modelling results indicate that real wages are expected to rise for both EU and Australia for both skilled and unskilled workers. However, for the EU, real wages follow the same pattern as national income i.e. rising marginally compared to Australia. For Australia, real wage increases are most profound for both unskilled and skilled workers in the increased liberalization scenario of trade liberalization, ranging from 0.33% and 0.27% for unskilled and skilled workers, respectively (Note that the model applied in this study assumes that every country's labour supply is fixed). The "fixed labour market closure" implies that any increase in demand for labour will be met by wage increases, which will in turn push up firms' costs, and will be eventually be passed on to consumers as higher prices. The modelling results suggest, however, that rising consumer prices are more than offset by higher nominal wages, leaving the EU and Australia with gains in average real wages as a result of trade liberalization (Figure 31).

Figure 31: % Change in Real Wages (long term)



Source: GTAP analysis conducted by the European Commission

The Gini index is a measure of inequality typically measured in survey data with multiple types of households. It measures the extent to which the richest and poorest households are distant from each other in terms of income at any given point of time. We employ this concept in our context in a slightly different way than that. For skilled and unskilled labour in each country, we measure the Gini index for inequality in wages.

We employ the initial data on wage bill (in €) and aggregate employment (in number of jobs) from the GTAP Data Base. Using the wage rates before and after the scenarios, for skilled and unskilled labour, we measure the Gini index for wage inequality between skilled and unskilled labour for both the EU and Australia. We follow Deaton (1997) for the formula to measure Gini index. The higher the value of this index, the higher the measure of inequality.

As far as wage inequality between unskilled and skilled labour across the two partners (EU and Australia), the results of Gini coefficients indicate that the overall gap between real wages of unskilled and skilled workers could rise by fall slightly in the liberalization scenario in the EU, while it may stay stagnant in the increased liberalization scenario; for Australia, it falls in the liberalization scenario and falls even more in the increased liberalization scenario (Table 28).

Table 28: Gini Index

	Base Year	Liberalization (long term)	Increased liberalization (long term)
Wage Inequality in EU	0.4361	0.4357	0.4361
Wage Inequality in Australia	0.4299	0.4222	0.4135

The results for the change in reallocation of workers in the EU corroborate our findings. The substitution of workers is expected from import-intensive sectors to export-intensive sectors in the long run, since the model applied in this study assumes that every country's labour supply is fixed. For instance, in the increased liberalization

scenario, with the cuts in the relatively high import barriers into the EU in agricultural sectors, and also the global competitive position of Australia in some of these sectors, there would be an expected increase in the imports of these products into the EU. Table 29 highlights that there is likely to be reallocation of workers in these sectors in both the EU and Australia. The positive per cent change in the numbers of workers reallocating to these sectors in Australia is indicative that Australian firms could expand production in these sectors with increase of exports. While the workforce from these sectors in the EU would reallocate to more efficient sectors of production and thus the employment in some of the non-agricultural sectors will go up, which include, motor vehicles, machinery, and non-metal products, where maximum export gains are expected for the EU in the long run.

Table 29: Reallocation of workers in the EU and Australia (% change, long term)

Sectors	EU				Australia			
	Liberalization		Increased liberalization		Liberalization		Increased liberalization	
	Unskilled	Skilled	Unskilled	Skilled	Unskilled	Skilled	Unskilled	Skilled
rice	**-0.06**	**-0.05**	**-0.18**	**-0.17**	0.04	0.07	0.21	0.27
cereals	**0.00**	**0.00**	**-0.15**	**-0.15**	**-0.02**	**-0.02**	0.10	0.12
veg_fruit	**-0.19**	**-0.19**	**-0.20**	**-0.20**	0.27	0.28	0.22	0.23
oil_seeds	**-0.09**	**-0.09**	**-0.17**	**-0.17**	0.47	0.48	0.59	0.62
sugar	**-0.03**	**-0.03**	**-0.23**	**-0.23**	0.01	0.04	0.65	0.71
fiber_crop	**-0.03**	**-0.03**	**-0.09**	**-0.09**	0.02	0.03	**-0.15**	**-0.13**
ruminant_meat	0.23	0.23	**-1.21**	**-1.21**	0.04	0.05	2.52	2.56
other animal	**-0.04**	**-0.04**	**-0.05**	**-0.04**	0.25	0.26	0.17	0.19
other_meat	**-0.01**	**-0.01**	0.00	0.00	**-0.02**	0.02	**-0.13**	**-0.06**
dairy	0.07	0.07	**-0.11**	**-0.11**	**-0.36**	**-0.34**	**-0.02**	0.03
wood_paper	0.00	0.01	**-0.03**	**-0.03**	**-0.22**	**-0.18**	**-0.20**	**-0.12**
fishing	**-0.01**	**-0.01**	**-0.04**	**-0.04**	0.07	0.07	0.08	0.09
coal	**-0.12**	**-0.12**	**-0.22**	**-0.22**	**-0.08**	0.04	**-0.15**	0.10
oil	**-0.06**	**-0.06**	**-0.10**	**-0.10**	0.20	0.22	0.37	0.40
gas	**-0.14**	**-0.14**	0.74	0.74	0.21	0.25	**-1.80**	**-1.73**
minerals	**-0.03**	**-0.03**	**-0.05**	**-0.05**	0.01	0.02	0.01	0.02
other_food	0.01	0.02	**-0.04**	**-0.03**	**-0.12**	**-0.09**	**-0.16**	**-0.09**

bev_tob	**-0.02**	**-0.02**	**-0.03**	**-0.03**	0.34	0.38	0.25	0.32
textile	**-0.04**	**-0.03**	**-0.03**	**-0.03**	0.19	0.23	**-0.24**	**-0.15**
chemicals	**-0.05**	**-0.05**	**-0.03**	**-0.03**	**-0.09**	**-0.05**	**-0.75**	**-0.66**
oil_pcts	**-0.05**	**-0.04**	**-0.08**	**-0.08**	**-0.01**	0.03	**-0.06**	0.02
metal_pcts	**-0.02**	**-0.02**	0.01	0.01	**-0.02**	0.02	**-0.22**	**-0.13**
no_metal_pct	0.01	0.01	0.04	0.05	**-0.08**	**-0.04**	**-0.40**	**-0.31**
motor_equip	0.22	0.22	0.28	0.28	**-1.48**	**-1.44**	**-1.91**	**-1.83**
machinery	0.01	0.01	0.14	0.14	**-0.48**	**-0.44**	**-2.21**	**-2.13**
ele_other	**-0.10**	**-0.09**	**-0.10**	**-0.09**	0.20	0.24	**-0.04**	0.05
electricity	**-0.02**	**-0.02**	**-0.03**	**-0.03**	**-0.05**	**-0.01**	**-0.19**	**-0.10**
utility	0.03	0.03	0.05	0.05	0.27	0.31	0.50	0.59
transport	**-0.04**	**-0.04**	**-0.09**	**-0.09**	**-0.11**	**-0.05**	**-0.20**	**-0.09**
communication	**-0.01**	**-0.01**	**-0.02**	**-0.01**	0.00	0.04	**-0.01**	0.08
financial	**-0.02**	**-0.02**	**-0.04**	**-0.04**	**-0.07**	**-0.03**	**-0.13**	**-0.05**
other_serv	**-0.01**	**0.00**	**-0.01**	**-0.01**	**-0.07**	**-0.03**	**-0.16**	**-0.07**

4.1.3. Impact on core labour standards

Australia's approach to labour standards in FTAs

In Australia, both the Department of Foreign Affairs and Trade (DFAT) and the Department of Employment work jointly to address labour linkages in trade policy. The DFAT has the lead on all trade issues, and the former provides advice and input in the conduct of regional and bilateral trade negotiations. Although Australia's institutional and policy framework is less formalized than the EU (see General report) when it comes to trade-labour linkages, Australia has, in the past, addressed trade-related labour issues by designing a specific labour chapter (e.g. US-Australia FTA, TPP) and/or by advising trade negotiators on chapters impacting employment.[116]

Although its FTAs with Thailand and Singapore both feature a chapter on the "movement of business persons,"[117] Australia and its partners did not include a separate chapter on labour. Nor was it the case in the Australia-Japan FTA, signed in July 2014, which makes only a very brief and general reference to labour standards.[118] Australia began

[116] Department of Employment (2016). "International Labour Issues," available at: https://www.employment.gov.au/international-labour-issues.
[117] See the text of the Australia-Thailand Free Trade agreement, available at: http://dfat.gov.au/trade/agreements/tafta/fta-text-and-implementation/Documents/aus-thai_FTA_text.pdf ; and of the Singapore-Australia FTA, available at : http://dfat.gov.au/trade/agreements/safta/pages/singapore-australia-fta.aspx.
[118] European Commission, DG Trade (2015), "Trade Sustainability Impact Assessment of the Free Trade Agreement between the European Union and Japan", available at: http://trade.ec.europa.eu/doclib/docs/2015/april/tradoc_153344.pdf.

incorporating labour provisions in its FTAs as part of its trade agreements with the United States, first on a bilateral basis, and second within the (cross) regional framework of the TPP. Because labour issues were not a source of tension between the two advanced economies, their bilateral FTA provided limited scope for binding language on trade-labour linkages, requiring simply that each country enforce its respective labour laws. Chapter 18 of the US-Australia FTA does refer to the ILO Declaration on Fundamental Principles and Rights at Work (1998) as well as to "internationally recognised labour principles and rights," yet does it in exhortatory language ("shall strive to ensure"), reducing enforcement measures to bilateral consultation outside the scope of dispute settlement mechanisms.[119]

The much greater social and economic disparities between TPP countries (with Australia and lower-middle income and middle-income countries like Vietnam and Malaysia), however, meant that labour issues would be subject to a different approach that reflects not only US input into the negotiations, but a compromise between multiple trading partners with different practices and experiences in this policy sphere.[120]

The TPP's chapter on labour both builds upon the framework developed by Washington over the past two and a half decades of FTA negotiations, and innovates in several regards.[121] This has led the US Trade Representative to claim "TPP has the strongest protections for workers of any trade agreement in history". Like the US-Australia FTA, TPP refers both to the 1998 ILO Declaration and to the same set of "internationally recognized labour rights," yet does it in much more binding terms than the US-Australia FTA stating that parties "shall adopt and maintain in its statutes and regulations, and practices thereunder, the [core labour standards] as stated in the ILO Declaration" (emphasis added). Unlike the US-Australia FTA, TPP's labour provisions can be brought to dispute settlement (chapter 28) under the same terms (including potential trade sanctions) as other chapters if consultations fail to find an agreement. For Australia, this constitutes an unprecedented degree of enforceability that may have a future impact on its approach to trade-labour linkages.

Beyond enforceability, TPP's labour chapter breaks new ground both in terms of content and public engagement, albeit more in promotional language than binding terms. Perhaps the most visible labour provisions in the TPP are the pre-ratification of legally binding "labour action plans" that require Vietnam, Brunei and Malaysia to implement legal and institutional reforms to meet a number of labour standards tailored to each labour action plan.[122]

Finally, TPP's labour chapter also breaks new ground for Australia and its trading partners with regard to its governance, and more specifically the many instruments designed to increase public engagement on labour issues. These provisions include, among others:

- a section on public awareness (art. 19.8) requiring access to administrative and judicial proceedings;

[119] These labour rights draw from the original US GSP framework and, somewhat redundantly include all four core labour standards with the exception of non-discrimination, along with "acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety health." The text of the US-Australia FTA's labour chapter is available at: https://ustr.gov/sites/default/files/australia_FTA_Labor.pdf
[120] We assume that TPP will enter force as agreed by the partners.
[121] Signed in 1992, NAFTA was the first FTA to "include" labour provisions as side agreements.
[122] For more details, see ILO (2016), "Assessment of Labor Provisions in Trade and Investment Arrangements."

- mechanisms for public submissions (art. 19.9);
- the creation of a Labour Council (art. 19.12) composed of senior governmental representatives in charge of monitoring and assessing the implementation of the labour chapter, potentially liaising with relevant regional and international organisations like APEC or the ILO;
- the establishment or maintenance of a national labour consultative or advisory body including representatives of its labour and business organisations to provide views on the implementation of TPP's labour provisions (art. 19.14).

In short, TPP's labour chapter may well provide a new framework for Australia's trade-labour linkages, breaking new ground in enforceability, content and stakeholder consultation. Not all the provisions of its ambitious scope are subject to strict enforcement. As a result, TPP's ability to meet its promises will depend on political will on behalf of its parties and on the financial resources allocated to implement and monitor the agreement.

Expected scope of Australia-EU FTA and potential impact on core labour standards

As explained earlier, the trade and sustainable development chapter of the Korea trade agreement has become a template for trade-labour linkages in EU FTAs, as reflected by the similar scope of CETA's labour chapter or EU's TTIP labour chapter proposal released in November 2015.[123] The final scope of TTIP's labour chapter is likely to be fiercely debated given Washington's strong attachment to its enforcement measures over the past decade. However, the content of an EU-Australia FTA is likely to be subject to fewer controversies and in the light of Australia's flexibility on trade and labour, will likely follow the framework established in the EU-Korea FTA and consolidated in subsequent FTAs like CETA. Thus, we can reasonably expect that an FTA will provide a clear framework for the two parties to:

- commit to the ILO's core labour standards and the Decent Work Agenda;
- reassert their right to regulate labour issues;
- favour a consultative and cooperative approach to dispute settlement;
- establish ad hoc institutional procedures to:
  - monitor the implementation of the agreement (Committee on Trade and Sustainable Development, Civil Society Forum, Domestic Advisory Groups),
  - review alleged violations of the agreement (e.g. Panel of Experts)
  - and conduct a yearly or five-year assessment of the FTA by incorporating feedback from stakeholders.

The prominence of ILO core labour standards in trade agreements (both in EU and US FTAs) makes them a logical starting point to discuss the social impact that an EU-Australia FTA might have on working conditions. Admittedly, the tensions between trade liberalization and the enforcement of international labour standards are of lesser concern in trade negotiations when two parties are both established democracies and advanced economies. Yet, the evidence below (Table 30) shows that industrialized

[123] European Commission (2015), "EU Textual Proposal. Trade and Sustainable Development," available at: http://trade.ec.europa.eu/doclib/docs/2015/november/tradoc_153923.pdf.

countries are far from immune from transgression or non-enforcement of international labour standards. This section draws on the NORMLEX database to review recent cases submitted to the ILO's Committee of Experts that reflect contentious issues in the implementation of ILO standards in the EU and Australia. It then assesses the extent to which the EU-Australia FTA might impact core labour standards in both parties (Table 31).

Table 30: ILO cases brought to CEACR in EU and Australia

ILO Core Labour standards	AUSTRALIA Examples of cases reviewed by ILO Committee of Experts[124]	EUROPEAN UNION Examples of cases reviewed by ILO Committee of Experts
Freedom of association and the effective recognition of the right to collective bargaining (conventions 87 and 98)	• State measures infringing upon freedom of association, right to strike, rules on trade union membership • State interference in collective bargaining in the building industry	Curtailment of right to strike in municipal administrations; collective bargaining rights of self-employed workers; Right of workers' organizations to elect their representatives in full freedom and to organize their activities and formulate their programmes
Elimination of all forms of forced or compulsory labour (conventions 29 and 105)	Legislative framework for forced labour practices; vulnerable situation of migrant workers; work of prisoners for private enterprises	Work of prisoners for private enterprises; trafficking in persons; exploitation of foreign workers in an irregular situation; Imposition of sentences of imprisonment involving the obligation to work as a means of labour discipline
Effective abolition of child labour	Use of children for prostitution, for the production of pornography; use of children in production and trafficking of drugs; underground work by young persons (e.g. mining sector)	Child trafficking; identifying and reaching out to children at risk; Roma and street children
Elimination of discrimination in respect of employment and occupation	Gender pay gap; sexual harassment; age discrimination;	Discrimination with regard to employment and occupation; Equality of opportunity and treatment irrespective of race, colour and national extraction; gender pay gap; sexual harassment

Source: Author's analysis of ILO NORMLEX database.

[124] Cases are selected from the NORMLEX database according to three criteria: 1) relevance to core labour standards; 2) nature of ILO comments (direct requests, as opposed to simple observation); 3) recency of the case (four years maximum).

Table 31: Impact of EU-Australia FTA on core labour standards

Core labour standards	Trade measures likely to have an impact	Likelihood of direct vs. indirect impact	Likelihood of major vs. minor impact	Magnitude of expected impact	Positive, neutral or negative impact
Freedom of association and right to collective bargaining	Trade in goods and services	Indirect	Likely	Minor	Neutral to positive for EU unions; neutral to negative for Australia unions
	Labour chapter	Direct	Likely	Minor	Positive
Elimination of all forms of forced and compulsory labour	Trade measures	Indirect	Unlikely	Minor	Neutral
	Labour chapter	Indirect	Unlikely	Minor	Neutral to positive
Effective abolition of child labour	Trade measures	Indirect	Unlikely	Minor	Neutral
	Labour chapter	Indirect	Likely	Minor	Neutral to positive
Elimination of discrimination in respect of employment and occupation	Trade measures	Indirect	Likely	Minor	Positive
	Labour chapter	Direct	Likely	Minor	Positive

Freedom of association and right to collective bargaining

Cases relating to freedom of association and the effective recognition of the right to collective bargaining are the most common occurrences among those reviewed by the CEACR. Thus, despite the EU and Australia's adherence to conventions 87 and 98, analysis of CEACR reports reveal many cases in Australia (both at federal and state levels) and across the EU, where freedom of association and the right to collective bargaining are being infringed upon. This comes in a general context of declining union membership that is the result of both economic dislocation in the aftermath of the financial crisis and political reforms often hostile to unions.

Trade in goods and services under an EU-Australia FTA is likely to have only a minor indirect impact on labour standards. These indirect effects are likely to be confined to unionized sectors like manufacturing. Thus, unions in manufacturing sectors benefiting from tariff reduction under increased liberalization (e.g. motor equipment and machinery in the EU) may experience increasing bargaining power. Conversely, social dislocation and employment reallocation could result in diminishing bargaining power among Australian unions.

Given its current practice and the nature of this North-North trade agreement, the EU is unlikely to embrace a sanctions-based approach to ILO compliance. Additionally, our analysis of the EU-Australia FTA's aggregate and sectoral impacts shows that these are not projected to be significant enough to prompt a set of reforms that would prop up labour standards in the EU or Australia. Thus, the impact that the EU-Australia FTA might have on unions' rights will depend not only on the content of the labour chapter but also on the political will to enforce its provisions.

Because protecting freedom of association, collective bargaining and the right to strike can face considerable obstacles to enforcement, the success of a soft regulatory approach will depend on civil society inclusion in monitoring, sustained resource allocation and feedback loop mechanisms. First, evidence shows that transnational cooperation among trade unions can lead to knowledge transfer and resource aggregation. Once domestic channels are blocked, the support of transnational alliances and international institutions can bring new visibility to cases of anti-union practices, as reflected by the cooperation between North American unions under the North American Agreement on Labour Cooperation (Stillerman and Joel 2003, and Kay 2005). Yet, as the limited results of NAFTA's labour side agreement reveal, awareness is only one step toward effective enforcement of unions' rights. Second, monitoring programs must be funded adequately to allow sustained participation of labour organizations. Given the above-mentioned decline in unions' financial capacities, cooperative enforcement mechanisms are more likely to be effective if participation costs for labour (and other civil society) groups are minimized and if the latter perceive that their input matters. This is the third key element to ensure that the EU-Australia FTA's chapter on trade and sustainable development maximizes its positive externalities with regard to labour standards in general: designing feedback loop processes to ensure that monitoring and assessment measures lead to concrete responses from governments or bilateral institutions.

Elimination of all forms of forced and compulsory labour

EU and Australian cases of forced or compulsory labour that are subject to direct requests by the CEACR generally fall under three categories. The first pertains to state-imposed forms of compulsory labour,[125] and more specifically to the work of prisoners. ILO Convention 29 concerning Forced or Compulsory Labour does not classify the work of prisoners who have committed a crime as "forced labour" provided they work "under the supervision and control of a public authority and that the said person is not hired to or placed at the disposal of private individuals, companies or associations" (Art. 2(2)(c)). Conversely, prison labour carried out on behalf of private enterprises requires voluntary consent to be in full compliance with convention 29. Close examination of CEACR reports

[125] At the global level, this category represents 10% of all forms of compulsory labour. For more details on typology and statistics, see ILO (2014), "Profit and Poverty: The Economics of Forced Labour", available at: http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_243391.pdf.

reveals that securing the informed consent of prisoners working for private contractors is a common request of the CEACR in both Australia and Europe. However, both domestic regulation and international agreements limit the scope of competition between prison workers and labour in the free market. In Australia, the prison industry is regulated through a complex web of advisory bodies, state jurisdictions and codes of conduct within the prison industry (Fenwick 2003).

At the international level, Art. XX of GATT allows WTO members to adopt trade restrictive measures related to the products of prison labour. Thus, to the extent that there is very little, if any, linkage between prison labour and EU-Australia trade, the potential impact of an EU-Australia FTA is unlikely to have any impact, whether through economic or rule-making channels. Indeed, while compliance with ILO conventions can admittedly be subject to cooperation, the potential of bilateral consultations in this realm is limited to the extent that the path to domestic regulation is clear, as shown by CEACR reports.

The second category of forced labour cases lies at the crossroads between labour standards and human rights and deals with human trafficking. This is not a prominent case in Australia, who has not been subject to CEACR comments over the past five years. However, it is a common issue raised by the ILO among EU members, which has gained greater significance with the current refugee crisis. These issues are examined in the Human Rights chapter (Chapter 6).

The third category of requests regarding the elimination of force labour (and more specifically convention 29) has to do with the vulnerable situation of migrant workers and refugees. This issue has long been a common issue of CEACR comments in both the EU and Australia and is discussed under the HR analysis.

To the extent that cases of forced and compulsory labour are only indirectly related to EU-Australia trade, and despite references to the Decent Work Agenda, the implementation of labour provisions are unlikely to have a major impact on these issues. And while bilateral cooperation through knowledge transfers may have positive effects under an EU-Australia FTA, the sensitive nature of immigration policies means that these questions might be more effectively addressed in other international fora than a bilateral trade agreement.

Effective abolition of child labour

As mentioned above, the fact that Australia has not ratified Convention 138 concerning Minimum Age for Admission to Employment does not mean that child labour is more common than in the EU. In effect, both federal and state laws regulate child labour. The Children (Care and Protection) Act of 1987 prohibits the employment of children under 15 in a number of sectors and where "the child's physical or emotional well-being is put at risk." Likewise, the Australian Capital Territory and the states of Western Australia and Victoria prohibit the employment of children under a certain (15 or school-leaving) age but allow exceptions for child labour under certain conditions (outside school hours, light work and family businesses, or under a fixed-term permit).[126]

In the EU, all members have ratified Convention 138 on minimum age, while the EU Directive on the protection of young people at work (94/33/EC) states that EU members

[126] Colin Fenwick & Jane Hodges, "National Labour Law Profile: Australia", ILO. Available from: http://www.ilo.org/ifpdial/information-resources/national-labour-law-profiles/WCMS_158892/lang--en/index.htm.

must prohibit the employment of children under the age of 15 or those still in full-time compulsory education. Most EU legislation sets the minimum age at 15 or 16 and/or puts restrictions on the age of compulsory education. As in Australia, children are protected when it comes to working conditions, and particularly safety and health issues.[127] In the EU, the situation differs dramatically from one country to another with the regard to the type of work by young person. Except for agriculture, work by children under 15 years is generally concentrated in services (restaurants, supermarkets, petrol stations) or family work (cleaning, household assistance) and does not have a direct impact on international trade flows.[128] Conversely, the prospect of an EU-Australia FTA is not expected to affect the parties' practices through trade or rule-making channels. However, the diversity of child labour cases in the EU and Australian states (due to sectoral composition, cultural traditions etc.), and the more consensual nature of the fight against child labour, show that there might be greater scope for cooperation.

Exchange of information and best practices under cooperative mechanisms like a Civil Society Dialogue would be even more relevant with regard to some of the worst forms of child labour (Convention 182) that have a greater international dimension. This is the case for child trafficking (see Task 9 on human rights), for the use of children in production and trafficking of drugs, and the use of children for pornography. Although the EU-Australia FTA is not expected to have a direct impact on any of these forms of child labour, bilateral cooperation encouraging knowledge transfers and policy learning are more likely to occur with an EU-Australia FTA than without. These information exchanges could be institutionalized under the trade and sustainable development chapter or, with regard to child pornography on the Internet, could fall under the electronic commerce chapter which, in the case of CETA, establishes a dialogue that "takes the form of exchange of information on the Parties' respective laws, regulations, and other measures on these issues, as well as sharing experiences on the implementation of such laws, regulations and other measures" (chapter 16, art. 16.6).[129]

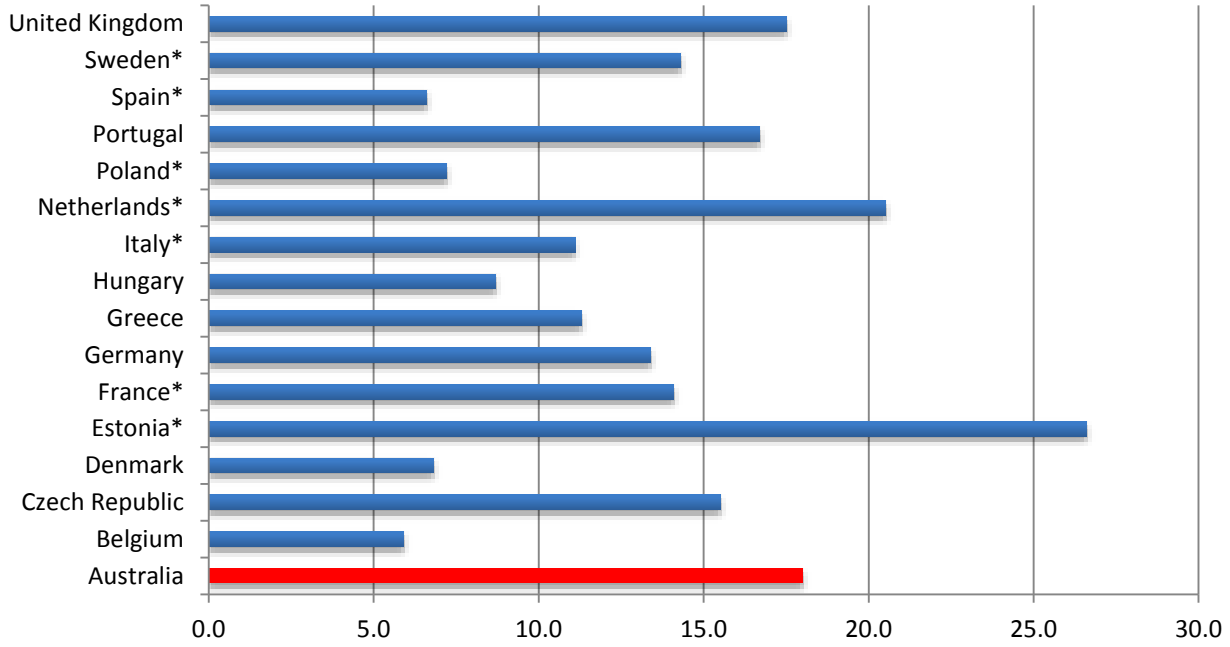
Elimination of discrimination in respect of employment and occupation

Despite the two parties' ratification and application of Convention 100 concerning equal remuneration and Convention 111 on discrimination in respect of employment and occupation, a close study of CEACR reports reveals the persistence of gender-, race- and disability-based discrimination in both EU countries and Australia.

The most common subject of the ILO's direct requests concerns the enduring gender pay gap. The CEACR's comments either highlight the need to address the pay gap or, in the ILO's tradition of regulatory and legal advice, request further information with regard to the implementation of anti-discrimination programs. As Figure 32 shows, unequal remuneration has been an enduring feature of labour markets in OECD countries (and elsewhere).

[127] European Commission (n.d.), "Working Conditions - Young People at Work", available at: http://ec.europa.eu/social/main.jsp?catId=706&intPageId=209&langId=en.
[128] Labour Asociados Consultores (n.d.), "Study on Child Labour and Protection of Young Workers in the European Union, available at: http://ec.europa.eu/social/BlobServlet?docId=4200&langId=en.
[129] Comprehensive Economic and Trade Agreement (CETA) between Canada and the European Union and its member states, available at: http://trade.ec.europa.eu/doclib/docs/2014/september/tradoc_152806.pdf.

Figure 32: Gender pay gap, selection of OECD countries, 2013 (difference between average gross hourly earnings of male and female employees as % of male gross earnings)



*Source: OECD. * Data for 2010.*

The gender pay gap in both the EU and Australia has receded yet persisted despite a wave of gender equity reforms over the past ten years. In the EU, these reforms have taken place at both national levels (e.g. France, Germany, Ireland, Denmark etc.) and at the supranational level within the framework of the "The Strategic engagement for gender equality". The Commission's 2010-2015 strategy for equality between women and men prioritised five key areas for action: 1) equal economic independence for women and men; 2) equal pay for work of equal value; 3) equality in decision-making; 4) dignity, integrity and ending gender-based violence; and 5) promoting gender equality beyond the EU. The 2015 report from the EU Commission underlined the progress accomplished during the 2010-2015 plan (rising employment rate among women, increasing participation in economic decision-making) and reasserted the relevance of its priorities for the 2016-2019 period.[130] Likewise, Australia has sought to address various forms of discrimination through both federal action (e.g. 2012 Workplace Gender Equality Act) and state initiatives.

In short, the proliferation of legislation designed to measure and address gender-, race- and disability-based discrimination over the past few years provides great potential for international cooperation both at the ILO and under the cooperative mechanisms of the trade and sustainable development chapter. Here, robust stakeholder consultation mechanisms optimizing civil society inclusion are all the more crucial since women, but also ethnic minorities and disabled populations remain underrepresented in both economic and political decision-making.

[130] European Commission (2015), "Strategic engagement for gender equality 2016-2019", available at: http://ec.europa.eu/justice/gender-equality/files/documents/151203_strategic_engagement_en.pdf.

Beyond rule-making channels or cooperative mechanisms, an EU-Australia FTA may also impact the gender pay gap through trade effects. First, as female graduates outnumber male graduates in both Australia and the EU,[131] women skilled workers are more likely to reap more benefits from trade liberalization between two advanced economies. This scenario is, however, conditioned on sustained progress in women's participation in economic decision-making. Second, EU or Australian multinational corporations may provide new hiring opportunities for educated women. Third, trade and investment integration is conducive to changes in management practices, including gender equity and diversity policies. Indeed, increased competition between advanced economies, far from encouraging a regulatory race-to-the-bottom, can encourage companies to adopt gender equity measures as they compete for skilled workforce. As mentioned in the baseline section, given that salaries in exporting sectors are on average higher than in other sectors, an EU-Australia FTA may contribute to reduce the gender pay gap. Conversely, and beyond aggregate figures, the impact of an EU-Australia FTA on the gender pay gap is likely to be uneven across sectors, reflecting the sectoral effects described above.

4.1.4. Summary of key findings and recommendations

Using quantitative and qualitative methods, this chapter has analysed the potential impact of an EU-Australia FTA through trade, economic and rule-making channels. Overall, we expect the social impact of this trade agreement between two advanced open economies to be positive overall. However, the present study highlights both sector-specific risk factors that deserve to be addressed, as well as political opportunities that could help the two parties maximize the positive externalities arising from a stronger EU-Australia economic partnership.

With regard to macroeconomic trends, our key findings concerning the potential social impact of an EU-Australia FTA include:

- **Mixed but limited effects on workers reallocation**, with greater impact on Australia than in the EU. For the EU, the sectors expected to benefit the most from a bilateral FTA include motor equipment, machinery, wood and paper and chemicals. For Australia, the agricultural sector, and more specifically the sugar, ruminant meat, oil seeds, as well as beverages and tobacco are among the sectors expected to reap the greatest gains from trade liberalization.
- **Sector-specific risks of reallocation under increased liberalization**, affecting increasingly competitive sectors in agriculture (e.g. ruminant meat, dairy, sugar) and manufacturing (chemicals, motor equipment, wood paper, etc.).
- Positive long-term welfare effects for both the EU and Australia.
- Limited but positive wage effects for both unskilled and skilled workers in each trading partner – the impact being relatively more significant in Australia than the EU.

In short, CGE modelling provided by DG Trade suggests that the impact of an EU-Australia FTA on aggregate economic trends is expected to be broadly positive in the long run. Yet, as is often the case with trade liberalization, many of these benefits will be broadly dispersed over time, while negative externalities will be concentrated in a

[131] European Parliament, "Women and Education in the EU", March 2015, available at: http://www.europarl.europa.eu/RegData/etudes/ATAG/2015/551301/EPRS_ATA(2015)551301_EN.pdf.

small number of sectors. As mentioned above, this means that both parties need to devote greater resources to a variety of policy instruments that can help mitigate the adjustment costs of trade liberalization that are at times more visible to the public than its more diffuse benefits. These tools include improving trade adjustment programs, allocating more resources to retraining in tradable goods sectors, reinforcing policy cooperation between trade policy initiatives and rural development programs etc.

With regard to compliance with ILO standards, our analysis reveals that both the EU and Australia provide strong protections for workers' rights but that even core labour standards remain subject to cases before the ILO. An EU-Australia FTA is likely to have only a minor impact on core labour standards through trade and economic channels. Although the enforcement of labour provisions may not dramatically alter each party's labour laws, our study has highlighted cases where cooperative mechanisms might be most effective. These include:

- ensuring the participation of unions, labour and human rights organizations in the enforcement and monitoring of the FTAs' labour provisions and designing built-in feedback loop processes to ensure accountability;
- building on existing consultative mechanisms to foster cooperation on both national and transnational issues related to enforcement of core ILO standards and more specifically the elimination of worst cases of child labour, the elimination of discrimination (against disabled persons, ethnic minorities and women) as well as cases of forced labour that may also be dealt with under human rights protection mechanisms.
- capitalizing on recent reforms on gender pay gap in both EU countries and Australia to develop a common framework of best practices.

4.2. The Impact on Consumers from an EU-Australia FTA (Task 11)

4.2.1. State of Consumer Protection and Australia

Consumer protection is key for Australia. Australia has implemented a comprehensive legislative package to protect consumers. The Australian Consumer Law (ACL) applies nationally and in all Australian States and Territories. The ACL includes:[132]

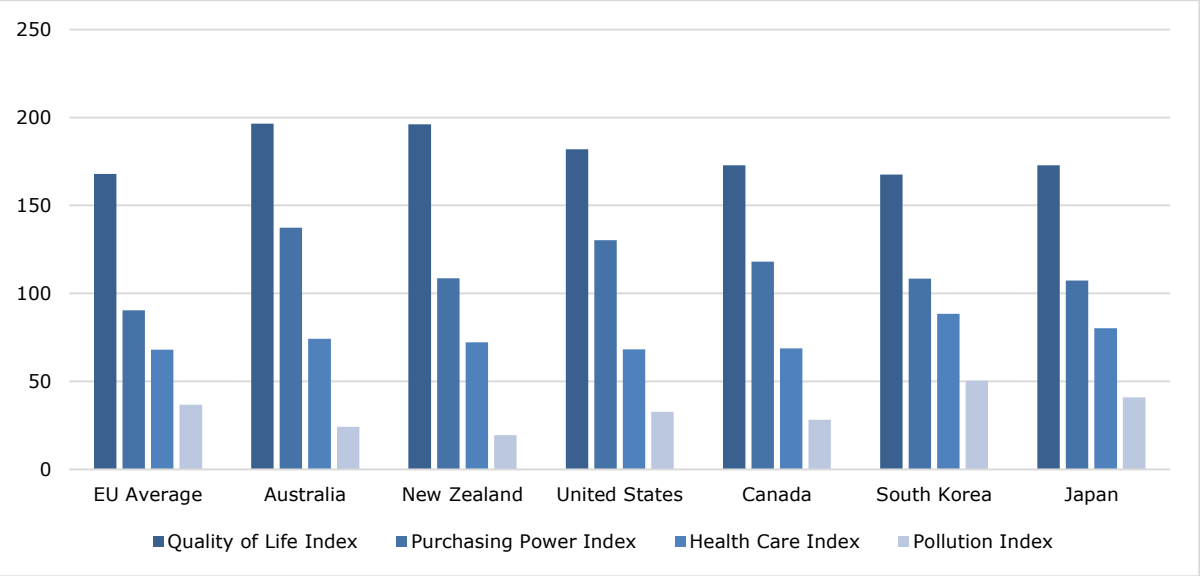
- a national unfair contract terms law covering standard form consumer and small business contracts;
- a national law guaranteeing consumer rights when buying goods and services,
- a national product safety law and enforcement system;
- a national law for unsolicited consumer agreements covering door-to-door sales and telephone sales;
- simple national rules for lay-by agreements; and
- penalties, enforcement powers and consumer redress options.

The high level of consumer protection in Australia and the EU is reflected by common national indicators of the quality of life, purchasing power, health and environmental standards. Data collected by NUMBEO as well as data surveyed by the OECD indicate

[132] See overview of the Australian Consumer Law, http://consumerlaw.gov.au/the-australian-consumer-law/, accessed on 6 July 2016.

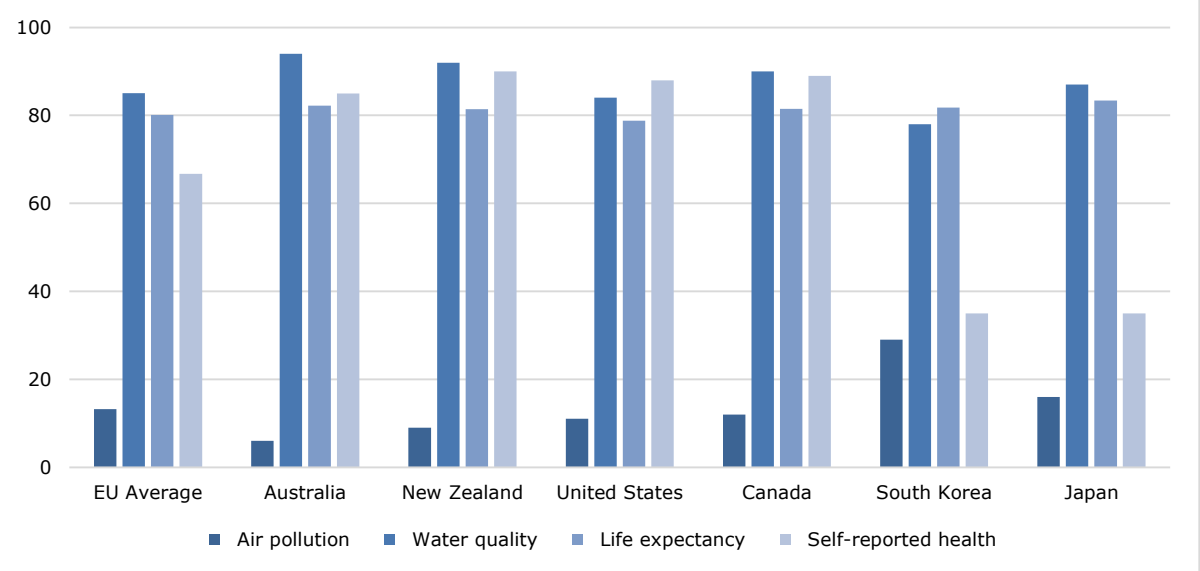
that living standards in all countries are roughly at the same level as in the US and Canada. The same picture emerges from indicators reflecting air and water pollution, for which Australia and the EU show high levels of quality. As concerns health care, both self-reported health as well as the quality of health care index show high values, which are also reflected in the data for general life expectancy (82.2 years for Australia and 80.1 years for the average of the EU countries).

Figure 33: NUMBEO indicators of standard of living and consumer welfare



Source: NUMBEO 2016 Mid-Year Indices. Notes: The overall Quality of Life Index (higher is better) is an estimation of overall quality of life by using empirical formula which takes into account purchasing power index (higher is better), pollution index (lower is better), house price to income ratio (lower is better), cost of living index (lower is better), safety index (higher is better), health care index (higher is better), traffic commute time index (lower is better) and climate index (higher is better). The Health Care Index Health Care Index indicates the overall quality of the health care system, health care professionals, equipment, staff, doctors, cost, etc. The Pollution Index indicates the overall pollution in a country. The biggest weight is given to air pollution, then to water pollution/accessibility, two main pollution factors. Small weight is given to other pollution types.

Figure 34: OECD indicators of standard of living and consumer welfare

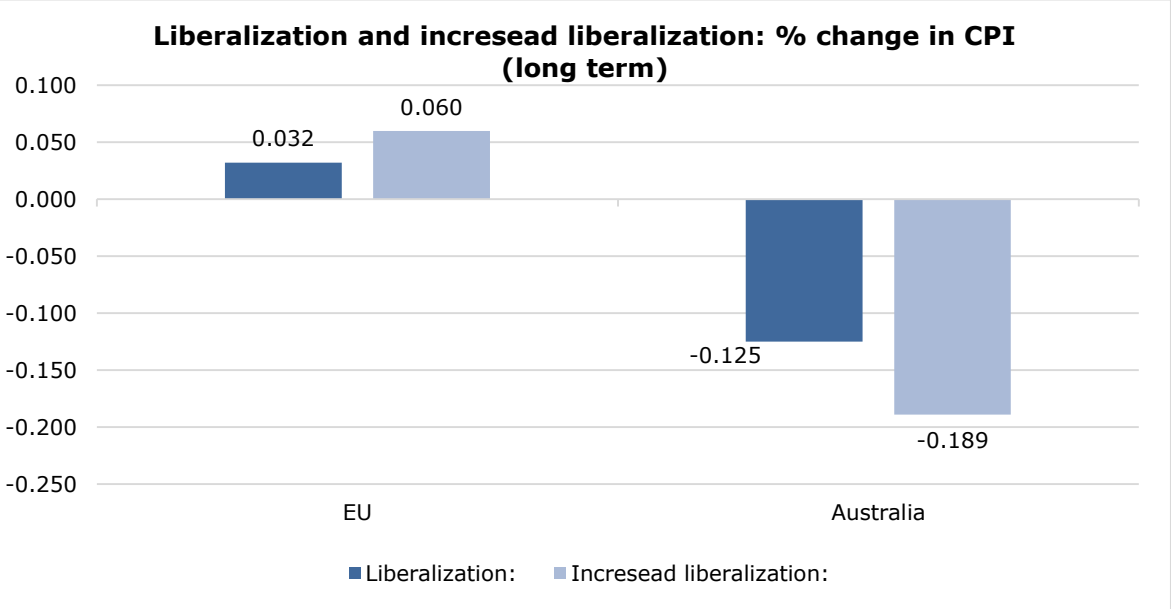


Source: OECD Better Life Index 2016. Notes: Air pollution indicates the population weighted average of annual concentrations of particulate matters less than 2.5 microns in diameter (PM2.5) in the air. Water quality indicates people's subjective appreciation of the environment where they live, in particular the quality of the water. Life expectancy measures how long on average people could expect to live based on the age-specific death rates currently prevailing. Self-reported health refers to the percentage of the population aged 15 years old and over who report 'good' or better health.

4.2.2. Quantitative Impact on Consumers in the EU and Australia - Based on CGE Modelling Results

Per CGE modelling provided by DG Trade, quantitative changes in aggregate consumer prices in the EU and Australia are likely to be marginal. Given that the estimation horizon of the analysis is 2032, both the total, as well as the average annual, FTA-induced change in regional consumer prices is estimated to be below the perception threshold (Figure 35). Note that the CGE model applied implicitly assumes that every country's labour supply is fixed. The "fixed labour market closure" implies that any increase in demand for labour will be met by wage increases, which will in turn push up firms' costs, and will be eventually be passed on to consumers as higher prices.

Figure 35: Development of regional consumer price indices (CPI) after liberalization



Source: GTAP analysis conducted by the European Commission.

Similarly, changes in average regional import prices are marginal for both liberalization scenarios. For the increased liberalization scenario, the strongest expected changes in average import prices (vis-à-vis the rest of the world incl. the EU and New Zealand) are registered for Australian imports of dairy products (-2.51%), beverages and tobacco products (-1.54%), and motor equipment (-1.84%). The effect on average EU import prices is estimated to be virtually negligible by the proposed trade liberalization measures (see Table 36). Moreover, in Australia all services sectors including transport, communication, financial, utility and other services are expected to register a decline in their average import prices in both scenarios. However, this decline is projected to be less than 1%.

Table 36: Development of import prices after liberalization

Change in import prices (%, long term)				
	Liberalization		Increased liberalization	
	EU	Australia	EU	Australia
rice	0.03	**0.00**	0.02	**-0.01**
cereals	0.03	0.00	**-0.08**	**0.00**
veg_fruit	**-0.12**	0.08	**-0.12**	0.12
oil_seeds	0.01	**-0.03**	0.02	**-0.03**
sugar	0.04	**-0.01**	**-0.07**	**-0.01**
fiber_crop	0.00	0.01	**-0.01**	0.01
ruminant_meat	0.21	0.07	**-0.81**	0.21
other animal	**-0.08**	0.01	**-0.09**	0.07
other_meat	0.01	**-0.03**	0.02	**-0.02**
dairy	0.05	**-2.61**	**-0.10**	**-2.51**
wood_paper	0.03	**-0.47**	0.05	**-0.48**
fishing	**0.00**	0.14	**-0.04**	0.09
coal	**-0.01**	**-0.01**	**-0.01**	**-0.06**
oil	0.00	0.00	0.00	**0.00**
gas	0.00	**-0.01**	0.01	**-3.38**
minerals	**-0.03**	**-0.04**	**-0.04**	**-0.21**
other_food	0.00	**-0.72**	0.02	**-0.70**
bev_tob	**-0.12**	**-1.58**	**-0.10**	**-1.54**
textile	0.01	**-0.22**	0.01	**-0.46**
chemicals	0.02	**-0.29**	0.04	**-0.88**
oil_pcts	0.00	**0.00**	0.01	**-0.01**
metal_pcts	0.01	**-0.28**	0.03	**-0.68**
no_metal_pct	0.02	**-0.54**	0.03	**-1.36**
motor_equip	0.02	**-1.34**	0.04	**-1.84**

Change in import prices (%, long term)				
	Liberalization		Increased liberalization	
	EU	Australia	EU	Australia
machinery	0.01	**-0.47**	0.03	**-1.35**
ele_other	0.00	**-0.06**	0.01	**-0.26**
electricity	0.03	0.01	0.05	0.01
utility	0.01	**-0.59**	0.02	**-0.59**
transport	**-0.02**	**-1.02**	**0.00**	**-1.00**
communication	0.01	**-0.69**	0.03	**-0.68**
financial	0.01	**-0.83**	0.03	**-0.82**
other_serv	**-0.02**	**-0.66**	0.00	**-0.64**

Source: GTAP analysis conducted by the European Commission.

As both AUS and NZ show similar characteristics in terms of national consumer protection regulation as well as in their approaches to protect high consumer standards in their trade agreements, a discussion is provided in the general part on the impact on consumers.

5. ANALYSIS OF ENVIRONMENTAL IMPACTS (TASK 8)

5.1. Australia's Involvement in International Environmental Agreements and its Relation to the EU: Baseline

Multilateral environmental Agreements

Australia has ratified most of the main multilateral environmental agreements (22). There is, however, a notable exception. Australia is one of the few countries that has not yet signed the Cartagena Protocol (as shown in Table 32). The Protocol establishes an international regime primarily aimed at regulating trade in genetically modified organisms (GMOs) intended for release into the environment. The agreement has 170 parties and 103 signatories. Non-signatories include countries that have contributed significantly to the global distribution of commercialized GMOs such as the US, Argentina, Australia, and Canada. Additionally, Australia has not ratified the Nagoya Protocol, nor have several European Union members.[133] The protocol is meant to facilitate access to genetic resources and to provide the fair sharing of commercial benefits with provider countries.

Table 32: Multilateral Environmental Agreements signed by Australia[134]

TREATY	AUSTRALIA	
	Signature	Status
Basel Convention		Accession
The Cartagena Protocol on Biosafety		
CBD	05-Jun-92	Ratification
CITES	29-Jul-76	Ratification
CMS	01-Sep-91	Party
Kyoto Protocol	29-Apr-98	Ratification
Minamata Convention on Mercury	10-Oct-13	Signatory
Montreal Protocol	08-Jun-88	Ratification
Nagoya Protocol	20-Jan-12	Signatory
Rotterdam Convention	06-Jul-99	Ratification
Stockholm Convention	23-May-01	Ratification
UNCCD	14-Oct-94	Ratification
UNFCCC	04-Jun-92	Ratification

[133] Non-ratifying countries include Austria, Belgium, Croatia, Cyprus, Greece, France, Ireland, Italy, the Netherlands, Portugal, Poland, Romania, Slovenia, and Sweden (although almost all EU members have signed the Protocol).
[134] The implementation of MEAs is discussed in accordance with the selection of issues below.

Vienna Convention	Accession

Source: InforMEA, UNEP. Access on 4th July 2016.https://www.informea.org/en/countries/AU/parties

5.1.1. Australia's approach to sustainability in trade policymaking

In Australia, both the Department of Foreign Affairs and Trade (DFAT) and the Department of the Environment and Energy (DEE) work jointly to address environmental linkages in trade policy. The latter takes the lead on all trade issues, and the former provides advice and input in the conduct of multilateral, plurilateral and bilateral trade negotiations. Within the WTO, Australia has been an active member of the Committee on Trade and the Environment since its creation in 1994, particularly involved in discussions over the relationship between the WTO and MEAs (during the Doha negotiations), eco-labelling and environmental technology transfer. At the bilateral or plurilateral level, the DEE also works closely with DFAT to address environment-trade linkages arising from FTA negotiations. Although Australia's institutional and policy framework is less formalized than the EU, the DEE has, in the past, addressed trade-related environmental issues by designing a specific environment chapter (e.g. US-Australia FTA, TPP) and/or by advising trade negotiators on chapters directly impacting the environment, among which Government Procurement, Services, TBT and SPS measures.[135]

Australia's FTAs with Thailand and Singapore did not include a separate chapter on the environment,[136] nor did the Australia-Japan FTA signed in July 2014. Australia began incorporating labour provisions in its FTAs as part of its trade agreements with the United States, first on a bilateral basis, and second within the (cross)regional framework of TPP. Because environmental issues were not a source of tension between the US and Australia, their bilateral FTA provided limited scope for binding trade-environment linkages, requiring simply that each party enforce its respective environmental laws and cooperate on sustainability issues through cooperation and consultation. Thus, if politically, Australia and the EU have at times differed on sustainability issues (e.g. Australia's rejection of the Kyoto Protocol), Australia's promotional approach to trade and environment in the US-Australia FTA dovetailed with the EU's proclivities for consultation and cooperation.

The much greater social and economic disparities between TPP countries (with Australia and lower-middle income and middle-income countries like Vietnam and Malaysia), however, meant that trade-environmental linkages would be subject to a different approach reflecting not only strong US influence in the negotiations, but a compromise between multiple trading partners with different practices and experiences in this policy sphere. In many regards, TPP's chapter on the environment both builds upon the framework developed by the US over the past two and a half decades of FTA negotiations, while innovating in several regards.[137] This has led the US Trade

[135] Australia Government. Department of the Environment and Energy, "Trade and the Environment". Available at: https://www.environment.gov.au/about-us/international/trade.
[136]See the text of the Australia-Thailand Free Trade agreement, available at: http://dfat.gov.au/trade/agreements/tafta/fta-text-and-implementation/Documents/aus-thai_FTA_text.pdf ; and of the Singapore-Australia FTA, available at : http://dfat.gov.au/trade/agreements/safta/pages/singapore-australia-fta.aspx.
[137] Signed in 1992, NAFTA was the first FTA to "include" labour provisions as side agreements.

Representative to describe TPP's environment chapter as "the most far-reaching ever achieved in a trade agreement."[138]

Like the US-Australia FTA, the TPP includes commitments by all parties to enforce their respective environmental laws and implement MEAs. The TPP uses a combination of cooperative and consultative instruments, leaving dispute settlement mechanisms (chapter 28) as a last resort (art. 20.23). Critics from both academia and civil society have described these enforcement mechanisms as much less effective than the MEAs themselves, to the extent that they are dependent on a party's ability to demonstrate that the alleged violations of an MEA has trade-distorting effects (Wod 2016, and Patino 2016).

Beyond debates on enforceability, TPP's environment chapter includes a number of innovative provisions regarding both its regulatory scope and its governance. As far as content is concerned, the agreement drew praise from the US Trade and Environment Policy Advisory Committee for making new strides in protecting marine fisheries and eliminating certain fisheries subsidies (art. 20.16), (TEPAC).[139] The chapter also includes, among others, provisions on ozone layer protection (art. 20.5), marine protection from ship pollution (art. 20.6) trade and biodiversity (art.20.13) and conservation (art. 20.17). It also features a section entitled "Transition to a Low Emissions and Resilient Economy" (art. 20.15) that according to TEPAC, falls short of addressing climate change in any substantive way.[140] Finally, while the parties do establish an intergovernmental Environment Committee in charge of assessing the implementation of the agreement (art. 20.19), the promotional nature of most provisions in the text, and the lack of specific measures on capacity-building raise many questions on the TPP's ability to fulfil its environmental promises. For the purpose of this study, the TPP constitutes an interesting window into Australia's approach to trade-environmental linkages that offers lessons for the negotiations of an EU-Australia FTA.[141]

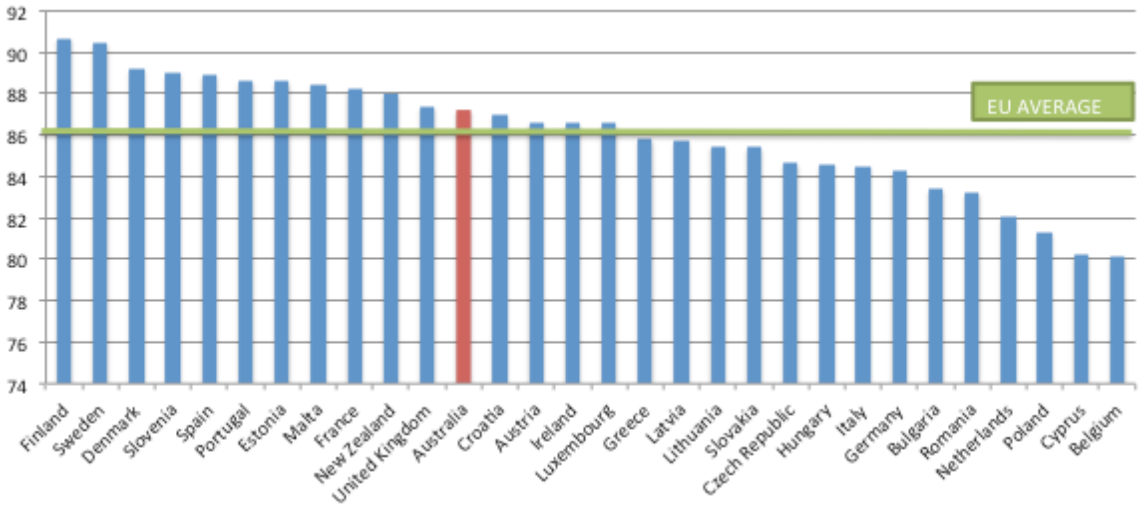
5.1.2. Overall environmental performance

In this section we benchmark Australia's environmental performance against relevant countries, such as OECD and EU countries, using the Environmental Performance Index (EPI).[142]

The EPI index allows us to assess a country's overall performance through 6 main aspects: water resources, fisheries, biodiversity, forest, climate and energy. In 2016 Australia ranked 13th worldwide. Its score is above the European average (Figure 37) and it outperforms 18 out of 28 EU countries.

[138] https://ustr.gov/sites/default/files/TPP-Chapter-Summary-Environment.pdf.
[139] In the United States, TEPAC is composed of environmental experts (academia, business, NGOs) providing advice to US negotiators on trade-environment linkages. They produce a report on each FTA. Trade and Environment Policy Advisory Committee (TEPAC), "The U.S.-Trans-Pacific Partnership Free Trade Agreement," 2015, available at: https://ustr.gov/sites/default/files/Trade-and-Environment-Policy-Advisory-Committee.pdf.
[140] Ibid, p. 3.
[141] TPP's environment chapter is available at : https://www.mfat.govt.nz/assets/_securedfiles/Trans-Pacific-Partnership/Text/20.-Environment-Chapter.pdf.
[142] The index is provided by Yale Centre for Environmental Law & Policy (YCELP) and the Centre for International Earth Science Information Network (CIESIN) at Columbia University.

Figure 37: EPI for Australia and European countries (2016)



Source: EPI 2016

It is worth noting that, within two years, Australia's has dropped 10 places in ranking to 13th out of 180 nations in the latest update of the index. It ranked 3rd in the 2014 edition of the index. The drop is not due to an absolute decrease in score but rather a much modest improvement vis-à-vis other top ranking countries. Table 33 shows the comparison in the overall score between Australia and the EU. Such a modest improvement is due to small improvements across all sub-indices and a drop in the forestry sub-index (discussed below).

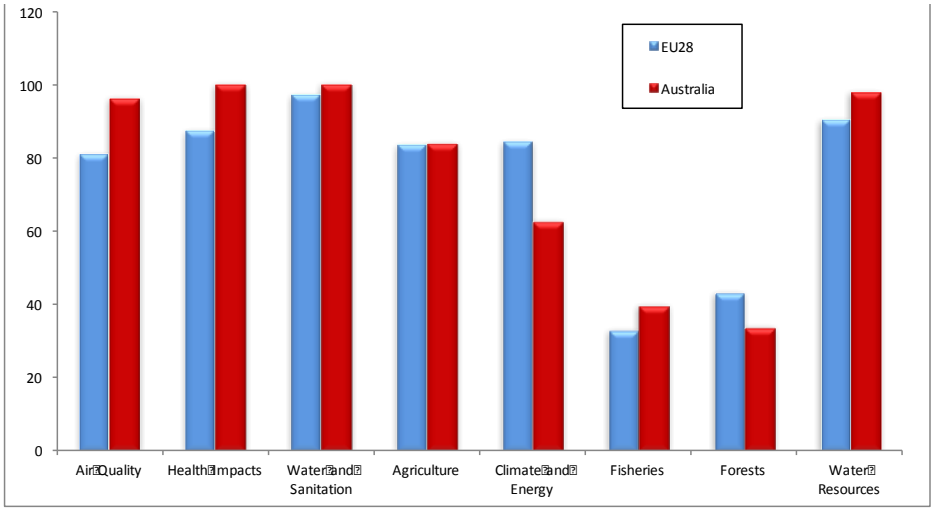
Table 33: EPI in 2014 and 2016

	2014	2016	Change
EU	72.4	86.0	13.6
Australia	82.4	87.2	4.8

Source: EPI 2014/2016

Figure 37 reports Australia and EU scores in the nine main EPI sub-categories. Australia performs better than EU averages in terms of air quality and health impact, while Australia scores much lower in terms of Climate and Energy, and Fisheries. Its worst performance is in the climate and energy category, where it ranks 150th for its trend in carbon emissions for electricity generation. The latter topics are given greater consideration in the next sections. Minor differences are instead observed in terms of water and sanitation and water resources where Australia tops the ranking.

Figure 38: Scores in EPI sub-categories, EU28 and Australia in 2016



Source: EPI 2016

5.1.3. Environmental regulation

This section provides an overview of the state of environmental regulation in Australia from a comparative perspective with the EU. To do so, we review the most widespread summary measures of environmental regulatory stringency. We also examine each party's pledges for the Paris agreement on climate change.

The first measure is the Climate Laws, Institutions and Measures Index (CLIMI) provided by the EBRD in 2011. The index follows the framework earlier provided in Dasgupta et al. (1995). The index builds on the UN country reports, as well as on the National Communications to the United Nations Framework Convention on Climate Change (UNFCCC), which includes information of climate adaptation and mitigation measures adopted by national governments. It comprises four main areas: international cooperation; domestic climate framework; sectoral, fiscal or regulatory measures or targets; cross-sectoral fiscal or regulatory measures. The index refers to 2010.

Australia's performance in the index is poor: the country ranks 55th out of 95 countries. Its score is well below the lowest score of a European country, Estonia (40th). Similarly, in the more recent edition of the Climate Change Performance Index (CCPI)[143] released in 2016, Australia has come third-to-last in an annual assessment of 61 nations' climate policies, with only Saudi Arabia and Kazakhstan ranking worse. The latter index is produced by Germanwatch and Climate Action Network Europe and assesses climate change policies together with actual emission levels per capita, trends in emission projections, the deployment of renewable energy, and the energy intensity of the economy. Such a low performance is attributed to the reversal of climate policies brought about by the conservative Australian government in 2014. Since then some improvements have occurred with regard to efficiency levels, policy evaluation and in the renewable sector but they have not been sufficient to improve the country's ranking.

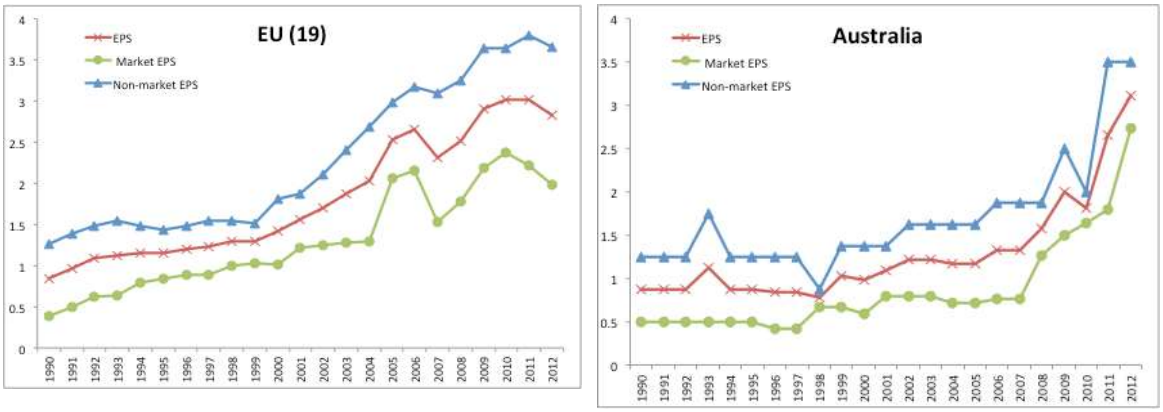
A third measure, however, shows a steep improvement since 2010. This is depicted in Figure 39. The most recent OECD Stringency of environmental policies Index was published in 2014 (Botta and Koźluk 2014). It uses selected environmental policy

[143] The Climate Change Performance Index 2016. Jan Burck, Franziska Marten, Christoph Bals (2016), The Climate Change Performance Index 2016 https://germanwatch.org/en/11390.

instruments, primarily related to climate and air pollution and in order to measure environmental policy stringency internationally over a relatively long time horizon. The index covers only 19 of the 28 EU countries so the reported average is based on this selected number of European countries.[144]

Figure 39 reports the two components of the index and the overall index. The market-based component assesses taxes, trading schemes, subsidies and deposit-fund systems, while the non-market based component evaluates command and control regulation, technology support and voluntary approaches. The improvement in Australia's score since 2010 is largely due to subsidies for R&D in green technologies and renewable energy, and the Renewable Energy Certificates Trading Scheme. This could also be linked to the Clean Energy Future package introduced in 2011 (part of the Clean Energy Act 2011) that supported research, development, demonstration and deployment of clean and renewable energy technologies.

Figure 39: OECD Stringency of environmental policies Index over time



Source: Botta and Koźluk (2014)

Although there are no more recent editions of index, the gains documented in 2010 could soon be lost. Indeed, following the election of the Abbott Government in July 2014, Australia became the first developed nation to repeal a carbon price and abolish the portfolio of Climate Change, as evident in the CCPI ranking. In particular, the Clean Energy Act 2011 that established an Australian emissions trading scheme, to be preceded by a three-year period of fixed carbon pricing designed to reduce carbon dioxide emissions was repealed on 17 July 2014 by the Abbott Government.

With regard to the Paris agreement, Australia's Intended Nationally Determined Contribution (INDC) is one of five industrialised countries rated "inadequate" by the Climate Action,[145] the other three being New Zealand, Canada, Japan and Russia. Australia's INDC 2030 proposes a target to reduce greenhouse gas (GHG) emissions by 26–28% from 2005 levels including land-use, land-use change and forestry (LULUCF).

All other industrial countries, except Canada, have proposed 2025 or 2030 goals significantly below 1990 levels. The EU's INDC target consists of reducing its domestic

[144] Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Portugal, Slovak Republic, Slovenia ,Spain, Sweden, United Kingdom.
[145] The Climate Action Tracker is an independent scientific analysis produced by four research organisations tracking climate action and global efforts towards the globally agreed aim of holding warming below 2°C, since 2009. The CAT Consortium if formed by: Climate Analytics, Ecofys, NewClimate Institute and Potsdam Institute for Climate Impact Research. http://climateactiontracker.org/countries/australia.html and http://climateactiontracker.org/countries/newzealand.html.

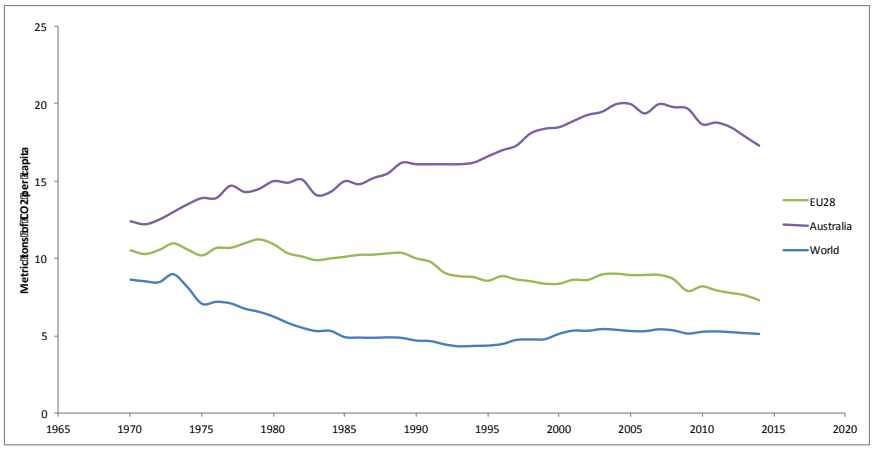
greenhouse gas emissions by at least 40% below 1990 levels by 2030. Australia, together with South Korea, has also posed resistance to the OECD effort to rein in export subsidies for coal power stations in a move likely to make it harder to build many of the plants that help fuel global warming.

5.1.4. GHG Emissions

In this section we describe the trends in emission levels of CO_2 and of the most important types of GHG by the EU and Australia's major sectors of the economy. Australia accounts for only 1.2% of global C02 emissions while the EU contributes to 13% of global C02 emissions (EIA, International Energy Statistics).

In per capita terms, Australia is the 5th highest producer of GHG emissions and the 11th in terms of CO2 emissions.[146] Figure 40 plots emissions per capita in Australia, the EU and World averages. EU and Australia's emissions per capita are all above the global average. However, while EU emissions per capita have been decreasing steadily since the 1990s', Australian's emissions per capita, well above EU levels, sharply increased until 2005, when they started decreasing.

Figure 40: Emissions per capita in Australia and the EU

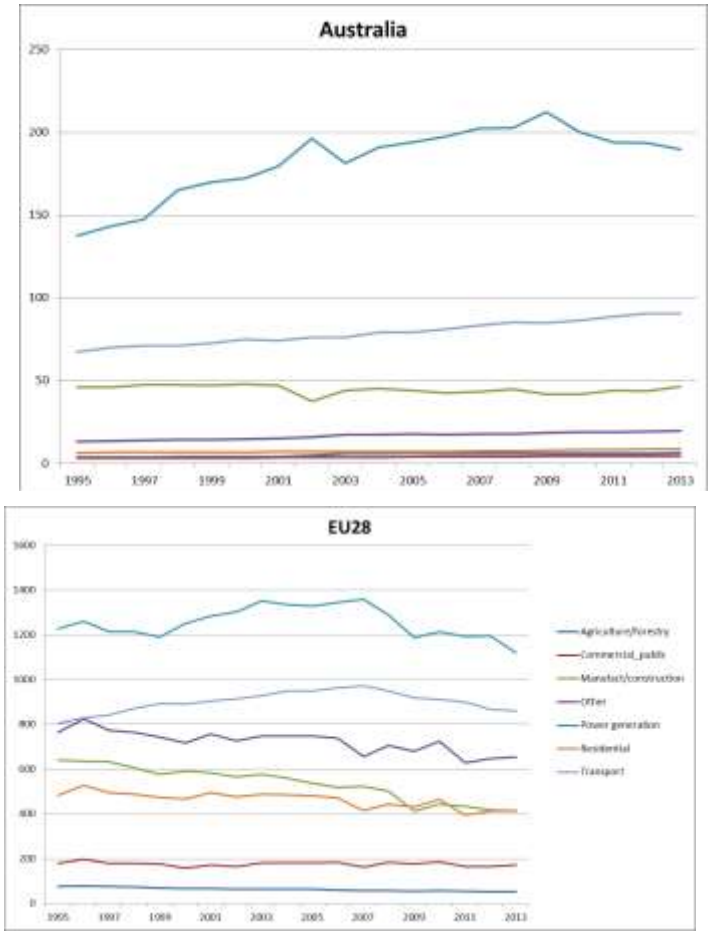


Source: Author's calculations from EDGAR (emissions) and WDI (population) – Emissions per capita in tons.

Trends in emissions by sectors are reported in Figure 41. The power generation sector dominates emissions in both Australia and the EU. Emissions from power generation have experienced a decrease in all countries soon after the economic downturn in 2008 and have remained low since then. The EU has experienced a decrease in emissions across most sectors of the economy. The largest drop has occurred in the manufacturing and agricultural sectors while the power generation and commercial sectors have shown a stable pattern over time. For Australia, with the exception of the power generation sector, all other sectors have maintained or increased their emission levels.

[146]Australia's very high level of emissions makes it the 150th country (out of 180) in the Environmental Performance Index in the climate change and energy sub-category.

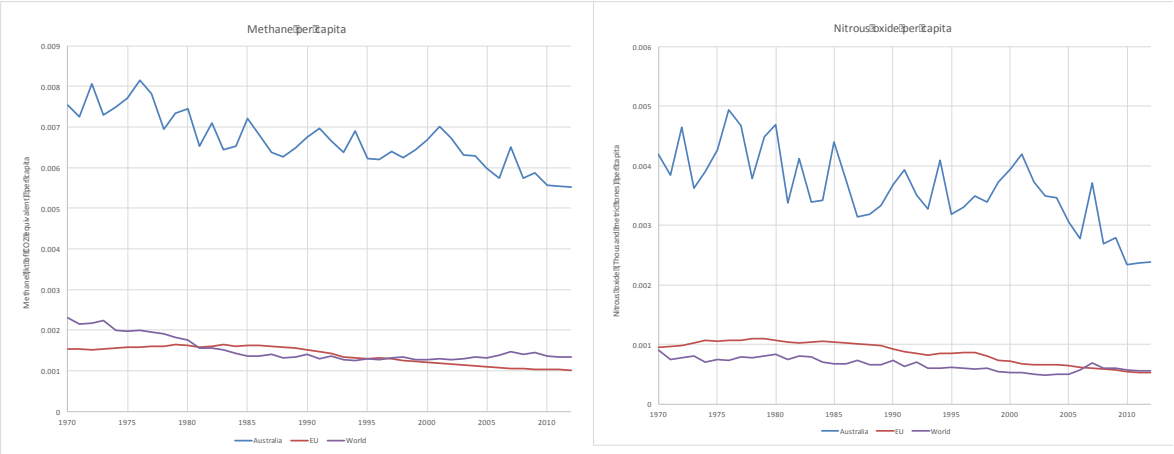
Figure 41: Emissions by sector in Australia and the EU



Source: Author's calculations from the EIA – Emissions in millions of metric tons (Mt)

With regard to other GHG, Australia is among the largest producers, in per capita terms, of both methane and nitrous oxide (using data from EDGAR and WDI). In particular, Australia ranks 7th for methane emissions per capita (the EU28 ranks 66th). Similarly, Australia ranks 6th in terms of nitrous oxide per capita (the EU ranks 43rd). Australia is also the 9th largest producer of methane in absolute terms and the 11th largest producer of nitrous oxide. Figure 42 shows that, despite the rapid decreases in emissions, Australia's emissions still stand well above European levels, in particular for Nitrous Oxide. GHG emissions are largely produced by the agricultural and animal sectors. Because the AUS-EU FTA is likely to produce some expansionary effects on some agricultural and animal sectors, potential concerns are discussed below.

Figure 42: Methane (left) and Nitrous oxide (right) per capita in Australia and the EU



Source: Author's calculations from EDGAR through World Bank portal (emissions) and WDI (population).

5.1.5. Power generation

Electricity generation in Australia heavily depends on coal (Table 34). 80% of the energy generated in 2005 came from coal. This proportion dropped down to about 65% in 2013, still more than twice the EU levels (30%). This largely contributes to the high levels of CO2 emissions shown earlier. This is primarily due to the large availability of coal. According to the International Energy Agency (2012) Australia enjoys abundant and diverse energy resources; it is the world's ninth-largest energy producer and is one of only three net energy exporters in the OECD.

Table 34: Electricity sources in Australia and the EU

	1990	1995	2000	2005	2013
EU:					
Coal	40.00	35.12	31.75	29.77	27.47
Hydroelectric	11.26	12.18	11.86	9.49	11.47
Natural gas	7.48	9.85	15.96	20.32	15.71
Nuclear	30.85	32.36	31.45	30.32	27.15
Oil	8.70	8.38	5.91	4.33	1.90
Renewable sources	0.73	1.08	2.05	4.49	14.98
Australia:					
Coal	78.74	80.16	83.03	79.53	64.75
Hydroelectric	9.17	9.19	7.80	6.70	7.30
Natural gas	9.31	8.63	7.74	10.42	21.33

Nuclear	0.00	0.00	0.00	0.00	0.00
Oil	2.30	1.58	0.85	1.24	1.37
Renewable sources	0.49	0.43	0.59	2.10	5.26

Source: Author's calculations from the World Development Indicators – World Bank

Coal mining and natural gas industries are subsidised by the federal government for fossil fuel use and production since this constitutes a major export. A key policy that has been in place since 2001 to encourage large-scale renewable energy development is a mandatory renewable energy target, which in 2010 was increased to 41,000 gigawatt-hours of renewable generation from power stations. This was subsequently reduced to 33,000 gigawatt-hours by the Abbott Government with the approval of the Labour opposition. In 2012, a carbon price was also introduced together with a 10 billion-dollar fund to finance renewable energy projects. These initiatives were later withdrawn by the federal government. Greater cooperation and sharing of best environmental practices between the two partners and could help revive efforts towards climate change mitigation actions.

5.1.6. Natural resources

Australia is one of only three net exporters of energy among OECD countries and the largest exporter of coal accounting for 48% of world exports of hard coal (source: Comtrade). Coal is mined in every state and it is used to generate electricity or exported mostly to eastern Asia. The EU accounted for about 7% of Australia's total export of hard coal in 2015 (source: Comtrade) Australia is also one of the world's largest producers of many mineral products, including aluminium, copper, gold, iron, mineral sands, and zinc. Australia accounts for 33% of world's export of metal ores, 56% in the case of iron. The EU accounted for less than 2% of Australia's total export of metal ores in 2015 (source: Comtrade)

Regarding fisheries, there has been a steady reduction in Australian exports of fisheries products by value and volume, whereas imports of fishery products have increased, which has made Australia a net importer of fishery products since 2007. Nevertheless, Australia is not a substantial importer of fish. Australia accounts for less than 1% of world imports of fish. The EU instead accounts for 38% of world imports (Comtrade).

Australia has approximately 123 million hectares of native forest, which represents about 16% of Australia's land area. The states and territories are responsible for managing forests. The export of unprocessed wood requires a specific export licence from the Australian Government Department of Agriculture and Water Resources.[147] In Australia, natural forest is practically all under protection and wood supply comes largely from tree plantations. It is also involved in some reforestation programmes. Imports of wood from Australia accounts for a very small share of global trade, 1.3% of total imports (Comtrade), and the share of EU trade is negligible, therefore, we anticipate were limited direct impact of the EU-AUS FTA on forestry.

5.1.7. Air pollution

Australia scores higher than the EU in terms of air quality in the Environmental Performance Index. This is also evident in Table 35 that displays three different

[147] http://www.stats.govt.nz/browse_for_stats/environment/environmental-economic-accounts/forests-and-forest-products-2005.aspx.

measures of exposure to particulate matter. Both Australia and the EU show a declining trend in PM2.5 concentrations, but the EU remains at a much higher level. In 2013, about 78% of the European population was exposed to more than 10 of PM micrograms per cubic meter compared to just above zero percent in Australia.

Table 35: Exposure to particulate matter in Australia and the EU over time

	2000	2005	2010	2013
EU				
Mean population exposure to PM2.5	16.58	15.78	14.56	13.63
% exposed to more than 10 micrograms/m3	87.94	85.51	82.05	77.74
% exposed to more than 25 micrograms/m3	3.24	2.31	1.34	1.37
Australia				
Mean population exposure to PM2.5	8.32	7.77	6.89	6.03
% exposed to more than 10 micrograms/m3	24.02	21.48	5.21	0.16
% exposed to more than 25 micrograms/m3	0	0	0	0

Source: Author's elaboration from OECD

As far as the two main pollutants, NOX and SOX, are concerned, Table 36 provides a summary of the evolution of total emissions, in absolute and per capita terms for the EU and Australia. These pollutants are the results of industrial processes and engine combustion. Sulphur dioxide is emitted when fuels containing sulphur are combusted. It is a pollutant, which contributes to acid deposition, which in turn can lead to potential changes occurring in soil and water quality. Excessive levels of NOX mainly impacts on respiratory conditions causing inflammation of the airways at high levels. While total emissions of both pollutants have substantially decreased in the last decade in the EU28, Australia has experienced an upward trend in NOX emissions. Major sources of air pollutants in Australia are industrial combustion and power generation that are likely to experience limited increases due to the AUS-EU FTA as discussed below.

Table 36: Emissions of pollutant in the EU and Australia for selected year

		2000	2005	2010	2014
NOX	**EU28**				
	Total emissions per capita	33.3	32.4	24.3	19.1
	Total man-made emissions	12171.2	11091.8	8701.4	7239.2
	Australia				
	Total emissions per capita	99.2	108.4	108.4	108.5
	Total man-made emissions	1887.7	2187.4	2389.1	2548.7
SOX	**EU28**				

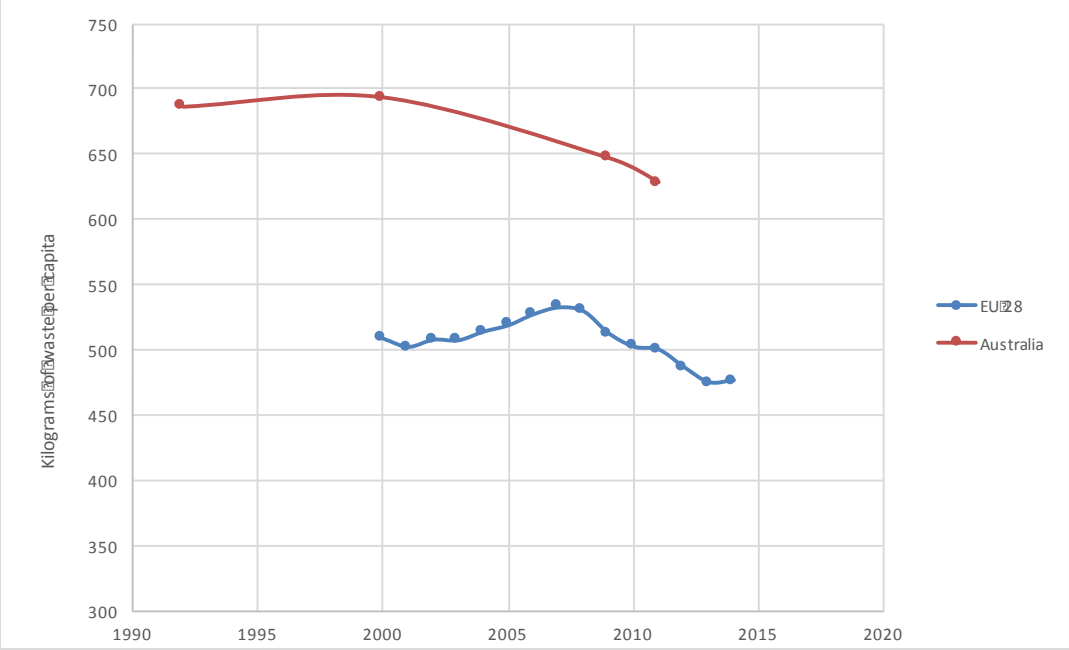
Total emissions per capita	23.8	16.4	10.3	6.7
Total man-made emissions	8386.6	6095.8	3575.2	2625.7
Australia				
Total emissions per capita	120.4	124.9	108.0	97.4
Total man-made emissions	2290.5	2519.9	2379.7	2287.1

Source: Author's elaboration from OECDstat. Values in tons.

5.1.8. Waste

Australia shows higher levels of per capita municipal waste than the EU (Figure 43) although both have experienced a downward trend in the last decade. In 2011, Australia was the 5th largest producer of waste per capita. On the other hand, however, about 45% of Australian municipal waste is recycled, compared to 23% on average for the EU (source OECDstat).

Figure 43: Municipal waste per capita over time



Source: Author's elaboration from OECDstat. Data for Australia are available only for certain years.

The industrial waste profile of Australia differs from that of the EU (Table 37). A large share of industrial waste in the EU is generated by the metal and chemical sectors followed by the food industry. In Australia the motor vehicles and machinery sector represent the highest contribution to industrial waste, followed by the food sector.

Table 37: Percentage of waste by sector in Australia and the EU

Australia (2011)	%	EU (2010)	%
Basic metals	11.4	Basic metals and fabricated metal products, except machinery and equipment	24.2

Chemical, pharmaceutical, rubber and plastic products	9.1	Chemical, pharmaceutical, rubber and plastic products	19.9
Coke and refined petroleum products	1.1	Coke and refined petroleum products	2.4
Fabricated metal products, of computer, electronic and optical products, of electrical equipment, of machinery and equipment	6.1	Computer, electronic and optical products, electrical equipment, motor vehicles and other transport equipment	6.2
Food products; beverages and tobacco products	23.8	Food products; beverages and tobacco products	18.5
Motor vehicles, other transport equipment, furniture, other manufacturing, repair and installation of machinery and equipment	27.6	Furniture; jewellery, musical instruments, toys; repair and installation of machinery and equipment	1.8
Other non-metallic mineral products	4.1	Other non-metallic mineral products	6.4
Paper and paper products; printing and reproduction of recorded media	8.0	Paper and paper products; printing and reproduction of recorded media	10.9
Textiles, wearing apparel, leather and related products	4.5	Textiles, wearing apparel, leather and related products	1.2
Wood and of products of wood and cork, except furniture; articles of straw and plaiting materials	4.3	Wood and of products of wood and cork, except furniture; articles of straw and plaiting materials	8.4

Source: Author's elaboration from OECDstat. Sector classification differs slightly between Australia and the EU.

In terms of e-waste, according to Baldé et al (2015) in Europe, the total e-waste generation was 11.6Mt in 2014 led by Germany (1.8 Mt) and the United Kingdom (1.5 Mt). Per capita values range between 15 and 20 kg per person across European countries. The EU is one of the few regions in the world to have a uniform legislation regarding the collection and processing of e-waste. Australia's generation of e-waste amounts at 0.47 Mt. Relative quantities are similar to European levels and stands at 20 kg per capita in Australia. Australia has a national regulation regarding the disposal of end-of-life computers and television units. The increase in output for some sectors due to the EU-AUS FTA could potentially increase waste production. On the other hand, greater cooperation and sharing of best practices between the two partners could help reduce pollution at the global level. The extent to which it can impact e-waste trade, through the impact on trade with the rest of the world (in particular developing countries) is hard to quantify because of limited data but is expected to be limited.

5.2. Analysis

The first part of the analysis examines the impact of trade liberalization on CO2 emissions and land intensity in the EU and Australia. The analysis is based on the CGE modelling produced by DG Trade and include the decomposition into scale, structural and technique (sector energy intensities, fuel mix and carbon factors effects). A Log Mean Divisia Index (LMDI) based on input-output tables is used for separating these different effects.

Table 38: Top 10 most positively affected sectors

EU						Australia					
	Liberalization			Increased liberalization			Liberalization			Increased liberalization	
N	Sector	%	N	Sector	%	**N**	Sector	%	N	Sector	%
1	Motor	0.1	1	Gas	0.2	1	Beverage/Tob	0.6	1	Sugar	0.8
2	Ruminant meat	0.1	2	Machinery	0.1	2	Oil seeds	0.3	2	Other meat	0.8
3	Dairy	0.1	3	Motor	0.1	3	Utility	0.3	3	Beverage/tob	0.6
4	Other food	0.0	4	Wood/Paper	0.1	4	Textile	0.2	4	Ruminant meat	0.6
5	Machinery	0.0	5	Non-metallic	0.0	5	Elec other	0.2	5	Utility	0.5
6	Non-metallic	0.0	6	Oil products	0.0	6	Veg & fruit	0.2	6	Rice	0.5
7	Utility	0.0	7	Utility	0.0	7	Gas	0.2	7	Oil seeds	0.4
8	Oil products	0.0	8	Textile	0.0	8	Oil	0.1	8	Dairy	0.3
9	Wood/Paper	0.0	9	Electricity	0.0	9	Communication	0.1	9	Oil	0.3
10	Cereals	0.0	10	Chemicals	0.0	10	Electricity	0.1	10	Coal	0.3

Source: CGE results from DG TRADE. Long term changes, both scenarios.

The analysis mainly refers to the sectors most affected by the FTA. Table 38 shows the sectors that are expected to benefit most from the FTA according to both the liberalization and the increased liberalization scenario, and the respective impact. Among these sectors are some environmentally sensitive sectors such as animal production, agriculture and natural resources. Potential concerns are discussed below. At the same time, we consider also possible offsetting impacts related to sectors that are likely to experience a reduction. Moreover, an analysis of the impact of the FTA on energy, natural resource use, and biodiversity follows and aims at identifying the sensitive environmental sectors most affected by the FTA as well as the potential risk factors.

5.2.1. Impact on CO_2 emissions

In this section we discuss the implications that the FTA has on CO_2 emissions. According to the CGE modelling performed by DG TRADE, the global impact on CO_2 emissions is negligible. The FTA is expected to increase emissions in the long term in Europe by 0.04% and in Australia by 0.38% in the increased liberalization scenario (Table 39). This suggests that overall, the FTA is expected to have a negligible impact on CO_2 emissions.

Table 39: Change in CO_2 emissions in the scenarios (long term impact, %change)

	Liberalization	Increased liberalization
EU	0.03	0.04
Australia	0.12	0.38

Source: DG TRADE CGE modelling results

Using the model data we decompose this effect into scale, structural and technique effects (intensity, fuel mix and emission factor).

Table 40: Decomposition of the impact on CO_2 emissions (in %)

	EU 28	Australia
Scale effect	0.03	0.16
Composition effect	-0.01	-0.13
Intensity effect	0.00	0.64
Technique effect (fuel mix & emission factor)	0.04	-0.48
Total effect	0.05	0.20

Source: Author's elaboration using input-output tables from DG CGE modelling

Table 40 reports the results of the LMDI decomposition.[148] Effects are expressed in percentage change. It shows that the increase in emissions due to the increase in the scale of production, at a given factor, output mix, and state of technology, is mitigated by a negative composition effect in both the EU and Australia. This suggests that the FTA is likely to induce in the long term a reallocation towards lower emission intensive sectors that is represented by the negative sign of the composition effect.

The emission intensities of different sectors in Australia and the EU are reported in Table 41. Sectors accompanied by a plus sign are the top 5 sectors benefitting from the FTA (increased liberalization scenario). Those accompanied by a minus sign are the most negatively affected. In the case of the EU, the negative composition effect is likely to be due to an expansion of the low emission intensive wood, paper, machinery, and motor vehicle sectors and the contraction of the food and animal production sectors. In the case of Australia, the larger negative composition effect (in relative terms with respect to the scale effect) is mainly due to a contraction of the highly emission intensive non-metallic minerals and chemicals sectors and the expansion of the less emission intensive beverage, utility and animal production sectors.

[148] These results were obtained using an Input-output table that covers only firms, therefore emissions due to households and government consumption were excluded. The effects were subsequently rescaled to reflect the overall impact as estimated by the CGE model.

Table 41: CO_2 Intensity by sector

EU				Australia			
FTA impact	Sector	CO_2 intensity	Rank	FTA impact	Sector	CO_2 intensity	Rank
	Electricity	446.649	1		Electricity	2786.025	1
	Transport	205.675	2		Transport	201.256	2
+	Non-metallic	51.583	3	-	Non-metallic	193.071	3
	Oil products	43.097	4		Gas	188.651	4
	Cereals	38.788	5		Oil products	135.995	5
	Fishing	35.584	6		Metal Products	90.622	6
+	Gas	32.506	7		Oil	58.732	7
	Fibre crop	31.203	8	-	Chemicals	56.067	8
-	Oil Seeds	25.451	9		Fibre crop	41.822	9
	Metal Products	15.755	10		Fishing	34.579	10
-	Veg/Fruit	15.548	11	+	Sugar	30.329	11
-	Sugar	12.349	12		Oil Seeds	26.894	12
	Coal	11.81	13		Cereals	25.263	13
	Chemicals	11.435	14		Rice	24.634	14
-	Rice	11.175	15	-	Wood/Paper	24.559	15
-	Bovine meat	10.408	16		Dairy	21.751	16
	Oil	10.299	17		Vegetable/Fruit	21.62	17
	Minerals	8.688	18	+	Bovine meat	21.487	18
	Other Meat	8.306	19		Other food	19.773	19
	Beverage/Tob	7.924	20		Textile	19.186	20
	Dairy	7.072	21	+	Other Meat	17.146	21
+	Wood/Paper	6.511	22		Coal	16.24	22
	Other food	4.578	23		Minerals	15.98	23
	Utility	3.107	24	+	Beverage /Tob	10.151	24
	Other Services	2.735	25	+	Utility	3.48	25
	Textile	2.578	26	-	Machinery	2.967	26
	Communication	2.21	27		Electronics other	2.14	27

+	Machinery	1.691	28		Communication	1.908	28
+	Motor vehicles	1.399	29		Other Services	1.415	29
	Electronics	1.167	30		Financial	0.398	30
	Financial	0.986	31	-	Motor vehicles	0.045	31

Source: Author's calculation from input-output tables. In the column headed "FTA impact" we indicate with + the five most positively affected sectors and with the sign- the five most negative affected sectors in the increased liberalization scenario.

In the EU the positive scale effect is also mitigated by a decrease in emission intensity within sectors. This is not the case in Australia where energy intensity has been foreseen to increase. Australia, however, is expected to experience a reallocation towards a cleaner fuel mix that would only partly compensate for this effect as shown by the negative technique effect.

5.2.2. Impact on land-use[149]

In this section we discuss the implications for land use. Table 42 summarises the impact on land intensity as modelled by the DG Trade CGE modelling. The table shows a minor decrease in land intensity in Australia. Land intensity is expected to experience a negligible increase of 0.55% in the EU. This is largely due to the expected increase in some agricultural sectors and animal production. On the other hand, Australia is expected to experience a moderate increase of 0.98% on land use intensity most likely due the expansion of the ruminant meat and some agricultural sectors. This suggests that, keeping overall output constant, land use would increase by about 1%.

Table 42: Impact on land intensity

	Change in land intensity
EU28	0.55%
Australia	1.00%

Source: Author's elaboration using DG Trade input-output tables

5.2.3. Impact on air pollution

Even though the CGE model used by DG Trade to estimate the impact of the FTA does not provide estimates of the impact on SOX and NOX emissions, we can gain some insight by exploring air pollution (SOX and NOX) by sectors in the EU and Australia as summarized in Table 43. In the EU the major sources of NOX are mobile (transport). In Australia, instead, the largest source of NOX is industrial combustion.

Table 43: NOX (left) and SOX (right) by sector in Australia and the EU, 2010

	NOX (%)		SOX (%)	
Sector	EU	Australia	EU	Australia

[149] Land use intensity is measures by total land used over output. An increase in land use intensity can result from an expansion of or a shift towards more land intensive sectors.

Agriculture	3.07	1.00	0.10	0.00
Industrial combustion	12.83	45.00	27.32	4.71
Industrial processes/product use	2.35	0.73	6.16	68.90
Miscellaneous	0.32	0.76	3.59	0.00
Other Mobile Sources	15.13	18.15	2.45	0.71
Other combustion	8.11	1.68	15.08	0.12
Power stations	18.57	24.89	45.02	24.87
Road Transport	39.50	7.79	0.19	0.69
Waste	0.12	0.00	0.09	0.00

Source: Author's calculations from OECDstat

Although the EU sectors that are expected to benefit most from the FTA involve combustion processes, the impact is very small and therefore does not pose particular concern. The table shows that the contribution of agriculture to air pollution is very negligible, therefore, the positive impact on some agriculture sectors in Australia does not raise particular concerns in terms of air pollution. Similarly, the small expansion of the food industry, which is relatively low NOX- and SOX-emission intensive, does not pose particular concerns for air pollution either.

5.2.4. Impact on demand for energy and natural resources

Table 44 shows the 10 most energy intensive sectors for the EU and Australia. Both share a similar energy intensity profile with Oil products topping the list. The sectors that are expected to benefit most from the FTA are not among the most energy intensive. The only exception is the sugar sector that is expected to grow by 0.8% (in the increased liberalization scenario). Nevertheless, its energy intensity, although among the top 10 in Australia, is far below that of other sectors topping the list. Therefore, we do not expect the FTA to induce significant pressure on demand and imports of natural resources for the energy generation sector in either Australia or the EU. Although the EU is expected to experience a positive impact in the gas sector, the expected effect is small.

Table 44: Most energy intensive sectors by country

EU		Australia	
Oil products	0.29	**Oil products**	0.47
Coal	0.17	**Electricity**	0.24
Electricity	0.15	**Metal products**	0.08
Gas	0.06	**Non- metallic products**	0.06
Non-metallic products	0.06	**Gas**	0.06

Metal products	0.05	**Sugar**	0.03
Chemicals	0.04	**Chemicals**	0.03
Wood & paper	0.04	**Oil**	0.02
Beverage/tobacco	0.03	**Wood & paper**	0.02
Minerals	0.03	**Textile**	0.02

Source: Author's elaboration using DG Trade input-output tables. Figures indicate value of energy use (coal, gas, oil and electricity) divided by value of output.

As for the paper and wood sector in the EU, which is one of the largest users of timber resources, it is expected to benefit from the FTA, but with a negligible impact. Therefore, we do not expect the FTA to induce pressure on domestic and imported natural resources in the EU. Despite the positive impact on agricultural and animal sectors in Australia the impact on land use is expected to be limited. Some concerns regard the expansion of the coal and oil sectors and the associated consequences in terms of greenhouse gases emissions. However, given the small impact (about 0.3% in the long term) this is not likely to constitute a significant concern for global emissions.

5.2.5. Impact on environmental goods and services

Lower trade barriers to environmental goods and services can contribute to increased access to such goods with notably important consequences for the environment. In particular, increased access can yield positive environmental benefits in terms of improved resource-use efficiency and pollution prevention. Increased trade in these goods and services can increase competition and induce greater innovation. Being part of the Environmental Goods Agreement (EGA), the EU and Australia will experience the benefits of increased trade in environmental goods through that agreement that is expected, if successful, to reach a settlement before negotiations on the EU-Australia FTA are concluded. We, therefore, do not envisage substantial additional benefits from this FTA.

5.2.6. Impact on waste

One potential concern is the impact of increased trade and production on waste. Reynolds et al. (2014) provide a very detail description of sectorial waste production in Australia. They compute total waste multipliers that incorporate a direct and indirect effect of each sector on total waste production. According to their study only the production of meat (among the top 10 sectors to benefit from the FTA) show some modest impact on waste production, followed by utility and the production of dairy product with lower impacts. Moreover, among the sectors with the largest impact on waste production appear the motor vehicle components sector and the metal sectors that are expected to experience a negative impact from the FTA. Therefore, we do not envisage particular concerns in terms of waste production.

5.2.7. Potential risk factors

In this section we identify potential risk factors for the EU and Australia, i.e. environmental aspects that are currently under pressure, and discuss how increased trade can impact them. In particular, the analysis relates to the sectors that are most likely to experience an expansion due to the FTA and areas where the countries perform particularly poorly. Among the most affected sectors in Australia are the oil and coal

and electricity sectors, which are likely to increase the production of CO2 emissions. The impact on CO2 emissions has been discussed above and are not revisited in this section.

5.2.7.1. Impact on Forestry

In the EPI index Australia ranks 89 out of 180 in the forestry sub-index, after a drop in from 2014 to 2016, due to its high level of deforestation. It also performs poorly in terms of Terrestrial Protected Areas (85 out of 180). According to Global Forest Watch, Australia ranks 12th in terms of forest cover loss during the period 2001-2014.[150] The major causes of deforestation in Australia are weed invasion and spontaneous forest fires. The observed tree cover loss in the past decades has been partly driven by droughts and bushfires in addition to land clearing. EU countries show an average rank of 69 in the EPI forestry sub-index but rank 33rd (on average) in terms of terrestrial protected areas.

The results from the DG Trade CGE modelling show a small negative impact on the wood and paper sector in Australia. This suggests that there are no expected negative effects on deforestation through an expansion of the timber sector. On the other hand, the positive impact on the agricultural and animal sectors could pose some limited concerns due to increased stress on natural resources. This is further mitigated by the fact that Australia is expected to experience a decrease in land intensity as discussed above.

As far as the EU is concerned the AUS-EU FTA is expected to benefit the wood and paper sectors, which are primary user of forestry products. The impact, however, is small (0.1%) and, therefore, is not expected to raise concerns in terms of pressure on forestry resources.

5.2.7.2. Impact on Fishery

Australia shows a poor performance in the fisheries sub-index. This is mainly due to the depletion of its fish stocks where Australia ranks 92nd (out of 180). The Fish Stocks indicator in the EPI is a measure of the proportion of a country's total catch that comes from overexploited or collapsed fish stocks. Overexploitation occurs when a fish stock is harvested at levels that exceed the species' capacity for reproduction and replacement.

Nevertheless, according to FAO (2014), Australia reports only 11% of its assessed stocks overfished in 2011 and it has ended overfishing in the fisheries under its management in 2014.

The results of the DG Trade GCE modelling show no impact on the fishing sector for either the EU or Australia. Moreover, the limited impact on economic growth caused by the FTA is likely to have a negligible impact on fish consumption. Therefore, we do not envisage particular concerns about the impact of the FTA on fisheries.

5.2.7.3. Impact on Animal Production

Both intensive (industrial) and non-intensive (traditional) forms of meat production result in the release of greenhouse gases. Additional environmental hazards include deforestation, desertification, overuse of freshwater, inefficient use of energy and diverting food for use as feed (Janzen 2011). According to UNEP (2012), Australia scores second, after the USA, in terms of consumption of meat consumption per person (just below 120 kg per person per year). Europeans consume slightly more than 76 kg per year.

[150] http://www.globalforestwatch.org/country/AUS.

An increase in animal production can results in an increase in the emissions of methane (CH4) and nitrous oxide (N2O), as well as from chemical nitrogenous (N) fertilizers used to produce the feed. The FTA is expected to have an expansionary impact on some animal sectors in Australia. In particular ruminant meat is expected to grow by 2.4% and other meat by 0.1% in the long term. Given the small size of the impact, we do not expect it to constitute a concern for global emissions.

5.2.7.4. Impact on Agriculture and Biodiversity

Australia performs poorly in the EPI's agriculture sub-index. The low score for Australia is due to a poor performance in terms of Nitrogen Use Efficiency[151] (102 out of 180). While the focus on nitrogen use in agriculture has been guided by the poor international performance as indicated by the EPI index, we also consider the state of soil, water use and pollution and ecosystems.

According to the OECD (2008)[152], agriculture's use of inputs is a major driving force leading to pressure on the environment (OECD, 2010) Agriculture, for example, can be a source of water pollution through the discharge of pollutants and sediment to surface and/or groundwater and the net loss of soil by poor agricultural practices. Unfortunately data on water quality is lacking for Australia. We, therefore, focus on nitrogen and pesticides use in agriculture to gauge the environmental impact of agriculture expansion.

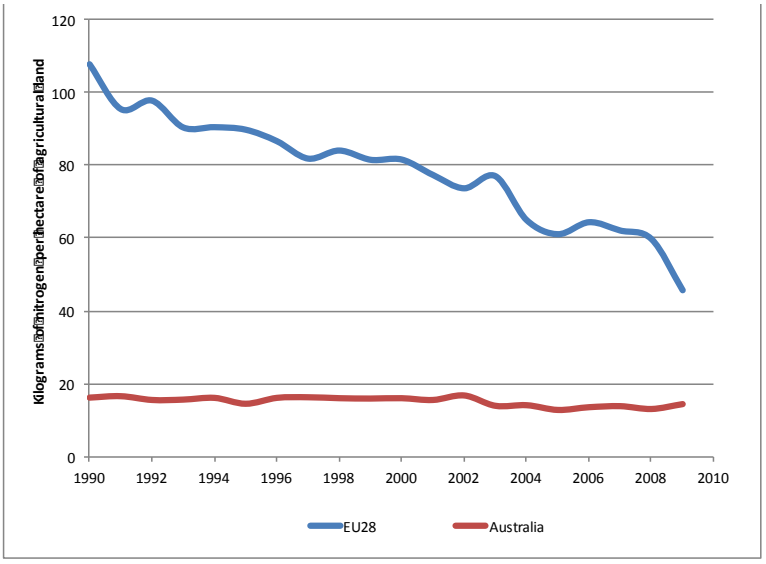
Australia is one of the most biologically diverse countries in the world, with a large portion of endemic species and excessive use of agricultural inputs could threaten it biodiversity. For the majority of OECD countries the use of these inputs has decreased since 1990. This is confirmed by EU trends. A notable exception, however, is Australia (and New Zealand, Canada, Greece, Ireland, Portugal, Spain and Turkey). As shown in Figure 44, although being stable over time, the use of nitrogen in agriculture remains lower than average European levels. It is worth noting that the EU also performs poorly in terms of Nitrogen use in agriculture, therefore, despite a better performance of Australia, the country still ranks 102nd globally (EPI).

Data on pesticides are unavailable for Australia as the monitoring of agricultural water pollution is poorly developed, especially for pesticides (OECD, 2008).Nevertheless, government policies are in place to control water pollution, e.g. aerial spray of pesticides is prohibited as in the EU, and are supplemented by the use of community-based approaches that promote the exchange and transfer of information.

[151] Nitrogen Use Efficiency (NUE) is a term used to indicate the ratio between the amount of fertilizer removed from the field by the crop and the amount of fertilizer applied. The nitrogen balance instead provides information about the absolute flow of nitrogen that is not captured in agricultural products and therefore potentially available for losses. Excess nitrogen often leaves soils through erosion, or volatizes into nitrous oxide. Nitrous oxide is a greenhouse gas that has 300 times the heat trapping power of carbon dioxide. When nitrogen ends up in water bodies, it can produce algal blooms that suffocate aquatic organisms and cause widespread dead zones.

[152] OECD (2008) Environmental Performance of Agriculture at a Glance, OECD Paris.

Figure 44: Nitrogen balance per hectare of agricultural land over time



Source: Author's elaboration from OECDstat.

The expansion of the agricultural sector could constitute a potential threat to biodiversity. In Australia the FTA is expected to have some positive impact on agricultural and animal activities as summarize in Table 45.

Table 45: Impact of the FTA on agricultural sectors output (long term)

Agricultural sectors	Liberalization		Increased liberalization	
	EU	Australia	EU	Australia
Rice	0.0	0.1	-0.1	**0.5**
Cereals	0.0	0.0	-0.1	0.2
Vegetables/fruit	-0.1	0.2	-0.1	0.1
Oil/seeds	-0.1	0.3	-0.1	**0.4**
Sugar	0.0	0.0	-0.2	**0.8**
Fibre crop	0.0	0.0	0.0	-0.1

Source: CGE results from DG TRADE

Australia is expected to experience an expansion, although small, of the rice, sugar and cereals sectors. Norton et al. (2005) computes some estimates of nitrogen use efficiency for some agricultural sectors in Australia. His findings reveal that while rice production in Australia is quite efficient in terms of nitrogen use, sugar and oil/seeds production are highly inefficient, thereby raising concerns about the potential implications for ecosystem degradation.

Finally soil salinity is an important problem degrading the environment of Australia especially in the South-West. High salinity can damage the ecosystem by preventing the grow of crops and vegetation and also impact on aquatic ecosystems and biodiversity. As the soil becomes no longer suited for agriculture it opens up

opportunities for further land clearing[153] exacerbating the problem further. Because, simulation results show a decline in land use intensity we expect limited pressure on agriculture land. Irrigation, however, is also one of the contributor to salinity and wider implications of water use in agriculture are discussed below.

The agriculture sector in Australia, where irrigation plays a key role, farming is a major water user (77% of total water) and agricultural water use over the past decades has been notably increasing. Water used in agriculture has almost doubled over the period 1990-2000 (OECD, 2008). This, however, has been accompanied by a more efficient use of water resources shown by a decline in water application rate per hectare irrigated by 50% over the same period. Among the tree most positively affected crops, rice has relatively low medium water requirements while oil/seeds has medium-high water requirements (source: FAO[154]). Because the impact is, however, small and water efficiency is relatively high (with respect to EU average) and has been increasing over time, there is limited concern for the potential impact of the agriculture expansion on water resources.

[153] In 2013 the Queensland parliament passed laws relaxing land clearing and opening up national parks to cattle grazing. Victoria has proposed similar clearing changes. Source: http://theconversation.com/clearing-more-land-we-all-lose-14601.
[154] http://www.fao.org/docrep/s2022e/s2022e02.htm.

6. ANALYSIS OF HUMAN RIGHTS IMPACTS

6.1. Baseline: Human Rights in Australia

Australia has a limited record of negotiating FTAs with human rights' provisions and has a pragmatic policy not to link human rights to trade in its external relations.[155] Previous agreements include reference only to indigenous minority rights. The literature reviewed shows few existing assessments on the impact of its trade agreements on third countries where the literature primarily focuses on the impact of agreements on the Pacific Island Countries (see Appendix 2). Even though the bulk of the literature focuses on the Pacific Island Countries, this is only briefly mentioned here, since a potential agreement between the EU and Australia is not likely to have the same impact given the level of economic, political and legal development and commitment to international rules and human rights advocacy by both parties.

6.1.1. Existing Australian commitments

Australia has limited legislative protection of human rights and fundamental freedoms at the federal level.[156] Many of Australia's human rights obligations are implied through common law, where it falls on the legislators to balance between human rights principles and other policies and issues such as migration and counter-terrorism.

Australia's population benefits from an elaborate court system that people can resort to if they feel their human rights are violated.[157] Australia is also a strong international Human Rights advocate and is currently seeking a seat in the UN Human Rights Council 2018-2020.[158] As part of its bid, the Australian Government focuses on five key dimensions: "gender equality, good governance, freedom of expression, the rights of indigenous peoples, and strong national human rights institutions and capacity building".[159] These commitments are also highlighted in "Australia: Seeking Human Rights for All", prepared for the 60th anniversary of the Universal Declaration of Human Rights.[160]

Australia has ratified most of the international conventions. Australia is a party to seven of the main human rights treaties: International Convention on the Elimination of All Forms of Racial Discrimination (ICERD); International Covenant on Economic, Social and Cultural Rights (ICESCR); the International Covenant on Civil and Political Rights (ICCPR); Convention on the Elimination of Discrimination Against Women (CEDAW); Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment (CAT); Convention on the Rights of the Child (CRC); and Convention on the

[155] Commonwealth of Australia, 1997. Australia's Foreign and Trade Policy, In the National Interest, Chapter3, White paper, http://repository.jeffmalone.org/files/foreign/In_the_National_Interest.pdf.
[156] Australian Human Rights Commission, 2015. Factsheet: National Framework: http://www.humanrights.gov.au/sites/default/files/2.%20National%20framework%20Final.pdf.
[157] Australian Human Rights Commission, 2006. How are human rights protected in Australian law? Available at: https://www.humanrights.gov.au/how-are-human-rights-protected-australian-law. In addition to this, the Australian Human Rights Commission investigates and deals with complaints regarding infringement of human rights within the territory of Australia, where the service provided is "free, impartial and can be made anywhere within the country". See: Australian Human Rights Commission, n.d. Complaints. Available at: https://www.humanrights.gov.au/complaint-information.
[158] Australian Government, Department of Foreign Affairs. Australia's candidacy for the United Nations Human Rights Council 2018-2020. Available at: http://dfat.gov.au/international-relations/international-organisations/pages/australias-candidacy-for-the-unhrc-2018-2020.aspx.
[159] Idem.
[160] Australian Government, Department of Foreign Affairs. "Australia: Seeking Human Rights for All". http://dfat.gov.au/international-relations/themes/human-rights/pages/australia-seeking-human-rights-for-all.aspx.

Rights of Persons with Disabilities (CRPD). Australia has also ratified or acceded to the 2nd Optional Protocol to the ICCPR; the Optional Protocol to the CEDAW and CRPD; the Optional Protocol to the CRC on the involvement of children in armed conflict; the Optional Protocol to the CRC on the sale of children, child prostitution and child pornography.[161]

It has signed but not ratified the OP-CAT (signature, 2009)[162], which has been addressed by a series of recommendations in the 2015 Universal Periodic Review (UPR), the mechanism of the United Nations Human Rights Council that reviews the human rights records of all 192 United Nations Member States. The review recommends for Australia to ratify the optional protocol to the Convention against Torture in order to allow visits to places of detention in particular. Further to Article 1 of OP-CAT, "the objective…is to establish a system of regular visits undertaken by independent international and national bodies to places where people are deprived of their liberty, in order to prevent torture and other cruel, inhuman or degrading treatment or punishment." In order to abide by this, Australia will have to set up a national preventative mechanism for places of detention (Article 3 OP-CAT). The Australian Government has accepted the recommendations and has declared that it is "working with States and Territories to take the necessary steps towards ratifying the Optional Protocol".[163]

Australia has not ratified the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (ICRMW) and the International Convention for the Protection of All Persons from Enforced Disappearance (ICPPED).[164] At the time of the last UPR in 2015, the Australian government has declared that it does not intend to become a party to the former, while there is no formal stance of the current government and its position is unclear.

Australia also has not ratified International Labour Organisation Convention n.169 on Indigenous and Tribal Peoples (ILO Convention 169). In the previous review, Australia has declared that it "cannot commit to becoming a party to the CED or ILO 169, but formal consideration will take place."[165] Finally, as noted in the last UPR, the Australian government also made a number of reservations and declarations such as: ICERD[166] (reservation, art. 4 (a), 1975), relating to the criminalisation of racial hatred; ICCPR (reservation, arts. 10 (2) (a) and (b) and (3), 14 (6) and 20; general declaration, 1980); related to the separation of children from adults in prisons; CEDAW (general reservation; reservation, art. 11 (2); general declaration, 1983, modification of general reservation, 2000), related to provision of maternity leave with pay and the employment of women in combat or combat-related positions in the defence force; and CRC (reservation, art. 37 (c), 1990) OP-CRC-AC (declaration, arts. 3 (2), minimum age of voluntary recruitment 17 years, and 3 (5), 2006). The Australian Human Right Commission and peer reviewers in the UPR process have made calls for withdrawal of

[161] Australian Human Rights Commission, 2015. Factsheet: Scope of international obligations. Australia has ratified ICERD (1975), ICESCR (1975), ICCPR (1980), ICCPR-OP 2 (1990), CEDAW (1983), CAT (1989), CRC (1990), OP-CRC-AC (2006), OP-CRC-SC (2007), CRPD (2008).
[162] Optional Protocol to the Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment: http://www.ohchr.org/EN/ProfessionalInterest/Pages/OPCAT.aspx.
[163] Australia's formal response to UPR recommendations: https://www.ag.gov.au/RightsAndProtections/HumanRights/United-Nations-Human-Rights-Reporting/Documents/AustraliasformalresponsetotheUPRrecommendations.pdf.
[164] Office of the Human Rights Commissioner: http://tbinternet.ohchr.org/_layouts/TreatyBodyExternal/Treaty.aspx?CountryID=9&Lang=EN.
[165] Ibid at 9: Australia's formal response to UPR recommendations.
[166] International Convention on the Elimination of All Forms of Racial Discrimination: http://www.ohchr.org/EN/ProfessionalInterest/Pages/CERD.aspx.

reservations to ICERD, CEDAW and CRC.[167] The Australian government has also received a series of recommendation vis-à-vis Indigenous peoples' rights. The recommendations made links to constitutional recognition, consultation with Indigenous communities and reducing inequality in health, education and employment. Overall, the Office of the United Nations High Commissioner for Human Rights has highlighted two salient issues vis-à-vis the human rights situation in Australia: treatment of indigenous peoples and asylum seekers.[168] These issues and the response by the Australian government are further discussed in the following section.

6.1.2. Human rights record

While Australia has a solid record with the protection of civil and political rights and a strong court system, the UPR identifies a variety of issues that still are weaknesses of the Australian system: "closing the gap in opportunities and life outcomes between Indigenous and non-Indigenous Australians, and in achieving gender equality and reducing violence against women."[169]

In this section, we discuss Australia's political record of human rights as reported by the Australian Government, the Australian Human Rights Commission, the United Nations Human Rights Council and other international bodies.

6.1.2.1. Freedom of expression, association and peaceful assembly, and right to participate in public and political life

Freedom of expression is protected by the ICCPR under Article 19. The right to association and peaceful assembly, and right to participate in public and political life is protected by the ICCPR under Article 22: right to freedom of association and by the ILO Convention No. 87 which protects the freedom of Association and Protection of the Right to Organise Convention. Additionally, it is protected by the ILO Convention No. 98: Right to Organise and Collective Bargaining Convention. One of the Guiding Principles on Human Rights Impact Assessment 2011 addresses the question "whether the obstacles states face in realising human rights are increased or reduced, and whether the policy space of states remains sufficient for them to meet their human rights obligations".[170]

With regards to these aspects, the Australian High Court has upheld that implied freedom of political communication was crucial to the political system created by the Constitution. Australia's political life is transparent and democratic, and no major infringements of these rights have been recorded.

6.1.2.2. Right to highest attainable standard of physical and mental health

Australia is known to have high levels of health status.[171] The WHO notes that there are discrepancies between 'the health of Indigenous populations, those living outside the

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[167] United Nations General Assembly, 2015. Compilation prepared by the Office of the United Nations High Commissioner for Human Rights in accordance with paragraph 15 (b) of the annex to Human Rights Council resolution 5/1 and paragraph 5 of the annex to Council resolution 16/21: https://documents-dds-ny.un.org/doc/UNDOC/GEN/G15/195/70/PDF/G1519570.pdf?OpenElement.
[168] Ibid, at. 6.
[169] Report of the Working Group on the Universal Periodic Review. Page 3. https://documents-dds-ny.un.org/doc/UNDOC/GEN/G11/122/90/PDF/G1112290.pdf?OpenElement.
[170] Bürgi Bonanomi, Elisabeth EU's Sustainability Impact Assessment Methodology Compared to De Schutter's Human Rights Impact Assessment Methodology, in: Improving the Methodology for Measuring Social and Human Rights Impacts of Trade Agreements, p.8.
[171] Australian Government, Australian Institute of Health and Welfare, 2016, Australia's Health 2016. Available at: http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129555788.

capital cities and those of low socio-economic status compared to the health status of other Australian residents'[172]. The WHO reports, for example, that the infant mortality rate in Australia was listed as 4.2 per 1,000 live births in 2007, with a comparative rate of 9.6 per 1,000 live births in 2011 as an indigenous infant mortality rate[173]. The government's mandatory detention of asylum-seeker children has been identified as an issue cross-cutting multiple human rights and the Australian Human Rights Commission[174] found that it is in violation of their rights and detrimental to their mental and physical health.[175]

The Australian government has recognised the problems in its campaign "Closing the Gap", addressing the differences in key health indicators (life and health expectancy), between indigenous and non-indigenous people within a generation, aimed at reducing the gap by 2030. The objective is to reach the goals through human rights based approach outlined in the Aboriginal and Torres Strait Islander Social Justice Commissioner's Social Justice Report 2005.[176] The campaign is run by Australia's health professional bodies, human rights organisations and Aboriginal and Torres Strait Islander and non-Indigenous health bodies.[177]

6.1.2.3. Rights of Indigenous peoples

According to the Guiding Principles, parties should ensure that a trade agreement does not "disproportionately affect members of a particular group, in the absence of a reasonable and objective discrimination".[178] Australia was commended by other countries during its Universal Periodic Review, for its efforts to improve the rights of Indigenous people, in particular regarding a proposal for a constitutional referendum on formal recognition of indigenous peoples[179]. The Australian Government has identified the Rights of Indigenous Peoples as a national priority. The Government funds and delivers a variety of initiatives targeting Aboriginal and Torres Strait Islander peoples through the Indigenous Advancement Strategy (IAS).[180] Other progress in relation to legal status and current developments about explicit recognition of indigenous people include: bipartisan support since 2007 to amend the Australian Constitution to include the recognition of the indigenous peoples[181] as well as a Referendum Council to lead a national conversation on recognising Indigenous Australians in the Constitution.[182]

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[172] WHO, 2012. Health Service Delivery Profile: Australia. Page 1. Available at : http://www.wpro.who.int/health_services/service_delivery_profile_australia.pdf
[173] Idem.
[174] Australian Human Rights Commission, 2014. *The Forgotten Children: National Inquiry into Children in Immigration Detention.* Available at: https://www.humanrights.gov.au/sites/default/files/document/publication/forgotten_children_2014.pdf.
[175] Australian Human Rights Commission, 2014. *The Forgotten Children: National Inquiry into Children in Immigration Detention.* Available at: https://www.humanrights.gov.au/our-work/asylum-seekers-and-refugees/publications/forgotten-children-national-inquiry-children.
[176] Australian Government, Department of the Prime Minister and Cabinet, 2016. Closing the Gap: Prime Minister's Report 2016. http://closingthegap.dpmc.gov.au/index.html.
[177] Ibid.
[178] De Schutter, 2011. Guiding Principles for HRIAs. At II.2.1.
[179]UPR National Report of Australia. Page 2. https://www.ag.gov.au/RightsAndProtections/HumanRights/United-Nations-Human-Rights-Reporting/Documents/UPR-National-Report-of-Australia-2015.pdf.
[180] Department of the Prime Minister and Cabinet, 2016. Indigenous Advancement Strategy http://www.indigenous.gov.au/news-and-media/grants-funding/indigenous-advancement-strategy.
[181] Australian Human Rights Commission, n.d. Constitutional reform: Fact Sheet - Recognising Aboriginal & Torres Strait Islander people in the Constitution https://www.humanrights.gov.au/publications/constitutional-reform-fact-sheet-recognising-aboriginal-torres-strait-islander-people.
[182] Idem.

There are also reports of the systematic disadvantage faced by the indigenous population of Australia, examples include that Aboriginal women are the fastest growing prisoner demographic in Australia[183], Aboriginal and Torres Strait Islander women are thirty-five times more likely to be hospitalised as a result of family violence related assault than other Australian women[184], gap in key life indicators between Indigenous and non-Indigenous Australians[185], and that Aboriginal women have been poorly represented in national law and justice policy debates historically[186]. Australia has been implored to ensure access to services tailored to cultural needs and to improve opportunities for leadership development for Aboriginal women and communities. As discussed above, these issues are currently being addressed through the "Closing the Gap" campaign.

6.1.2.4. Rights of migrants, refugees and asylum seekers

As discussed above, issues relating to migrants, refugees and asylum seekers dominate discussions on Australia's human rights record. This was expressed clearly in Australia's Universal Periodic Review, an assessment of countries' human rights record by the UN Human Rights Council, where over 110 countries spoke about the country's record, predominately about the issue of asylum seekers.[187] This encompasses, "the indefinite detention of stateless persons, the keeping of children in detention-like conditions in remote areas and, at times, separated from their parents"[188]. Those facilities have also come under scrutiny, as the Australian Senate Select Committee on the recent allegations relating to conditions and circumstances at the regional processing centre in Nauru cited allegations of varying degrees of misconduct against the detention centre staff on Nauru including: verbal or physical abuse, sexual harassment and exchanging sexual favours for contraband in their final report published in August 2015.[189]

Various organisations, including the Australian Human Rights Commission and the Office of the United Nations High Commissioner for Refugees, have acknowledged these practices and called for the Australian Government to implement changes.[190] Specific events are also being investigated, as the UN Human Rights Committee found that Australia breached its international obligations and committed 143 human rights

[183] Australian Human Rights Commission. A statistical overview of Aboriginal and Torres Strait Islander peoples in Australia. Available at: https://www.humanrights.gov.au/publications/statistical-overview-aboriginal-and-torres-strait-islander-peoples-australia.
[184] National Human Rights Network of the National Association of Community Legal Centres. (2014). Joint NGO Report on Australia's Human Rights Record: An update on Australia's progress towards Universal Periodic Review recommendations for the United Nations Human Rights Council. Available at: http://www.naclc.org.au/resources/Joint_NGO_Report_on_Australia_s_Human_Rights_Record_Final.pdf.
[185] Australia's Health 2014. Indigenous Health. Available at: http://www.aihw.gov.au/australias-health/2014/indigenous-health/#t8.
[186] National Human Rights Network of the National Association of Community Legal Centres. (2014). Joint NGO Report on Australia's Human Rights Record: An update on Australia's progress towards Universal Periodic Review recommendations for the United Nations Human Rights Council. Available at: http://www.naclc.org.au/resources/Joint_NGO_Report_on_Australia_s_Human_Rights_Record_Final.pdf.
[187] Australian Human Rights Commission. Australia's Universal Periodic Review on human rights. Available at: https://www.humanrights.gov.au/australias-universal-periodic-review-human-rights.
[188] Report of the Working Group on the Universal Periodic Review Australia. Page 12. Available at: https://documents-dds-ny.un.org/doc/UNDOC/GEN/G11/122/90/PDF/G1112290.pdf?OpenElement.
[189] Select Committee on the recent allegations relating to conditions and circumstances at the regional processing centre in Nauru. *Final Report. Taking responsibility: conditions and circumstances at Australia's Regional Processing Centre in Nauru.* 2015. Page 23. Available at: http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Regional_processing_Nauru/Regional_processing_Nauru/Final_Report.
[190] UN News Centre. *Australia and Nauru must end offshore detention; investigate claims of abuse-UN rights office.* August 2016. Available at: http://www.un.org/apps/news/story.asp?NewsID=54669#.WBn4wC2LTcu.

violations when it indefinitely detained 46 refugees for four years in 2013[191], and more recently, the Office of the UN High Commissioner for Human Rights raised the issues of the "serious allegations of violence, sexual assault, degrading treatment and self-harm" suffered by people who were forcibly transferred to Nauru after seeking refuge in Australia.[192]

At the same time, Australia's right to detain refugees on its offshore detention centre on Nauru was upheld in the High Court of Australia most specifically in the court case: Plaintiff M68/2015 v Minister for Immigration and Border Protection & ORS.[193] The court upheld that section 198AHA of the Migration Act, adopted in June 2015, provides the Australian government the right to detain refugees on offshore detention centres[194]. This also allows for returning refugees that were sent to Australia for medical treatment to the detention facilities.

6.1.2.5. Right to a fair hearing

Fair trial and fair hearing rights are enshrined in Article 14 of the International Covenant on Civil and Political Rights (ICCPR), to which Australia is a party. Similar issues are covered in the Australian Constitution, with Chapter III of the Constitution defining the jurisdiction and parameters for the High Court. Australian practices have developed a strong system, which aims to protect the right to a fair hearing. Even though, the Human Rights Law Resource Centre has identified that the "Commonwealth Government must take steps to ensure greater equality in access to justice"[195] to maximize equity of the application of the principle.

6.1.2.6. Right to privacy

The right to privacy is enshrined in the Universal Declaration of Human Rights and Article 17 of the ICCPR. Australian law finds that there is no general legal or constitutional right to privacy, and the Commonwealth Privacy Act is the primary legislation covering information privacy and the handling of personal information[196]. In March, the government passed the Telecommunications Amendment bill, requiring telecommunications companies to retain metadata for a period of two years so that Australian intelligence organizations can access the data.[197] As seen, given the developed judicial system in Australia, it is unlikely for negative impacts to occur. Furthermore, the issue of data protection does not fall within the scope of the potential trade agreement.

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[191] United Nations Human Rights Committee. Communication No. 2136/2012. Available at: http://tbinternet.ohchr.org/Treaties/CCPR/Shared%20Documents/AUS/CCPR_C_108_D_2136_2012_20721_E.pdf.
[192] UN News Centre. Australia and Nauru must end offshore detention; investigate claims of abuse – UN rights office. Available at: http://www.un.org/apps/news/story.asp?NewsID=54669#.WBm8nC2LTcs.
[193] High Court of Australia, 2016. PLAINTIFF M68/2015 v MINISTER FOR IMMIGRATION AND BORDER PROTECTION & ORS. http://www.hcourt.gov.au/assets/publications/judgment-summaries/2016/hca-1-2016-02-03.pdf.
[194] Ibid.
[195] Human Rights Law Resource Centre. (2009) *The right to a fair hearing and access to justice: Australia's obligations.* p. 3 Available at: http://www.hrlrc.org.au/files/hrlrc-submission-access-to-justice-inquiry.pdf.
[196] Human Constitutional Rights. *Australia, Right to Privacy*. Available at: http://www.hrcr.org/safrica/privacy/austr_law.html.
[197] Australian Human Rights Commission. Inquiry into the Telecommunications (Interception and Access) Amendment (Data Retention) Bill 2014. Available at: https://www.humanrights.gov.au/submissions/inquiry-telecommunications-interception-and-access-amendment-data-retention-bill-2014 .

6.2. Analysis

6.2.1. Overview of screening results

Since human rights are interrelated and cross-cutting, we look at a selection of human rights, which are likely to be affected by the EU-Australia FTA, based on the screening of inputs from Australian stakeholders[198]; literature review and experience of previous IAs, as well as linking the analysis below to the economic, social and environmental qualitative and quantitative analysis presented in the previous chapters. Some of the human rights issues are addressed in detail elsewhere and are only briefly summarised in this section, in particular:

- Impact of the two liberalization scenarios on the **right to adequate standard of living** and in particular on reallocation of workers, differences between skilled and unskilled workers in the Analysis of social impacts.
- Impact of the two liberalization scenarios on rights of children, prohibition of child labour, and protection of young people at work; women, people with disabilities, see Social impact chapter, Impact on Core Labour Standards.
- Impact of the two liberalization scenarios on right to consumer protection, see Consumer impact chapter
- Impact on **freedom of expression, association and peaceful assembly, and right to participate in public and political life** of the Commission's proposal to establish the Investment Court System, as well as comparison to investment provisions in FTAs signed by Australia in the Market Access and Regulatory Obstacles to Investment, see section 3.3.

Table 46 summarises possible impacts of various trade measures, but also identifies crosscutting or general human rights that may cause concern or benefits for an FTA. These use as a reference general International and European commitments in the area, as well as the text of the EU-Canada FTA and the proposals tabled in the scope of the TTIP negotiations. These agreements are used as a reference due to the fact that the potential EU-Australia FTA will be signed between two developed countries, which have committed to liberalization while adhering to multilateral commitments.

Table 46: Possible impacts of various trade measures

Measure/ Process	Summary of measure	Human rights that may be affected (expected)	Evidence
Transparency and inclusiveness in the negotiations	Process of conducting stakeholder consultations	Freedom of expression, association and peaceful assembly, and right to participate in public and political life	Negotiation process
	Inclusiveness of the process	Rights of indigenous people	'Right to regulate' for states
		Rights of migrants, refugees and asylum seekers	

[198] Australian Government, Department of Foreign Affairs and Trade. Australia-European Union Free Trade Agreement. Available at: http://dfat.gov.au/trade/agreements/aeufta/Pages/aeufta.aspx.

Trade in goods and services	Liberalise trade in goods over a transitional period and reducing barriers to trade in services. Key channels: Positive impact through lowering of tariff lines can lead to price decreases, leaving more disposable income to people, also possible expenditure on health items. Positive impact through improved quality and price of services through competition.	Right to adequate standard of living Right to highest attainable standard of physical and mental health Right to take part in cultural life Right to property Rights of indigenous people Rights of migrants, refugees and asylum seekers	GDP change Aggregate Welfare Effects on skilled versus unskilled labour Water resources Quality of services
Investment provisions and public procurement	FDI can contribute to technology upgrades and more efficient and cleaner production methods using less energy in metallurgy, chemicals, and machinery. Positive impact through foreign capital can give boost to sectors in which this is not possible with the (limited) amounts of domestic capital. Contribute to technological updates and cleaner production methods.	Right to an adequate standard of living Right to property Freedom of expression, association and peaceful assembly, and right to participate in public and political life Rights of indigenous people Rights of migrants, refugees and asylum seekers	Investor protection provisions Right to regulate
Regulatory cooperation	Promoting cooperation between the Parties and respective public or private organisations Positive impact through the cooperation in fields relevant for the improvement of standard of physical and mental health. Positive impact through increasing the standards on social and environmental issues.	Right to an adequate standard of living Right to highest attainable standard of physical and mental health	Right to regulate Cooperation in other fora

Source: Consultant's own work.

The provisions we look at may have a direct or indirect impact on the rights reviewed. The selected human rights result from the screening of the literature, human rights

commitments and actual records in the EU and Australia. As supported in the literature and guidance to HRIAs, priority setting is necessary in terms of those elements of the agreements that should be subject to an assessment, as well as a focus on most vulnerable groups.

6.2.1.1. Transparency and inclusiveness in the negotiation process

In line with the framework described earlier, one of the goals of the stakeholder consultations conducted by DG Trade, is to improve the transparency of trade policy initiatives. As highlighted in the Guidelines and in the academic literature, consultations bolster the **right to participate in the conduct of public affairs**, a human right enshrined in the International Covenant on Civil and Political Rights.

Thus we combine assessing the track record of the EU and Australia in including human rights' commitments and conducting Human Rights Impact Assessments. With regards to the former, this is important since much of the literature identifies that the inclusion of human rights' clauses supports the recognition of human rights norms. At the same time, we place stronger focus on the second element – whether and how Australia and the EU have conducted Human Rights Impact Assessments (HRIAs). The process of conducting HRIAs supports the **right of citizens to take part in the conduct of public affairs**, directly or through freely chosen representatives (ICCPR Art. 25(a)). This is further supported by ICCPR Art.19 (2): **the right to seek, receive and impart information and ideas of all kinds.** Inclusive participation is also highlighted by United Nations Special Rapporteur on the right to food, De Schutter, who states that the "human rights impact assessment should consider the views of the communities directly affected by the trade or investment agreement by ensuring participation in the conduct of the assessment. For this participation to be meaningful, those consulted should be provided with all the available information on the potential impacts, and the assessment should refer explicitly to their concerns and how these concerns could be addressed."[199]

This study feeds into the impact assessment conducted by the Commission and includes an assessment of whether the process conducted is itself participatory, inclusive, and transparent. Conducting HRIAs itself makes negotiation processes more participatory, inclusive, and transparent; and thereby, contributes both to the enjoyment of HRs by individuals and to the fulfilment of HR obligations by governments. The public consultation, designed by the Commission services, addresses both detailed views on the future trade and economic relationship between the European Union and Australia, and raises awareness of the initiative. The online public consultation was conducted by the Directorate General for Trade between the 11 March and 3 June 2016.[200] The wide consultation was targeted at all interested stakeholders via responses to 51 questions, and the results will be published unless stakeholders require anonymity.

In line with Australia's treaty making process, agreements involve a stakeholder consultation process and National Interest Analysis (NIA), which includes a Regulatory Impact Statement.[201] The NIA, which has the function of a scoping document, explains the impact of the proposed treaty action on the national interest and are conducted

[199] A/HRC/19/59/Add.5 para. 45.
[200] DG Trade, n.d. *Online public consultation on the future of EU-Australia and EU-New Zealand trade and economic relations*. Available at: http://trade.ec.europa.eu/consultations/index.cfm?consul_id=195.
[201] Department of Foreign Affairs and Trade. Free Trade Agreements. Available at: http://dfat.gov.au/trade/agreements/Pages/public-consultations.aspx.

before Australia enters into new treaty obligations.[202] The Australian government consults "extensively with the public before a decision is made whether or not to enter into FTA negotiations".[203] The government collects written submissions and arranges meetings with interested stakeholders[204] and the consultation process informs the priorities in the negotiations. Consultations are predominantly directed at identifying opportunities and impediments to increasing trade with partner countries. Such consultations are conducted at least a year prior to concluding the negotiations, and are published on the government's website. The consultations on a potential FTA between Australia and the EU are currently open and as of 5 September 2016, the government had received 36 submissions by various stakeholders, which have been reviewed for the completion of the current study.[205] In the consultations on the EU-Australia FTA, a number of stakeholder submissions urge the Australian government to lead the negotiations in a more transparent and inclusive way, compared to the approach of the government in the TPP negotiations.[206] Stakeholders often point to the EU as an example in the mode of providing a "genuine input into the negotiations"[207] by trade unions, civil society and businesses.

Vis-à-vis previous agreements, one stakeholder consultation describes the consultation process in Australia as "severely limited by the secrecy and lack of transparency in negotiations. Certainly, stakeholders can make their views known to DFAT through processes such as this one, but thereafter they are given very little information on the detail of negotiations. General briefing meetings may be held, but without access to the details of any text being negotiated, such consultation has limited value."[208] Stakeholders also echo the conclusions of a recent report by the Foreign Affairs, Defence and Trade Committee of the Australian Senate titled "Blind agreement: reforming Australia's treaty-making process**".** The report reviews the current treaty-making process in Australia highlighting that Parliament is only to implement treaties once they have been signed by passing implementing legislation, usually applying to changes to tariffs rather than the whole text of the agreement.[209] The report also goes on to shed light on the differences between the involvement of the Australian Parliament and the European Parliament in the process of treaty-making, concluding that MEPs are kept informed throughout the negotiating process and that they have wider access to

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[202] Australian Human Rights Commission. Available at: http://www.humanrights.gov.au/sites/default/files/1.%20Scope%20of%20international%20obligations%20Final_1.pdf.
[203] Department of Foreign Affairs and Trade, FTA negotiations and the public consultations process. Available at: http://dfat.gov.au/trade/agreements/Pages/public-consultations.aspx.
[204] Stakeholders consulted include: "state and territory governments, peak industry bodies, individual companies, including Australian businesses based in potential FTA partner countries, academics, unions, and consumer groups". Ibid.
[205] *Australia-European Union Free Trade Agreement*. Available at: http://dfat.gov.au/trade/agreements/aeufta/submissions/Pages/submissions.aspx.
[206] See ACTU, 2016. Submission on a proposed Australia-EU Free Trade Agreement. Available at: http://dfat.gov.au/trade/agreements/aeufta/submissions/Documents/australian-council-of-trade-unions-eufta-submission.PDF; AFTINET, 2016. Submission to the Department of Foreign Affairs, Defence and Trade on the proposed Australia-EU free trade agreement. Available at: http://dfat.gov.au/trade/agreements/aeufta/submissions/Documents/australian-fair-trade-and-investment-network-limited-eufta-submission.PDF.
[207] ACTU (2016). Submission on a proposed Australia-EU Free Trade Agreement. Available at: http://dfat.gov.au/trade/agreements/aeufta/submissions/Documents/australian-council-of-trade-unions-eufta-submission.PDF.
[208] Ibid at 5.
[209] Foreign Affairs, Defence and Trade Committee (2015). Blind agreement: reforming Australia's treaty-making process**.** Chapter 3 http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Foreign_Affairs_Defence_and_Trade/Treaty-making_process/Report.

documentation on on-going trade negotiations. There is a continuous debate in Australia, not only in relation to the potential negotiations with the EU, but also other agreements, where stakeholders and Parliament do not feel sufficiently involved. Stakeholders in Australia have raised a series of calls for conducting Human Rights Impact Assessments of on-going and future FTAs due to their potential effects both on human rights within Australia but also in third countries, however, the Australian government has not yet taken such steps.[210]

6.2.1.2. Trade in goods and services

The effects of trade in goods and services and the elimination of customs duties may have a positive or negative impact on human rights, depending on the aggregate impact on the economies as well as sectors affected. The liberalization of the markets of the two countries over a transitional period and according to the two liberalization scenarios affect indirectly a number of the rights discussed above.

On one hand, the liberalization of trade in goods in certain sectors can have a positive impact through lowering of tariff lines, which can lead to price decreases. This leaves more disposable income to people, also possible expenditure on health items. Thus the reduction and removal of barriers to trade in goods and services can improve the **right to adequate standard of living**, the **right to highest attainable standard of physical and mental health**, **right to take part in cultural life**, and **right to property.**

Further to the earlier analysis (see Chapter 4), wages and aggregate welfare, the disposable income of the population in Australia and the EU should increase. The increase in trade in goods and services between the two countries will in the long term increase the number of jobs, quality of jobs, wages, household income and the affordability of essential goods and services. The effects of the two liberalization scenarios, under the assumptions of the model, show different impact on shifts of employment across industries, less pronounced in the case of the liberalization scenario.

Another channel through which trade in goods and services provisions can affect human rights, albeit indirectly, is through the liberalization of trade in services. This could lead to improved provision of health services through competition, improving the **right to highest attainable standard of physical and mental health**, while new economic opportunities created by the agreement could lead to strengthening the **right to work** and **right to adequate standard of living**.

Liberalization of trade in goods and services has to take into consideration effects on the most vulnerable groups, where for Australia these are Indigenous peoples, migrants, refugees and asylum seekers. At this stage, prior to opening the negotiations the effect on these groups is indeterminate.

6.2.1.3. Business and Human Rights

In 2011 the UN Human Rights Council endorsed the "Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework", thereafter ("Guiding Principles"), developed by the Special Representative of the Secretary-General on the issue of human rights and transnational corporations

[210] Submission to the Department of Foreign Affairs and Trade on the Trans-Pacific Partnership Agreement on Behalf of the Australian Fair Trade and Investment Network.

and other business enterprises.[211] Guiding Principle 9 reads that "States should maintain adequate domestic policy space to meet their human rights obligations when pursuing business-related policy objectives with other States or business enterprises, for instance through investment treaties or contracts." This Principle is relevant both for the area of public procurement but also in terms of the investment provisions (see below).

The European Charter of Fundamental Rights strengthens the constitutional status of human rights in the EU legal order as well as the role of public purchasing in securing sustainable development.[212] The Directive on public procurement[213] as part of the Europe 2020 Strategy for Smart, Sustainable and Inclusive Growth[214] has a provision allowing "procurers to make better use of public procurement in support of common societal goals such as protection of the environment, higher resource and energy efficiency, combating climate change, promoting innovation, employment and social inclusion and ensuring the best possible conditions for the provision of high quality social services."[215]

The EU also has committed to the objectives of the United Nations Guiding Principles on Business and Human Rights (UNGPs), in the European Commission's 2011 Communication on Corporate Social Responsibility and the EU Strategic Framework on Human Rights and Democracy. Similarly, Australia has aimed to develop its national capacity to implement and promote initiatives on business and human rights, as indicated in the Government's intervention on "The State Duty To Protect: Government experiences and steps taken towards implementing the Guiding Principles and identifying opportunities for implementation".[216]

Due to the level of existing commitments in both the EU and Australia, the likelihood of a negative impact of the agreement on human rights is low. At the same time, efforts by the Parties vis-à-vis the obligations to respect, protect and fulfil human rights and fundamental freedoms could improve cooperation in ensuring policy coherence (Guiding Principle 8) as well as the promotion of these principles multilaterally.

In addition to the issues raised above, the agreement also carries implications for "green public procurement". The ratification process for the Paris Climate Agreement brings opportunities for leadership on the sustainable development agenda stemming from the new procurement directives, particularly those relating to transition to low emission economy. Another prominent realm of cooperation between the EU and Australia on trade and environment issues is the EGA. As discussed in the environmental section, the agreement will have positive effects both in terms of the liberalization of environmental services (e.g. maintenance of green goods) and removal of non-tariff

[211] UNHRC, 2011. Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf.
[212] DIHR-ICAR (2014). Briefing Note: Protecting Human Rights through Government Procurement http://www.humanrights.dk/files/media/dokumenter/business/unwg_8_may_workshop_icar_dihr_procurement_final.pdf.
[213] COM (2011) 896.
[214] COM (2010) 2020.
[215] Explanatory memorandum, COM (2011) 896, p. 2 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0896:FIN:EN:PDF.
[216] Australian Government, 2012. The State Duty To Protect: Government experiences and steps taken towards implementing the Guiding Principles and identifying opportunities for implementation. Available at: https://business-humanrights.org/en/doc-the-state-duty-to-protect-government-experiences-and-steps-take-towards-implementing-the-guiding-principles-and-identifying-opportunities-for-implementation-intervention-by.

barriers (e.g. local content requirements or restrictions on investments).[217] Building on these initiatives will likely have a positive effect on a number of human rights, particularly **right to highest attainable standard of physical and mental health** as well as the **right to clean environment** mentioned earlier.

The studies reviewed (in Appendix 2) highlight possible issues arising from the provisions of the Investment Chapter of agreements providing recourse to Investor-State dispute settlement (ISDS). Investment provisions hold high importance for the fulfilment and enjoyment of human rights, particularly in relation to the International Covenant on Civil and Political Rights (e.g. art. 19 and 25).

In light of the proposed approach by the EU, we draw on the previous chapter on investment in relation to Task 4 (Section 3.3). Building on the description of the differences between the previous system and the latest proposal, we study the possible impact on the realisation of human rights.

As indicated earlier, there has been a concern with questions of regulatory space, including in relation to human rights with regards to both the dispute settlement system as well as the substantive rules of investment. The UN Committee on Economic, Social and Cultural Rights (CESCR) describes the disproportionate protection for the rights of investors in the Investor-State Dispute Settlement as the "most controversial aspect of FTAs".[218] Common criticism against ISDS includes the concern that ISDS undermines the actions of government in protecting human rights, the environment, as well as equitable development.[219] This has been seen as a restriction of a country's right to regulate or causing regulatory chill, precluding the state from fulfilling its obligation to regulate for the aim of protecting human rights. In terms of the substantive provisions, this disproportionate treatment in favour of investors has also been seen in the requirement that investors receive "fair and equitable treatment."[220] The CESCR has noted that the wording of such provisions has allowed permissive interpretation in favour of investors. Another set of concerns include the arbitral process itself including *inter alia* lack of transparency; conflicting awards; participation of judges on an ad hoc basis, which could be in a conflict of interest situation. Australia's recent experience with the Investor State Dispute Settlement provisions in trade and investment agreements clearly highlights some of these concerns (see Section 3.3). [221]

The new provisions, proposed by the EU as part of the TTIP negotiations and the CETA agreement, respond to several the criticisms raised towards the dispute settlement system, featured in previous agreements and is also combined with other aspects of investment provisions. With the EU's new protections, the human rights impact in terms of regulation is likely to be minimal. The chapter on Investment highlighted both the changes to the dispute settlement side (the new ICS), and changes to the substantive rules (clarification of the right to regulate, the meaning of FET, indirect expropriation).

In terms of the impact on human rights, one of the advantages of the new system is that it is tailor-made to the party with whom the EU is negotiating and amendments can

[217] DG Trade, "The Environmental Goods Agreement (EGA): Liberalising trade in environmental goods and services," July 2016. Available at: http://trade.ec.europa.eu/doclib/press/index.cfm?id=1116.
[218] ESCR-Net, 2016. Briefing Note on Trade and Investment. Available at: https://www.escr-net.org/resources/briefing-note-trade-and-investment, at p.5.
[219] Ibid at p. 6.
[220] Ibid at p. 6.
[221] Australian Government Productivity Commission (2015). Annual Report Series: Trade & Assistance Review 2013-14. Available at: http://www.pc.gov.au/research/ongoing/trade-assistance/2013-14/trade-assistance-review-2013-14.pdf.

be made to the number of judges and other key provisions.[222] Article 2 of the EU proposal for the TTIP also clearly safeguards a State's right to regulate in order "to achieve legitimate policy objectives, such as the protection of public health, safety, environment or public morals, social or consumer protection or promotion and protection of cultural diversity."[223] The article further clarifies that the provisions do not prevent the Party to "change the legal and regulatory framework", therefore, bringing greater certainty that states have the right to regulate in order to fulfil their obligations in the protection of human rights and avoid the likelihood of "regulatory chill". Similarly, in the CETA agreement this is covered in Section D, Article 8.9.

The protection of legitimate public welfare objectives is also safeguarded under the expropriation provisions (Annex I of the TTIP proposal and Annex 9-A of the CETA text), where "non-discriminatory measures are designed and applied to protect legitimate public welfare objectives, such as health, safety and the environment, do not constitute indirect expropriations" unless "manifestly excessive".[224] Both the CETA text and the TTIP proposal also address the transparency of the proceedings, by applying the UNCITRAL Transparency Rules[225] (CETA Article 8.36; TTIP Proposal Article 18). This has been seen as an improvement to previous international investment provisions, which do not include such reference.

The Commission's proposal of the Investment Court System as it has been included in the TTIP proposal and the CETA texts marks an improvement towards securing the regulatory space for both parties to the agreement to be able to regulate in the public interest. Depending on the final provisions of an agreement, if similar to the CETA text, this not affect negatively the fulfilment of human rights in the EU and Australia and will have positive impact on **freedom of expression, association and peaceful assembly, and right to participate in public and political life** through increased possibility for monitoring and access to rulings and processes associated with arbitration.

Further to the changes proposed and the existing commitments of both Parties to the UN Guiding Principles on Business and Human Rights, the investment provisions are not likely to have a negative impact on human rights in the EU and Australia. The institutionalization of the ICS system in the agreement with Australia has the potential to stimulate a broader discussion on the inclusion of investment provisions in trade agreements and the form these provisions take.

In light of the proposed provisions in TTIP and CETA and the increasing call of Australian stakeholders for the government to move away from the inclusion of dispute settlement and other provisions in FTAs, the likelihood of provisions protecting the right to regulate is very high and thus has an indirect effect on a range of human rights.

[222] European Commission, 2016. CETA: EU and Canada agree on new approach on investment in trade agreement. Available at: http://europa.eu/rapid/press-release_IP-16-399_en.htm.
[223] European Commission, 2015. Commission draft text TTIP – investment. Article 2.1. Available at: http://trade.ec.europa.eu/doclib/docs/2015/september/tradoc_153807.pdf. European Commission (2016). Comprehensive Economic and Trade Agreement (CETA), Article 8.9. http://trade.ec.europa.eu/doclib/docs/2016/february/tradoc_154329.pdf.
[224] European Commission, 2015. Commission draft text TTIP – investment. Annex I. Available at: http://trade.ec.europa.eu/doclib/docs/2015/september/tradoc_153807.pdf. European Commission (2016). Comprehensive Economic and Trade Agreement (CETA), Annex 8-I. http://trade.ec.europa.eu/doclib/docs/2016/february/tradoc_154329.pdf.
[225] http://www.uncitral.org/uncitral/en/uncitral_texts/arbitration/2014Transparency.html.

6.2.1.4. Regulatory Cooperation

According to the analysis a number of differences have the potential to be addressed in this FTA. This also includes a commitment by both sides to standard harmonisation and regulatory cooperation towards high internationally-recognised common standards.

The potential for regulatory cooperation in order to remove trade-limiting or even prohibiting measures, could as discussed vis-à-vis services, increase the quality of products and the affordability of essential goods and services, therefore improving the right to an **adequate standard of living** and the **right to highest attainable standard of physical and mental health.**

The promotion of cooperation between the Parties and respective public and private organisations can bring positive impact through intensified contact in fields relevant for the improvement of standards of physical and mental health as well as through increasing the standards the Parties support vis-à-vis human rights linked to social and environmental rights.

6.2.2. Potential human rights impacts of the FTA on Australia and the European Union

6.2.2.1. Right to an adequate standard of living

Right to an adequate standard of living is guaranteed under Article 11 of the International Covenant on Economic, Social and Cultural Rights. The Committee on Economic, Social and Cultural Rights has issued several General Comments explaining the components of this right, which includes the **right to adequate housing** (General Comments 4 and 7), **the right to food** (General Comment 12), the **right to water** (General Comment 15) as well as **the right to social security** (General Comment 19). The General Comments elaborate on the criteria, which need to be taken into consideration for this right to be fulfilled. The right to an adequate standard of living is also enshrined in the EU Charter of Fundamental Rights under Article 34. An adequate standard of living has been taken to imply "living above the poverty line of the society concerned".[226]

The **right to water**[227] features as part of the **right to adequate standard of living**. The environmental section of the study assessed that both Australia and the EU are committed to ensuring the preservation of water resources and are signatures of the main multilateral agreements in the area. In terms of the impact of the agreement on the **right to water,** based on the earlier assessment, there is no impact. The expected impact on the environment is minimal as it is mitigated by the fact that the FTA favours relatively less energy- and emission-intensive sectors leading to a reallocation of production towards cleaner sectors in the both the EU and Australia.

Freedom of expression, association and peaceful assembly, and right to participate in public and political life

In the summary presented above on the potential provisions in the agreement and associated measures (such as the transparency and inclusiveness of the agreement),

[226] Icelandic Human Rights Centre. The Right to an Adequate Standard of Living. Available at: http://www.humanrights.is/en/human-rights-education-project/human-rights-concepts-ideas-and-fora/substantive-human-rights/the-right-to-an-adequate-standard-of-living. This has been defined by the World Bank as: "The expenditure necessary to buy a minimum standard of nutrition and other basic necessities and a further amount that varies from country to country, reflecting the cost of participating in the everyday life of society." Ibid.

[227] The water quality within the EU is addressed and protected in Drinking Water Directive (Council Directive 98/83/EC of 3 November 1998).

the gathered evidence suggests that the potential FTA between the EU and Australia will not negatively impact the **political and civil rights** of the populations.

The review highlighted that the stakeholder consultation processes in EU and Australia though similar are reflected differently in the ensuing treaty-making process. In the case of Australia, stakeholders have voiced concerns that the prospective negotiations with the EU will follow similar pattern to those with the TPP partners and therefore, a detailed assessment on human rights impacts will not be concluded and Parliament will remain responsible to vote only on the implementing legislation. This, however, is a domestic issue and the negotiations are unlikely to bring changes in the legislation at the current time. Australian stakeholders also highlight the example of the EU as a system, providing more opportunities for stakeholder engagement during the negotiations.

The consultation of stakeholders at different stages of the negotiation process in the EU system provides an opportunity for civil society organisations and interested parties to raise concerns timeously, so that they can be reflected in the negotiations.

At the current stage of the proceedings, the study cannot comment on the opportunities for adopting transparency measures and the publication of documentation, often raised by stakeholders in both Parties.

6.2.2.2. Right to highest attainable standard of physical and mental health

The **right to the highest standard of physical and mental health** is protected by ICESCR under Article 12. It is covered under Article 3 of the EU Charter of Fundamental Rights, which protects the physical and mental integrity and under Article 35 which safeguards the right to adequate access to health care. As discussed earlier, in the current study we assessed the potential positive and negative effects on health through the following channels:

- liberalization of trade in goods could lead to cheaper food imports and greater expenditure on health items;
- liberalization of trade in services could lead to improved provision of health services through competition;
- new economic opportunities created by the agreement could lead to strengthening the right to work and right to adequate standard of living;
- cooperation on environmental issues to better health.

In the study of the potential impact on health and health-related issues we take into consideration the availability of previous methodologies and indicators: UN Special Rapporteur on the Right to Health has developed a series of indicators on access to health depending on the availability of data,[228] Also Australia, New Zealand and the EU Member States are all parties to the International Covenant on Social, Economic and Cultural Rights (ICSECR) and CEDAW and thus have a duty to protect these rights.

Based on the CGE modelling and the results derived from the economic, social and environmental impacts, at this stage provisions on trade in goods and services, public procurement and investment, as well as regulatory cooperation, are likely to enhance the **right to health** and the **right to the highest standard of physical and mental**

[228] Hunt, P and MacNaughton, G. (2006). Impact Assessments, Poverty and Human Rights: A case study using the right to the highest attainable standard of health. UNESCO, New York.

health. Both the EU and Australia have committed to not reduce standards, which may affect health and the FTA can only improve cooperation in the area.

6.2.2.3. Rights of vulnerable groups: indigenous peoples; migrants, refugees and asylum seekers

The rights of indigenous peoples are protected by the UN Declaration on the Rights of Indigenous Peoples, the International Labour Convention (ILO) on the Rights of Indigenous and Tribal Peoples in Independent Countries, No.169 and by the International Labour Convention (ILO) on the Rights of Indigenous, Tribal and Semi-Tribal Populations in Independent Countries, No. 107. The EU has two new programmes entitled "Global public goods and challenges" (GPGC) and "Support for civil society organizations and local authorities" prioritizing the fight against poverty and supporting inclusive growth. In both documents, EU committed itself to maintain indigenous peoples as a focus of attention given their disadvantage in all societies. The rights of migrants, refugees and asylum seekers are protected by the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families. Within the EU, the rights of migrants, refugees and asylum seekers are protected under the right to asylum outlined in Article 18 of the EU Charter of Fundamental Rights.

The rights of migrants, refugees and asylum seekers are not likely to be affected by the potential agreement. Vis-à-vis indigenous people, previous trade agreements concluded by Australia include reference to the Rights of Indigenous people and the agreement between Australia and the EU is not likely to impact negatively the treatment of Indigenous people in the domestic environment.

6.3. Conclusions: impact on human rights

In this section, we summarize the link between the potential inclusion of certain clauses and the specific human rights indicated above. Further to the analysis, we conclude that there is a likely positive impact in the long term through the conclusion of the trade agreement. The human rights impact will be indirect channelled through increases in the number of jobs, quality of jobs, wages, household income and the affordability of essential goods and services. It will also be positively affected through strengthened regulatory cooperation as well as stimulating inclusiveness and transparency both in the application of investment provisions but also the general conduct of the negotiations.

In Table 47 we combine the results for both liberalization scenarios since the difference in impact will mostly result through increased welfare and thus the fulfilment of the **Right to adequate standard of living.** This is quantified and detailed in the Social chapter (4.1).

Table 47: Analysis of trade measures and potential impact

	Human rights that may be affected	Likelihood of direct vs. indirect impact	Likelihood of major vs. minor impact	Magnitude of expected impact	Positive, neutral, or negative impact? EU	Positive, neutral, or negative impact? Australia
Transparency in the negotiations	Freedom of expression, association and peaceful	Direct	Likely	Major impact	Neutral to positive	Neutral

	assembly, and right to participate in public and political life					
Trade in Goods and Services	Right to adequate standard of living Right to highest attainable standard of physical and mental health	Indirect	Likely	Minor impact	Positive vis-à-vis trade in goods in the long term, but possible negative effect from liberalization in trade in goods for specific sensitive sectors; Positive with regards to trade in services	Positive vis-à-vis trade in goods in the long term, but possible negative effect from liberalization in trade in goods for vulnerable groups and groups in specific sensitive sectors Positive with regards to trade in services
Investment provisions	Right to an adequate standard of living Freedom of expression, association and peaceful assembly, and right to participate in public and political life	Indirect	Likely	Minor impact	Positive	Positive
Regulatory cooperation	Right to an adequate standard of living Right to highest attainable standard of physical and mental health	Indirect	Likely	Minor impact	Positive	Positive

The findings of our analysis point to a more likely positive than negative impacts in terms of human rights. This conclusion is supported by input received from stakeholders

in Australia, where submissions to ongoing stakeholder consultations point to the positive impact of the potential FTA on the access and enjoyment of specific rights.

Appendix 1

Table 48: International conventions

Specific Human Rights	Convention
Right to a fair hearing	ICCPR, Article 14
Right to privacy	ICCPR, Article 17
Freedom of expression, association and peaceful assembly, and right to participate in public and political life	ICCPR, Article 19: right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds ICCPR, Article 22: right to freedom of association ILO Convention No.87: Freedom of Association and Protection of the Right to Organise Convention ILO Convention No.98: Right to Organise and Collective Bargaining Convention
Right to an adequate standard of living	International Covenant on Economic, Social and Cultural Rights (ICESCR), Article 11
Right to highest attainable standard of physical and mental health	ICESCR, Article 12
Right to take part in cultural life	ICESCR, Article 15a
Right to property	Universal Declaration of Human Rights, Article 17 International Convention on the Elimination of All Forms of Racial Discrimination, Article 5
Indigenous peoples	UN Declaration on the Rights of Indigenous Peoples International Labour Convention (ILO) on the Rights of Indigenous and Tribal Peoples in Independent Countries, No. 169 International Labour Convention (ILO) on the Rights of Indigenous, Tribal and Semi-Tribal Populations in Independent Countries, No. 107
Migrants, refugees and asylum seekers	International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families

Appendix 2

Table 49: Overview of studies on third-country effects

Study	Methodology and	Scope	Conclusions & recommendations

	Assumptions (if applicable)		
Morgan, W. et al. (2010). *Human rights and trade in the Pacific*[229] On Pacific Island countries see also: Institute for International Trade (University of Adelaide) (2008). *Research Study on the Benefits, Challenges and Ways Forward for PACER Plus*[230] UNDP, WHO and OHCHR (2014) *Pacific trade and human rights.*	Desk research, extensive review of the existing literature relating to HRIAs and trade agreements in the Pacific, semiformal interviews with experts on HRIA and stakeholders in the Pacific island countries, questionnaire was completed by a number of research participants.	Only Pacific Islands countries; Screening resulted in identification of a range of HR that could be impacted: the **right to an adequate standard of living**, the **right to employment**, the **right to food**, the **right to health**, and the **right to development**. Authors of study recommend a focus on one of these rights in a future HRIA (p.14 outlines a number of criteria). According to the criteria, recommendation is placed on the right to health. Previous HRIAs[231] cited have focussed on intellectual property rules and access to medicine, and on agricultural trade liberalization and the right to food (rights closely interrelated with the right to health).	Recommended methodology for further HRIAs and potential scope for an HRIA for PACER Plus (with a focus on the **right to health**): Channels for impact vis-à-vis trade in goods: + Cheaper imports contribute to human health and cheaper food imports allowing greater expenditure on health items; - Competition from AUS and NZ produce undermining local food production; impacts for women's status, role, and livelihoods as main food producers; Availability of cheaper, nutritionally inferior, imports adding to NCD burden; Poor services through govt. revenue losses; Increase in availability of tobacco and alcohol; More intense advertising; Increases in smoking and increase in alcohol abuse, with associated health implications. Trade in services: + Improved services through competition. - Two-tiered provision of health services & gender implications; price increases; Labour mobility: + Increase in remittances and skills sharing - 'Drain' of Pacific workers; IPR: + Protection of 'traditional knowledge' in Pacific; - Decrease of availability of medicine; loss of rights to use traditional medicine.
Greenleaf, G. (2016). *The TPP & Other*	Review of existing and on-going	Considers data protection/data privacy in TPP,	Comments on the possibility for stringent rules under TPP to be adopted under other agreements.

[229] Morgan, W. Legge, D. Rowland, C. Sami, R. 2010. *Human rights and trade in the Pacific: A scoping study on designing a Human Rights Impact Assessment for PACER-Plus*, Working Paper # 1, Australian Council for International Development – Institute for Human Security.
[230] Institute for International Trade (University of Adelaide) (2008) *Research Study on the Benefits, Challenges and Ways Forward for PACER Plus – Final Report*. June 2008. Institute for International Trade, Adelaide.
[231] Hunt, P and MacNaughton, G. 2006. Impact Assessments, Poverty and Human Rights: A case study using the right to the highest attainable standard of health. UNESCO, New York

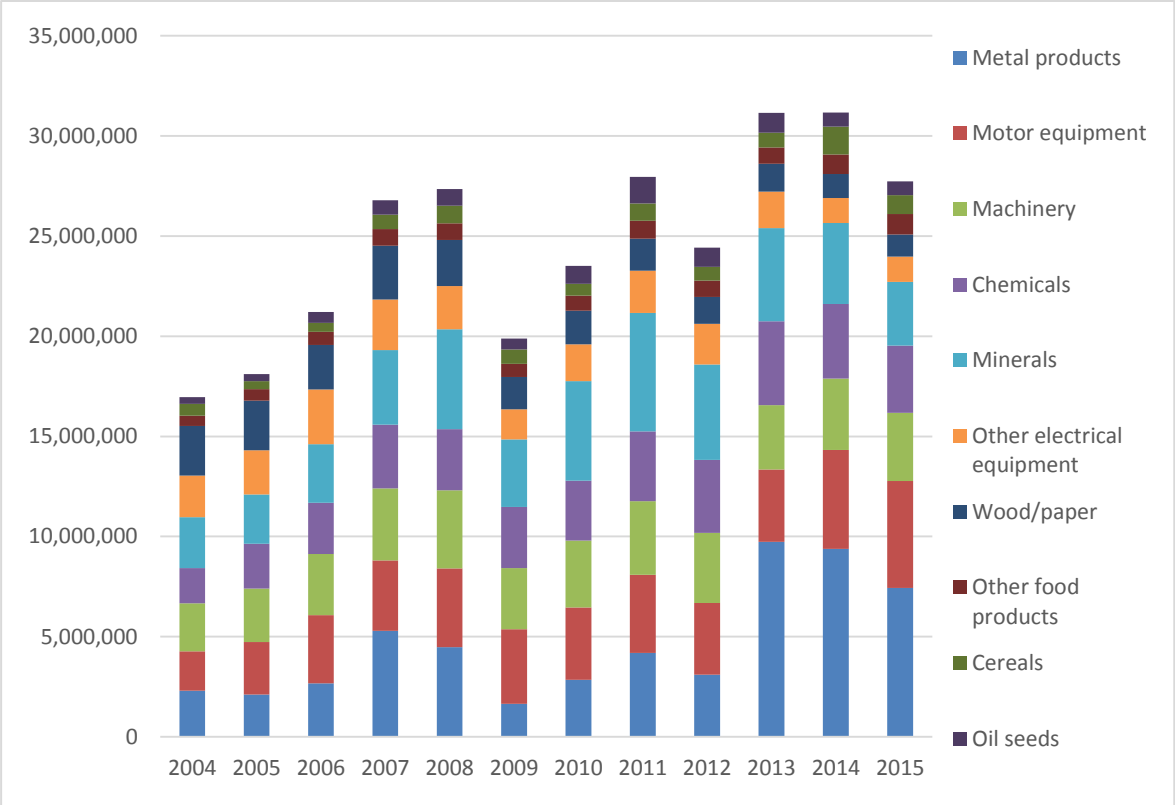
Free Trade Agreements: Faustian Bargains for Privacy?[232]	agreements; the effectof FTAson data protection/ data privacy prior to 2015's Trans-Pacific Partnership agreement is first considered, then the TPP's effect is analysed in some detail, followed by consideration of future FTAs still at the negotiation stage	AANZFTA, RCEP, TiSA and PACER.	Vis-à-vis TPP, it identifies potential issues on data protection due to: (i) lack of substantial requirements to protect privacy; (ii) prohibitions on data export limitations or data localisation requirements can only be overcome by a cumbersome 'four step test' of justification; (ii) the risk of enforcement proceedings between states or under ISDS provisions.
Nathan Associates, (2007). *Pacific Regional Trade and Economic Cooperation Joint* *Baseline and Gap Analysis.*[233]	Consists of two parts: joint study or baseline analysis, and gap analysis. Four steps: data collection and analysis (available data resources); literature review; legal analysis of trade agreements; and stakeholder identification and consultation. Holds a series of assumption on: Absence of labour mobility; impact of investment chapter; 'negative list' approach; provisions on ROO, quarantine, IPR, safeguards and trade remedies.	Addresses social, cultural and environmental concerns associated with liberalization (p.55). No explicit reference to human rights but a discussion of indigenous rights and land tenure; gender; environmental impacts and social control.	The study calls for systems of management of communal land, with high importance to indigenous populations in Pacific Island Countries. It identifies that women are often excluded from growth industries and may suffer disproportionately from sector displacement as a result of liberalization. The study also allows for the possibility for governments to lower their environmental protection standards to encourage investment.

[232] Greenleaf, G. (2016). The TPP & Other Free Trade Agreements: Faustian Bargains for Privacy? (February 14, 2016). UNSW Law Research Paper No. 2016-08. Available at SSRN: http://ssrn.com/abstract=2732386 or http://dx.doi.org/10.2139/ssrn.2732386.
[233] Nathan Associates, 2007. "Pacific Regional Trade and Economic Cooperation Joint Baseline and Gap Analysis", Report to the Pacific Islands Forum Secretariat. http://www.forumsec.org/resources/uploads/attachments/documents/Pacific%20Regional%20Trade%20and%20Economic%20Cooperation_FINAL%20REPORT_December%202007.pdf,

PIIE (2016) 16-4 *Assessing the Trans-Pacific Partnership, Volume 2: Innovations in Trading Rules.*	Different methodologies across sections; review of TPP provisions and comparative approach to existing WTO rules and similar agreements.	A range of issues without explicit reference to human rights. Particular relevance of data exclusivity and data protection –public health and access to essential medicine. Labour rights also subject to a case study.	The analysis concludes that TPP retains 'important safeguards to ensure access to life-saving medicines, especially in poor countries' (p.26). Benefits of TPP for labour rights: upgraded labour protections such as enforcement of ILO labour rights in EPZs. Many EPZs concentrate in labour-intensive assembly production and have long been scrutinized for working conditions and labour compliance issues. The TPP also commits members to discourage imports of goods produced by forced labour through "initiatives considered appropriate." p.42

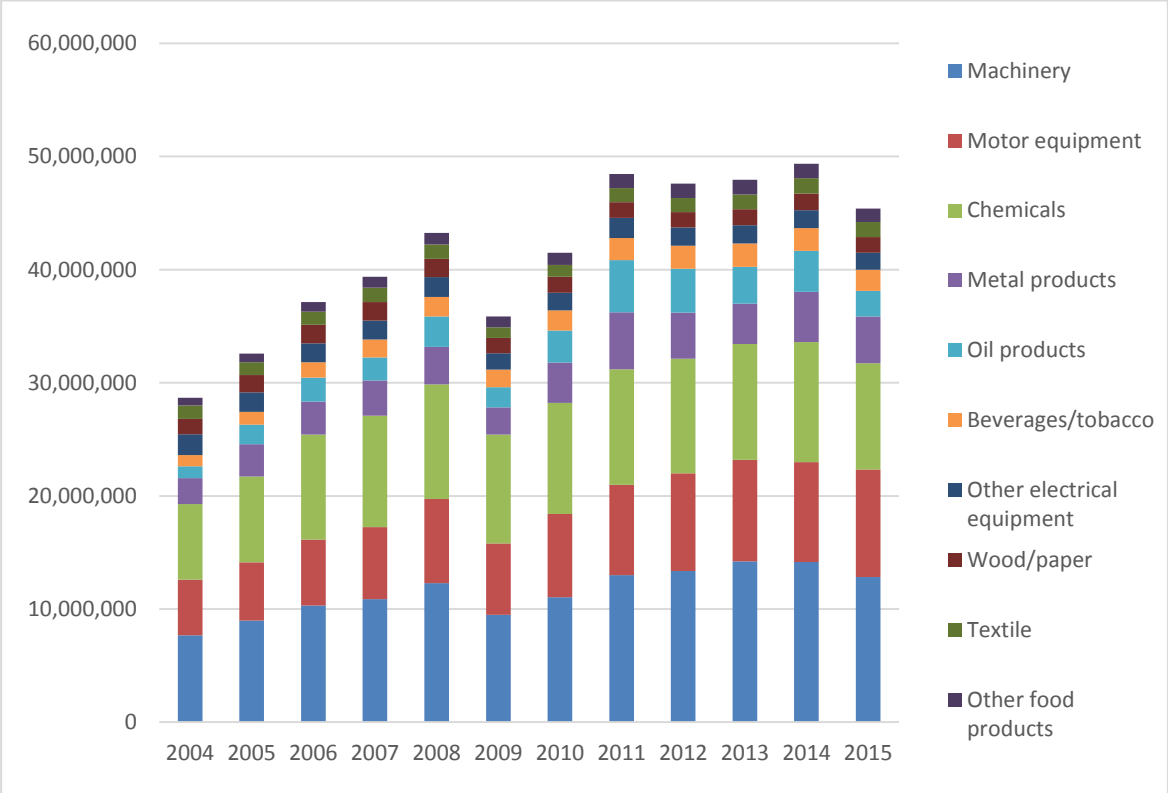
ANNEX 1: OVERVIEW OF EU-CANADA AND AUSTRALIA-USA TRADE IN GOODS FLOWS

Figure 45: Top 10 EU-Canada sector imports of goods, 2004-2015 (thousand Euros)[234]



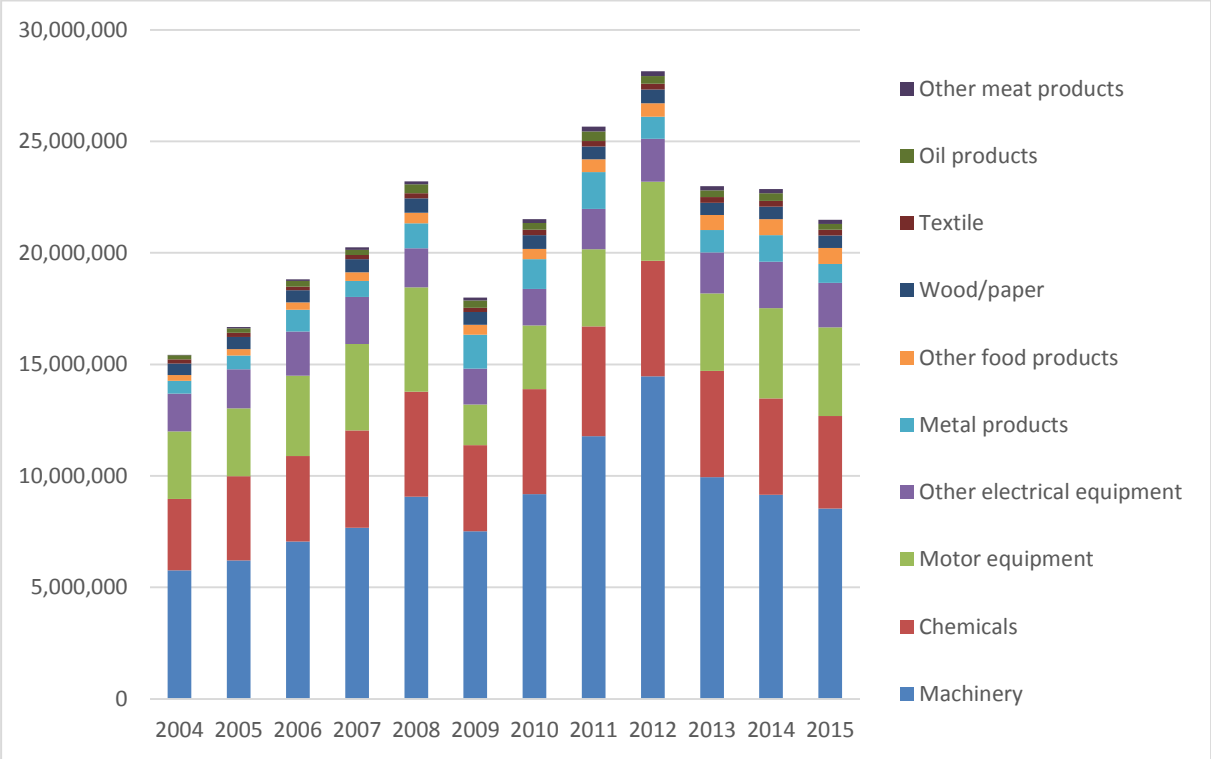
[234] UN Comtrade, own calculation on the basis of the sectoral aggregation used in the CGE model.

Figure 46: Top 10 Canada-EU sector imports of goods, 2004-2015 (thousand Euros)[235]



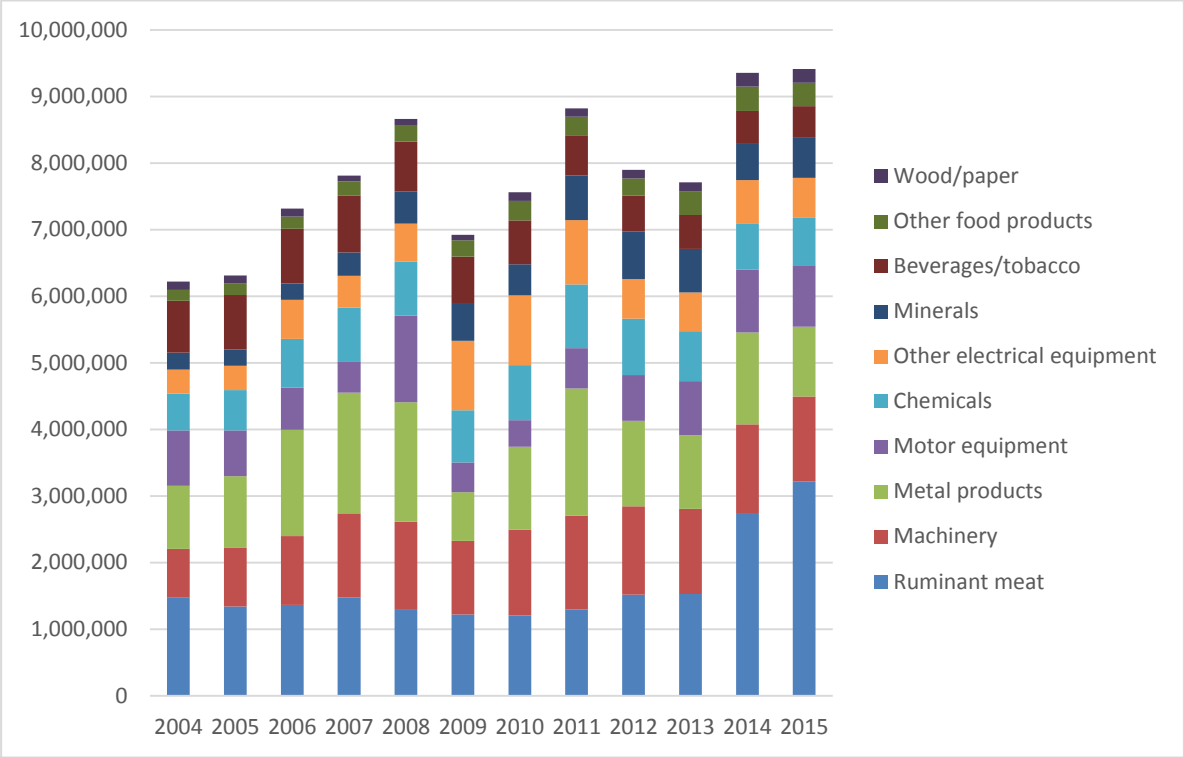
[235] UN Comtrade, own calculation on the basis of the sectoral aggregation used in the CGE model.

Figure 47: Top 10 Australia-USA sector imports of goods, 2004-2015 (thousand Euros)[236]



[236] UN Comtrade, own calculation on the basis of the sectoral aggregation used in the CGE model.

Figure 48: Top 10 USA-Australia sector imports of goods, 2004-2015 (thousand Euros)[237]



[237] UN Comtrade, own calculation on the basis of the sectoral aggregation used in the CGE model.

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1. DESCRIPTIVE ACCOUNT OF THE EU-NEW ZEALAND TRADE AND INVESTMENT FLOWS AND BARRIERS TO TRADE (TASK 1)

1.1. Introduction

This chapter provides a comprehensive overview and analysis of the EU-New Zealand trade in goods, services and investment flows. It focuses on the evolution of trade and investment flows from 2004 to 2015 at a detailed sectoral level. In addition, it outlines the trade and investment relation between the EU and Canada as a reference country. Canada has been selected as reference country as it is comparable with New Zealand with regard to the analysis of their role as trading partner of the EU.

It also provides a comparison of these trade and investment relations in light of the partners' parallel Free Trade Agreements (FTAs) with third countries. Accordingly, this chapter will also provide a brief overview of the trade and investment flows of New Zealand with the USA as a selected reference country. The USA was also selected as a result of its importance as a trading partner and as it is comparable to the other trading partners analysed. The descriptive analyses of EU-NZ trade and investment patterns are followed by a streamlined summary of major trends in the EU's trade in goods and services relationships and investment flows with New Zealand. The final sections of this chapter provide an overview and analysis of the most important tariff and non-tariff barriers to trade and investment in New Zealand.

1.2. Overview of EU's Trade in Goods with New Zealand and Other Selected Partners

In 2015 total trade between the EU and New Zealand was worth €8.1 billion (rank 50 in total EU trade volumes). The EU's trade surplus with New Zealand amounted to €1.1 billion. Total EU imports from New Zealand amounted to €3.5 billion in 2015. Agricultural goods and commodities are the major sources of EU imports from New Zealand. Ruminant meat and vegetable/fruit comprised the largest parts of imports (29% and 14% respectively), followed by beverages/tobacco imports. Total EU exports to New Zealand amounted to €4.6 billion in 2015. The large majority of New Zealand's imports from the EU are composed of motor equipment, machinery and chemicals sector imports.

1.2.1. Diversification patterns

Figure 1 allows for a first glance at trade diversification patterns. The numbers represent concentration ratios as calculated by the standard Hirschman Index. The Hirschman Index is a widely used measure of trade concentration. It is the index that would result if a country's export receipts were divided evenly among different products. Similar to alternative measures of concentration, the explanatory power of the Hirschman-Index is limited when detailed information is needed to derive sector-specific policy recommendations. However, the measure provides a first indication about the concentration of exports (and imports) on a range of export categories and a trading countries' comparative advantages respectively. It can be written as follows:

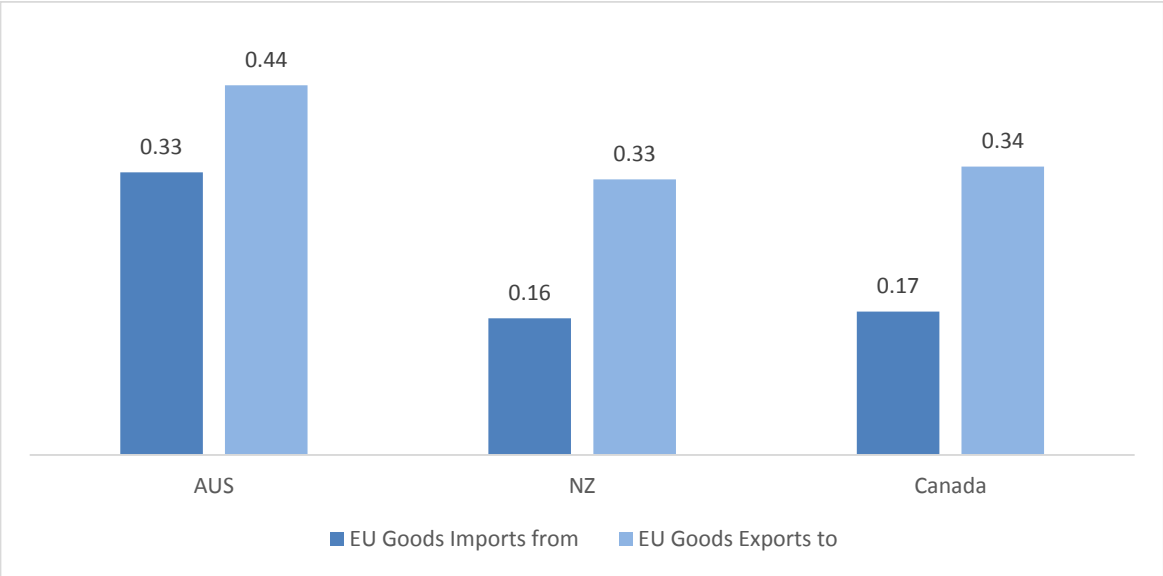
$$H_1 = \sqrt{\sum_{i=1}^{N} \left[\frac{x_i}{X}\right]^2},$$

where x_i is the export value of a specific commodity i, X the country's total export. A higher H_1 indicates greater concentration of exports/imports on a few commodities.

EU trade with New Zealand shows patterns similar to EU-AUS trade, although both exports and imports are less concentrated compared to Australia. For EU-NZ trade, trade diversion is by and large similar to that of EU-Canada trade. However, while the EU's import

composition for imports from Canada is fairly different from the composition of imports from New Zealand, the composition of EU exports to both regions is by and large evenly distributed owing to the EU's comparative advantages in chemicals, machinery equipment and motor vehicles. EU exports to New Zealand are concentrated on motor vehicles (29%), machinery equipment (27%) and chemicals (17%). The EU's imports from New Zealand show a comparatively high share of ruminant meat (29%), but relatively low shares for those sectors immediately following ruminant meat, i.e., vegetables and fruit (14%), beverages/tobacco (10%), chemicals (7%) and machinery equipment (7%).

Figure 1: Diversification patterns for EU trade flows with Australia, New Zealand and Canada (Hirschman Index)[1]



1.2.2. Overview of New Zealand's public procurement market

The final report also provides a detailed overview of the public procurement market of New Zealand. In 2013, general government procurement accounted for a share of total government expenditures of 36.3% in New Zealand. This figure is above the OECD countries' unweighted average of 29.1%, illustrating the relative potential of New Zealand's public procurement market for foreign companies. General government procurement accounted for 14.6% of Gross Domestic Product (GDP) in New Zealand in 2013, which is above average of the OECD countries unweighted average of 13%.[2]

[1] Own calculations.
[2] OECD, 2015. Government at a Glance 2015. Available at: http://www.oecd-ilibrary.org/docserver/download/4215081ec042.pdf?expires=1472641756&id=id&accname=guest&checksum=112EE851970438AE8B49EC2DB757B05D.

1.2.3. Overview of evolution of trade flows

Concerning the evolution of trade flows over time, Table 1 provides a short overview of selected indicators for all goods traded between the EU and New Zealand from 2004 to 2015.

The data is provided for EU-New Zealand overall trade in goods in Table 1. As concerns New Zealand, the EU shows consistent trade surpluses from 2011 onwards. New Zealand accounted for 0.2% of the EU's total imports (similar to Bosnia and Herzegovina) and 0.3% of total exports leaving the EU in 2015 (similar to Iraq).

Table 1: EU-New Zealand Overall Trade in Goods

Indicators	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
EU trade balance with New Zealand (million Euro)	259	141	-189	-140	-92	-403	-46	264	586	1,051	1,102	1,124
EU exports to New Zealand (million Euro)	3,034	3,106	2,800	2,897	2,913	2,211	2,728	3,473	3,684	4,109	4,493	4,617
EU imports from New Zealand (million Euro)	2,775	2,964	2,988	3,037	3,005	2,615	2,774	3,209	3,098	3,058	3,391	3,492
EU imports from New Zealand as share of total EU imports (%)	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
EU exports to New Zealand as share of total EU exports (%)	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3

1.3. Analysis of evolution of trade flows on the sectoral level

Furthermore, the detailed trade in goods relationship between the EU and Australia, New Zealand and Canada is presented at the sectoral level. The analysis lays a focus on the top 10 import sectors in 2015, and their development from 2004 to 2015. Figures are provided for both imports by the EU from partner countries and imports by partner countries from the EU.

1.3.1. Canada

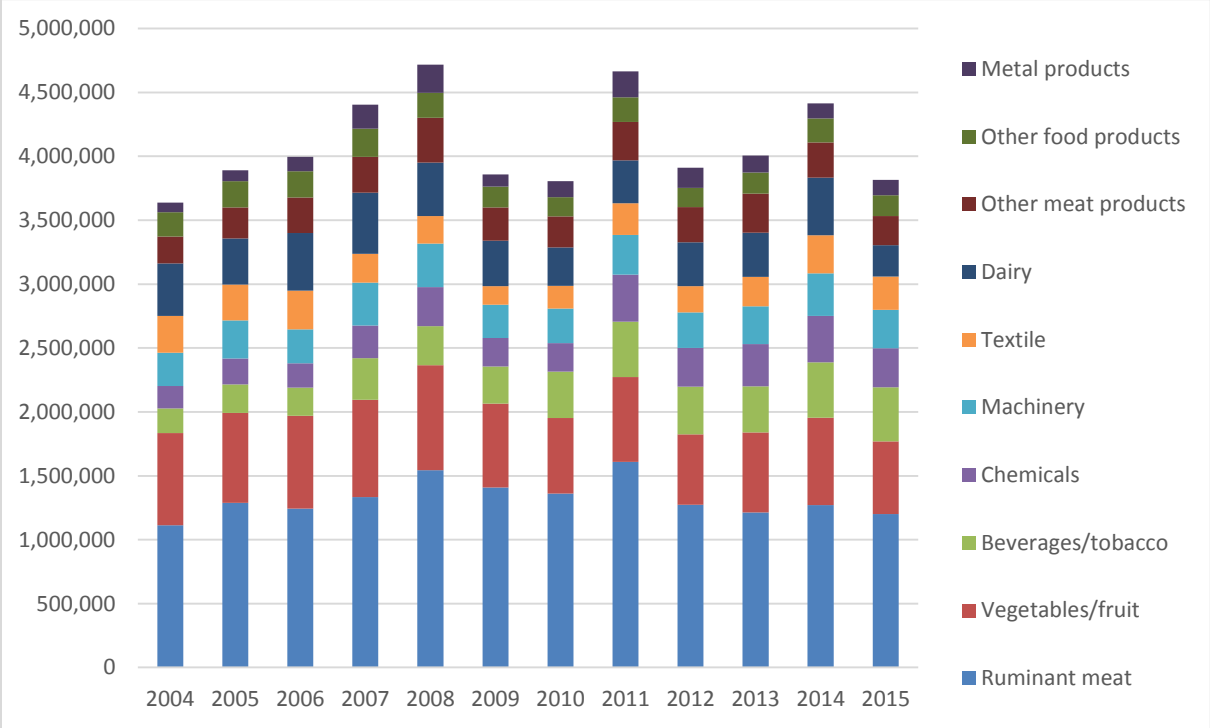
In order to allow for a comparison of EU trade flows with third countries, we start with a brief sketch on trade in goods relations of the EU with Canada. EU imports from Canada have increased since 2004 up to 2015, but decreased during the world-wide financial and economic crisis and have been relatively stable since 2011. The composition of EU imports from Canada changed relatively significantly after 2011. Between 2011 and 2015, EU imports of metal products, motor equipment, other food products and cereals increased by 140%, 49%, 27% and 38% respectively, while imports of minerals, other electrical equipment, wood/paper products and oils seed decreased by 33%, 34%, 18% and 37% respectively. Canada's imports from the EU have overall increased since 2004, but remained rather steady after 2011. The sectoral composition of exports has remained relatively stable since 2011. As of 2015, machinery, motor equipment and chemicals

account for the largest parts of overall imports. Between 2011 and 2015, EU exports of motor equipment increased by 19% and exports of textiles products by 7% respectively. In the same period, EU exports of metal products, oil products and other electrical equipment decreased by 18%, 51% and 14% respectively.[3]

1.3.2. New Zealand

As concerns New Zealand, the value of total EU top 10 imports remained almost steady from 2004 to 2015. Concerning the evolution of the sectoral shares of imports over time, the sectoral composition of New Zealand's exports to the EU has remained at fairly constant levels. Ruminant meat and vegetable/fruit comprised the largest shares of EU imports from New Zealand, followed by beverages/tobacco. Between 2011 and 2015, EU imports of ruminant meat, dairy products, and metal products decreased by 25%, 27%. 42% respectively. EU imports of textiles from New Zealand increased by 5% after 2011 (Figure 2).

Figure 2: Top 10 EU-New Zealand sector imports of goods, 2004-2015 (thousand Euros)[4]

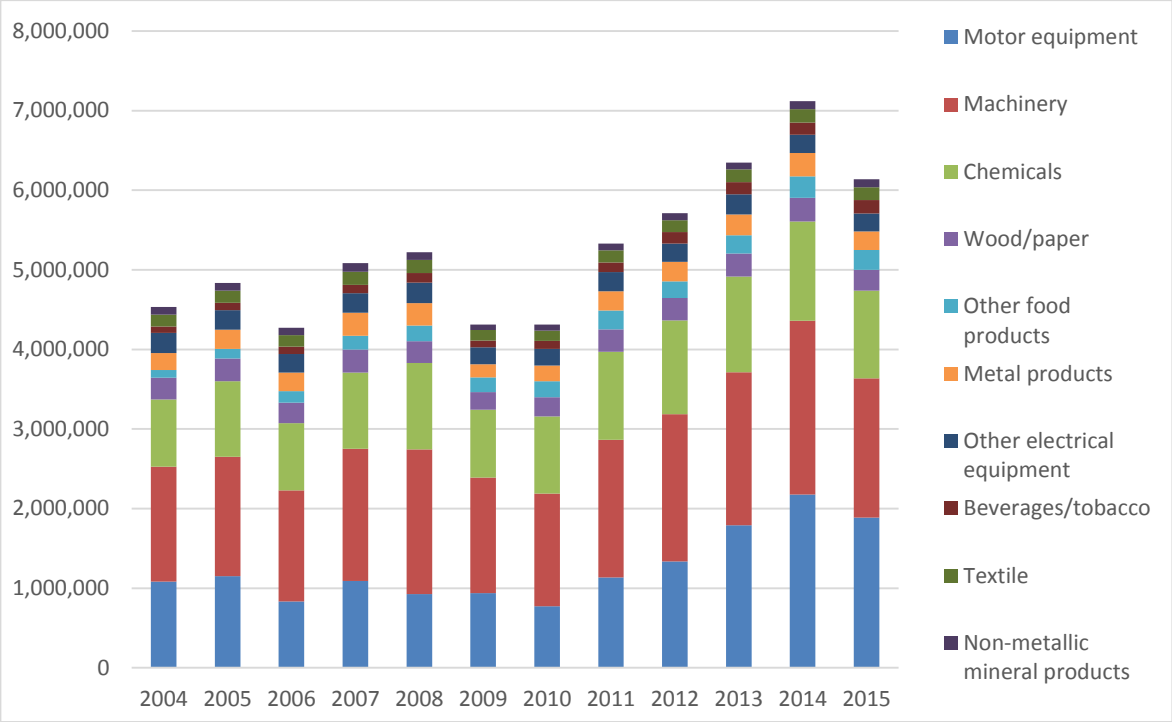


EU exports to New Zealand almost continuously increased since 2004, but dropped by 14% from 2014 to 2015 (Figure 3). Similar to the EU's exports to Australia, motor equipment, machinery and chemicals sectors constitute the largest shares in top 10 exports to New Zealand. The numbers indicate that New Zealand is an export destination for high value-added products assembled in the EU. Sectors that are generally seen as lower value-added industries, i.e. textiles, beverages and tobacco and other food products, contribute relatively low volumes and value to the EU's exports to New Zealand. Between 2011 and 2015 EU exports of motor equipment, beverages/tobacco and non-metallic minerals

[3] Corresponding figures with additional detail on EU-Canada, Australia-USA and New Zealand-USA trade in goods flows are provided in annex 1.
[4] UN Comtrade, own calculation on the basis of the sectoral aggregation used in the CGE model. In the case of the aggregated dairy sector, data only represents the value of the individual "MIL" GTAP sector, as "RMK" GTAP sector data was unavailable.

increased by 66%, 40% and 24% respectively, while EU export volumes of all other top 10 product categories remained rather stable.

Figure 3: Top 10 New Zealand-EU sector imports of goods, 2004-2015 (thousand Euros)[5]



This picture has to be contrasted with the top ten sector trade between New Zealand and the USA (Figure 44 and Figure 45 in Annex 1). New Zealand's imports from the US have increased by 65% from 2004 to 2015. The sectoral composition of exports has remained relatively stable over time. Motor equipment and machinery imports have been the most important export categories for the US. In addition, the chemicals sector accounted for a large part of New Zealand's imports from the US. For the period 2011 and 2015, most import categories show significant growth rates. At the same time, imports of other electrical equipment and metal products decreased by 15% and 5% respectively. The USA's imports from New Zealand have increased by 45% from 2004 to 2015. The sectoral composition has remained relatively stable over time. Ruminant meat as well as dairy products account for large parts of the EU overall imports from New Zealand. For the US, New Zealand's machinery equipment sector is an important source of imports. Between 2011 and 2015 total US imports from New Zealand grew by 34%.

1.3.3. EU-NZ trade in 2015

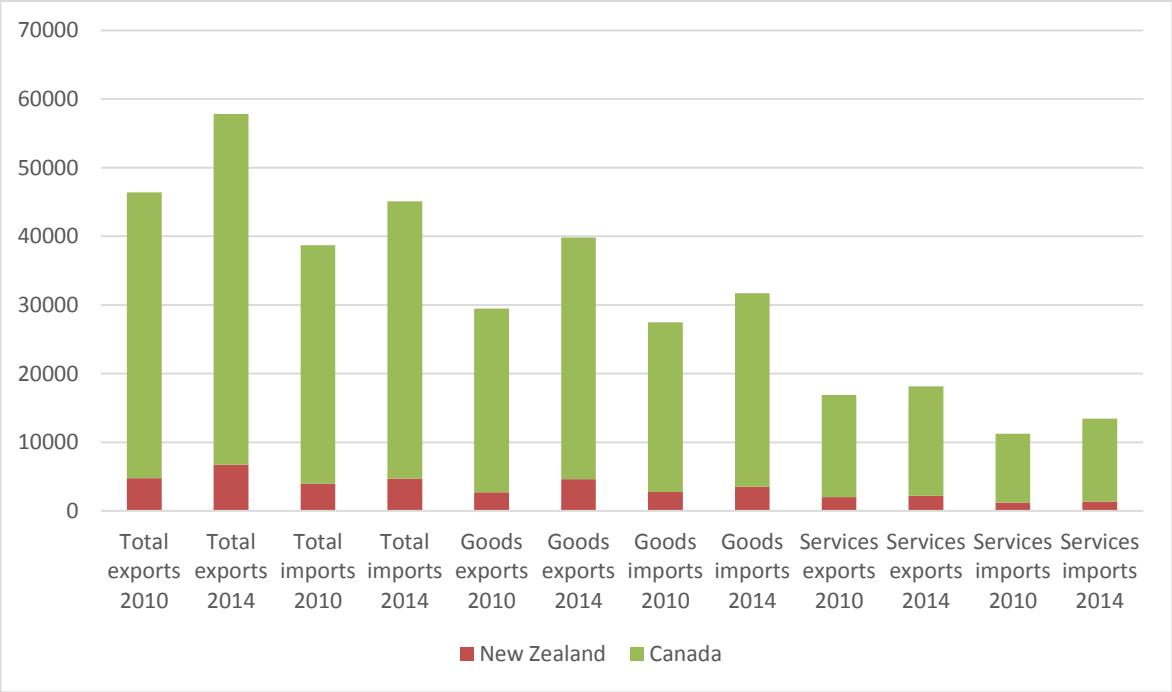
Finally, in addition to the sectoral trade flows analysed above, we also provide an overview of EU-New Zealand trade at the more detailed product group level in 2015. In 2015, the EU's major import product group was by and large sheepmeat (with a value of €969 million), followed by wine (€379 million) and fresh fruit (€296 million).[6] The most imported product group by New Zealand from the EU were cars (with a value of €769 million), followed by aircraft, spacecraft (including satellites) and suborbital and spacecraft launch vehicles (€365 million) and medicaments (€248 million).

[5] UN Comtrade, own calculation on the basis of the sectoral aggregation used in the CGE model.
[6] Grape must other than that of HS 4 heading 2009.

1.4. Overview of EU's Trade in Services with New Zealand and Canada

The following section provides an overview of total EU trade in services with New Zealand and Canada for data available since 2010. The EU is one of the world's major services trade exporters. The EU's current comparative advantage in trading services is reflected by volume of services trade vis-à-vis Canada and New Zealand. On the other hand, EU services imports from these countries remained rather steady.

Figure 4: Comparison of EU total goods and services trade flows with New Zealand and Canada, 2010 and 2014 (million euros)



In 2010, EU services exports accounted for 36% of total exports to Canada (31% in 2015) and 43% of total exports to New Zealand (33% in 2014). As concerns EU imports in 2010, imports of services constituted 29% of total imports from Canada (30% in 2015) and 30% of total imports from New Zealand (28% in 2014).

Figure 5: EU trade balances with New Zealand and Canada, 2014 (million euros)[7]

In 2014 (the year for which data are consistently available for all countries), the EU's trade surplus in services amounted to €5.1 billion for Canada and €0.9 billion for New Zealand. In the case of Canada data is available for 2015; the services trade balance was €3.8 billion in 2015. Figure 5 shows EU trade balances vis-à-vis these countries, illustrating the relative significance of services trade for the total trade balances of the EU.

Tables 2-8 provide a detailed overview of the EU's services exports to these countries, the EU's services imports from these countries as well as a detailed overview of the services trade balances from 2010 to 2015.

Table 2: EU total international services trade credit (exports) with selected partners (BPM6, million euros)[8]

Partner	2010	2011	2012	2013	2014	2015
Canada	14,848.4	15,687.0	17,414.2	17,664.0	16,480.7	15,914.7
New Zealand	2,041.1	2,133.9	2,435.0	2,234.3	2,214.0	n/a

[7] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database. For Canada, the data provided is from 2015.
[8] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.

Table 3: EU total international services trade debit (imports) with selected partners (BPM6, million euros)[9]

Partner	2010	2011	2012	2013	2014	2015
Canada	10,026.7	10,386.0	11,642.3	11,659.4	11,390	12,110.7
New Zealand	1,204.4	1,288.5	1,608.9	1,376.7	1,347.8	n/a

Table 4: EU total international services trade balance with selected partners (BPM6, million euros)[10]

Partner	2010	2011	2012	2013	2014	2015
Canada	4,821.7	5,301.0	5,771.8	6,004.6	5,090.6	3,804
New Zealand	836.7	845.4	826.1	857.6	866.2	n/a

EU services exports to New Zealand in 2014 were characterized by relatively high values of transport services, communication services and other services accounting for 59%, 17% and 15% of total EU services exports respectively.

Concerning EU services imports from New Zealand in 2014, transport services are the most important sectors accounting for 80% and 16% of total EU services imports respectively.

Table 5: EU international services trade credit (exports) with New Zealand by sector (BPM6, million euros) [11]

Sectors	2010	2011	2012	2013	2014
Total services	2,041.1	2,133.9	2,435	2,234.3	2,214
Communication	160	156.9	266.2	252	375.1
Financial	256.4	276.6	260.8	138.8	148.5
Other services	418.8	387.7	421.9	308.4	327.1
Transport	1,197.3	1,305.8	1,427.2	1,482	1,309
Utility	5.5	2.6	3.1	2.7	5.1

Table 6: EU international services trade debit (imports) with New Zealand by sector (BPM6, million euros) [12]

Sectors	2010	2011	2012	2013	2014

[9] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.
[10] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.
[11] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database. BPM6. Individual BoP items have been classified according to the sectoral aggregation used for the CGE model.
[12] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database. BPM6. Individual BoP items have been classified according to the sectoral aggregation used for the CGE model.

Total services	1,204.4	1,288.5	1,608.9	1,376.7	1,347.8
Communication	52.4	52.1	53.6	44	26.7
Financial	22.4	24.8	57.3	20.9	27
Other services	169.5	121.7	195.5	198.6	220.7
Transport	938.6	1,077.7	1,292.6	1,104.3	1,072
Utility	14.1	7.9	1.5	2.1	0.4

For comparison, the EU-Canada trade in services relations are briefly outlined below. EU services exports to Canada in 2014 were characterized by relatively high values of transport services, and communication services at 49% and 11% of total EU services exports respectively.

Concerning EU services, imports from Canada, transport services are the most important sectors accounting for 46% of total EU services imports.

Table 7: EU international services trade credit (exports) with Canada by sector (BPM6, million Euros) [13]

Sectors	2010	2011	2012	2013	2014	2015
Total services	14,848.4	15,687	17,414.2	17,664	16,480.7	15,914.7
Communication	1,256.7	1,236	1,368.8	1,495.2	1,325.6	1,695.4
Financial	2,649.9	3,328	3,930.5	2,453.6	2,057.1	1,434
Transport	6,311.9	6,939.1	7,374.2	8,322.3	7,767.4	7,872.4
Utility	100.4	109.9	183.9	128.3	290	178.2
Other services	4,525.2	4,074	4,125.8	4,668.7	4,434.4	4,722.2

Table 8: EU international services trade debit (imports) with Canada by sector (BPM6, million Euros) [14]

Sectors	2010	2011	2012	2013	2014	2015
Total services	10,026.7	10,386	11,642.3	11,659.4	11,390	12,110.7
Communication	922	881.1	1,086.8	1,002.7	752.4	863.7
Financial	561.5	695	842.6	661.3	533.4	254.2

[13] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database. BPM6. Individual BoP items have been classified according to the sectoral aggregation used for the CGE model.
[14] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database. BPM6. Individual BoP items have been classified according to the sectoral aggregation used for the CGE model.

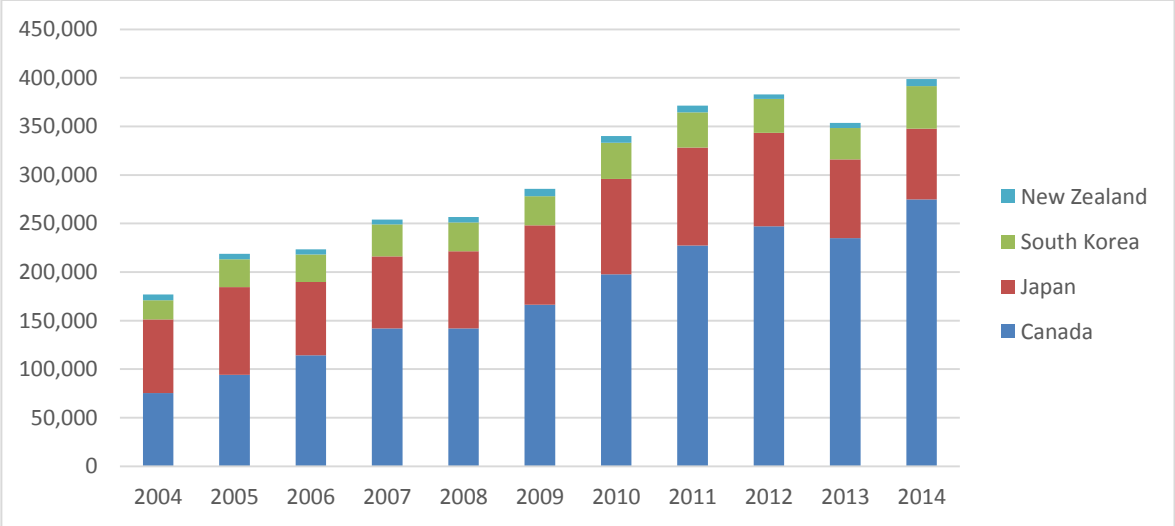
Transport	4,839.8	4,706.4	5,318.5	5,507.5	5,407.4	5,555.6
Utility	98.3	86.3	137.1	154.5	48.7	55.9
Other services	3,605.4	4,013.4	4,247.6	4,328.3	4,642	5,342.8

Trade in services has become a consistently significant part of the EU's trade relations with New Zealand. Since 2010, however, there has only been limited (or no growth). One of the sectors that experienced an increase in EU exports and a decrease in EU imports is communication services, pointing to an increasing competitive position of European providers. Growing exports and imports in transportation are reflecting the importance of trade in goods as well as tourism flows; transportation has been the strongest trade item throughout the period of investigation. EU-New Zealand trade in financial services has been relatively low compared to the volume of EU-Canada trade in financial services.

1.5. Overview of the EU's Investment Stocks, Flows and Income with Selected Partners

This section depicts EU investment stocks, flows and income with/from selected partner countries from 2004-2014.[15] South Korea and Japan have been added to Canada as reference countries as they are among New Zealand's major Asia-Pacific and OECD trading partners with which the EU has concluded or is seeking to conclude FTAs. They compete with New Zealand for European investors. The data shows that the EU had relatively low levels of direct investment stocks in New Zealand from 2004 to 2014 (as low as €7.2 billion in 2014). The data also show that EU FDI stocks in Canada have been increasing since 2004 amounting to €274.7 billion in 2014. Given that the EU's total outward FDI stock was €12.9 trillion in 2014, New Zealand and Canada accounted for 0.06% and 2.13% of total EU outward FDI respectively (Figure 6).

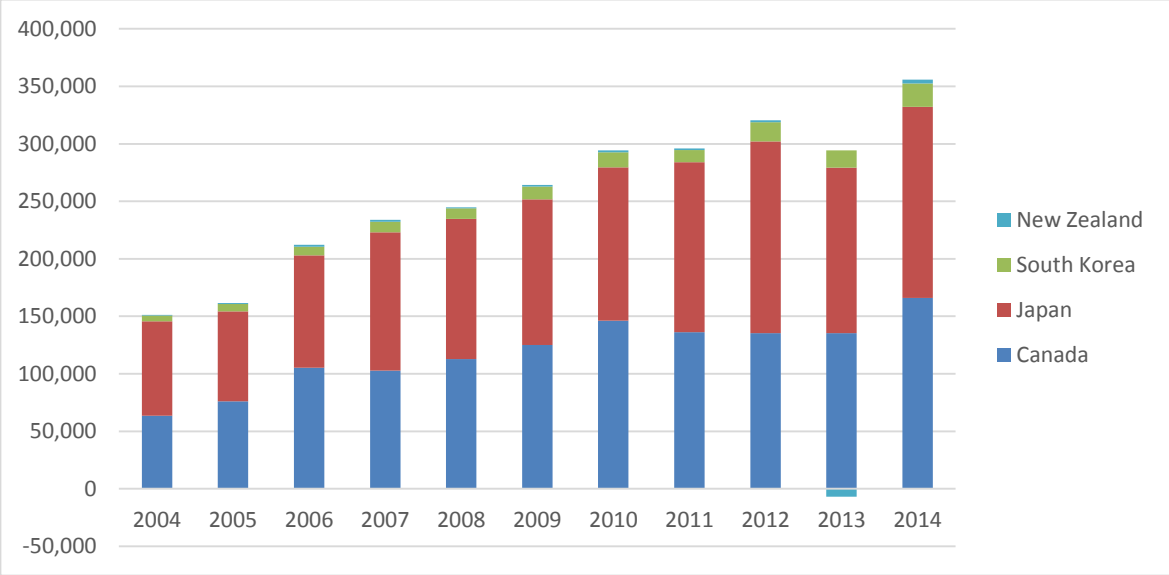
Figure 6: EU foreign direct investment stocks abroad in selected countries (million Euros)[16]



[15] At this stage, the analysis lays a focus on investment stocks, flows and income of the EU with selected countries.
[16] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.

As concerns FDI stocks held in the EU, New Zealand's investment stocks in the EU have been comparably low since 2004. In 2014, New Zealand EU FDI stock amounted to only €3.3 billion. FDI stocks of Japan and Canada that are held in the EU are at a significantly higher level and have also been increasing since 2004. Compared to EU direct investment stocks held in New Zealand, New Zealand's investment stocks in the EU are significantly lower. New Zealand's FDI stock held in the EU in 2014 amounted to 46% of the EU's FDI stock held in New Zealand (Figure 7).

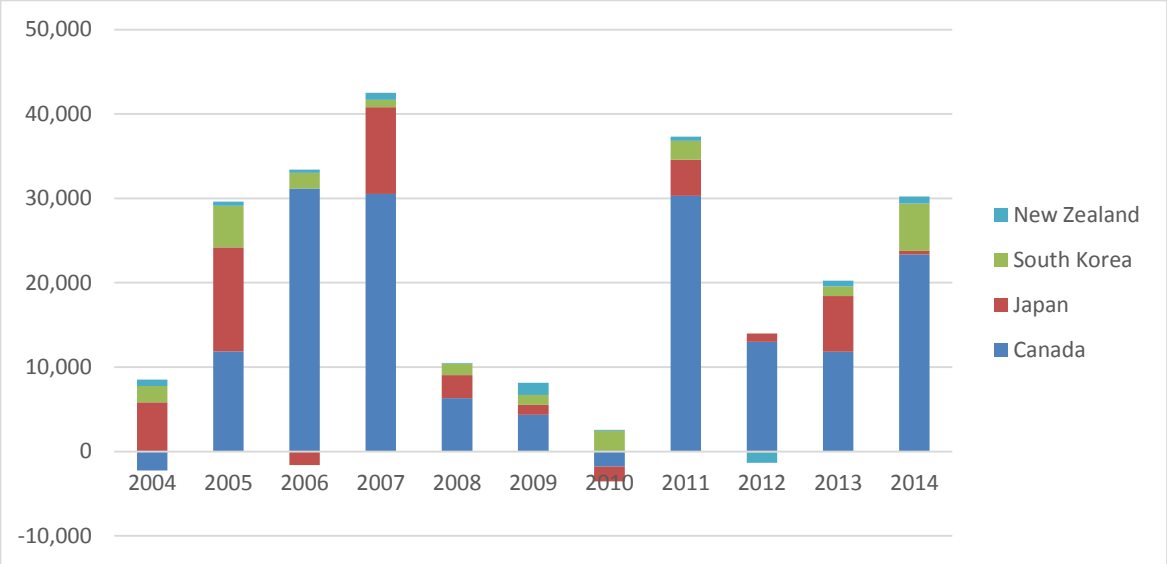
Figure 7: Direct investment stocks of selected countries in the EU (million Euros)[17]



EU investment flows to New Zealand have, however, been stable at a generally low positive level, with positive flows of €831.6 million in 2014. At the same time, the EU had generally strong positive investment outflows to Canada (Figure 8).

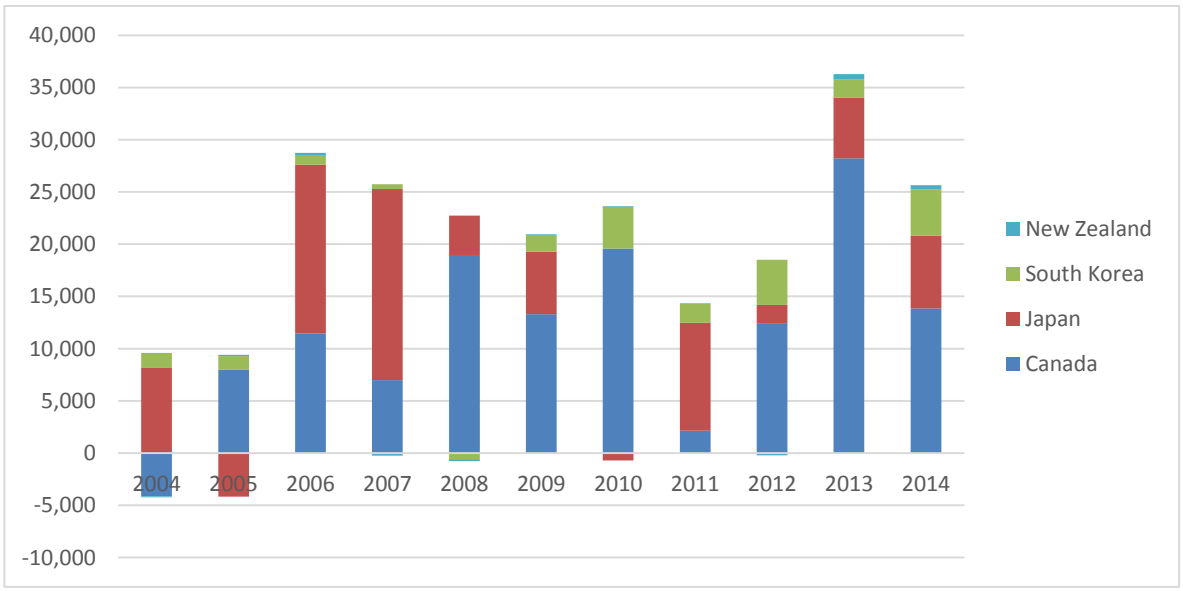
[17] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.

Figure 8: EU direct investment flows to selected countries (million Euros)[18]



In comparison to other countries, New Zealand's direct investment flows to the EU are at a constantly low level, with a value of €403.7 million in 2014. On the other hand, Canada shows an almost constantly positive and generally high level of direct investment flows to the EU (Figure 9).

Figure 9: Direct investment flows from selected countries to the EU (million Euros)[19]

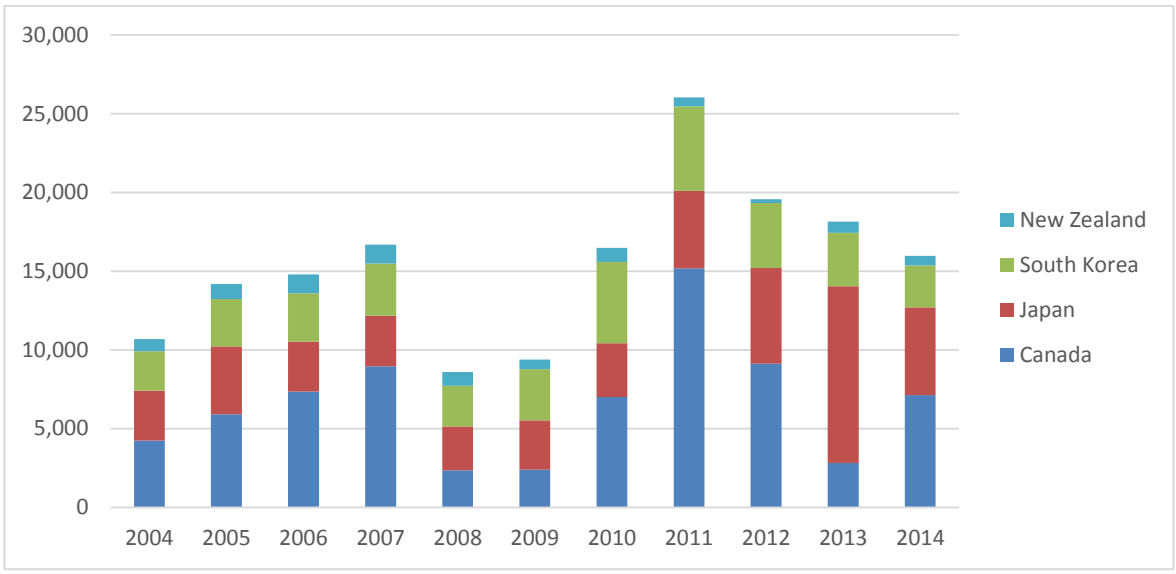


The countries' investment profiles result in corresponding levels of direct investment income. The EU's direct investment income from FDI held in New Zealand has been at a

[18] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.
[19] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.

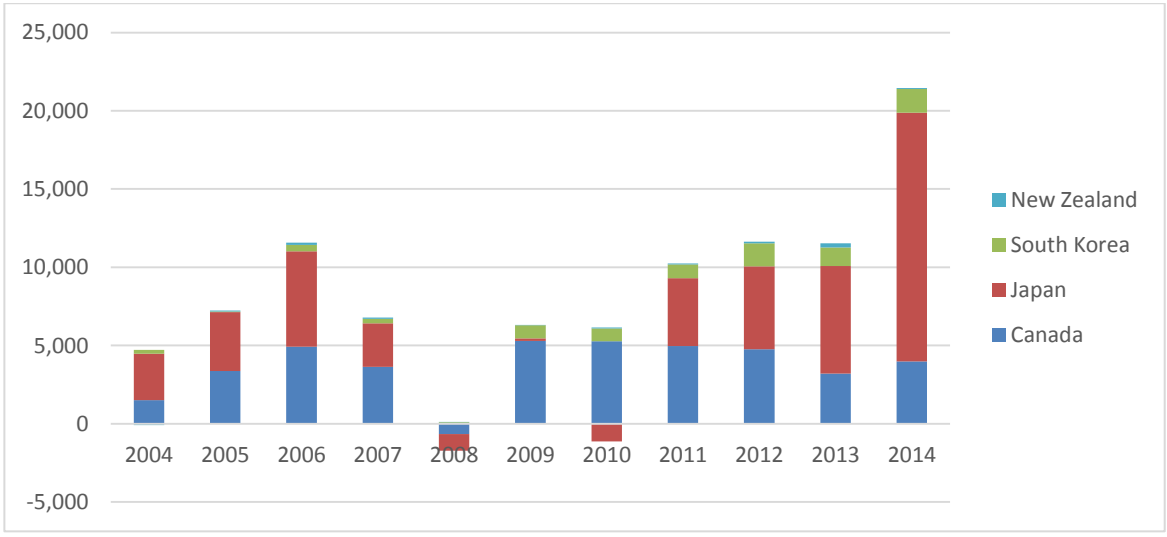
relatively low level. EU direct investment income was relatively high for Canada (Figure 10).

Figure 10: EU direct investment income in selected countries (million Euros)[20]



New Zealand showed only low levels of direct investment income from FDI held in the EU (only €58.1 million in 2014). At the same time, Canada's direct investment income has been at a high level since 2009, with an income of €4 billion in 2014 (Figure 11).

Figure 11: Selected countries' direct investment income in the EU (million Euros)[21]



1.6. Overview of Barriers to Trade and Investment in New Zealand

The following section presents an overall description and analysis of the existing tariff and non-tariff barriers in New Zealand.

1.6.1. Tariff Profiles of New Zealand

[20] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.
[21] Eurostat, 2016. *International Trade*. Available at: http://ec.europa.eu/eurostat/web/international-trade/data/database.

In the case of New Zealand, average final bound duties are particularly high in the case of beverages & tobacco (13.1%), cereals & preparations (10.6%) and dairy products (10.1%). Peak tariffs in the case of beverages & tobacco reach 53%. MFN applied tariffs are lower, with an average of 3.1% for beverages & tobacco. Note that New Zealand also applies a Generalized System of Preferences (GSP) scheme granting non-reciprocal concessions to developing countries.[22]

Concerning non-agricultural products, clothing (40.9%), leather, footwear (16.1%), transport equipment (15.6%) and non-electrical machinery (15.1%) show the highest final bound duties. Note that individual peak tariffs reach up to 200% in the case of the clothing product group. While the average duties in the chemicals sector are only 4.3%, individual tariff peaks are estimated to go up to 619%. Applied average tariff rates are lower, with an average of 9.7% in the case of the clothing product group, and only 3.2% for transport equipment and 3.1% for leather, footwear products. A detailed overview of both bound and applied duties is provided in the Table 9 below.

Table 9: New Zealand's product groups with highest final bound and MFN applied duty rates, in percent[23]

	Final bound duties		MFN applied duties	
Product groups	**AVG**	**Max**	**AVG**	**Max**
Dairy products	10.1	19	1.3	5
Coffee, tea	8.9	22	2.3	5
Cereals & preparations	10.6	26	2.4	5
Beverages & tobacco	13.1	*53*[24]	3.1	5
Minerals & metals	8.5	45	1.8	10
Chemicals	4.3	*619*	0.8	10
Textiles	10.9	45	1.9	45
Clothing	40.9	*200*	9.7	10
Leather, footwear, etc.	16.1	45	3.1	10
Non-electrical machinery	15.1	35	3	5
Electrical machinery	11.7	45	2.6	10
Transport equipment	15.6	55	3.2	10

[22] For more information, see: http://unctad.org/en/Pages/DITC/GSP/Handbooks-on-the-GSP-schemes.aspx
[23] WTO, 2016. *WTO Tariff Profiles.* Available at: http://stat.wto.org/TariffProfile/WSDBTariffPFHome.aspx?Language=E.
[24] Non-ad valorem duties are converted into ad valorem equivalents by the WTO and the methodology of the conversion is outlined in Technical Annex B of World Tariff Profiles 2006 (see: https://www.wto.org/english/tratop_e/tariffs_e/tariff_profiles_2006_e/tariff_profiles_2006_e.pdf). The maximum values in italics for the beverages & tobacco, chemicals and clothing sectors are based on a WTO estimate of the corresponding ad valorem equivalents.

Manufactures, n.e.s.	10.1	43	1.7	10

1.6.2. Barriers to Trade and Investment New Zealand and Other Selected Partners

This section presents an overview of product market regulations, state control, barriers to entrepreneurship, and barriers to trade and investment using indices provided by the OECD Product Market Regulation Database. The OECD Product Market Regulation Database provides a set of indicators that measure to which extent policies inhibit competition in areas of the product market. The indicators are consistent across time and countries and cover the following areas: state control of business enterprises; legal and administrative barriers to entrepreneurship; barriers to international trade and investment. The information used to construct the indicators are mainly responses of national governments to the OECD Regulatory Indicator Questionnaires in the following years: 1998, 2003, 2007 and 2013. The index ranges from 0 – 6, where 0 is the least restrictive and 6 is the most restrictive.[25]

As before in the analysis of FDI, we compare the non-tariff restrictions of trade and investment in Australia and New Zealand with Canada, Japan and Korea. When it comes to the restrictiveness of the level of overall product market regulation, numbers for both Australia and New Zealand have continuously decreased from 1998 to 2013. It is noticeable that Australia's and New Zealand's indicators are mostly lower than those of Canada, Japan, and especially Korea (Table 10).

Table 10: Product market regulation of New Zealand and other selected countries[26]

Indicator	Product market regulation			
Country	**1998**	**2003**	**2008**	**2013**
Australia	1.72	1.34	1.46	1.29
Canada	1.91	1.64	1.53	1.42
Japan	2.11	1.37	1.43	1.41

[25] Wölfl, A. et al., 2010. Product Market Regulation: Extending the Analysis Beyond OECD Countries. Available at: http://www.oecd-ilibrary.org/docserver/download/5km68g3d1xzn.pdf?expires=1472635751&id=id&accname=guest&checksum=43D70780FAA23C1292AB007E855EFC44. The paper states: "The qualitative information on which the indicators are based is mainly derived from answers to a questionnaire by national administrations, the results of which are subject to peer review, thereby guaranteeing a high level of comparability across countries. This information is coded by assigning a numerical value to each of the possible responses to a given question. The coded information is normalised over a scale of zero to six, reflecting increasing restrictiveness of regulatory provisions for competition and aggregated into low-level indicators at the bottom of the indicator tree. At each step up the indicator tree, higher-level (composite) indicators are calculated as weighted averages of their lower-level indicators using equal weights for aggregation." In addition, the paper mentions that "growth regressions provide evidence that less restrictive product market regulation is conducive to growth. An improvement of ½ index points of barriers to entrepreneurship would translate into approximately a 0.4% higher average annual rate of GDP per capita growth."

[26] OECD, 2016. *Product Market Regulation 2013*. Available at: https://stats.oecd.org/index.aspx?DataSetCode=PMR.

Korea	2.56	1.95	1.94	1.88
New Zealand	1.45	1.29	1.23	1.26

Concerning indicators for the level of state control, Australia has maintained a relatively stable level from 2.28 in 1998 to 1.99 in 2013. By contrast, New Zealand's indicators for the level of state control in the economy has strongly increased from 1.18 in 1998 to 2.06 in 2013. By comparison, levels of state control in Australia and New Zealand in 2013 is similar to that of Canada and Japan, and lower than that of Korea (

Table 11).

Table 11: State control in New Zealand and other selected countries[27]

Indicator	**State control**			
Country	**1998**	**2003**	**2008**	**2013**
Australia	2.28	1.59	2.21	1.99
Canada	2.15	2.08	1.96	1.92
Japan	1.87	1.66	1.9	1.85
Korea	2.6	2.1	2.44	2.47
New Zealand	1.18	1.55	1.93	2.06

Barriers to entrepreneurship have decreased in both Australia and New Zealand from 1998 to 2013. In the case of Australia, the level of barriers to entrepreneurship decreased from 1.94 to 1.69. In New Zealand, the level of barriers to entrepreneurship almost halved from 2.06 to 1.18. By comparison, the barriers in Japan and Korea are still relatively high in 2013 (1.67 and 1.87 respectively) (Table 12).

Table 12: Barriers to entrepreneurship in New Zealand and other selected countries[28]

Indicator	**Barriers to entrepreneurship**			
Country	**1998**	**2003**	**2008**	**2013**
Australia	1.94	1.76	1.65	1.69
Canada	1.82	1.44	1.36	1.34
Japan	3.22	1.69	1.65	1.67
Korea	2.63	2.4	2.16	1.87
New Zealand	2.06	1.64	1.09	1.18

[27] OECD, 2016. *Product Market Regulation 2013*. Available at: https://stats.oecd.org/index.aspx?DataSetCode=PMR.
[28] OECD, 2016. *Product Market Regulation 2013*. Available at: https://stats.oecd.org/index.aspx?DataSetCode=PMR.

A significant decrease of barriers to trade and investment can be registered for both Australia and New Zealand between 1998 and 2013 (Table 13). Australia's barriers to trade and investment decreased from 0.95 to 0.19, while New Zealand's level of barriers to trade and investment halved from 1.1 to 0.53. Both Australia's and New Zealand's barriers are much lower than those of the other selected countries, especially in comparison to Korea (level of 1.3).

Table 13: Barriers to trade and investment in New Zealand and other selected countries [29]

Indicator	Barriers to trade and investment			
Country	**1998**	**2003**	**2008**	**2013**
Australia	0.95	0.67	0.53	0.19
Canada	1.75	1.4	1.27	1.01
Japan	1.24	0.75	0.74	0.71
Korea	2.44	1.37	1.23	1.3
New Zealand	1.1	0.66	0.66	0.53

Next we offer a detailed analysis of the trade in services barriers in New Zealand. This section is based on the OECD Services Trade Restrictiveness Index (STRI) results for both countries. The OECD STRI indexes measure the restrictiveness to services trade of the regulatory environment in the specific countries. The index takes values between zero and one, one being the most restrictive.[30]

In the case of New Zealand, the overall regulatory framework can also be regarded as favourable. Overall, New Zealand's STRI score is below the OECD average in 20 out of the 22 sectors analysed by the OECD. The two sub-sectors with an STRI score above average are the logistics cargo handling sub-sector (0.256) and the telecommunications sub-sector (0.257). With regard to the logistics cargo handling sub-sector, barriers are mainly due to restrictions on foreign entry (33.2%) and barriers to competition (30.6%). In the telecommunications sector, barriers also rely to a very large extent from restrictions on foreign entry (40.5%) and from barrier to competition (40.8%). Another sub-sector with a high STRI score is the air transport sub-sector (0.272). Barriers result mainly from restrictions to foreign entry (53.6%). Barriers to competition account for 28.1% of the overall restrictiveness in this sub-sector.

[29] OECD, 2016. *Product Market Regulation 2013*. Available at: https://stats.oecd.org/index.aspx?DataSetCode=PMR.
[30] OECD, 2016. *Services Trade Restrictiveness Index*. Available at: http://www.oecd.org/tad/services-trade/services-trade-restrictiveness-index.htm.

2. LITERATURE REVIEW AND PREVIOUS ANALYSIS ON NEW ZEALAND (TASK 2)

There are only four papers discussing the effects of an EU-NZ FTA. One of the papers (Plaisier et al. 2009) in fact deals with an EU-NZ FTA in a quantitative way. The authors present a study on a joint EU-AUS-NZ FTA with an explicit perspective from the Netherlands. The authors also consider the EU-27 (in 2009, Croatia was not a member of the EU) as well as Australia and New Zealand. The study is based on a CGE model applying the Global Trade Analysis Project (GTAP) 7 database. The model is dynamic in that it captures investment and the distinction between the long run and the short run. Australia and New Zealand jointly gain about a quarter percent of nominal GDP in the short run, which is reduced to almost zero in the long run. Distribution effects between the two are not reported. The gains for the EU in the short run are below 0.1% of nominal GDP and twice as much in the long run. The agricultural sector in the EU is estimated to lose, while at the same time almost all other European industries are estimated to gain.

Besides this quantitative study, a few qualitative analyses exist. The paper by Bauer et al. (2015) is a political economy analysis. The authors argue that the EU has recognized the shift in the world economy's gravity and that the gains for the EU are mainly in the political arena: (1) the EU would lose its power as an agenda setter without adequate links to New zealand; (2) New Zealand is an ideal partner to start in that area since the country is participating in many Asian FTAs; and (3) New Zealand is one of the countries in the world with the highest degree of indvidual freedom and a natural match with the EU. In addition, with respect to New Zealand's highly successful track record in agricultural liberalization and significant gains in agricultural competitiveness, the study sees a huge export potential for the EU's diverse agricultural industries . In addition, the EU and New Zealand cooperate widely with mutual recognition agreements for regulation in many industries. This, as concluded by Lee-Makiyama (2015b), makes New Zealand an ideal partner for developing a new generation of FTAs if the EU is to agree.

The New Zealand International Business Forum (2015) also argues in favour of an EU-NZ FTA, using qualitative analysis as well as interviews with 25 stakeholders from different regions and industries in New Zealand. Priorities were tariffs, harmonisation of regulation, labour mobility issues and exchange rate volatility. How the latter can be mitigated by an FTA, is not addressed by the report. The report is a political statement from a domestic New Zealand perspective rather than analysis, which is considered in light of the scarce material.

In addition to these papers, our search found a number of newspaper articles and one op-ed. Dreyer (2013) argues that the chances of an agreement between the EU and New Zealand have been increasing due to the recent conclusion of a China-NZ FTA and negotiation of the Trans Pacific Partnerhsip (TPP). In 2015, Lee-Makiyama (2015a) supports this view. Difficulties are seen in agricultural trade; Dreyer (2013) raises the issue of much higher EU trade barriers towards kiwi fruit, dairy products and wines from New Zealand than towards their competitors from Chile and Argentina respectively. In 2015, the EU had already reacted and reduced trade barriers towards New Zealand.

Finally, the study by Ballingall, Giesecke and Zuccollo (2010) is worth mentioning. They analyse a further reduction of New Zealand's tariffs, starting with the government's statement in 2009 not to further reduce trade barriers until 2015 unilaterally. This paper can work as a benchmark. The authors use a newly-developed dynamic CGE model (MONASH-NZ) of the New Zealand economy and show that due to the low level of New Zealand's remaining tariffs, removing them without additional measures may make

consumers marginally worse off, despite delivering allocative efficiency and GDP gains. The results are supported by a robustness check with the GTAP model (GTAP 7). Since the paper does not account for reciprocal tariff reduction elsewhere, it concludes that for future FTA negotiations a further reduction of tariffs may not be useful. To verify such a conclusion, further research into New Zealand's export demand elasticities is deemed necessary.

3. ECONOMIC IMPACT OF REMOVING OR REDUCING BARRIERS TO TRADE IN GOODS AND SERVICES NEW ZEALAND

3.1. General Findings (Task 6)

3.1.1. Change in GDP in the scenarios (long term impact)

The national income effects from the FTA scenarios are presented in Figures 12 and 13 based on both liberalization scenarios. The FTA is estimated to have a positive impact on the GDP of both EU and New Zealand. However, the results suggest that with respect to a long-term (2030) change of GDP, the benefits of an EU-NZ FTA are comparatively small for the EU as compared to New Zealand.

In scenario I (liberalization), GDP is estimated to marginally increase by 0.01% in the EU by €2.1 billion in the long term. Likewise, for New Zealand, GDP is expected to rise by 0.28% by €0.7 billion. While the respective figures are higher in the scenario II (increased liberalization), GDP in the EU is expected to increase by 0.02% i.e. by €4.9 billion in value terms, while in New Zealand by 0.52% by €1.3 billion.

Figure 12: EU and New Zealand: Percentage Change in GDP (long term)

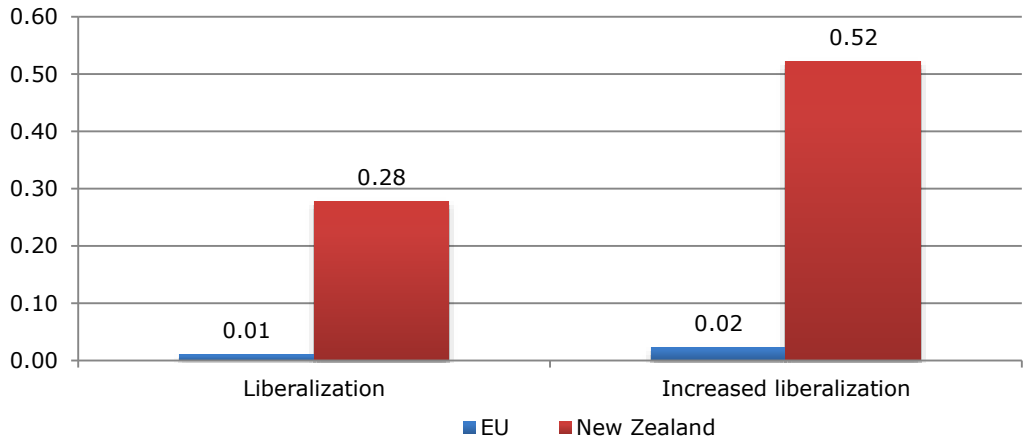
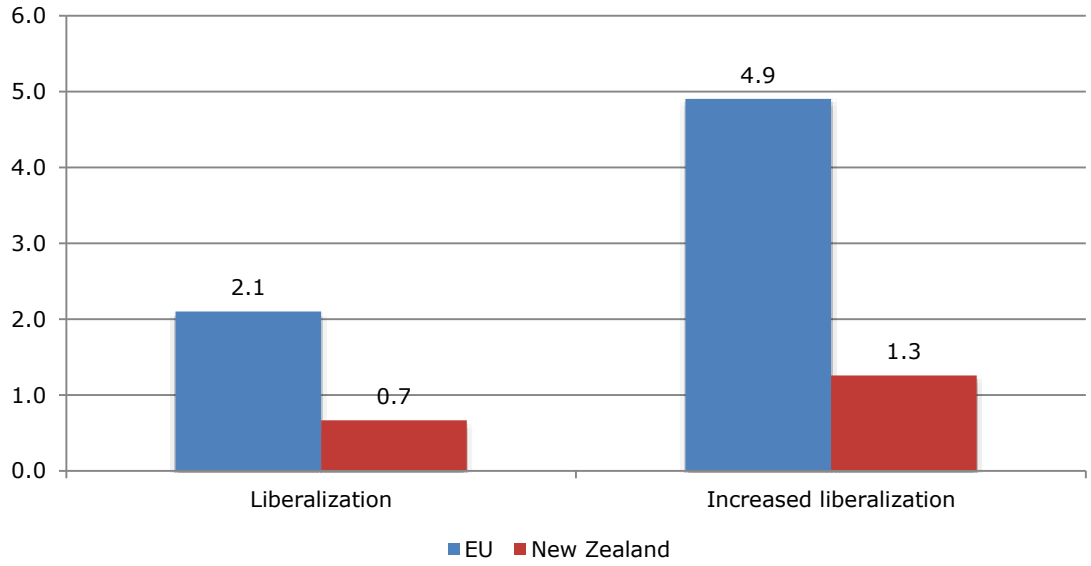


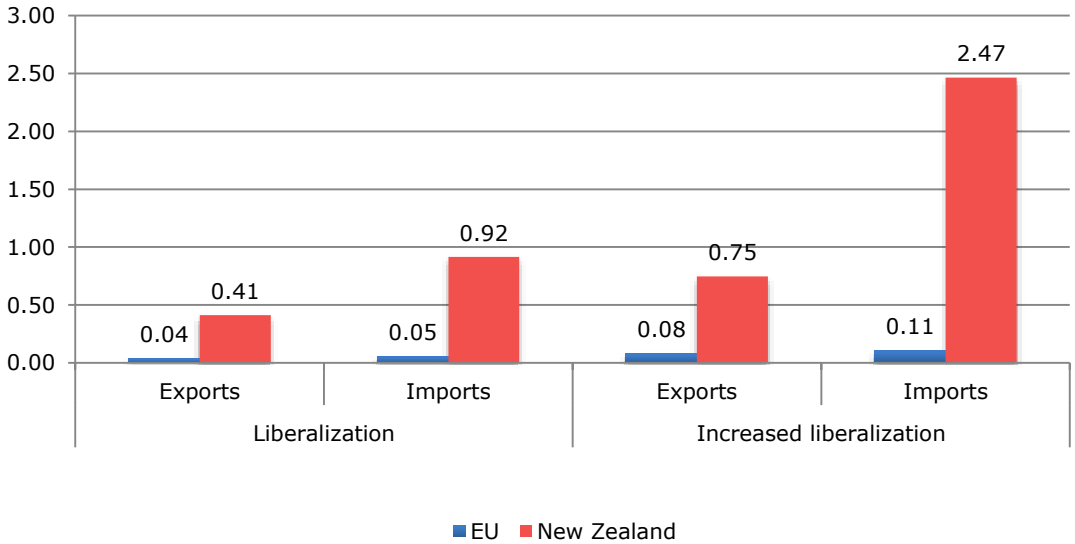
Figure 13: EU and New Zealand - Value Change in GDP (Long Term, Billion €)



3.1.2. Total Trade

The results indicate that an FTA is expected to lead to an overall increase in exports and imports by the EU and New Zealand with the world. However, this change in the total trade for the EU is minimal as compared to New Zealand. Moreover, for New Zealand, the percentage change in imports shows a much higher rise as compared to its exports. As illustrated in Figure 14, in the increased liberalization scenario, both exports and imports for the EU are expected to rise by 0.08% and 0.11% respectively. While for New Zealand imports are estimated to increase by 2.5%, which is more than 3 times the rise in its exports at 0.75%. The increase in imports will be in most sectors of the economy with strongest increase registered in gas, ruminant meat, other meat, dairy and non-metal products, among others.

Figure 14: EU - New Zealand Percentage Change in Total Trade with the World (long term impact)



3.1.3. EU-New Zealand Percentage Change in Bilateral Exports

The results indicate that percentage changes in bilateral export flows for both EU and New Zealand are positive and quite substantial for EU especially in the increased liberalization scenario. Bilateral exports from EU to New Zealand are expected to rise by 14.2% and 32.4% in the liberalized and increased liberalization scenarios, respectively. Likewise, New Zealand's exports are estimated to increase by 10.5% and 22.2% (Figure 15).

In the increased liberalization scenario, EU exports to New Zealand show greatest increase in gas, coal, textiles, metals, non-metals, motor vehicles, machinery and other meat, among others. It is interesting to note that though "Gas" and "Coal" are not at all traded between the two countries currently; they show highest percent change increase in EU exports to New Zealand at 2057% and 96%, respectively. However, the magnitude in relative changes in export values would be small because of almost zero-base values. The main reason for such a high percent change in exports of these 2 products is that the tariff rates for imports from EU to New Zealand are quite substantial for gas and coal. The tariff liberalization would result in increased exports from the EU.

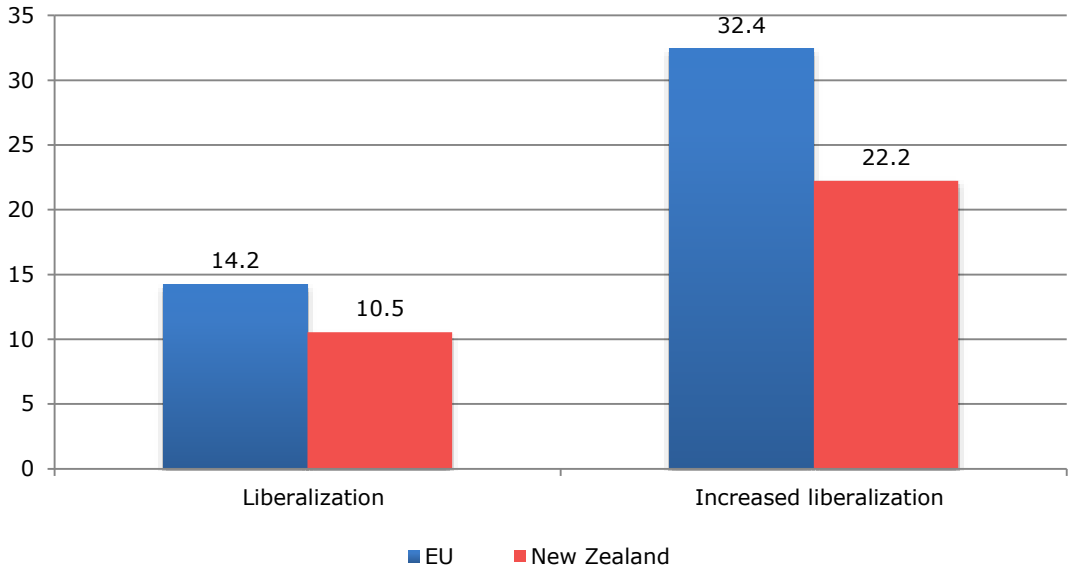
Similarly, the gains are substantial for the EU for machinery and motor vehicles sectors where New Zealand has high base tariff rates. The exports for machinery would increase by 63% while for motor vehicles the exports would rise by 44% in the increased liberalisation scenario.

As regards service sectors, EU's exports to New Zealand in sectors such as transport, communication, utility and financial are expected to register a slightly higher percent gain in the increased liberalization scenario compared to the less liberalised scenario. In the increased liberalization scenarios, EU's exports of communication services are projected to register a change of 7.5%. Similarly, transport services are expected to increase by (7.2%), financial services (7.2%) and utility (9.5%).

For New Zealand, the top 5 products with maximum percent change in exports in value percentage terms include sugar, dairy, other food products, fruits and vegetables, and rice in the increased liberalization scenario. At present, there is no export of sugar and rice from New Zealand to EU. However, in case of increased liberalization scenario, the increase in value of exports of sugar and rice would be negligible because of the very low base values. The exports of dairy would increase 134%, other food products 54% and vegetables and fruits by 38%.

Moreover, for New Zealand, the gains in service sector exports including transport, communication, utility, financial and other services are expected to be slightly higher in the less liberalised scenario compared to the increased liberalization scenario. In the liberalised scenarios, New Zealand exports of communication services are projected to increase of 8.3%. Similarly, transport services are expected to increase (8.4%), financial services (8%) and utility (8.7%).

Figure 15: EU-New Zealand Percentage Change in Bilateral Exports (long term)

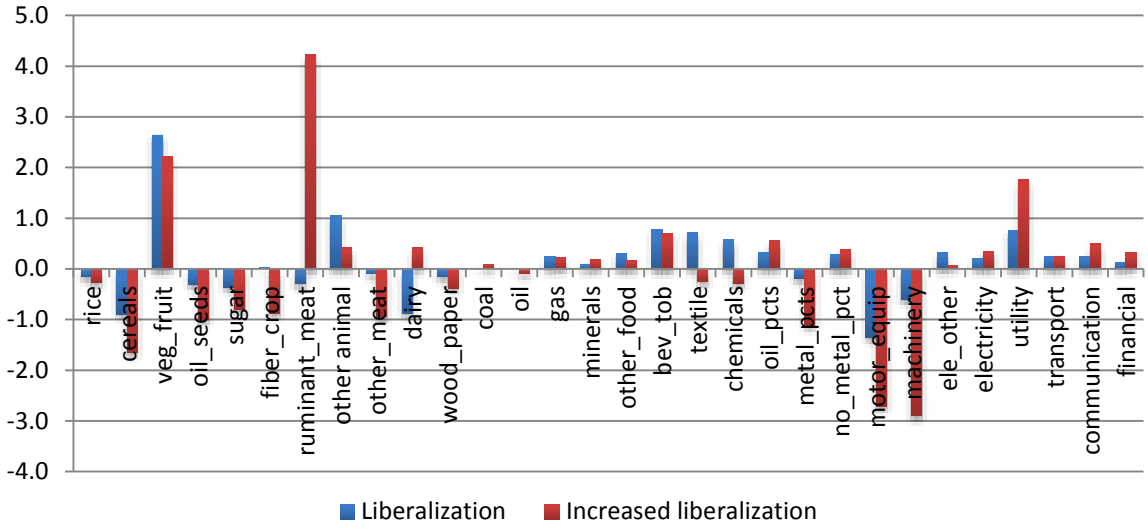


3.1.4. Sectoral Output

The results indicate that the impact on sectoral output of EU is negligible for the majority of sectors (Figure 16). As earlier mentioned, the highest output decline at sector level for the EU is estimated to occur for the ruminant meat sector (-1.2% in the long run) followed by sugar (-0.2%) in case of increased liberalization scenario. The motor vehicles sector shows an expansion in the output by +0.2% and +0.3% for both liberalization scenarios, respectively, while there are gains for machinery and equipment (+0.1%) only in increased liberalization. There is not much in change in output of services sector in the EU.

For New Zealand, output in case of liberalization scenario is estimated to expand mainly for vegetables and fruits (2.6%). Motor vehicles and machinery are expected to contract somewhat in New Zealand because of increase in exports from the EU in these two sectors. Likewise, in the increased liberalization scenario, output in expected to expand in ruminant meat (4.2%) while further output declines are expected in motor vehicles and machinery. As regards service sectors in the increased scenario, New Zealand will gain in utility sector by 1.8%, however, gains in other sectors such as transport, communication, financial and other services are minimal only with less than 1% increase.

Figure 16: Percentage Change in Sectoral Output in New Zealand (long term)



3.1.4.1. Machinery

Trade in machinery products plays an important role in EU-NZ trade relations. At the same time, EU exports to NZ are significantly higher than NZ's exports to the EU. Machinery remains one of the top exports of the EU to NZ and is also a significant sector where EU will highly gain in terms of increase in exports to New Zealand especially in the increased liberlisation scenario. The tariff liberalization would result in increased exports from the EU to NZ with exports for machinery expected to increase by 62.8% in value terms under the increased liberalization scenario. For the EU, the estimated percentage change of total output of machinery is below the perception threshold for both scenarios while output for New Zealand is estimated to decrease by 2.9% under the increased liberalization scenario. Aggregate average import prices for machinery products would not change (below the perception level) for the EU, however, for NZ import prices are expected to fall by 1.64% for increased liberalization scenario.

3.1.4.2. Motor Vehicles/ Transport Equipment

Another important sector for trade EU and NZ is motor vehicles. However, EU exports to NZ are significantly higher than NZ exports to the EU. Motor vehicles is an important sector where gains in increased exports from EU to NZ will be significant especially under the ambitious scenario. The exports of motor vehicles from EU to NZ are expected to increase by 43.6% in value terms under the increased liberalization scenario. For the EU, the estimated percentage increase in total output of machinery is 0.3% under the increased liberlisation scenario, whereas, output for NZ is estimated to fall by 1.4% and 2.7% under both the scenarios, respectively. Aggregate average import prices for motor vehicles products would not change (below the perception level) for the EU, however, for NZ import prices are expected to fall by 0.82% and 1.57% respectively for both liberalization scenarios.

3.1.4.3. Trade in Services

In the remaining part of this section, we focus on all the services sectors in this analysis. In all services sectors except 'other services', EU has a trade balance surplus with New Zealand, with higher exports than imports.

Utility Services

Output in the EU rises slightly in both scenarios, New Zealand's output increases more steeply, relatively speaking, because New Zealand is not a major exporter or importer to/from the EU, but EU is an important source as well as destination for New Zealand utility services, as in many of our results in this analysis. Nevertheless, EU does import more from New Zealand than the baseline. At the same time, EU also exports more of utilities.

Transport Services

Transport services form a major part of EU's services exports to New Zealand. For EU and New Zealand, the estimated percentage change of total output is below the perception threshold for both scenarios. New Zealand's import prices declines by 0.7%, while EU import prices hardly decline, because, while New Zealand forms a negligible part of EU's import sources of transport services, EU forms an important part of New Zealand's import sources of transport services. Still, EU does increase imports considerably from New Zealand and increases its exports to New Zealand even more in absolute terms, since initial level of exports are much higher than imports.

Communication Services

For the communication services sector, EU's import prices increase slightly, thereby making New Zealand's exports to the EU more competitive. Therefore, EU imports a lot from New Zealand, but there is no change in EU's output despite an increase in exports. New Zealand's import prices do decline quite a bit (-0.96%), but still its output increases slightly as well, since it continues to export more to the EU.

Financial Services

The results in financial services sector indicate that EU is projected to have increasing imports from New Zealand, resulting in slightly lower output, despite increasing import prices. EU still exports more, while New Zealand's output increases, partly offset by reduction in import prices; output growth is also partly attributable to reduced import prices, since financial services sector can now import cheaper intermediate inputs, which may be contained within the same sector. This is an important aspect that explains most of the counter-intuitive results in a CGE model that has aggregate sectors, with a lot of self-consumption. For example, financial services sector may contain sectors like banking and insurance, each of which may consume another for production, while the aggregate financial services sector would appear to be consuming itself in our model and data. In such cases, reduction in import prices in a given sector means two opposite things for the same sector – reduction in intermediate input prices, thereby boosting output, and reduction in output due to competition from cheaper imports.

Other Services

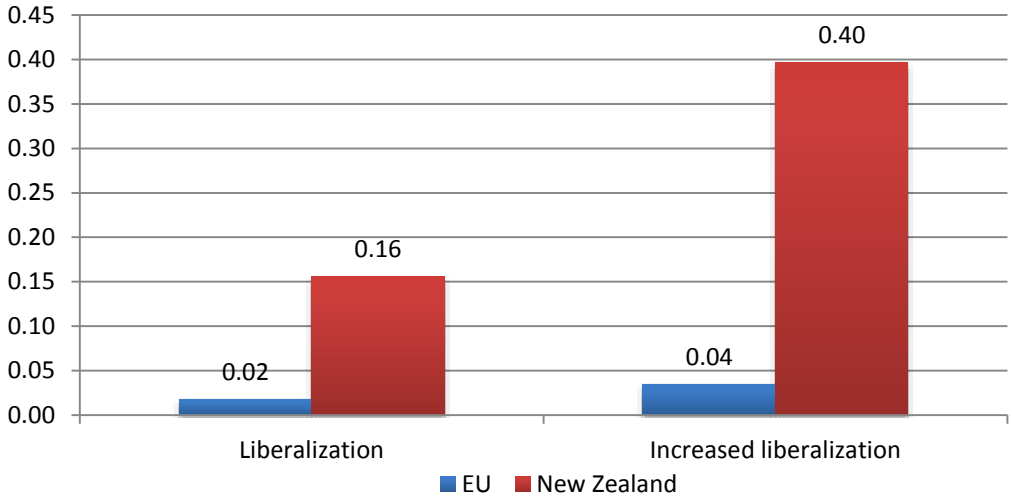
Other services sectors aggregated as a single sector in our model show pretty obvious and intuitive results: increased demand for imports coming from declining prices, boosting output, and exports at the same time, due to cheaper intermediate inputs, in both the EU and New Zealand; extents of increase, relatively speaking, are much higher for New Zealand than for the EU.

3.1.5. Terms of Trade

The results indicate that there are no significant effects of the FTA on the terms of trade of the EU though they are positive. Terms of trade are expected to be relatively positive for New Zealand with a sharper difference between the liberalized (0.16%) and increased liberalization scenarios (0.40%). One possible explanation of this could be that since New

Zealand has relatively low baseline import tariffs, there are not many changes expected in its import prices but there are likely increases in all its export prices due to tariff reductions among its FTA trading partners. Therefore, New Zealand's terms of trade are expected to improve because it receives a higher price for its exports (Figure 17).

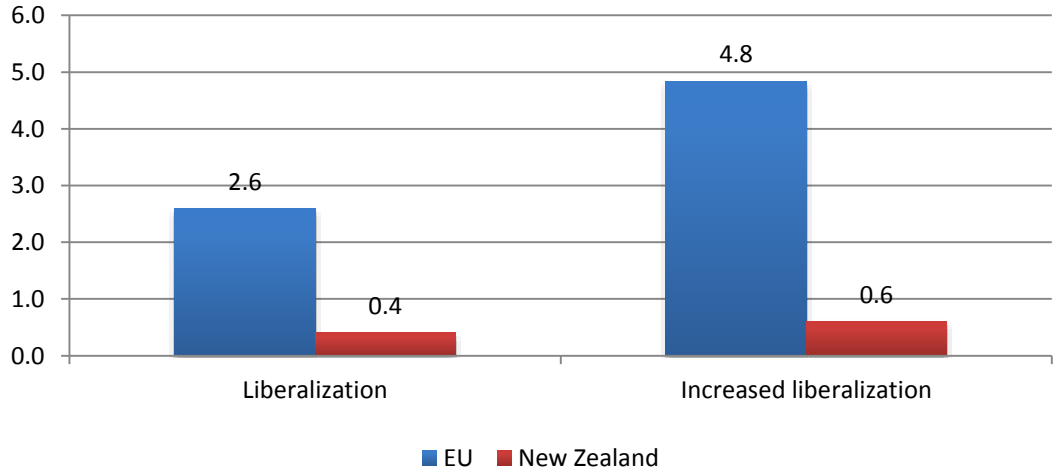
Figure 17: EU- New Zealand Percentage Change in Terms of Trade (long term)



3.1.6. Welfare Impact

For the EU, the gain in aggregate welfare amounts to €4.8 billion in the increased liberalization scenario, white is quite substantial as compared to the liberalization scenario at €2.6 billion. Depending on the degree of liberalization, aggregate welfare improvements range from €0.4 billion to €0.6 billion for New Zealand (Figure 18).

Figure 18: EU-New Zealand Absolute Change in Welfare (long term, billion €)



The overall effects of the potential EU-NZ FTA are positive. In this section 3.1., we discussed the sectoral effects on production and trade as well as the welfare implications. There are more detailed results. In the following, we deal with the estimated effects on agricultural goods (section 3.2), investment (section 3.3), real wages (section 4.1), prices (section 4.2) and the environment (chapter 5).

3.2. Analysis in Agricultural Goods and Food (Task 3)

3.2.1. Effects of an EU New Zealand FTA

Focusing on EU-NZ trade relations, this section provides a qualitative analysis of existing tariff and non-tariff barriers for trade in agricultural goods and foodstuff sectors between the EU and New Zealand. We also present the results of the CGE modelling that was conducted by DG Trade.

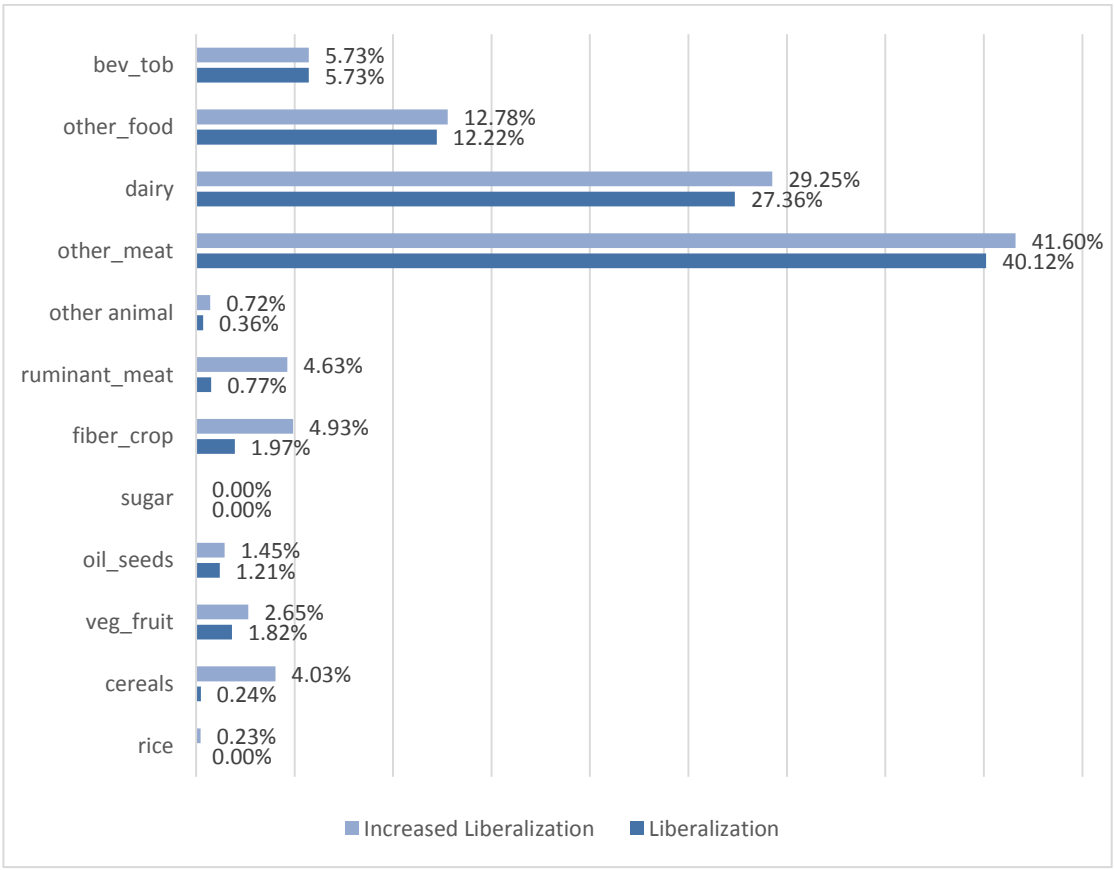
3.2.1.1. The Results of the CGE Model: An overview

The modelling conducted by DG Trade is based on two scenarios that are, amongst other trade policy measures, based on different approaches in the liberalization of agricultural markets. Before we continue with the discussion of the impact of trade liberalization on a sector-by-sector basis, we provide an overview of the estimated changes in EU output of agricultural commodities and food sectors, changes in bilateral exports and imports, and changes in commodity import prices. The aim is to get an understanding about the relative magnitude of the impact on key indicators under the two liberalization scenarios for the whole range of agricultural and foodstuff sectors.

3.2.1.2. Changes in EU Exports to New Zealand

As shown by Figure 19, changes in EU exports to New Zealand are most significant for other meat products, dairy products, and other food products under the ambitious liberalization scenario. For all other sectors, the changes in exports are rather low or insignificant for both liberalization scenarios.

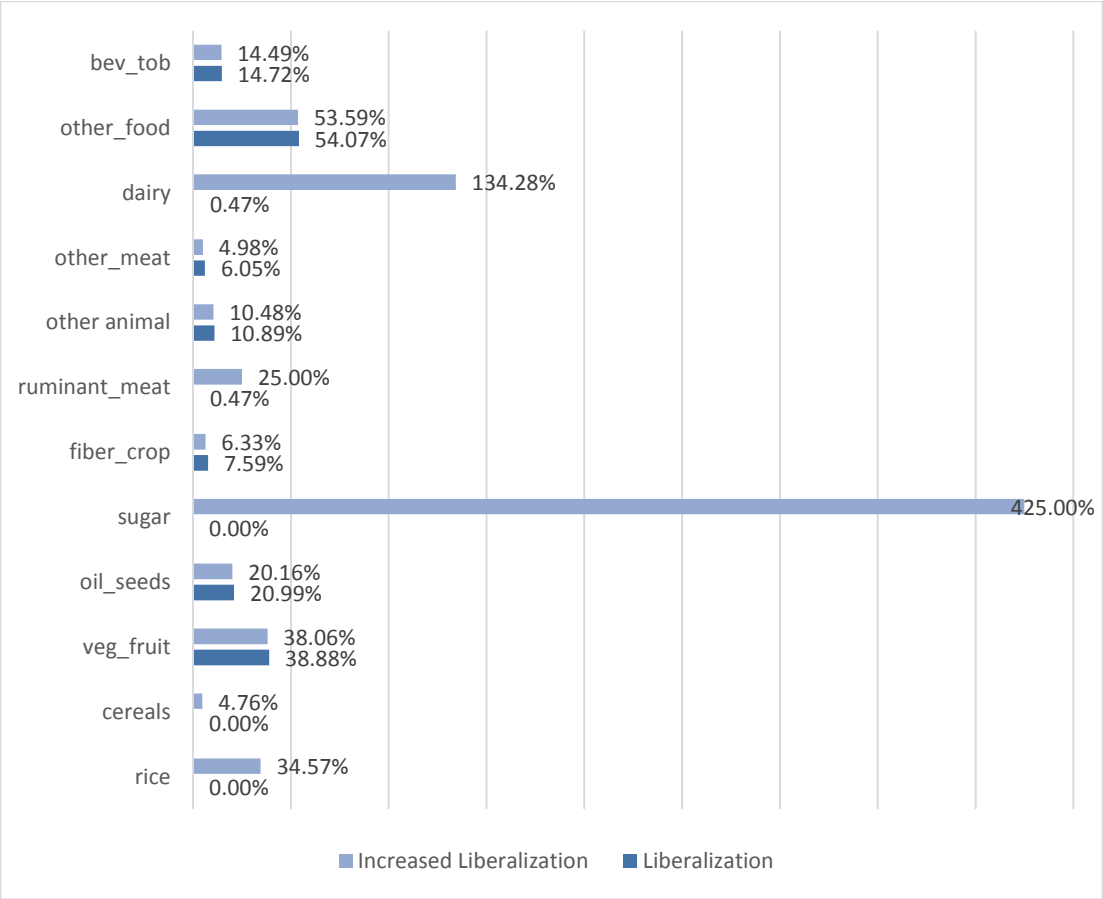
Figure 19: Changes in EU Exports to New Zealand, based on simultaneous EU-AUS- and EU-NZ FTA (long-term)



3.2.1.3. Changes in EU Imports from New Zealand

As concerns EU imports from New Zealand, the largest percentage changes in exports are estimated for dairy products, other meat, other food products and vegetable and fruits products. Sugar, rice products, and oil seed products should not be taken into consideration as the magnitude in relative changes can attributed to an almost zero base trade values (see Figure 20).

Figure 20: Changes in EU Imports from New Zealand, based on simultaneous EU-AUS- and EU-NZ FTA (long-term)



3.2.1.4. Changes in EU Sectoral Output

As concerns total sectoral output, relative changes in output are generally low and often below the perception threshold. For the ambitious scenario, largest relative changes in sectoral output in the EU are estimated for ruminant meat sector, for which output losses are estimated to be 1.2%. On the other hand, New Zealand's meat sectors are estimated to gain in output relatively significantly under the increased liberalization scenario, followed by New Zealand's vegetables and fruits sectors. On the other hand, New Zealand's dairy, beverages and tobacco and fibre crops sectors are estimated to show slightly declining output levels. It should be noted that "plant and animal fibres and other crops" includes the wool products sector, which is an important trade item in EU-NZ trade (Figures 21 and 22).

Figure 21: Changes in Sectoral Output in the EU, based on simultaneous EU-AUS- and EU-NZ FTA (long-term)

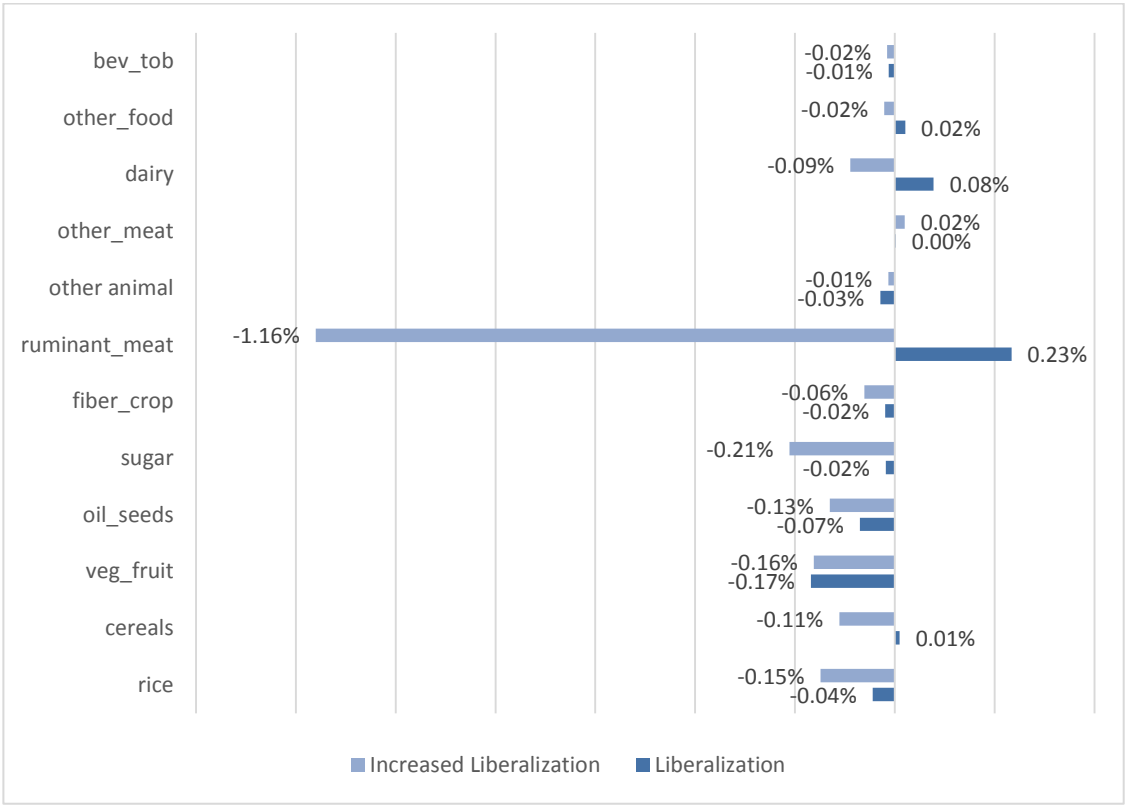
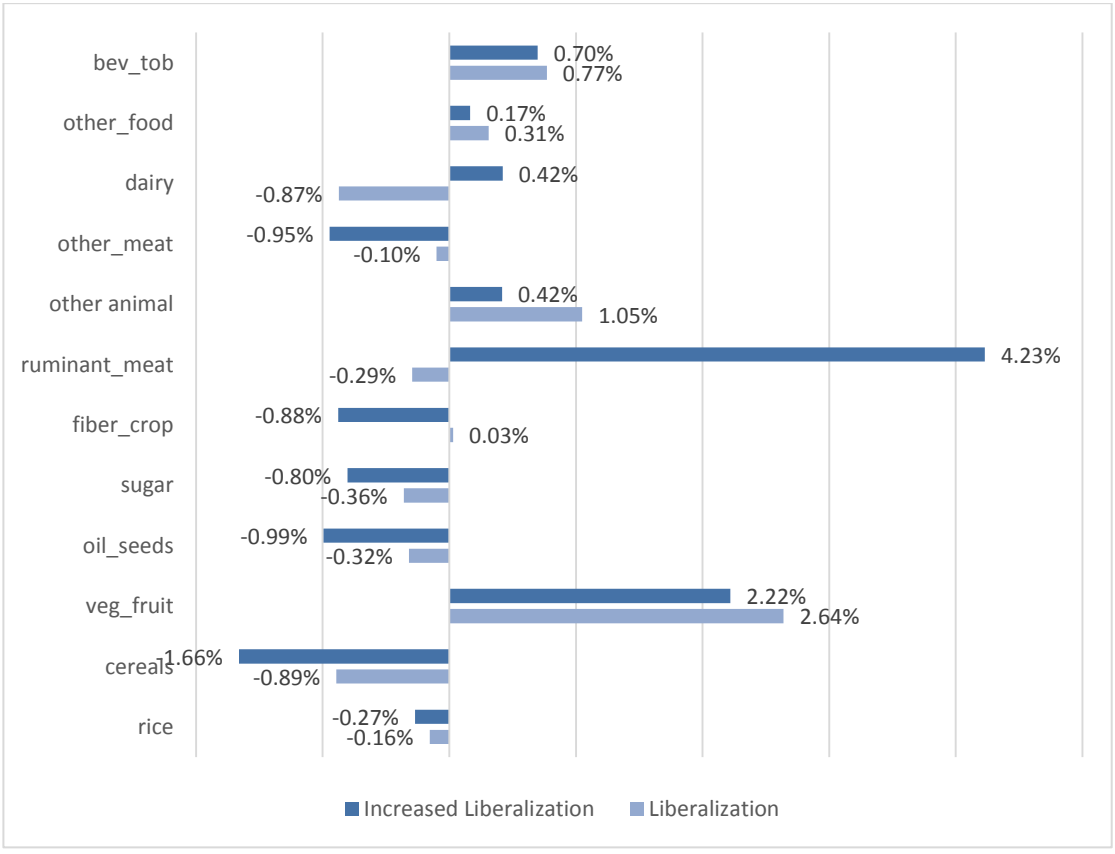


Figure 22: Changes in Sectoral Output in New Zealand, based on simultaneous EU-AUS- and EU-NZ FTA (long-term)



3.2.2. The effects by products

3.2.2.1. Fruit and Vegetables

Exports of fruits and vegetables products to the EU are important for New Zealand, while exports to New Zealand are less important but not insignificant for the EU, e.g. kiwifruit from Italy. The importance of the horticultural sector is particularly high for NZ, whose 2015 export value of horticultural exports to the EU amounted to €513 million (US$570 million, World Bank ITS data).[31] In 2015, New Zealand's major fruits and vegetables commodities exported to the EU were:

- Onions, shallots, garlic, leeks: €41.2 million
- Dried vegetables, whole, cut, sliced: €0.96 million
- Dried leguminous vegetables: €3.9 million
- Apples, pears and quinces: €169.4 million
- Other fresh fruits products: €295.6 million

Even though the trade balance for fruit and vegetables is in NZ's favour, there is a two-way trade. In value terms, however, EU exports of fruits and vegetables products are comparatively small and mainly comprise of:

- Other fruits products: €1.9 million
- Vegetables (uncooked or cooked): €1.5 million
- Other vegetables, fresh or chilled: €0.8 million
- Coffee: €3.4 million

Trade policy measures

While New Zealand's import tariffs are zero for most fruits and vegetables categories, the EU imposes relatively high tariffs on fruits and vegetabes products imported from NZ. For major NZ export commodities, EU applied tariffs are as follows: 9.6% for onions, 12.3% for dried vegetables, a mere 0.8% for dried leguminous vegetables, 7.2% for apples, pears and quinces, and 8% for other fresh fruis products.

The relatively high EU tariffs on horticultural exports are seen as a considerable problem by NZ, because many third country competitors benefit from substantially lower tariffs. For example, for NZ onions the EU applies a 9.6% tariff, while competitors from Chile, Peru and South Africa now enjoy a zero import tariff. In addition, producers supported with the help of EU grants for long-stored domestic produce directly compete with NZ's natural off-season window.[32]

In 2013, NZ introduced a commodity levy for onions, supplemented by a voluntary exporter levy, with a participation rate of 90% of production. According to the submission by Onions New Zealand Inc, Australian onions from Tasmania appear to benefit from the export component of the Tasmanian Freight Equalisation Scheme (TFES), which provides an export subsidy equivalent of approximately €35/mt, or an estimated 32% of the total NZ freight cost.[33]

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[31] Due to data gaps in Eurostat's trade volume data at HS-4 and HS-6 level, we present more comprehensive trade data of the World Banks's ITS database. For $ to € conversion, the exchange rate used throughout the report is 0.901 based on 2015 average.
[32] Onions New Zealand Inc. Submission to the Ministry of Foreign Affairs & Trade (MFAT) (February 2016).
[33] Ibid.

In addition to these measures, NZ currently enforces two antidumping measures against EU products, namely against canned peaches from Greece and from Spain.

CGE model results

Estimated changes in EU exports of fruits and vegetables products are rather low, standing at 1.8% and 2.7% respectively. New Zealand's exports of fruits and vegetables are estimated to increase relatively strongly by about 39% and 38% under the two scenarios respectively. At the same time, New Zealand's total output of fruits and vegetables products is estimated to increase by 2.6% under the liberalization scenario and 2.2% under the increased liberalization scenario. EU ouptut in fruits and vegetables is estimated to decreased slightly by -0.2% under both liberalization scenarios. For the EU and New Zealand, the estimated percentage changes in aggregate import prices are below the perception threshold for both liberalization scenarios.

3.2.2.2. Ruminant Meat

According to FAOSTAT figures for 2013, beef, sheep and goat meat products were NZ's second biggest export commodity group by weight and by value, as well as its biggest non-dairy export group to the world. New Zealand's meat industry emphasises that NZ exports more than 80% of its beef and over 90% of its sheep meat production. In 2015, red meat and associated by-products (including skins and hides and offal, excluding wool[34]) went to the EU for over NZD 2 billion (€1.8 billion or 23% of the industry's total exports).

The EU exports almost no ruminant meat to New Zealand, and less than €2 million worth of offal and animal fats. According to Eurostat, EU28 imports of all beef meat from New Zealand averaged 13'000 tons for the years 2011-2015. For sheepmeat and goatmeat (frozen, fresh or chilled) imports varied between 161,000 and 183,000 tons – considerably down from an average of about 231,000 tons in the years 2006-2009. However, according to Eurostat the EU was 88% self-sufficient in 2013 (and exported 8% of its production), yet as much as 94% of its imports came from NZ and AUS.

Trade policy measures

In 2015, the EU and New Zealand updated the EU–NZ Veterinary Agreement, which has been in place since 1996. Upon the adoption of a series of technical amendments on 10 November 2015, the European Commission said it should give a significant boost to bilateral trade in meat and dairy products. New Zealand called it an example of "world-leading practice for trade in agricultural and food products." It was agreed back in 1996 (i.e. during the BSE crisis), but its full benefits became effective as of 2015, after several national legislation and treaty modifications. According to the *New Zealand Food Safety Authority* (NZFSA), it was expected to save potential costs of up to NZD200 million (€180.2 million). The NZFSA also noted that this was one of the first agreements effectively applying the (WTO-enshrined) *regionalisation principle* by re-accepting EU meat products: "based on information supplied by the EU on the epidemiology of the outbreak and the controls they had in place, we were the first country to reopen the doors to products from non-infected areas two weeks later."

Respondents to the EU Commission Public Consultation confirmed that this agreement has led to specific results such as the rapidity of consignment clearance at port of entry and resultant cost reduction from fewer inspections, the ability to resolve minor issues in paperwork through improved communication and cooperation, increased EU pork sales to

[34] The EU is also NZ's second largest market for wool exports by value. Wool is aggregated with fibres and other crops.

New Zealand, increased import of lamb from New Zealand, less complicated veterinary certification and the recognition of equivalence of sanitary measures between the two sides. The 2015 amendments of the agreement have helped to further streamline requirements and facilitate trade into the EU including expediting listings of food establishments.

According to the joint submission to MFAT by Beef + Lamb New Zealand and the Meat Industry Association (as of December 2015), NZ enjoys "comparatively favourable conditions of access to the EU market" for sheep meat thanks mainly to a zero-duty country-specific quota (TRQ) of 228,254 tonnes carcass weight equivalent (c.w.e) of sheepmeat (and goatmeat).[35]

EU market access for ruminant meat is generally determined by two elements: relatively high tariffs and TRQs offering low tariff market access, but for limited quantities only. At the same time, access to such TRQs may be reserved to one country or „shared" between suppliers from different countries, within a FTA or otherwise agreed.

For beef, according to the WTO tariff data base, EU TRQs for which NZ is eligible are open to all other WTO Members, namely a frozen beef quota of 53,000 tonnes p.w. (1 July – 30 June) with an in-quota tariff rate of 20%, and a processing beef quota of 63,703 tons (1 July – 30 June) with an in-quota rate of between 20% and 20% + €994.5–2,138.4/ton, depending on the product. These quotas "tend to be dominated by lower cost suppliers (for example from South America), which are also able to supply some product over the high out-of-quota tariff."[36]

Another quota for hormone free and "grain-fed high-quality beef" (HQB), established as a result of the WTO dispute on beef hormones, is also accessible to the USA, Canada, Australia, Uruguay and Argentina. Within this HQB quota, NZ can supply a country-specific quota of 1,300 tonnes p.w.[37]

Even though NZ (and AUS) supply 94% of the EU's sheepmeat and goatmeat imports, mostly through their preferential TRQs, it does face relatively high tariffs for out-of-quota supplies.

Total tariff costs for NZ's red meat and co-product exports were estimated by Beef + Lamb New Zealand (B+LNZ) and the Meat Industry Association (MIA) at NZD69 million (€62.17 million) in 2014, allegedly making the EU "the second-best protected beef market after Japan".

CGE model results

For the EU, total output of ruminant meat is estimated to decrease by 1.2% under the ambitious scenario. For New Zealand, the estimated percentage change of total output of ruminant meat is 4.2% for the increased liberalization scenario. New Zealand's exports of ruminant meat to the EU are estimated to increase by about 25% under the increased liberalization scenario. EU exports of ruminant meat products to New Zealand are estimated to increase by 4.6% for the increased liberalization scenario. Aggregate average import prices for ruminant meat products would not change (below the perception level)

[35] NZ Beef and Lamb and Meat Industry Association (2015), Joint submission by Beef + Lamb New Zealand and the Meat Industry Association to New Zealand's Ministry of Foreign Affairs and Trade, December 2015.
[36] All quotes from *Beef + Lamb New Zealand* (B+LNZ) and the *Meat Industry Association* (MIA), Joint Submission #169167 (6 pages, undated).
[37] EU Reg. No 481/2012 dated 7 June 2012.

for New Zealand under both liberalization scenarios, and slightly decrease by about 0.8% for the EU.

3.2.2.3. Other Meat (including pork and poultry)

Pork meat (fresh, chilled and frozen) is the EU's first agri-food export commodity exported to NZ, with 31,000 tons worth €65 million, representing a share of 14.7% in the value of EU agricultural exports to NZ, in 2015. NZ export of pork meat products are low, standing at €88,000 in 2015. Bilateral trade volumes in poultry meat product are marginal for both regions.

Trade policy measures

New Zealand imposes an applied average tariff of 5% on EU imports of several other meat products' categories. EU applied tariffs on other meat products are generally low. However, the EU applies a complex system of weight-based (kilograms) compound tariffs on a great number of meat products categories including fresh, chilled or frozen meat.

While tariffs and quotas are key issues, other factors play an important role. Quota allocation methods, presently working to the satisfaction of NZ's major meat producers industry associations, impact on import rents that accrue at export or import levels. The application of this agreement has brought clear benefits to the EU (pork) meat industry: between 2011 and 2015, EU exports of "other meats" to NZ almost trebled to 31,000 tons.

As concerns poultry products, New Zealand resricts the import of chicken meat due to Infectious Bursal Disease considerations (IBD, Gumboro Disease). The EU noted that the underlying scientific proof lacks material relevance, but restrictive measures are still in place.[38] The measures affect HS codes 0207 (Meat and edible offal, of the poultry of heading) and 0105 (fresh, chilled or frozen). A complex list of import health standard requirements that poultry meat importers need to meet when importing meat products is provided by NZ's Ministry for Primary Industries.[39]

CGE model results

New Zealand's exports of other meat products to the EU are estimated to increase by 5% under the increased liberalization scenario. For New Zealand, the estimated percentage change in total output of other meat is relatively low, standing at -0.9% for the increased liberalization scenario. For the EU, total output of other meat would not change for either scenario. EU exports of other meat products would increase by about 40-41% under both liberalization scenarios. Aggregate average import prices would not change (below the perception level) for the EU, and fall by about 1% for New Zealand's imports.

3.2.2.4. Dairy Products

Trade in dairy products is important for both the EU and New Zealand. At the same time, New Zealand's exports of dairy products to the EU (about €221 million in 2015) are significantly higher than New Zealand's dairy imports from the EU (about €76 million in 2015).

[38] EU Market Access Database, Barrier ID 10721, http://madb.europa.eu/madb/sps_barriers_details.htm?barrier_id=10721, accessed on 3 March 2017.
[39] NZ Ministry for Primary Industries, Import health standards, https://www.mpi.govt.nz/importing/food/poultry/requirements/, accessed on 3 March 2017.

NZ has a large trade surplus in dairy products vis-à-vis the EU (and is still its main supplier of butter[40]). The dairy sector is not only of vital importance for NZ, it also shows substantial EU exports, and export interests respectively. According to industry data, NZ accounts for about 3% of global milk production, amounting to 19.1 billion litres of milk. 95% of NZ dairy products are exported. Major NZ export goods are: milk powder (38% of total exports), butter and cream (17%), yoghurt and ice cream (9%), skim milk, butter milk powder and infant food (13%), casein and protein products (13%) and cheese products (10%). In 2014, NZ was the EU's largest external lactose market.

Dairy is also important for the EU. In the EU's 2015 final agricultural production, "milk" ranks second with 14.1%, after "fruit and vegetables" (23%) and before "cereals incl. seeds" (13.3%).[41] In 2015, milk powders and whey were the EU's second agricultural export after pork, valued €33 million or a 7.4% share in all agri-food exports.[42] In addition, European cheeses anr important export commodities for the EU, still showing increasing exports to NZ. On the other side, Fonterra, which is NZ's largest exporter, sees the EU as a source for high quality dairy ingredients, not least for re-exports in processed form to China and other countries in the regions. It has partnerships and fully-owned subsidiaries in Germany, Lithuania and the UK.

For both regions, 2015 bilateral export values for major dairy product categories are as follows (World Bank ITS data):[43]

(1) NZ exports of dairy products to EU:

- Casein, caseinates and other casein: €162.6 million
- Cheese: €19.1 million
- Milk and cream, concentrated: €1,688
- Milk and cream, no concentrated: €8.6 million
- Butter: €90.6 million
- Buttermilk: €11.1 million
- Whey, whether or not concentrated: €0.9 million

(2) EU exports of dairy products to NZ:

- Casein, caseinates and other casein: €0.6 million
- Cheese: €19.8 million
- Milk and cream, concentrated: €0.4 million
- Milk and cream, not concentrated: €4.5 million
- Butter: €0.4 million
- Buttermilk: €0.27 million

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[40] According to Eurostat (COMEXT) figures updated on 13 February 2017, EU exported butter mainly to the USA, Saudi Arabia and Egypt: its total exports increased between 2012 and 2016 from 102'000 162'000 tons while total imports decreased from 36'000 to 8'000 tons. With 72% of these imports NZ remained the main supplier.

[41] DG Agriculture website at http://ec.europa.eu/agriculture/milk/index_en.htm last visited on 17 October 2016.

[42] NZ – EU FTA Fonterra Submission to MFAT (February 2016).

[43] Due to data gaps in Eurostat's trade volume data at HS-4 and HS-6 level, we present more comprehensive trade data of the World Banks's ITS database.

- Whey, whether or not concentrated: €30.9 million

Trade policy measures

NZ average applied ad valorem MFN tariff on dairy products imports is 1%. Tariffs between 3% and 5% are applied on milk and cream and several processed milk products such as yoghurt, buttermilk, but also whey and milk powder products. A 7.7% percent tariff is applied on a range of cheese products, while other processed milk products imports face ad valorem zero tariffs.

As concerns EU tariffs and quotas, NZ benefits from a large number of TRQs, which the EU opens for all supplier countries ("erga omnes") or to NZ only (either "traditional suppliers" or "new suppliers").

According to the WTO tariffs database, the EU grants a number of TRQs erga omnes i.e. to all WTO Members:

- [12.9 EUR/100 kg] [13.8 EUR/100 kg] for "Milk and cream of a fat content by weight of <= 1%, not concentrated nor containing added sugar or other sweetening matter",
- [1.81 EUR/kg/lactic matter + 19.4 EUR/100 kg] [1.08 EUR/kg/lactic matter + 18.5 EUR/100 kg] [1.08 EUR/kg/lactic matter + 19.4 EUR/100 kg] [57.2 EUR/100 kg] [1.81 EUR/kg/lactic matter + 18.5 EUR/100 kg] for "Milk and cream, concentrated and sweetened (excl. in solid forms)",
- [8.3 % + 26.6 EUR/100 kg] [8.3 % + 12.4 EUR/100 kg] [8.3 % + 168.8 EUR/100 kg] [8.3 % + 130.4 EUR/100 kg] [8.3 % + 17.1 EUR/100 kg] [8.3 % + 95 EUR/100 kg] [0.54 EUR/kg/lactic matter + 21.1 EUR/100 kg] [0.2 EUR/kg/lactic matter + 21.1 EUR/100 kg] [0.17 EUR/kg/lactic matter + 21.1 EUR/100 kg] [59.2 EUR/100 kg] [24.4 EUR/100 kg] [20.5 EUR/100 for "Yogurt, whether or not flavoured or containing added sugar or other sweetening matter, fruits, nuts or cocoa".

Preferential import quota allocations for the year 2017 are for eight TRQs *erga omnes,* totalling 83,241 tons, and for four large TRQs reserved for NZ (for cheeses and butter), totalling 85,693 tons.[44]

The administration of these TRQs on an annual basis and in response to supplier requests is handled by NZ. Two reputed EU scholars describe this system of non-AV tariffs for almost all raw and processed milk products (30 HS6 product lines in total) as "complex", but overall "relatively satisfactory, compared with those of other countries."[45] According to Eurostat data, NZ seems to make relatively good use of those quotas which are available to all producers.[46] However, a NZ study points out that NZ consistently underfills by about one third the TRQs to which it is eligible. According to the authors a main reason for this

[44] (i) whole cheddar cheeses (ii) cheese for processing (iii)/(iv) butter, for new and for traditional exporters. Source: Milk Market Observatory (TRA.EU.Pref), EU Preferential Import Quotas. Last update 19 January 2017, at https://ec.europa.eu/agriculture/sites/agriculture/files/market-observatory/milk/pdf/preferential-import-quotas_en.pdf

[45] Jean-Christophe Bureau and Stefan Tangermann, Tariff Rate Quotas in the EU. *Agricultural and Resource Economics Review* 29/1 (April 2000) 7, p.80

[46] For EU preferential TRQs globally and their use by NZ see the continuously updated website at https://ec.europa.eu/agriculture/sites/agriculture/files/market-observatory/milk/pdf/preferential-import-quotas_en.pdf last accessed 9 March 2017.

underfill seems to lie in the complex quota administration system (e.g. the EU quota system review is alleged to negatively impact on NZ dairy exports).[47]

As noted by EDA, while the top ten EU dairy processors collect 36% of all milk produced in the EU, NZ's biggest dairy producer Fonterra processes 95% of all milk produced in NZ. This near-monopoly market power – under review in the Doha Round negotiations – has turned NZ into China's first supplier of butter and other products.[48]

The precise extent of the trade impact of TRQs (and their administration) is difficult to calculate for different liberalization scenarios and a given FTA. A recent study by the European Commission on the cumulative trade impact of twelve envisaged FTAs, including with AUS and NZ, suggests a generally positive overall impact for EU farmers.[49]

CGE model - results

For the EU, total output of dairy products would not change significantly for both liberalization scenarios. For New Zealand, total output of dairy products is estimated to slightly decrease for (-0.9%) in the conservative scenarios and increase in the (+0.4) in the increased liberalization scenario. New Zealand's exports of dairy products to the EU would increase by about 134% (about €296 million on the basis of the 2015 base value) under the increased liberalization scenario. EU exports of dairy products to New Zealand would increase by about 29% (about €22 million on the basis of the 2015 base value) under the increased liberalization scenario. Aggregate average import prices for dairy products would not change (below the perception level) for the EU. For New Zealand, aggregate average import prices for dairy products would fall by less than 1% for both liberalization scenarios.

3.2.2.5. Beverages (Note: in CGE modelling "Beverages & Tobacco")[50]

Trade in beverages products is very important for both the EU and New Zealand. At the same time, New Zealand's exports of beverages products to the EU are significantly higher than the EU's beverages exports to New Zealand. For alcoholic beverages, 2015 trade values are as follows (World Bank ITS data):[51]

(1) EU exports to NZ:

- Wine of fresh grapes: €47.3 million
- Beer made from malt: €10.2 million
- Other fermented beverages: €1.8 million
- Undenatured ethyl alcohol: €47.2 million
- Vermouth and other wine of fresh grapes: €0.25 million

(2) NZ exports to EU:

- Wine of fresh grapes: €379.4 million

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[47] Andrew Mead and Anna Strutt, Tariff Rate Quotas and New Zealand's Meat and Dairy Trade. Paper presented at the 2004 NZARES Conference Blenheim Country Hotel, Blenheim, New Zealand. June 25-26, 2004.
[48] Sources : (i) EDA Trade Focus, Dairy Trade and New Zealand (July 2016) (ii) The New Zealand Herald, 28 August 2015.
[49] European Commission, JRC Science for Policy Report, Cumulative economic impact of future trade agreements on EU agriculture (2016) (http://publications.jrc.ec.europa.eu/repository/bitstream/JRC103602/lb-na-28206-en-n_full_report_final.pdf)
[50] $ = USD if not indicated otherwise.
[51] D Due to data gaps in Eurostat's trade volume data at HS-4 and HS-6 level, we present more comprehensive trade data of the World Banks's ITS database.

- Beer made from malt: €1.35 million
- Other fermented beverages: €0.03 million
- Undenatured ethyl alcohol: €0.86 million
- Vermouth and other wine of fresh grapes: n.a.

Trade policy measures

New Zealand's average MFN applied tariff on beverages and spirits is 2.3%. NZ average tariff on imports of wine products is 4.6%. The average applied tariff on AUS wine imports is 5%. Tariffs between 1.9% and 2.5% apply for a range of spirits products, e.g. whiskies, rums, vodkas and other liqueurs.

The EU's average MFN applied tariff on beverages and spirits is 3.9%. The average applied tariff imposed on wine imports by the EU is 32%, whereas tariffs imposed on spirits are mostly zero. However, in addition to ad valorem tariffs, the EU applies a complex system of compound tariffs based on hectolitre volumes and alcohol content, e.g.:

- [32 EUR/hl] for "Sparkling wine of fresh grapes",
- [0.9 EUR/% vol/hl + 6.4 EUR/hl] [10.9 EUR/hl] for „Vermouth and other wine of fresh grapes, flavoured with plants or aromatic substances, in containers of <= 2 l",
- [0.6 EUR/% vol/hl] [0.6 EUR/% vol/hl] [0.6 EUR/% vol/hl + 3.2 EUR/hl] [0.6 EUR/% vol/hl + 3.2 EUR/hl] for „Rum and other spirits obtained by distilling fermented sugar-cane products".

With respect to issues such as trade regulations applying to labels or to wine ingredients, the situation of NZ alcoholic beverages is similar to the one described in the Australia Report. For the policy differences for GIs between the EU on one side and AUS and NZ on the other side please refer to the General Report.[52]

CGE model - results

For the EU, total output of beverages and tobacco products would not change for either of the liberalization scenarios. For New Zealand, total output of beverages and tobacco products would go up by about 0.8-0.7% for the two scenarios. New Zealand's exports of beverages and tobacco products to the EU would increase by about 15% under both scenarios. EU exports of beverages and tobacco products to New Zealand would increase by about 6% under both liberalization scenarios. Aggregate average import prices for beverages and tobacco products would not change significantly (below the perception level) for the EU. For New Zealand, aggregate average import prices for beverages and tobacco products would fall by about 0.7% for both liberalization scenarios.

[52] Detailed information on labelling requirements is given by the "Labelling of Alcoholic Beverages User Guide", provided by AU/NZ authorities, available at https://www.foodstandards.gov.au/code/userguide/Documents/Guide%20to%20Labelling%20of%20Alcoholic%20Beverages.pdf, accessed on 3 March 2017. Note: the Australian and New Zealand food standards system is governed by legislation in the states, territories, New Zealand, and the Commonwealth of Australia; including the Food Standards Australia New Zealand Act 1991 (the FSANZ Act).

3.3. Market Access and Regulatory Obstacles to Investment and Impact on Investment Flows (Task 4)

3.3.1. Introduction

This chapter sets out, first, the major obstacles to foreign direct investment existing in each New Zealand. Then, second, it assesses New Zealand's existing investment treaty practice, focussing in particular on the ways in which it differs from recent EU FTA practice, with a view to ascertaining the likely contours of the investment chapters of prospective EU-NZ. This will in turn inform our subsequent analysis, in a later chapter, of its potential impact on the identified barriers to investment in each country.

3.3.2. Analysis

3.3.2.1. Obstacles to foreign direct investment in New Zealand

Introduction

This section will begin by providing a macro view of the existing investment climate in New Zealand. It will then describe the most significant and obvious such barrier, namely New Zealand's foreign investment screening system. The final section will highlight certain specific obstacles at the sectoral level.

The primary data sources for this will include a number of different global indices and data sources relevant to foreign direct investment, including the OECD's Foreign Direct Investment Regulatory Restrictiveness, and the World Bank *Doing Business* reports. Specific New Zealand measures affecting investment are identified primarily by reference to existing lists and catalogues of investment restrictions, obtained from country-specific reservations under the OECD Code of Liberalization of Capital Movements and Code of Liberalization of Current Invisible Operations; OECD-UNCTAD Reports on G20 Investment Measures (2008); GATS Schedules; and lists of Non-Conforming Measures under recent New Zealand FTAs. We have focussed on those types of measures which are typically identified as the most commercially significant for foreign investors, and which are intentional and regulatory in nature, including: sectoral equity limits; screening; restrictions on key personnel; branching limitations, capital repatriation, and land ownership. Content analysis of the relevant New Zealand legislation has been performed for the most significant of these measures.

Overview

The OECD's Foreign Direct Investment Regulatory Restrictiveness Index measures obstacles to FDI in 58 OECD and non-OECD countries. It is primarily intended to measure the extent to which a country's regulatory regime departs from the principle of national treatment. As a consequence it focusses on four types of measure: foreign equity restrictions, screening and prior approval requirements; rules for key personnel; and 'other restrictions on the operation of foreign enterprises', the latter category including for example restrictions on branching, capital repatriation, acquisition of land, and access to local finance. Rules on state ownership and state monopolies are not included.[53]

Based solely on this index, New Zealand appears to have a restrictive environment for foreign direct investment. Its 2015 score was 0.24, which was the highest score amongst all OECD countries. The OECD average that year was 0.07.

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[53] See generally, Kalinova, B., A. Palerm and S. Thomsen (2010), "OECD's FDI Restrictiveness Index: 2010 Update", *OECD Working Papers on International Investment*, 2010/03, OECDPublishing. http://dx.doi.org/10.1787/5km91p02zj7g-e.

Table 14: 2015 Index Score

Country	2015 Index Score
Australia	0.14
Brazil	0.10
Canada	0.166
Denmark	0.03
Ireland	0.04
Japan	0.05
Korea	0.135
Netherlands	0.01
New Zealand	0.24
Norway	0.09
Spain	0.02
Switzerland	0.08
United Kingdom	0.06
United States	0.09

Source: OECD FDI Regulatory Restrictiveness Index, 2015.

As the above table shows, New Zealand's score is significantly higher than other small advanced economies such as the Netherlands (0.01), Denmark (0.03), Switzerland (0.08) and Norway (0.09), and higher than Korea (0.135) and Canada (0.166). Of the countries scored by the OECD, it is lower only than China, Indonesia, Jordan, Myanmar, the Philippines and Saudi Arabia. Looking historically, New Zealand's relative position on this index has worsened. This is because its score of 0.24 has remained steady throughout the period 1997-2015 through which this index has been compiled, while most other countries' scores have declined, often significantly.

The most restrictive sectors – as scored by the OECD index – include fisheries, telecommunications, air transport, shipping, primary industries and banking, insurance and financial services.

Table 15: 2015 Index Score per sector

Sector	2015 Index Score
Fisheries	0.700
Telecommunications	0.400

Air transport	0.400
Primary	0.325
Maritime transport	0.250
Banking and insurance	0.250
Financial services	0.235

Source: OECD FDI Regulatory Restrictiveness Index, 2015.

Nevertheless, it should be noted that New Zealand's relatively high index score largely reflects its foreign investment screening system, as well as its foreign equity limits in specific sectors, the practical effects of which are discussed further below. By different measures, the picture looks significantly better.

Over the last 20 years, for example, the overall level of FDI stocks in New Zealand has consistently been relatively high by global standards. According to UNCTAD figures, between 1994 and 2014, FDI as a share of GDP has fallen below 40% in only five years, reaching a high of over 58% in 1998. Over the last five years, the figure has hovered around 40%, as compared to an OECD average of around 30%. This is somewhat higher than the Australian experience of the same time period, significantly higher than that experienced by Germany, Canada, the US, but somewhat lower than the UK. FDI flows present a more mixed picture, with New Zealand's inward FDI flows falling below the OECD average in a number of years since 2008, albeit with significant variation between years.[54]

Table 16: FDI Stocks and Inward FDI Flow

Year	FDI Stocks AS % GDP (OECD ave)	Inward FDI Flow as % GDP (OECD ave)
2014	37.98 (32.84)	1.68 (1.12)
2013	40.30 (33.88)	0.84 (1.59)
2012	41.62 (30.48)	2.43 (1.52)
2011	39.49 (28.73)	0.71 (1.81)
2010	42.08 (29.87)	0.65 (1.63)
2009	47.05 (29.43)	2.45 (1.63)
2008	33.51 (23.81)	2.62 (1.83)

Source: UNCTADstat.

FDI inflows into New Zealand have tended to be broadly based across economic sectors, including agribusiness, real estate, energy and power, financial services, and materials. In 2015, the sectors with the highest proportion of FDI were financial services, manufacturing, agribusiness, retail and wholesale trade, utilities and real estate.

[54] UNCTADstat, FDI statistics, http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx.

Furthermore, New Zealand is consistently ranked very highly by a number of global indicators for its attractiveness as a destination for foreign investment. It was ranked second in the world, in the World Bank's *Doing Business 2016* report, below only Singapore.[55] This included a ranking of first in the world in those indicators relating to ease of starting a business, registering property, obtaining credit and protecting minority investors. In the present context, its consistent ranking at or near the top of the Protecting Minority Investors Index is significant. *Transparency International* consistently ranks New Zealand in the top global countries in its Corruption Perception Index.[56] However, in 2012, New Zealand was ranked only 71st on UNCTAD's Inward FDI Potential Index, which is based on measures of market attractiveness, availability of low cost and skilled labour, natural resources, and infrastructure capacity.[57] In this context, a number of non-regulatory factors may be dampening potential foreign investment, such as the small size of the internal New Zealand market, its specialisation in non-fuel primary products as exports, and its distance from US and European markets.

The New Zealand Foreign Investment Screening Process

The main elements of the legal framework governing New Zealand's foreign investment screening process are the *Overseas Investment Act 2005*, the Overseas Investment Regulations 2005, and the *Fisheries Act 1996*. This framework represents the latest development in quite a long history of the regulation of both inward and outward FDI in New Zealand. The *Land Settlement Promotion and Land Acquisition Act 1952* was an early precursor for some aspects of the existing legislation, and reflected a strong preference on the part of the government of the time in favour of owner-occupier land ownership, and smaller-scale domestic farming. The 1960s and 1970s saw political support for a relatively restrictive approach to FDI, leading to the adoption of the *Overseas Investment Act 1973*, the purpose of which was to supervise and control foreign investment in New Zealand, specifically to ensure that it brought benefits not available through local ownership.

However, over the course of the 1980s and 1990s, New Zealand's approach to foreign direct investment generally became significantly more permissive and open. Caps on foreign equity participation were over time limited to a small number of sectors, and the screening thresholds were raised significantly. Foreign participation, within limits, was permitted in major privatised entities in air transport, telecommunications and media in the early 1990s. In 1995, the provisions of the *Land Settlement Promotion and Land Acquisition Act 1952* which dealt with foreign ownership of land were incorporated into the *Overseas Investment Act 1973*, and in 2005 the 1973 Act was replaced by the *Overseas Investment Act 2005*.

The Act imposes two major tests, applying to two different categories of foreign investment. One test applies to all proposed investments by overseas persons in 'sensitive land'. The Act contains a broad definition of 'sensitive land', which includes: all non-urban land over 5 hectares in size; land over 0.4 hectares in size which is used for purposes such as conservation, recreation or heritage; and all land over 0.4 hectares in size which adjoins certain categories of otherwise sensitive land. In addition, 'special land' – which must first be offered to the Crown if it is part of an overseas transaction involving sensitive land – includes the foreshore, seabed, riverbed or lakebed. 'Overseas persons' including, broadly speaking, individuals who are not citizens nor ordinarily resident in New Zealand,

[55] See http://www.doingbusiness.org/data/exploreeconomies/australia.
[56] https://www.transparency.org/country/#NZL.
[57] UNCTAD, Inward FDI Potential Index, 2012.

companies registered in a foreign country, and companies with at 25% foreign owned or controlled.

Foreign acquisitions of sensitive land require ministerial consent, and consent is dependent on satisfying a number of criteria having to do with the applicant's business experience, business acumen, level of financial commitment, character, and eligibility for a visa. In addition, the Minister must be satisfied that the investment is likely to benefit New Zealand, compared to local ownership of the same asset. In the case of non-urban land, greater than 5 hectares, the benefit must be 'substantial and identifiable'. Factors to be considered in this benefit test include the creation of job opportunities, the introduction of new technology or skills, increased export receipts, increased market competition, increased processing of primary products, as well as impact on development, habitat and other matters. The relevant 'benefit' does not include benefit to the vendor. Furthermore, where a proposed acquisition involves farm land, the land must first have been offered by on the open market to local purchasers. Under the *Fisheries Act 1996*, the test for approval of overseas investments in fishing quotas is essentially the same as those applying to acquisitions of sensitive land.

The second test relates to transactions in which an overseas person seeks to acquire an interest of 25% or more in a business with assets exceeding NZD100 million (€90 million), or shares (valued at over NZD100 million/€90 million) in an existing business. These thresholds have been modified for investment originating in some countries with which New Zealand has concluded free trade agreements. Thus, under the 2013 Investment Protocol to the ANZCERTA, the threshold is NZD477 million (€429.7 million) for Australian investors for business assets not involving "sensitive" land, including farmland, or fishing rights. If the Trans-Pacific Partnership enters into force, the threshold above which an investor must get approval to invest in New Zealand will increase from NZD100 million (€90 million) to NZD200 million (€180 million) for investors from TPP Parties. For a variety of reasons, this higher threshold seems likely to flow through to China, Taiwan and Korea in due course as well. This will not, however, affect the regime governing approvals for transactions involved sensitive land or fisheries quotas. No changes will be made to the way New Zealand approves investments relating to 'sensitive land' or fisheries quotas.

For such business asset transactions, the criteria relating to character, business experience and acumen, and level of financial commitment are applied, but the 'net benefit to New Zealand' test is not. In applying both these tests, the relevant Minister usually follows the recommendation of the Overseas Investment Office, which considers application, but on occasion has not.

Despite the relatively high degree of restrictiveness of this regime on paper, it is important to note that outright rejections are rare (Table 17). Between January 2005 and December 2015, 24 applications were declined in total, of which 11 were declined by ministers. Of the 9 proposals which have been rejected in the last 6 years, all but two of them related to purchases by individuals of sensitive land for residential purposes, where the individual did not intend to reside on the property to be purchased. One rejected proposal, in 2010, concerned a proposed acquisition of Crafar farms, a major NZ dairy empire which had collapsed in 2009, which triggered a national debate over foreign land ownership. The rejected proposal in 2015 also related to a politically sensitive proposed sale of Lochinver farm to a Chinese company, which was rejected by the relevant Minister against the initial recommendation of the Overseas Investment Office. Earlier, in 2008, a proposed acquisition of Auckland Airport was rejected. The process is therefore on occasion highly politicised, even if the large majority of applications are approved.

Table 17: Foreign Investment Screening

Year	Approvals	Rejections (total)	Rejections of business acquisitions
2015	129	1	1
2014	148	0	0
2013	117	0	0
2012	113	0	0
2011	146	5	0
2010	123	3	1
2009	158	0	0
2008	130	4	4
2007	146	4	3

Source: Overseas Investment Office, Annual Reports, 2007-2015

That said, the number of outright rejections may understate the impact of this foreign investment screening process. Such statistics do not adequately take account of proposals which are withdrawn before being rejected, those which are modified before submission to improve the chances of approval, those in which concessions are granted prior to approval, as well as those which are never made. The New Zealand system was reviewed by the NZ Treasury in 2009, and by the OECD in 2011, with both bodies making criticisms of the way the current system operates. For example, it was noted that applications can take months to prepare, with application costs sometimes exceeding NZD200,000/€129,000. It was suggested that the problems which the system addresses are ill-defined, and that many of the concerns raised in relation to sensitive land could be dealt with by regulations which treated local and foreign investors alike. It has further been suggested that the complexity and opacity of the criteria could lead to unpredictable outcomes.

Sectoral Issues

New Zealand imposes foreign equity limits in respect of a small number of high profile entities with strategic importance in the New Zealand economy. Foreign ownership of Chorus (formerly part of Telecom New Zealand) requires board and shareholder approval, and half of the board of directors are required to be NZ citizens. If foreign ownership of Chorus is to exceed 49.9%, approval of the NZ government is required. At least 51% of Air New Zealand must be locally owned, and any single foreign acquisition of 10% or more of voting rights must receive shareholder approval. In addition, more than half the board must be NZ citizens, at least three must be ordinarily resident in NZ, and the Chairperson must be a NZ citizen.

Highly regulated industries in New Zealand include telecommunications, dairy, as well as electricity and gas. The acquisition by foreign governments or their agents of licences or management rights to use the radio frequency spectrum is subject to the written approval of the Chief Executive of the Ministry of Business, Innovation and Employment. The *Dairy Industry Restructuring Act 2001* restricts who may hold shares in certain co-operatives in the dairy sector, and this regime may not be amended without the consent of the responsible Minister.

New Zealand's List of Non-Conforming Measures, contained in its Schedules to the Trans-Pacific Partnership Agreement, provides an indication of areas in which the New Zealand government foresees actual or potential measures which may conflict with obligations under the TPP investment chapter. For example, in accordance with those Schedules, New Zealand maintains the right to adopt or maintain any measure:

- with respect to the provision of provision of traditionally public services such as health care, education, correctional facilities, fire-fighting, public transport, public housing, public utilities (within certain limitations), as well as childcare and services;
- with respect to the allocation, collection, treatment and distribution of drinking water, other than bottled water;
- involved in devolving services which are supplied in the exercise of governmental authority at the date of entry into force of the TPP;
- with respect to the sale of the shares or assets of the any enterprise wholly owned or effectively controlled by the New Zealand government;
- constituting nationality or residency requirements in relation to animal welfare or the preservation of human life or health, include food safety, biosecurity, animal feeds, and so on;
- relating to fisheries;
- with respect to certain research and development services;
- technical testing and analysis services;
- relating to nuclear energy;
- with respect to the promotion of film and television production in New Zealand; including preferential co-production arrangements for film and television products;
- with respect to the holding of shares in the Co-operative Dairy Company, or the disposition of its assets;
- with respect to the allocation of tariff quotas, and distribution rights, for certain agricultural products, as well as the implementation of mandatory marketing plans for products derived from specified agribusiness;
- with respect to public health measures relating to tobacco and alcohol products; and
- certain specified insurance services.

It will be clear from this list, as well as from the experience of the foreign investment screening process described above, that social and political sensitivities concerning foreign investment are concentrated primarily in only a few sectors[58], the most sensitive probably being agribusiness. The list above, combined with the foreign equity restrictions noted earlier, correspond somewhat to the list of most restrictive sectors as scored by the OECD FDI Regulatory Restrictiveness Index, which include fisheries, telecommunications, air transport, shipping, primary industries and banking.[59] Nevertheless, it is worth noting that, while these might be the most restricted sectors, some of them are also those which attract a significant percentage of FDI inflows into New Zealand. For example, the primary sector and agribusiness account for a large proportion of OIO foreign investment approvals over the last 15 years, as well as around 6% of New Zealand's total FDI stocks. Furthermore, remarkably, the financial services sector accounts for almost a third of total FDI stocks, a significant proportion of which originates in Australia.

3.3.2.2. The existing baseline for EU-NZ international investment protection

Since New Zealand has no existing BITs with EU partners, there is no need to consider the extent to which a prospective EU-NZ FTA will upgrade and extend existing protections

[58] The public services carve out is similar to the European sensitivity in this area, and driven by the same general concern – rather than a specific issue around each of these sectors individually.
[59] OECD FDI Regulatory Restrictiveness Index, 2015.

already in force. The prospective agreement will be starting from a zero base (other than, of course, those protections contained in general customary international law).

3.3.2.3. Recent New Zealand investment treaty practice

Introduction

The purpose of this section is to compare recent New Zealand and EU FTA practice, in respect of investment issues, in order to determine the likely contours of an agreement, and to highlight areas of particular uncertainty or likely controversy.

In respect of New Zealand treaty practice, attention will be focussed on New Zealand's more recent, new generation FTAs, which are more indicative of the potential content of an EU-NZ FTA. Of these, the primary points of reference will be the most recent four comprehensive agreements, ANZTEC, the NZ-Korea FTA, the NZ-Malaysia FTA and the TPP, though other agreements, for example with Singapore, Thailand, China and ASEAN/Australia, will be referenced as appropriate. Amongst recent EU treaties, the most important point of comparison will be CETA, but reference will also be made where appropriate to the EU's proposals in the TTIP negotiations, as well as other EU-level FTAs.

The content of these treaties will be investigated under the following headings: rules on establishment; standards of protection; right to regulate; exceptions, arbitration and dispute settlement..

New Zealand's investment and investment-related agreements

New Zealand is a party to 10 FTAs which are currently in force. These include FTAs with countries across the Asia-Pacific including Australia, Singapore, Thailand, Malaysia, Hong Kong, China, Korea, Taiwan, Chile, and ASEAN/Australia. In addition, New Zealand is a party to the Trans-Pacific Partnership, and has concluded negotiations over an FTA with the Gulf Cooperation Council, both of which have yet to enter into force. Current FTA negotiations involving New Zealand include a bilateral deal with India, as well as plurilaterals such as PACER, RCEP, TiSA and a potential deal with the RBK Customs Union (currently paused). New Zealand has no current FTAs with European countries.

Table 18: 2015 Investment and Investment-related agreements

FTA partner	Date of entry into force
Australia (CER)	Jan 1983
China	October 2008
ASEAN/Australia (AANZFTA)	Jan 2010 (for New Zealand)
Hong Kong	Jan 2011
Malaysia	August 2010
Singapore	Jan 2001
Thailand	July 2005
P4 (Brunei, Chile, Singapore)	2006
Korea	Dec 2015

Taiwan (ANZTEC)	Dec 2013
TPP	concluded but not yet in force
GCC	concluded but not yet in force

New Zealand is party to relatively few bilateral investment treaties beyond the FTAs, which include investments. The only two currently in force are those with China (signed in 1988), and Hong Kong (signed in 1995). Two other BITs, with Chile and Argentina, have been signed but never entered into force. New Zealand has no BITs with European countries (Table 18).

Rules on establishment

In the investment chapter of the ANZTEC, the non-discrimination obligations of most-favoured nation and national treatment are expressed to apply to the establishment of investments. A long list of specific performance requirements are also prohibited in relation to the establishment of investments. The same is true of New Zealand's FTA with Korea. The most favoured nation and national treatment obligations in the NZ-Malaysia FTA apply pre-establishment. The non-discrimination obligations of the NZ-China FTA, however, apply only post-establishment. The TPP's non-discrimination requirements are drafted to apply pre-establishment, and it also contains a comprehensive prohibition of listed performance requirements, including in relation to establishment.

Wherever New Zealand has agreed to pre-establishment liberalization obligations, it has of course also secured its ability to continue to maintain its foreign investment screening system, described above. Recall from above, however, that in a number of agreements, it has agreed to raise the screening thresholds for investments from certain FTA partners. For example, under the ANZCERTA Investment Protocol (2013), the threshold is NZD477 million (in 2012 dollars, indexed, €429.7 million) for Australian investors for business assets not involving 'sensitive' land, including farmland, or fishing rights. When the Trans-Pacific Partnership enters into force, the threshold above which an investor must get approval to invest in New Zealand will increase from NZD100 million (€90 million) to NZD200 million (€180 million) for investors from TPP Parties, and on an MFN basis for China, Taiwan and Korea. Importantly, any further increase in these thresholds, granted in future FTAs, will have to be extended also to investors from these countries.

In its recent FTAs, the EU also tends to favour the inclusion of pre-establishment non-discrimination norms. CETA contains a relatively full list of obligations applicable to measures that affect the establishment of an enterprise (not just the operation of an investment, once made). These include the core non-discrimination norms of most favoured nation treatment and national treatment, as well as a market access obligation for services and non-services, which prohibits the adoption of certain forms of restriction, including: limitations on the number of enterprises; limitations on the total value of transactions or assets; limitations on the total number of operations or quantity of input; limitations on the participation of foreign capital; limitations on the total number of natural persons that may be employed; and measures which restrict or require specific types of legal entity. A long list of specific performance requirements is also prohibited in relation to the establishment of investments. Measures relating to most air transport and related services, and to audio-visual services, as well activities carried out in the exercise of governmental authority, are exempted from the obligations regarding market access, non-discrimination and performance requirements with respect to the establishment or acquisition of a covered investment.

The European Commission's textual proposal for the TTIP Investment chapter contains a similar list. However, a positive list approach is adopted for the market access obligation. The EU-Vietnam FTA also contains non-discrimination and market access obligations prohibiting the sorts of quantitative restrictions listed above. However, pre-establishment national treatment and market access obligations apply only in respect of sectors in which specific commitments are undertaken. Performance requirements in connection with establishment are again prohibited, in sectors in which specific commitments are undertaken. However, in addition to the flexibility inherent in these so-called 'specific commitments', there are carveouts from these obligations in respect of a substantial list of specified sectors. The EU-Singapore FTA has a chapter on 'Establishment' which contains positive-list national treatment and market access obligations, which apply to 'establishments and entrepreneurs' rather than 'investors and investments'.

These pre-establishment obligations generally do not apply to the measures and sectors set out in each Party's lists of non-conforming measures, the content of which is a matter for negotiation.

On the basis of this practice, acknowledging that is impossible to predict with any certainty the content of a future FTA, the analysis will proceed on the basis that the EU will seek to have a comprehensive set of pre-establishment obligations contained in its FTA with New Zealand, including both non-discrimination norms, obligations regarding performance requirements, as well as market access. Furthermore, it will be assumed that the prospective FTA secures for EU investors the benefit of the highest screening thresholds New Zealand has already agreed with its other major FTA partners, but no further increase in those thresholds.

Standards of protection

As regards the standard of protection contained in its recent investment agreements, New Zealand's recent practice conforms relatively closely to standard international practice. All of its recent FTAs, including the TPP, aim to constrain the host countries' regulatory discretion through the adoption of some of the most widely recognized standards of investment protection: non-discrimination (national treatment and most-favoured nation treatment), fair and equitable treatment, full protection and security, expropriation, and transfers. The content of these standards tend to be based more or less broadly on the language of both traditional BITs and the WTO agreements, modified as needed. These standards broadly accord with the recent European FTA practice.

National treatment

All recent FTAs concluded by New Zealand contain a post-establishment national treatment norm, applicable in respect of both investors and investments of the other Party, in relation to the "expansion, management, conduct, operation, and sale or other disposition of investments in its territory." This standard has been one of the core components of New Zealand's foreign investment policy, and its purpose is to protect foreign investors and foreign investments against discriminatory practices vis-à-vis comparable domestic investors and domestic investments in relation to the operation of their investment. Similarly, the EU has also widely adopted national treatment in its FTAs. Since the post-establishment national treatment obligation is mostly seen as an uncontroversial protection, it is very likely to be accepted by both parties in order to "lock-in" all aspects of their already established domestic investment policy.

Most favoured nation treatment

The most-favoured-nation clause prevents discrimination between comparable investors from different foreign nationalities. Post-establishment MFN is a standard feature of New Zealand FTAs. Some FTAs (*e.g.* NZL-AUS Investment Protocol) have limited the reach of the MFN obligation through carveouts for specific issues and sectors. For instance, Article 10.6 of NZL-Korea FTA provides that the most-favoured-nation clause "does not encompass international dispute resolution procedures or mechanisms" (Table 19).

Table 19: Most Favoured Nation treatment

FTA Partner	Most-Favoured-Nation Clause				
	Pre and Post-establishment	Exception: economic integration agreement	Exception: sectoral reservations	Exception: Tax agreements	Exception: Dispute Settlement
Australia	Yes	No	Yes	No	Yes
Korea	Yes	No	No	No	Yes
Malaysia	Yes	No	Yes	No	Yes
ANZTEC	Yes	Yes	Yes	No	Yes
TPP	Yes	No	Yes	Yes	Yes

Likewise, the investment chapters of recent EU FTAs have also included standard MFN clauses applying both before and after establishment, but with some limitations. For example, the EU has limited the effects of MFN clause by adopting reservations, notably to exclude the dispute settlement matters and country-specific sectors. For instance, CETA's MFN obligation contains two important reservations: one excludes the application of MFN treatment to mutual recognition agreements with third parties, while the other carves out procedures for investment dispute resolution.

Thus, the recent practices of New Zealand and EU regarding the most-favoured-nation clause are broadly convergent, notably as regards the exclusion of dispute settlement provisions from their scope. On the other hand, depending on the approach taken by the EU, sector specific carve-outs from the MFN obligation may become a point of difference in the negotiations.

Fair and equitable treatment

The fair and equitable treatment obligation appears in the vast majority of New Zealand's investment agreements, more recently in a qualified and somewhat elaborated form. In New Zealand's FTA with Korea, for example, the relevant provision makes clear that it does not require treatment beyond that required by the international minimum standard under customary international law. It further specifies that it "includes the obligation not to deny justice in criminal, civil or administrative adjudicatory proceedings in accordance with the principle of due process embodied in the principal legal systems of the world." The same approach is followed in ANZTEC. As noted above, this is substantially the same as in the TPP, which in turn follows US Model BIT practice. Importantly, the TPP limits the doctrine of legitimate expectations by providing that the mere fact that a host State's act or omission is "*inconsistent with an investor's expectations*" does not constitute a violation of the standard *even if there is loss or damage as a result*. It further provides that "*the mere*

fact that a subsidy or grant has not been issued, renewed or maintained, or has been modified or reduced, by a Party" does not constitute a violation of the standard.

EU practice is different in material respects. Recent EU FTA practice has included a number of clarifications of the FET obligation which make its approach somewhat distinct. For example, and very importantly, CETA sets out an exhaustive list of ways in which the FET obligation might be breached including: denial of justice; a fundamental breach of due process; manifest arbitrariness; targeted discrimination on manifestly wrongful grounds; and abusive treatment of investors. A procedure is set out for the Parties to agree further elements should they choose to do so. The same provisions are set out in the EU-Vietnam FTA, EU-Singapore FTA and in the EU's TTIP proposal. This language represents an important development of the FET norm.

Broadly speaking, it seems that New Zealand and EU practices are converging towards a policy preference for a qualified and well-defined FET obligation, but they have adopted quite different means of achieving this. The main difference between their current investment policies is on how to limit the effects of FET in order to maintain governments' domestic regulatory space. New Zealand, on the one hand, has sought (like the US) to constrain FET by combining the reference to customary international law minimum standard with a non-exhaustive list of more specific obligations; the EU has, on the other hand, tried to impose restrictions on FET by exclusively listing the obligations protected by it. The negotiations between New Zealand and the EU, will represent an important moment in which the negotiating parties will be required to try to reconcile their different textual approaches.

Full protection and security

New Zealand grants full protection and security to the majority of investments made by investors of its FTA partners. Article 10.7 of NZL-Korea FTA, for example, sets out a qualified Full Protection and Security (FPS) clause requiring the host country to "take such measures as may be reasonably necessary in the exercise of its police powers to ensure the protection and security of the investment." The TPP notes that the obligation of full protection and security, requires each Party only to provide the level of police protection required under customary international law.

The EU has included a reference to a specific obligation to provide full protection and security in CETA, the EU-Vietnam FTA, its TTIP investment proposal, as well as the EU-Singapore FTA. It has expended considerably less effort in defining the content of this less controversial norm, noting simply that refers to parties' obligations with respect to the physical security of investors and covered investments.

The inclusion of an FPS obligation, and its content, is unlikely to be controversial. New Zealand and EU practices are not very divergent, though the New Zealand approach may provide more interpretive guidance, given the specific reference to police powers.

Expropriation

The prohibition of expropriation without compensation is a standard provision of international investment agreements, and it is included in some form in the vast majority of FTAs globally. Like the FET standard, however, its precise scope and effect has been interpreted differently by different arbitral tribunals, with the result that states have, over at least the last decade, sought to define its contours with more precision in their investment agreements.

As noted above, the TPP (Article 9.8) sets forth a qualified version of prohibition on expropriation, following the US Model BIT approach. It is expressed to cover indirect

expropriation, provided that it interferes with a tangible or intangible property right or property interest in an investment. But, importantly, it is noted in an Annex that, except in rare circumstances, non-discriminatory regulatory actions of a host country that are designed and applied to protect legitimate public welfare objectives, such as the protection of public health, safety, and the environment, do not constitute indirect expropriations. Furthermore, the fact that an action or series of actions by a Party has an adverse effect on the economic value of an investment, standing alone, does not establish that an indirect expropriation has occurred. Finally, these FTAs also carve out from the notion of expropriation the issuance, revocation or limitation of compulsory licenses in relation to intellectual property rights, to the extent such measures are consistent with WTO law.

New Zealand's FTA with Korea includes these provisions, but in addition provides that 'in order to constitute indirect expropriation, the Party's deprivation of the investor's property must be so severe in the light of its purpose that it cannot be reasonably viewed as having been adopted and applied in good faith'.

The EU's approach to indirect expropriation in its recent FTAs is very similar to that adopted in the TPP, though with some important additions. For example, CETA Article 8.12 provides, in the standard form, that a Party shall not expropriate an investment, except for a public purpose, under due process of law, in a non-discriminatory manner, and on payment of prompt, adequate and effective compensation. An Annex then specifies, in similar language to the TPP, that except in a rare circumstance, non-discriminatory regulatory actions of a host country that are designed and applied to protect legitimate public welfare objectives, such as the protection of public health, safety, and the environment. However, importantly, the CETA further specifies that this 'rare circumstance' is 'when the impact of a measure or series of measures is so severe in light of its purpose that it appears manifestly excessive.'

The EU's TTIP proposal is similar, but contains a broader list of legitimate objectives, including public morals, social or consumer protection or promotion and protection of cultural diversity. Both agreements make clear, like the TPP, that the fact that an action or series of actions by a Party has an adverse effect on the economic value of an investment, standing alone, does not establish that an indirect expropriation has occurred. And both adopt certain protections to preserve host countries' rights to undertake general regulatory measures in the public interest.

The current approaches undertaken by New Zealand in TPP and by the European Union in CETA and TTIP are quite similar. There are some differences of detail, but none of these is likely to pose a major impediment to reaching a common agreement on expropriation protection.

Umbrella clause

While New Zealand's 1990s-era BITs contain umbrella clauses, most of its more recent FTAs do not. There is no umbrella clause in ANZTEC, AANZFTA, NZ-Malaysia, NZ-Singapore or the NZ-Korea FTA. The TPP contains no umbrella clause, though it does provide access to ISDS for certain types of investment agreements and investment authorisation. For its part, the EU's practice on umbrella clauses is mixed. The final CETA text contains no umbrella clause. The EU's FTA with Singapore, however, does contain an umbrella clause (Article 9.4.5). The EU proposed to include one in its TTIP textual proposal.[60]

[60] http://trade.ec.europa.eu/doclib/docs/2015/september/tradoc_153807.pdf. section 2, Article 7.

Right to regulate

There is language relating to the "right to regulate" in a number of New Zealand's FTAs. For example, the opening Article of the investment chapter in both the NZ-Korea FTA and the ANZTEC sets out the objectives of those chapter as "to encourage and promote the flow of investment between the Parties on a mutually advantageous basis … while recognising the right of the Parties to regulate and the responsibility of governments to protect public health, safety and the environment." Less unequivocally, TPP Article 9.15 provides that "[n]*othing in this Chapter shall be construed to prevent a Party from adopting, maintaining or enforcing any measure otherwise consistent with this Chapter that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental, health or other regulatory objectives".* The inclusion of the language 'otherwise consistent with this Chapter' limits the practical effect of this latter provision.

Aside from the TPP provision, these articles are broadly similar to the EU's most recent FTA practice in this respect. In the CETA final text, Article 8.9, the Parties "reaffirm their right to regulate within their territories to achieve legitimate policy objectives, such as the protection of public health, safety, the environment or public morals, social or consumer protection or the promotion and protection of cultural diversity." In addition, the more recent EU-Vietnam FTA contains a textual reference to a right to regulate in Article 13bis, in the same terms. The EU has expressed its intention to propose including such specific and explicit language in its FTAs going forward.

Exceptions

New Zealand's recent FTAs with Korea and others contain the typical exceptions relating to national security; public morals or public order; the protection of human, animal or plant life or health; environmental measures; and cultural heritage. These are based broadly on the language of GATT Article XX, GATT Article XXI and GATS Article XIV, modified as needed. They also contain an exception for temporary safeguard measures relating to capital movements in the context of balance of payments crises and external financial difficulties, including threats thereof. The prudential carve-out in both agreements takes essentially the same form as in the GATS, and applies to investment obligations. The TPP includes all these exceptions, and in addition provides that nothing in the Investment chapter (as well as some other specified chapters) "shall apply to non-discriminatory measures of general application taken by any public entity in pursuit of monetary and related credit policies or exchange rate policies."

Many of these exceptions broadly accord with recent European FTA practice, and are unlikely to be controversial. Two potentially significant divergences from current EU-level practice are noteworthy. First, while CETA contains the standard exceptions for measures to protect public morals, health, the environment, and so on, they are expressed only to apply to those aspects of the CETA investment chapter which deal with non-discriminatory treatment, and the establishment of investments. The absolute standards of protection, contained in section D of the chapter, are not covered by these general exceptions. The second concerns the content of the prudential carveout. Certain potentially significant elaborations have been included in CETA, and other recent EU FTAs. For example, in some recent FTAs, the language of the prudential carveout has been expanded to: (a) explicitly include measures to maintain the safety, soundness, integrity or financial responsibility of individual financial service suppliers; (b) include prohibitions of particular financial services or activities for prudential reasons, provided such prohibitions are applied on a non-discriminatory basis; and (c) to remove the qualification that the prudential measure not be used to avoid commitments or obligations under the Agreement. Furthermore, in CETA,

a new Annex was added, primarily on the request of Canada, which contains a set of high-level principles to guide the interpretation of the prudential carve-out, including that interpreters ought to defer "to the highest degree possible" to the decisions and determinations of domestic financial regulatory authorities. It also provides that a measure shall qualify for protection where it "has a prudential objective" and "is not so severe in light of its purpose that it is manifestly disproportionate to the attainment of its objective". These recent developments in EU practice are not reflected in recent New Zealand FTAs.

Arbitration and dispute settlement

The arbitration of commercial disputes in New Zealand is governed by the *Arbitration Act 1996*. It is based on the UNCITRAL Model Law on International Commercial Arbitration. Appeals from arbitral awards to the New Zealand High Court are permitted. New Zealand is a party to the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards, and a signatory to the ICSID Convention. Enforcement of foreign arbitral awards is under the jurisdiction of the High Court, and the efficiency of the process is considered to be comparable to the UK.

A number of New Zealand's international agreements contain ISDS provisions. These include New Zealand's FTAs with China, Korea and ASEAN/Australia, as well as its earlier BITs with China and Hong Kong. These provisions follow the traditional ISDS model. No claims have yet been filed under ISDS mechanisms against New Zealand.

The Trans-Pacific Partnership, to which New Zealand is a party, includes comprehensive ISDS provisions, modified to respond to some of the criticisms which have been made of the system in recent years. For example, transparency of proceedings is increased, through requirements on governments to publish all pleadings and other written documentation, as well as open hearings to the public. Tribunals have clearer authority to receive *amicus curiae* submissions from the interested public. A mechanism (borrowed from other FTAs) is included, permitting parties to issue decisions on how particular provisions are to be interpreted, which will be binding on arbitral tribunals. A number of procedural and other safeguards have been included to reduce the incidence of duplicative, frivolous or sham proceedings. As a result of carveouts from the scope of the relevant substantive obligations, the ISDS provisions will not apply to disputes concerning foreign investment screening, public services, and tobacco. Importantly, Australia and New Zealand have agreed not to apply these ISDS provisions in their relations with each other.

In its most recent trade agreements, the EU has famously introduced a new investment court system to replace the traditional model of investor state dispute settlement contained in many BITs and FTAs. This system has so far been incorporated into the EU-Vietnam FTA and in CETA. It has been proposed by the EU in the context of its TTIP negotiations with United States.

The EU developed this system to respond to concerns which have been raised over the last decade, and more, about the nature, operation and legitimacy of traditional ISDS. It is an order of magnitude greater in terms of its judicialisation than the model it seeks to replace. The key features of this new system include:

- just as under traditional ISDS, claims may be brought by private investors directly;
- while in traditional ISDS, tribunals are composed specifically for the case at hand, the new system has a permanent and institutionalized dispute settlement tribunal;
- while in traditional ISDS tribunals, arbitrators are appointed on an ad hoc, case by case basis, in the investment system, members of the new system's Tribunal of First Instance (called "judges") are appointed for a fixed term by the states party

to the agreement on the basis of criteria similar to judicial appointments and cases are allocated randomly to a division of the Tribunal;

- as compared to traditional ISDS, the investment court system contains more detailed commitments on ethics to avoid conflicts of interest and other matters which have historically been a cause for concern in international investment arbitration;
- importantly, the new investment court system contains a procedure for the review of arbitral awards by a standing Appeal Tribunal, as opposed to the limited grounds for annulment proceedings in traditional ISDS
- just as in the modified ISDS system contained in the TPP and other recent agreements, proceedings are more open and transparent than has traditionally been the case in ISDS; and
- certain provisions have been included to limit forum-shopping, frivolous claims and parallel proceedings.

New Zealand has already indicated, at the Ministerial level, that it is open to considering replacing this with the new EU investment court system in any EU-NZ FTA.[61]

3.3.3. Impact assessment: investment flows and stocks

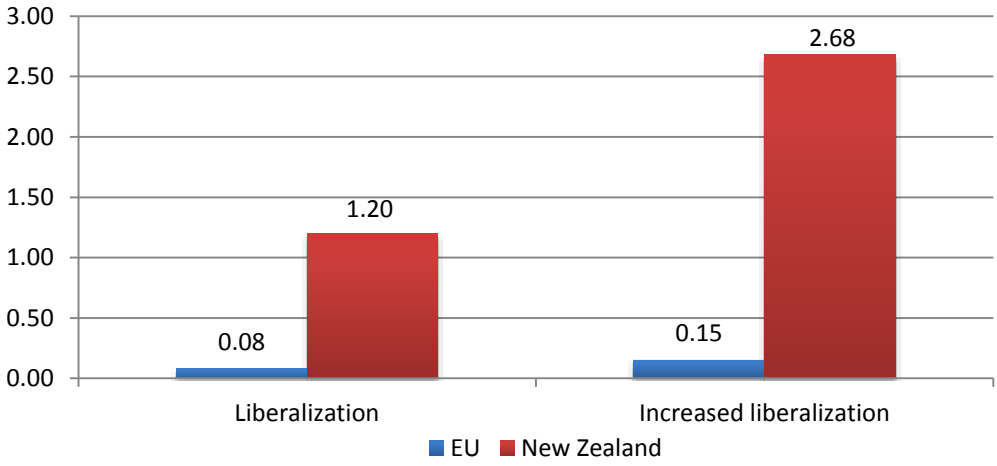
In this section, we briefly assess the impact of the investment chapter of a prospective EU-NZ FTA on investment flows and stocks between the two parties. It is important to note the limited scope of this chapter: it does not purport to be a full assessment of the costs and benefits of a prospective investment chapter, but instead an assessment of the extent to which, and the means by which, the inclusion of an investment chapter in this form may affect the EU-New Zealand investment relationship.

Foreign capital is of crucial importance for the positive impacts of the FTA because it can boost sectors in a way that is not possible with the (limited) amounts of domestic capital. FDI can contribute to technology upgrades and more efficient and cleaner production methods using less energy in metallurgy, chemicals, and machinery.

The results suggest that for the less liberalization scenario, the EU is expected to have relatively low levels of change in foreign capital at 0.08% while under the increased liberalization scenario, the EU change in foreign capital invested is expected to increase by 0.15%. By contrast, foreign capital investment for New Zealand is at significantly higher levels in both scenarios and will strongly increase to 2.68% in the increased liberalization scenario. This highlights that there could be a shift in a few valued added production sectors to New Zealand from the EU (Figure 23).

[61] 'NZ open to ditching old ISDS model under NZ-EU trade deal', *NZ Herald*, 30 October 2015, http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11537129.

Figure 23: EU –New Zealand % change in Foreign Capital Invested in Domestic Firms



3.3.3.1. Nature of effects

Following and modifying Copenhagen Economics (2012), it is useful to distinguish between a three different kinds of impacts which barriers to investment may have:

- Increased risk: Governmental measures may impose barriers to investment by increasing the risk associated with particular investment projects. This may apply to many different kinds of risk, including political, commercial and regulatory risk.
- Increased cost: Governmental measures may restrict investment by impose additional costs which otherwise would not have been incurred. These costs may be the costs associated with *establishing* the investment (such as approval procedures, requirements of specific legal entities, and so on) or the ongoing costs of *operation*, where such costs are not equally incurred across the relevant market (such as discriminatory regulatory compliance costs, performance requirements, insurance costs, and so on).
- Decreased volume: Investment barriers might reduce the volume of investment directly, by prohibiting particularly foreign acquisitions on a sectoral or project-level basis. It may also, or alternatively, limit the volume of business activity conducted foreign investors, for example by limiting the number of branches of foreign banks, or reducing the scope for expansion in the domestic market through measures to favour domestic competitors.

There is evidence to suggest that measures which affect the risk profiles of investment are far more significant, in terms of their impact on firms' decision-making, that measures which merely increase cost (APEC, 2013).

3.3.3.2. The relative importance of changes to foreign investment screening

We expect that the largest effect on inward FDI is likely to have come from the relaxation of screening limits in the NZ foreign investment screening process. Assessing the size of that impact is difficult without knowing the content of any prospective relaxation, and in the absence of better quality information about the effects of the current system. The low incidence of outright rejections may suggest that the current impact of the screening process is relatively low. However, it is important to take into account investment proposals which are withdrawn before being rejected, those which are modified before submission to improve the chances of approval, as well as those which are never made. In addition, the

review process itself, even where it results in approvals, can add risk, cost and delay to foreign investment projects. It is also worth noting that the potential impact of any change to the current thresholds may be significantly affected by the inclusion of carveouts.

3.3.3.3. Investment protection

From the analysis above, it is clear that the investment chapter of an EU-NZ FTA would establish an entirely new set of international investment protections applying to investment flows between NZ and EU member states. An extensive literature has developed over the last 15-20 years, empirically assessing whether or not the existence of investment protections in international treaties lead to increased investment flows between parties to those agreements.[62] A majority of extent studies finds some correlation between the conclusion of an international investment agreement between countries, and an increase in FDI flows between those countries, even if the effect is small.[63] That said, there are some important papers which have found little – or no – such correlation, and the matter remains highly contentious.[64]

In the case of an EU-NZ FTA, there are considerations which point both ways. On the one hand, New Zealand judicial and regulatory institutions are strong by world standards,[65] and the incidence of overtly discriminatory or arbitrary treatment of foreign investors by domestic regulatory bodies is relatively low. On the other hand, it has been argued by some that the additional clarity provided by more modern investment agreements, as compared to earlier BITs, may be more effective in promoting investment flows, and that increased FDI is typically achieved through the combined and interdependent effect of changes to many economic and political determinants of FDI at the same time, including international investment protection.

3.3.3.4. Economy-wide impacts of increased FDI

To the extent that international investment treaties facilitate increased investment flows between the parties to them, a number of different general economic benefits can follow.[66] In respect of increased inward FDI, these potentially include:

- reduced operating costs for domestic firms, as a result of downward pressure on the costs of capital;
- increased access to firm-specific assets, including expertise and know-how, technology, and best business practices;
- increased competitive pressure, driving productivity improvements, lower prices and innovation; and
- increased employment, especially in the context of greenfield investments.[67]

Quantifying the full economy-wide effects of inward investment is highly controversial.[68] Moreover, the extent to which they are realised will depend on a host of other facts,

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[62] For useful surveys, see UNCTAD, 2014: 4-9; Sachs and Sauvant, 2009: lii-lvii; Copenhagen Economics, 2012; Poulson, 2010.
[63] *eg* Neumayer and Spess, 2005; Büthe and Milner, 2004; Egger and Pfaffermayr, 2004; Berger et al., 2013; Oh and Fratianni, 2010; Guerin, 2010; Kerner, 2009; Banga, 2008; Siegmann, 2008; Tobin and Rose-Ackerman, 2006; and Grosse and Trevino, 2005.
[64] UNCTAD, 1998; Hallward-Driemeier, 2003; Tobin and Rose-Ackerman, 2003; Peinhardt and Allee, 2008; Gallagher and Birch, 2006; OECD, 2006; London Economics, 2011.
[65]
[66] [Cross-reference to economic analysis elsewhere in the report.].
[67] Copenhagen Economics (2006).
[68] See generally, Australian Government Productivity Commission and the New Zealand Productivity Commission, 'Strengthening trans-Tasman economic relations', Final Report, November 2012, http://productivity.govt.nz/sites/default/files/trans-tasman.pdf; also Copenhagen (2012) covers a good deal of the literature.

including for example the scope for learning spillovers between international and domestic firms, the employment practices of the foreign investor, and the extent of forward and backward linkages between foreign and domestic firms. Some of these matters, it may be noted, are at times addressed through the conditionality attached to approved foreign acquisitions through the investment screening process, further complicating any assessment of the precise consequences of its modification.

In respect of increased outward FDI, existing studies of its broader general economic effects suggest that the primary benefit to the source economy is that the global competitiveness of firms involved in outward FDI is improved, resulting in increased productivity generally in the source economy. In relation to employment, some studies have concluded that the aggregate impact of outward FDI on employment in the source country is small, in net terms across the economy as a whole, though it is clear that skilled workers tend gain in relation to unskilled workers as a result of outward FDI in advanced markets like the EU.[69]

3.3.4. Conclusion

This chapter has surveyed the existing investment climate in New Zealand, finding a broadly facilitative and encouraging environment for foreign investment, and identifying the foreign investment screening system to be the most significant cross-sectoral limitation on FDI in New Zealand. The chapter has also surveyed the relevant treaty practice of New Zealand and the EU, in order to determine the extent to which the proposed FTAs may include provisions which effectively address the barriers identified. Broadly speaking, the content of recent New Zealand and EU FTAs is relatively congruent, with potential divergences of textual practice as regards umbrella clauses, and the definition of the standard of fair and equitable treatment.

The investment chapter of a prospective EU-NZ FTA will be only one part of a comprehensive agreement covering many aspects of the trade, investment and regulatory relationship between the two parties. Such agreements tend to work, where they work, synergistically, with the result that it is impossible to isolate and quantify the precise impact of each chapter or provision of the agreement. The largest part of any impact of the investment chapter on investment flows is likely to come through changes to New Zealand's foreign investment review process.

[69] Copenhagen Economics (2012).

3.4. Market Access and Regulatory Obstacles to Public Procurement (Task 5)

3.4.1. New Zealand legal framework/policy review:

Public procurement in New Zealand is governed by a three-tier policy framework including overarching Principles of Government Procurement, the Government Rules of Sourcing and relevant good practice guidance. The Government Rules of Sourcing (2013, revised 2015) are minimum standards of good practice for government procurement, covering planning, market research, interaction with the market, evaluation of responses, and negotiation and award of the contract . Focused only on the sourcing part of the procurement lifecycle, they replaced 44 different pieces of legislation, Cabinet directives, and miscellaneous guidance released by various Government agencies over the years.

The stated purpose the overall regime - introduced from 2009-2012, to increase performance, maximise cost savings and integrate procurement strategies - is to:

- modernize the government's approach to procurement to align with good international practice and provide better value for the New Zealand public;
- encourage agencies to use more strategic approaches and commercial expertise when procuring,
- encourage agencies to engage early with the market to stimulate competition and innovation, and work with suppliers to develop better solutions, and
- include procurement requirements in Cabinet directives, Whole of Government Directions and legislation.

The public procurement system is characterised by a central policy and a strongly decentralized responsibility for procurement procedures and practices. Each government entity is responsible and accountable for its own procurement. The policy framework broadly promotes open competitive procurement practices, and no preferential treatment is accorded to domestic suppliers.

Open public tenders are advertised on the Government Electronic Tendering (GETS) website. Expressions of Interest are advertised on the GETS website. Spending on New Zealand's government procurement contracts amounted to some 19% of GDP in 2012. Government spending on goods and services was estimated at some NZD39 billion (€35.14 billion) in 2014.[70]

The Ministry of Business Innovation and Employment, the lead agency on procurement in NZ, in addition, actively works alongside NZ Trade and Enterprise to support New Zealand businesses to become more competitive in international markets and improve their ability to tender for government work. Specific guidance is currently provided for certain types of "category specific" procurement, for example, public transport infrastructure and property services, and a Significant Services Contracts Framework is under development.[71]

Potential barriers

NZ's coverage schedule under the Revised Government Procurement Agreement (GPA), as well as a series of recent bilateral FTAs reflects the previously described integrated policy

[70] WTO Secretariat. Trade Policy Review for New Zealand: Secretariat Report, 2015, available at: https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S006.aspx?Query=(@Symbol=%20wt/tpr/s/316/rev*%20or%20wt/tpr/s/316/corr*%20or%20wt/tpr/s/316/add*%20or%20wt/tpr/g/316/rev*%20or%20wt/tpr/g/316/corr*%20or%20wt/tpr/m/316/rev*%20or%20wt/tpr/m/316/corr*)&Language=ENGLISH&Context=FomerScriptedSearch&languageUIChanged=true# .

[71] Ministry of Business Innovation and Employment. See: www.procurement.govt.nz/procurement/for-agencies/key-guidance-for-agencies/procurement-planning-and-implementation.

framework. A wide, relatively unrestricted coverage is offered to Central Government entities (GPA Annex 1), other entities (Annex 3), goods (Annex 4) and construction services (Annex 6), whilst consequential market access barriers remain in the context of sub-central entities (annex 2) and services (Annex 5). It has also generally retained the ability to take measures necessary to accord more favourable treatment to Māori, including in fulfilment of its obligations under the Treaty of Waitangi provided that such measures are not used as a means of arbitrary or unjustified discrimination against persons of the other Members or as a disguised restriction on trade in goods and services (Annex 7).

Notwithstanding the all-encompassing "carve-out" for procurement conducted with "a view to commercial sale or resale, or for use in the production or supply of goods or services for commercial sale or resale" in the GPA/its Revised version, the architecture of this "framework" Agreement allows for disciplines to be imposed on state-owned enterprises (SOEs). In this sense, for example, NZ's Annex 3 schedules currently offer a limited coverage of SOEs as well as a selected number of "crown entities", or "bodies established by law in which the Government has a controlling interest but which are legally separate from the Crown".[72]

More generally, there are 5 broad categories of "state sector" organizations in the Crown's commercial portfolio in New Zealand: State-Owned Enterprises; Crown Research Institutes; Crown Financial Institutions; Crown-Owned Entity Companies, and; Companies the Crown Holds Shares in (including Mixed Ownership Model companies)[73] Key legislation governing the activities of such entities is embodied in the State-Owned Enterprises Act 1986, the Crown Entities Act 2004 and Amendment Act 2013, as well as the individual enabling legislation of each statutory Crown entity.

In 2012, NZ reported the following numbers and estimated values of SOEs to the OECD regarding its aggregate "state sector" holdings:

Majority-owned, listed entities	1	NZD	1,232
Majority-owned, non-listed enterprises	15	NZD	14, 238
Statutory corporations and quasi-corporation	2	NZD	3,489[74]

The state sector in NZ, however, is currently in the midst of its "biggest transformation" in a generation. The purpose of the reforms is broadly to foster a public service focused on innovation, providing high quality services, managing change effectively, and delivering value for money. Developing a collaborative team approach and culture in the Public Service is at the heart of these efforts; the goal is nothing less than a Public Service that works as a single, integrated system. Associated legislative reforms are embodied in the

[72] An up-to-date listing of all the organisations of NZ's state sector may be found at: http://www.ssc.govt.nz/state_sector_organisations, last visited on 5 November 2016.
[73] See the discussion on Crown Entities at: http://www.treasury.govt.nz/statesector/crownentities, last visited on 5 November 2016.
[74] OECD Secretariat. "The Size and Sectoral Distribution of SOEs in OECD and Partner Countries, OECD Publishing, Paris, 2014, available at: http://www.keepeek.com/Digital-Asset-Management/oecd/finance-and-investment/the-size-and-sectoral-distribution-of-soes-in-oecd-and-partner-countries_9789264215610-en#page47, last visited on 5 November 2016. More recent data available at: http://www.treasury.govt.nz/government/financialstatements/yearend/jun14/94.htm.

State Sector and Public Finance Reform Bill; it amends, inter alia, the Crown Entities Acts.[75] In this sense, whereas only New Zealand's larger state-owned companies were subject to the obligations on SOEs and "designated monopolies" recently agreed under the Trans-Pacific Partnership, the Parties agreed to negotiate within five years on whether the chapter's rules should be extended to sub-central "quasi-autonomous organisations such as commissions, agencies, review committees and tribunals, which are established to exercise public power or advise ministers outside the ambit of the central government".[76] Pursuit of this avenue in an FTA context – if aligned with the on-going NZ state sector reforms - could potentially extend the scope of coverage considerably, i.e. to sub-national "crown entities" operating at the district and regional levels.[77]

The following section addresses procurement at the sub-central level in greater detail; it equally focuses on key services sectors as the primary market access barriers exist at this level of government.

3.4.2. Regional Sub-divisions

At the local level, different local councils and regional entities have their own procurement policies in place. All operate within the broad confines of a statutory framework for local government defined by the Local Government Act 2002 (LGA), the Resource Management Act 1991 (RMA) and the Land Transport Management Act 2003 (LTMA). The "coherence" of this basic framework has recently been the focus of considerable debate; although originally designed to function as an integrated architecture, studies have suggested that policy development would "benefit from being more joined-up" nationally, whilst, equally, being "better informed by those at the coal-face", i.e. including but not limited to local authorities.[78] The debate is ongoing and, at the national level, is broadly linked to NZ's burgeoning participation in the Open Government Partnership.[79] As regards procurement policies, in particular, those of Auckland and the City of Christchurch – respectively, New Zealand's leading metropolitan centre and the site of major recent urban earthquake recovery activities - have been at the cutting edge of policy innovation and reform:[80]

The Auckland Council (Regional and City functions) Procurement Policy principles, for example, stress best value for money, efficiency, innovative approaches, along with equal access through the use of open and contestable processes. In addition, the Council has started publishing reports on "Awarded contracts" and "supplier spend".[81]

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[75] Coleman, J. "State Sector Legislation Passes Third Reading," available at: https://www.beehive.govt.nz/release/state-sector-legislation-passes-third-reading, last visited on 5 November 2016.
[76] Ministry of Foreign Affairs and Trade. "TPP Factsheet on SOEs and Designated Monopolies", available at: https://www.tpp.mfat.govt.nz/assets/docs/TPP_factsheet_SOEs.pdf, last visited on 5 November 2016.
[77] A useful mapping of the various entities in NZ's public sector may be found at: http://www.ssc.govt.nz/what-is-the-public-sector, last visited on 5 November 2016.
[78] http://www.lgnz.co.nz/assets/Uploads/Our-work/LGNZ-2016-Statutory-Framework-Of-NZs-Local-Government-Sector.pdf
[79] The Partnership is a forum of countries working to ensure that member governments are more open, accountable and responsive to citizens. Membership entails a commitment, inter alia, to *demonstrate how the government will implement transparency, accountability, technology and innovation and civil society participation in government." See
[80] See: http://www.ssc.govt.nz/christchurch-innovations Last accessed on 9 December 2016.
[81] See: http://www.aucklandcouncil.govt.nz/EN/AboutCouncil/HowCouncilWorks/PerformanceAndTransparency/Pages/awardedcontractsandsupplierspend.aspx last accessed on 9 December 2016.

The Christchurch City Council adopted a new procurement policy in September 2012 that puts in place an open and transparent process, and allows open competition and long-term sustainability of the local economy to ensure local suppliers are given the opportunity to tender. A Cabinet-level office, the Greater Christchurch Group (GCG) was formed on 1 March 2016 to lead and coordinate central Government's ongoing role in the recovery and regeneration of greater Christchurch following the devastating earthquakes of 2010 and from central government to local institutions.[82]

As an illustration of "coherence", the Waikato Regional Council's sustainable procurement policy adopted in 2011 is a procurement policy whereby decisions on any tenders and contracts worth more than NZD50,000 (€45,050) must include a 10-15 % "sustainability weighting" of "non-price" matters, while contracts worth less than NZD50,000 ((€45,050) must have "an appropriate sustainability weighting".

3.4.2.1. Potential barriers

Compared to other countries, a relatively low proportion of procurement in New Zealand is undertaken at the local government level.[83] Still, according to the previously cited the Ministry of Foreign Affairs and Trade (MFAT) source, that currently amounts to a full 20% of the total procurement spend.

In general, compliance with the key processes of open tendering, objective evaluation, and required disclosure appears high - especially for medium to large procurements which have to be tendered through the electronic tendering system GETS. New procurement policies adopted by Regional or City Councils in 2012 - such as those of Auckland or Christchurch - have rescinded "buy local" policies that were in place since approximately 1990. Procurement-related policies or practices such as the Local Impact Assessment requirement over a certain threshold does not give preference or weighting to local content in itself as well as the Māori Responsiveness Framework (Auckland region and city).

A potential issue to analyse deeper are "preferential contractors" at local level, which in practice could be used to favour local contractors. Another potential issue to focus on is the "sustainability weighting" of 10-15% of non-price matters over a certain threshold (Waikato region).

Turning to services, explicit market access barriers are set out in the following sectors:

- procurement of research and development services (CPC Prov. 851-853);
- procurement of public health services (CPC Prov. 931, including 9311, 9312 and 9319);
- procurement of education services (CPC Prov. 921, 922, 923, 924, and 929) and;
- procurement of welfare services (CPC Prov. 933 and 913).

3.5. Impact on EU SMEs from EU-NZ FTA[84]

The impact of an EU-New Zealand FTA on EU SMEs is assessed on the basis of the analysis presented in section 4.5 of the general part, which outline those sectors where EU SMEs are predominant in terms of employment, value added and extra-EU exports. Statistics available for EU SMEs show that SMEs are prevalent in "wholesale and retail" services, "manufacturing", "construction services", "business services" as well as "accommodation and food services". EU SME exporters are prevalent in "wholesale, retail trade and repair"

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[82] Greater Christchurch Group. See: https://www.dpmc.govt.nz/gcg.
[83] Ministry of Foreign Affairs,
See:www.tpp.mfat.govt.nz/assets/docs/TPP%20National%20Interest%20Analysis.pdf.
[84] For SME's public procurement is covered in the Chapter on public procurement.

services, "manufacturing", "professional, scientific and technical activities", "transportation and storage" services, "construction" services, "accommodation and food" services, "information and communication" services, "administrative and support" services, and "agriculture, forestry and fishing" sectors.

As concerns the quantitative impact of an EU-NZ FTA on SMEs in the EU, both changes in sectoral output as well as changes in sectoral exports are rather insignificant for the conservative scenario estimated by the European Commission. For the conservative scenario, SMEs producing meat products, dairy products, wood and paper products, food products, textiles, metal and non-metal products as well as motor equipment, machinery products and electronic products are likely to benefit strongest (see Table 20). SME services providers in transport services, communications services and business services are also likely to see rising exports as the result of an EU-NZ FTA.

Although total sectoral output (SMEs plus large enterprises) does not change much for the ambitious liberalization scenario, sectoral changes in bilateral exports are significant for a number of sectors in which EU SMEs are strong exporters. Accordingly, EU SMEs active in the *manufacturing of wood and paper products, food products, textiles, chemicals, metal and non-metal products, motor equipment, machinery and electrical/electronic products* are likely to benefit most from liberalization measures that go beyond tariff eliminations and effectively aim at reducing regulatory differences. The size and direction of the estimates is in line with the literature on (heterogeneity of) non-tariff trade barriers and how non-tariff trade barriers (NTBs) particularly hinder the internationalisation of SMEs.

Table 20: Overview of sectoral impact of EU-NZ FTA for sectors in which EU SMEs are predominant, based on EU Commission projections

	EU-NZ FTA					
	Conservative Scenario		Ambitious Scenario			
	EU Sectoral Output	EU Exports from to Zealand	EU Sectoral Output	EU Exports to New Zealand	Sector where SMEs are predominant in the EU (in terms of value-added)	Sector where EU SMEs are strong exporters
	long-term	long-term	long-term	long-term		
	%-change in volume	%-change in volume	%-change in volume	%-change in volume		
rice	0.0	0.1	-0.1	0.2		
cereals	0.0	0.2	-0.1	4.1	yes	
veg_fruit	-0.2	1.8	-0.1	2.7	yes	
oil_seeds	-0.1	1.1	-0.1	1.4		
sugar	0.0	-0.1	-0.2	-0.1	yes	
fiber_crop	0.0	2.1	0.0	5.1		
ruminant_meat	0.2	0.6	-1.2	4.5	yes	
other_animal	0.0	0.6	0.0	0.9		
other_meat	0.0	40.1	-0.1	41,6	yes	
dairy	0.1	27.3	-0.1	29.6	yes	
wood_paper	0.0	5.1	0.1	4.2	yes	yes
fishing	0.0	1.2	0.0	1.1	yes	
coal	-0.1	-0.3	-0.1	96.4		

EU-NZ FTA						
	Conservative Scenario		Ambitious Scenario		Sector where SMEs are predominant in the EU (in terms of value-added)	Sector where EU SMEs are strong exporters
	EU Sectoral Output	EU Exports from to Zealand	EU Sectoral Output	EU Exports to New Zealand		
	long-term	long-term	long-term	long-term		
	%-change in volume	%-change in volume	%-change in volume	%-change in volume		
oil	0.0	0.3	-0.1	14.0		
gas	-0.1	1.4	0.7	2113.0		
minerals	0.0	1.1	0.0	9.8		
other_food	0.0	12.2	0.0	12.7	yes	yes
bev_tob	0.0	5.8	0.0	6.1	yes	yes
textile	0.0	47.5	0.0	102.0	yes	yes
chemicals	0.0	9.1	0.0	26.6	yes	yes
oil_pcts	0.0	3.7	0.0	8.3	yes	yes
metal_pcts	0.0	21.3	0.1	52.1	yes	yes
no_metal_pct	0.0	17.4	0.0	53.7	yes	yes
motor_equip	0.2	22.4	0.3	43.5	yes	yes
machinery	0.0	19.6	0.2	62.7	yes	yes
ele_other	-0.1	12.1	-0.1	53.2	yes	yes
electricity	0.0	0.1	0.0	0.4	yes	yes
utility	0.0	7.9	0.0	9.1		
transport	0.0	6.9	0.0	7.1	yes	yes
communication	0.0	6.9	0.0	7.4	yes	yes
financial	0.0	6.7	0.0	7.2	yes	yes
other_serv	0.0	7.6	0.0	8.1	yes	yes

Note: negative relative changes presented in grey-shaded fields.

As SMEs generally lack the financial and human administrative resources to deal with regulatory differences (see discussion in the general part of this study), Table 21 depicts a number of manufacturing sectors in which EU SMEs are currently facing disadvantages in dealing with different NZ regulations compared to large enterprises.

Table 21: Cross-cutting Overview of sectoral impacts for selected manufacturing sectors

Sector where EU SMEs are strong exporters (see identification as provided in the general part of the study)	NZ Average Tariff rates	Tariff and potential NTBs imposing direct (cost) and indirect (administrative) burden on (EU) SMEs
Wood and paper products	Average MFN: 1.3%	Tariffs: • MFN tariffs already relatively low Potential NTBs:

Sector where EU SMEs are strong exporters (see identification as provided in the general part of the study)	NZ Average Tariff rates	Tariff and potential NTBs imposing direct (cost) and indirect (administrative) burden on (EU) SMEs
Textiles	Average MFN: 1.9%	• Importers must ensure to meet the import health standard (IHS) for wood products • All imported timber, wooden articles, bamboo and related products must comply with the import conditions as stated by the Ministry for Primary Industries (MPI) • Diverse reporting, documentation and storage requirements Tariffs: • Average MFN tariffs already relatively low Potential NTBs: • Several standards apply for importers of textiles • All imported textiles have to be labelled according to the standards AS/NZS 2622:1996 Textile products – Fibre content labelling; Labelling of clothes, household textiles and furnishings (AS/NZS 2392:1999); Textiles – Natural and man-made fibres – Generic names (AS/NZS 2450:1994)
Chemical products	Average MFN: 0.8%	Tariffs: • Average MFN tariffs already relatively low Potential NTBs: • Each shipment importing chemicals requires a separate permit • Several (hazardous) substances, including petrol, solvents, industrial chemicals, agrichemicals, household cleaners and cosmetics, need to be approved before they can be used in New Zealand • Cosmetics products containing hazardous substances, for example, have to be approved under the Cosmetic Products Group Standard
Minerals and metal products	Average MFN: 1.8%	Tariffs: • Average MFN tariffs already relatively low Potential NTBs: • No specific measures in place for iron and steel products
Transport equipment	Average MFN: 3.2%	Tariffs: • Average MFN tariffs already relatively low

Sector where EU SMEs are strong exporters (see identification as provided in the general part of the study)	NZ Average Tariff rates	Tariff and potential NTBs imposing direct (cost) and indirect (administrative) burden on (EU) SMEs
Non-electrical machinery	Average MFN: 3.5%	Potential NTBs: • Several inspection procedures apply for the import of new and used vehicles, equipment and parts, aircraft and seacraft according to Import Health Standard (IHS) for Vehicles, Machinery and Tyres • Importers must meet various biosecurity requirements to keep New Zealand free from harmful pests and diseases • Vehicles, machinery, and tyres must comply with the requirements of the import health standard (IHS) • Importers must provide a declaration with details about the consignment • Several fees charged for documentation processing, import permit applications and all inspections Tariffs: • Average MFN tariffs already relatively low Potential NTBs: • Several inspection procedures apply according to the Import Health Standard (IHS) for Vehicles, Machinery and Tyres (see row above) • Applies to new and used machinery
Electrical machinery & electrical equipment	Average MFN: 2.6%	Tariffs: • Average MFN tariffs already relatively low Potential NTBs: • All electrical equipment imported and sold in to New Zealand must be proven to be electrically safe • Australia and New Zealand's Electrical Equipment Safety System (EESS) applies • Sets out various testing, documentation and certification procedures for electrical equipment • Specific fees apply

Table 21 exhibits a number of regulations set in place by New Zealand for importers of manufacturing products. For a large number of manufactured products ranging from wood products to machinery and electrical components, New Zealand applies different customs procedures. Although tariffs are already generally low for most manufacturing products, the obligation to fulfil complex customs procedures is a particular obstacle for EU SMEs,

and this obstacle would continue to prevail even if tariffs are completely eliminated. In addition, New Zealand's regulators require specific product conditions and requirements for many manufactured products including wood products, textiles, chemical and (electrical) machinery products. Although the difficulty to overcome language differences weighs much lower on EU SMEs compared to other export destinations, these regulations are generally more difficult to fulfil by SMEs compared to large enterprises. That said, the obligation to meet various testing, certification and documentation procedures implicitly puts potential SME exporters with their in general lower sales volumes at a comparative disadvantage due to the higher impact of the related costs per unit. Accordingly, EU SMEs would generally benefit from a comprehensive FTA between the EU and New Zealand that aims for greater degrees of mutual recognition of standards and procedures and harmonisation in cases where standards are equivalent.

EU SMEs would primarily benefit in those sectors where 1) EU SMEs are relatively strong exporters (see general part of this study) and 2) where New Zealand's tariffs and NTBs are relatively high (see above). Accordingly, EU SMEs that operate in various manufacturing sectors would largely benefit from an EU-NZ FTA. Thereby SMEs in manufacturing sectors would show increased direct exports due to improved market access conditions. At the same time, EU SMEs that operate as suppliers in EU downstream sectors in manufacturing would also benefit from an EU-NZ FTA. As concerns the latter, SMEs that operate in sectors that go beyond manufacturing, i.e. construction sectors and other non-manufacturing suppliers, would benefit from increased production and increased investment activity in manufacturing sectors.

4. ANALYSIS OF SOCIAL IMPACTS

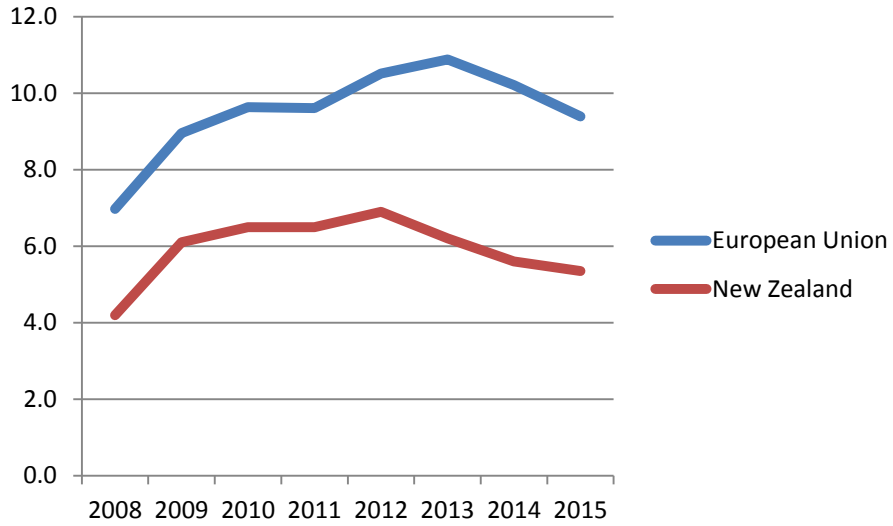
4.1. Direct social impacts (Task 7)

4.1.1. Baseline

4.1.1.1. Trade, employment and wages

Since the financial crisis of 2008-2009 and the subsequent European sovereign debt crisis, the European economy has struggled to regain its pre-crisis GDP level.[85] As in New Zealand, unemployment in Europe rose for a few years after the financial crisis before gradually receding until today (Figure 24). Between 2008 and 2015, New Zealand has, however, enjoyed an unemployment rate that has been consistently lower than the EU.

Figure 24: EU and New Zealand labour markets after the 2008 financial crisis

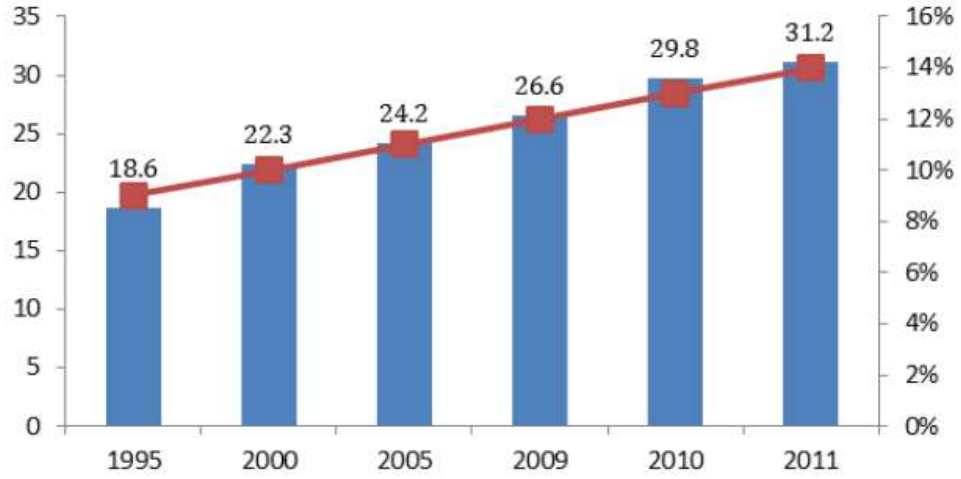


Source: OECD, 2016.

In a context of slow domestic demand, tapping "external growth" has become a crucial pillar of the EU's strategy to boost job creation and prop up incomes. The Commission's focus on external trade as employment policy stems from the growing significance of export-related jobs for European labour markets. According to DG Trade's own estimates, the proportion of jobs supported by extra-EU exports of goods and services has dramatically increased, rising from 1 in 11 jobs in 1995 to 1 in 7 jobs in 2011 (see Figure 25).[86] This is linked to the increasing weight of exports in EU GDP, a ratio that surged from 34.6% in 2000 to 42.9% in 2015 (OECD data). In 2012, another report by the EU Commission estimated that an "ambitious external trade agenda" could add an additional 2 million jobs and increase EU GDP by 2%.[87]

[85] See World Bank data (2016), available at: http://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=EU.
[86] Rueda-Cantuche and Nuno Sousa (2016), "EU Exports to the World: Overview of effects on employment and income."
[87] EU Commission (2012), "External sources of growth. Progress report on EU trade and investment relationship with key economic partners." Available at: http://trade.ec.europa.eu/doclib/docs/2012/july/tradoc_149807.pdf.

Figure 25: EU employment supported by extra-EU exports: number of jobs in millions (left axis) and in % of total employment (right axis)



Source: Rueda Cantuche & Sousa, 2016.

Manufacturing still represents close to 60% all jobs supported by extra-EU exports although the share of services exports has steadily increased.[88] EU merchandise exports to New Zealand are dominated by machinery and transport equipment (54%), chemicals and related products (14%), followed by manufactured goods – classified by material (10%) and miscellaneous manufactured articles (10%). Together, these three categories represent nearly 90% of all European goods exported to New Zealand and will likely remain a main component of EU export-related jobs in the near future – with or without any EU-NZ FTA.

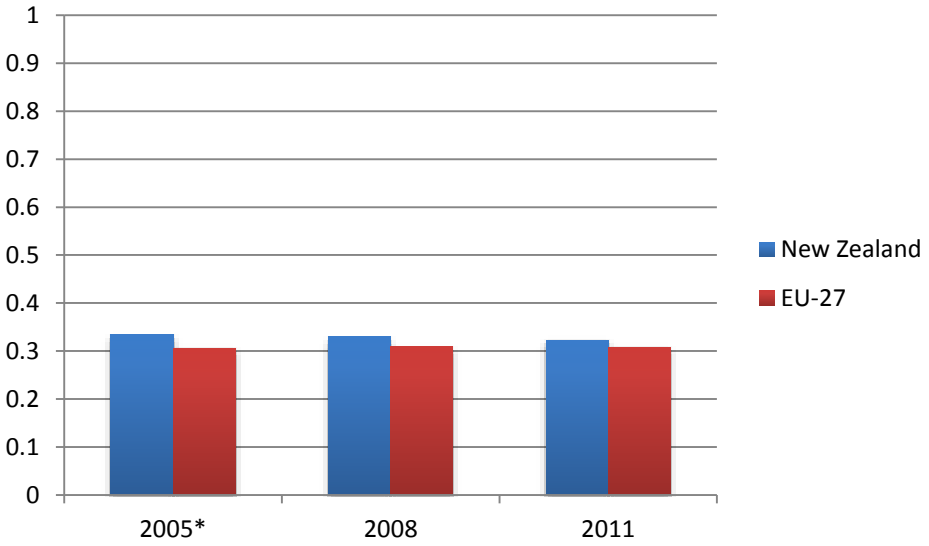
Beyond merchandise, EU services exports to New Zealand have only slowly increased over the past few years – by a mere 8% between 2010 and 2014 – a much lower growth than with other EU trading partners in the region (e.g. South Korea, Singapore or Australia). This means that there might be a strong potential for job creation in a sector described as the "sleeping giant"[89] of the EU economy. Services exports commonly face a variety of NTBs that would be best addressed under bilateral trade negotiations if the EU is to maximize its competitive potential in the services industry (see chapter 6). The trend toward the growing weight of European services exports, does not mean, however, that services should be fully dissociated from manufacturing and agricultural exports. In effect, 40% of all employment supported by the primary and secondary sectors correspond to

[88] Rueda-Cantuche and Nuno Sousa (2016), "EU Exports to the World: Overview of effects on employment and income."
[89] Daniel Hamilton & Joseph Quinlan (2015), The Transatlantic Economy 2015: Annual Survey of Jobs, Trade and Investment between the United States and Europe," Center for Transatlantic Relations, Johns Hopkins University.

"mode 5 services"[90] (a ratio that varies from 19 to 62% depending on the sector).[91] Whether they're affiliated with the services or manufacturing sector, export-related jobs are known for being high-skilled and better paid than average wages. This is even more the case for so-called "North-North" FTAs, like an EU-New Zealand trade agreement.[92]

While this argument is commonly used to justify the need for greater trade openness, it has also provided fodder for trade critics in Europe and America denouncing the widening gap between winners and losers of globalization. In the EU, the protracted period of economic slowdown that followed the financial crisis has brought social inequality to the forefront of political debates. In reality, however, Gini coefficient trends at the EU level do not indicate a clear and consistent rise in inequality across the continent; nor is this the case for New Zealand (Figure 26).

Figure 26: Income inequality. Changes Gini coefficient trends in EU27[93] and New Zealand



*Source: OECD & Eurostat data. *2004 measure for New Zealand.*

Additionally, a closer examination of Gini coefficients reveals very diverse trends on the European continent. Here, the rise in inequality in some countries was balanced out by a narrowing income concentration in others.

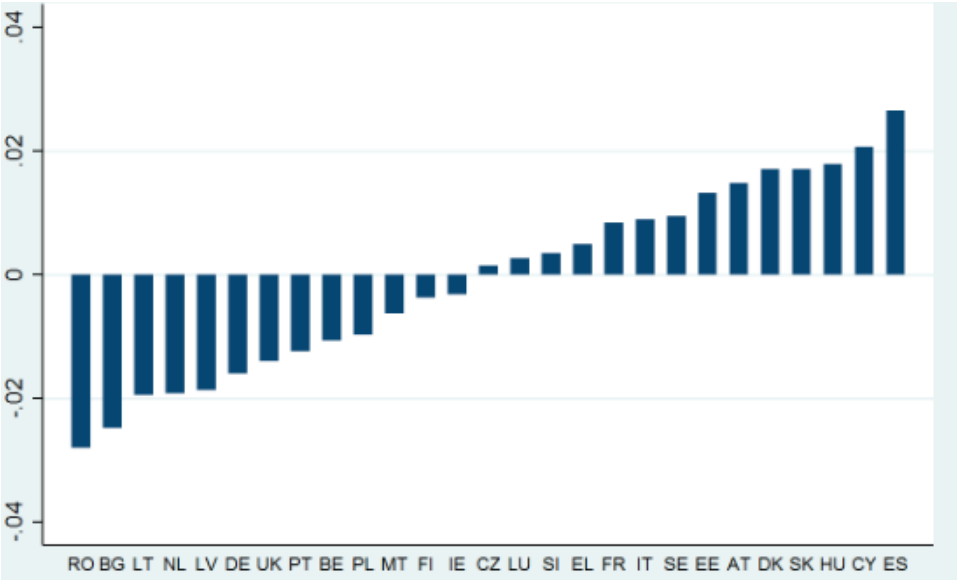
[90] Mode 5 services are labelled as products and, therefore, subject to GATT rules. For more details, see Lucian Cernat and Zornitsa Kutlina-Dimitrova, "Thinking in A Box: A 'Mode 5' Approach To Service Trade , Issue 1, March 2014 available from: http://trade.ec.europa.eu/doclib/docs/2014/march/tradoc_152237.pdf.

[91] Rueda-Cantuche and Nuno Sousa (2016), "EU Exports to the World: Overview of effects on employment and income."

[92] Using data from 164,000 workers, a recent study by the US International Trade Commission reveals that contrary to what people might expect, the wage earnings premium is not only greater for blue-collar workers than for white collars but also more significant in the manufacturing sector than in the services industry. David Riker (2015), "Export-Intensive Industries Pay More on Average: An Update," US International Trade Commission, available at: https://www.usitc.gov/publications/332/ec201504a.pdf.

[93] EU27 does not include Croatia, for which 2005 figures were not available.

Figure 27: Gini coefficient trends between 2007 and 2011 in EU countries



Source: EU Parliament, DG for Internal Policies, 2015.

It is important to note that these conflicting trends have occurred within a context of increasing trade openness (measured by the sum of exports and imports as a percentage of GDP) for both individual members and the EU as a whole.[94]

Of course, this should not be interpreted as dismissing the link between trade and social inequality. Today, few economists contest that trade plays a role in economic polarization. However, at the aggregate level, many regard the impact of trade as secondary to technological (skill-biased technological change) and political factors (e.g. tax policies, financial deregulation and labour market institutions).[95] In addition, to the extent that the European Union and New Zealand enjoy comparable standards of living, the potential polarizing effects of trade will likely remain limited, whether under the baseline scenario or under the two liberalization scenarios analysed in section 8.3. This means that any reflection on the linkage between trade liberalization and social inequality should go beyond aggregate indicators to examine risk factors at the sectoral level, as well as opportunities that may arise from institutional mechanisms and policy options (see section 4.1.3).

4.1.1.2. Overview of core labour standards, Fundamental Conventions and Decent Work in the EU and New Zealand

In its 1998 Declaration on Fundamental Principles and Rights at Work, the International Labour Organisation (ILO) established four core labour standards that are deemed universal and have since served as a benchmark for the protection of workers' rights: 1) freedom of association and the effective recognition of the right to collective bargaining; 2) the elimination of all forms of forced or compulsory labour; 3) the effective abolition of child labour; 4) and the elimination of discrimination in respect of employment and

[94] See Eurostat, "Exports of goods and services in % of GDP", available at: http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tet00003&plugin=1

[95] On technological change, see Autor, D., L. Katz and A. Krueger (1998). "Computing Inequality: Have Computers Changed the Labor Market?" *Quarterly Journal of Economics* 113, 1169-1213; Goldin, C. and L.M. Katz 1998. "The Origins of Technology-Skill Complementarity." *Quarterly Journal of Economics* 113, 693-732. On political factors, see e.g. Stiglitz, Joseph, (2012), *The Price of Inequality: How Today's Divided Society Endangers Our Future*. New York: W. W. Norton & Co.; Piketty, Thomas (2014). *Capital in the Twenty-First Century*. Belknap Press/Harvard Press; Jaumotte, Florence & Carolina Osorio Buitron (2015), "Inequality and Labor Market Institutions", International Monetary Fund SDN 15/14, available at: https://www.imf.org/external/pubs/ft/sdn/2015/sdn1514.pdf

occupation. These four core labour standards are protected by the following eight fundamental conventions:

1. Freedom of Association and Protection of the Right to Organise, 1948 (Convention 87);
2. Right to Organise and Collective Bargaining, 1949 (Convention 98);
3. Forced Labour, 1930 (Convention 29);
4. Abolition of Forced Labour, 1957 (Convention 105);
5. Minimum Age, 1973 (Convention 138);
6. Worst Forms of Child Labour, 1999 (Convention 182);
7. Equal Remuneration, 1951 (Convention 100);
8. Discrimination (Employment and Occupation), 1958 (Convention 111).

Before discussing the ratification of ILO conventions and issues of compliance/non-compliance among trading partners, three caveats must be raised. First, it must be noted that the ratification of conventions is by itself no guarantee for strict compliance with international labour standards as the cases below illustrate. Second, and conversely, non-ratification does not necessarily mean that labour standards are not met in practice. Indeed, the devolution of labour regulation to subnational actors like states or provinces can be obstacles to ratification. Third, comments and requests provided by the ILO Committee of Experts on the Application of Conventions and Recommendations (thereafter CEACR or Committee of Experts) on issues of compliance may not always reflect higher levels of non-compliance but rather greater attachment or activism in certain spheres like non-discrimination.

Before all, the EU promotes labour standards internally through the EU Charter of Fundamental Rights. The latter concerns primarily human rights but also contains language referring directly or indirectly to workers' rights: Chapter IV on solidarity, but also art. 5 (compulsory and forced labour), art. 12 (freedom of association), art. 21 on non-discrimination, art. 23 on equality between men and women etc.[96]

The general convergence of EU and ILO policy goals must not obscure national differences in compliance with ILO standards across the EU. A close analysis of the ILO 2016 report on the "Application of International Labour Standards" [97] and the latest data available (2015) from the NORMLEX information system reveals a wide range of compliance issues among EU members. Several fundamental labour conventions feature among the most common conventions subject to direct requests from the ILO. In 2015, the conventions subject to the greatest number of cases pertain to freedom of association and the effective recognition of the right to collective bargaining (conventions 87 and 98) and have involved many different EU members among which Portugal, Germany, Romania, Poland and Hungary. Direct requests by the ILO were also brought with regard to the effective abolition of child labour (conventions 138 and 182) (e.g. Greece, Hungary), and the elimination of discrimination in respect of employment and occupation (e.g. Denmark). Beyond core labour standards, the 2006 Maritime Labour Convention has been also frequently subject

[96] The full text is available at: http://www.europarl.europa.eu/charter/pdf/text_en.pdf.
[97] ILO, "Application of International Labour Standards" (up to 31st December 2015), Report 3 part II, available at: http://www.ilo.org/public/libdoc/ilo/P/09661/09661(2016-105-2).pdf.

to compliance issues, as have Governance conventions like Convention 81 Labour Inspection Convention and Convention 129 on Labour Inspection.

Like the EU, New Zealand has a strong commitment to international labour standards. It was a founding member of the ILO. The government has ratified 6 out the 8 ILO fundamental conventions. It has not ratified Convention 138 concerning Minimum Age for Admission to Employment even though it has ratified several ILO conventions regulating the working age in many sectors (Convention 10 in agriculture, Convention 59 in manufacturing etc.). The other ILO fundamental convention not ratified by New Zealand is Convention 87 on Freedom of Association and Protection of the right to Organise, which, here again, does not reflect the country's relatively lenient regulation of unions.[98] New Zealand has ratified three out of four Governance Conventions (all but Convention 129 on Labour Inspection in Agriculture). As illustrated by its historic role in the establishment of woman suffrage and the 8-hour working day, New Zealand has played a leading role promoting international labour standards both at home and abroad. It has been particularly active in Asia, funding various labour rights programs, including the elimination of child labour in Fidji, the improvement of labour laws Cambodia and the Recognised Seasonal Employer (RSE) Scheme.

Over the past four years, the ILO Committee of Experts has addressed a number of direct requests to the New Zealand government with regard to compliance with ILO conventions, including the implementation of core labour standards like the effective recognition of the right to collective bargaining (Convention 98), the elimination of discrimination in respect of employment and occupation (Conventions 100 and 111), and the effective abolition of child labour (Convention 182, as Convention 138 is not ratified).

4.1.2. Impact of the EU-New Zealand FTA

4.1.2.1. Impact through trade and economic channels

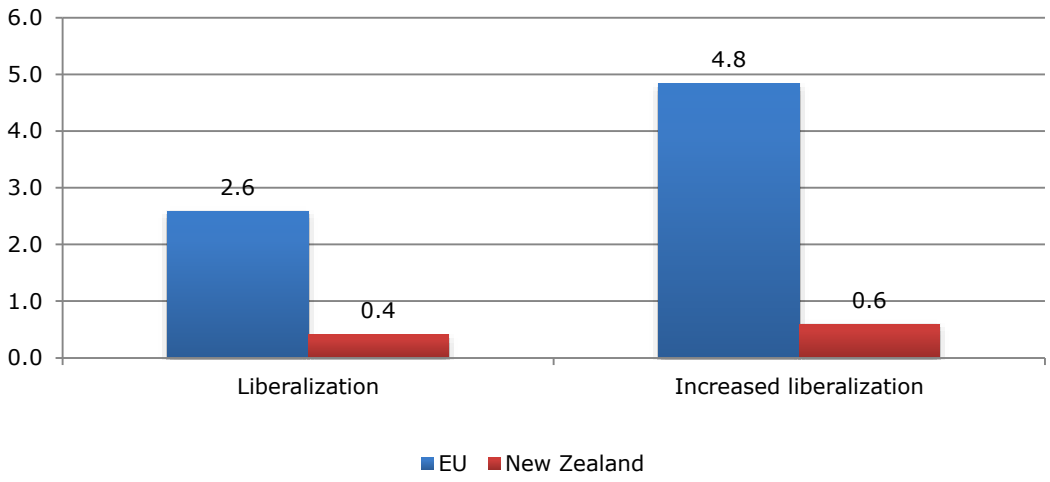
Welfare effects, employment, wages and inequality

A common indicator of the social impact of FTAs consists of measuring welfare effects. In the GTAP model, the welfare effect represents a money metric equivalent of the utility change that arises, for example, from terms of trade changes and improvements in a country's resource allocation. In the model, welfare is calculated by measuring "equivalent variation" (EV) which summarizes regional welfare changes and is translated in money values (million €).

For the EU, the gain in aggregate welfare amounts to €2.6 billion in the liberalization scenario and €4.8 billion in the increased liberalization scenario. Depending on the degree of liberalization, aggregate welfare improvements range from €0.4 billion to €0.6 billion (Figure 28).

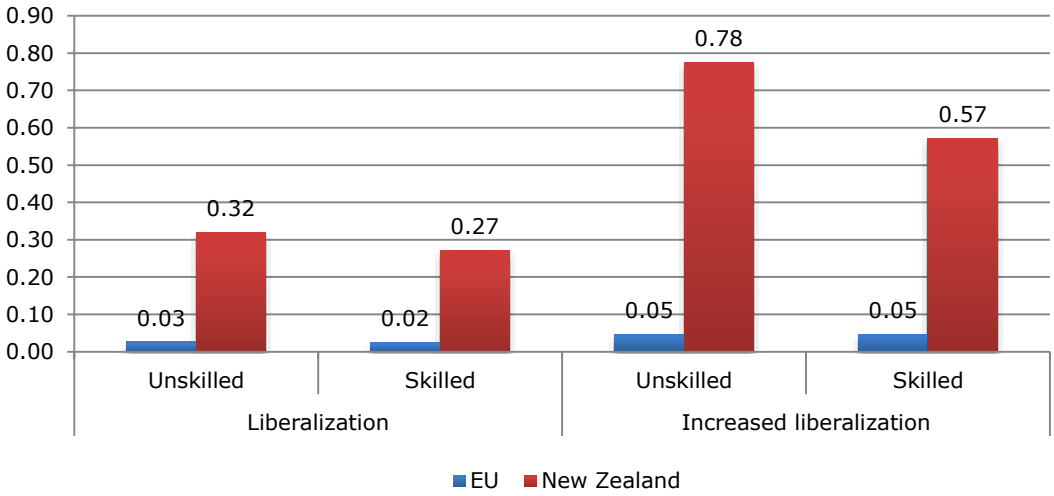
[98] International Labour Organization, "National Labour Law Profile: New Zealand," available at: http://www.ilo.org/ifpdial/information-resources/national-labour-law-profiles/WCMS_158915/lang--en/index.htm.

Figure 28: EU-New Zealand change in Welfare (long term, billion €)



As discussed earlier, the impact of an FTA on wages and employment is contingent upon workers' skill level and sector. In the case of the EU-New Zealand FTA, the GTAP analysis conducted by DG Trade reveals that real wages are expected to rise for both the EU and New Zealand for both skilled and unskilled workers. For the EU, real wages follow the same pattern as national income i.e. rising marginally compared to New Zealand. For New Zealand, real wage increases are more significant for both unskilled and skilled workers in the increased liberalization scenario of trade liberalization, ranging from 0.78% and 0.57% for unskilled and skilled workers, respectively. The percentage rise in real wages under the increased liberalization scenario is estimated to be more than twice than for the liberalization scenario. For the EU, the rise in real wages is expected to be marginal (Figure 29).

Figure 29: EU-NZ % Change in Real Wages (long term)



Our Gini Index is a measure of inequality typically measured in survey data with multiple types of households. It measures the extent to which the richest and poorest households are away from each other in terms of income at any given point of time. We employ this concept in our context in a slightly different way than that. We measure Gini index for inequality in wages for skilled and unskilled labor in each country.

We employ the initial data on wage bill (in €) and aggregate employment (in number of jobs) from GTAP Data Base. Using the wage rates before and after the scenarios, for skilled and unskilled labor, we measure the Gini index for wage inequality between skilled and unskilled labor for both the EU and New Zealand. We follow Deaton (1997) for the formula to measure Gini index. The higher the value of this index, the higher the measure of inequality.

As far as wage inequality between unskilled and skilled labor across the EU and New Zealand, the results of Gini coefficients indicate that the overall gap between real wages of unskilled and skilled workers could fall slightly in the conservative liberalization scenario in the EU, while it may stay stagnant in the increased liberalization scenario; for New Zealand, it falls in the conservative liberalization scenario and falls even more in the increased liberalization scenario Table 22.

Table 22: Gini Index (long term)

	Base Year	Liberalization	Increased liberalization
Wage Inequality in EU	0.4361	0.4357	0.4361
Wage Inequality in New Zealand	0.5718	0.5624	0.5342

The results concerning changes in the reallocation of workers indicate the substitution of workers from less efficient sectors to more efficient sectors of production in the long run, since the model applied in this study assumes that every country's labour supply is fixed. For instance, in the increased liberalization scenario, for New Zealand a decline in the number of jobs is expected in most sectors while the number of jobs is expected to rise in vegetables and fruits, ruminant meat, other animal, minerals and utility services (Table 23).

Table 23: Reallocation of workers in the EU and New Zealand (% change)

Sectors	EU				New Zealand			
	Liberalization		Increased liberalization		Liberalization		Increased liberalization	
	Unskilled	Skilled	Unskilled	Skilled	Unskilled	Skilled	Unskilled	Skilled
rice	-0.06	-0.05	-0.18	-0.17	-0.14	-0.13	-0.30	-0.24
cereals	0.00	0.00	-0.15	-0.15	-0.94	-0.92	-1.80	-1.75
veg_fruit	-0.19	-0.19	-0.20	-0.20	2.91	2.92	2.44	2.50
oil_seeds	-0.09	-0.09	-0.17	-0.17	-0.36	-0.33	-1.16	-1.03
sugar	-0.03	-0.03	-0.23	-0.23	-0.66	-0.60	-1.57	-1.35
fiber_crop	-0.03	-0.03	-0.09	-0.09	0.07	0.08	-0.92	-0.87
ruminant_meat	0.23	0.23	-1.21	-1.21	-0.37	-0.33	4.18	4.33
other animal	-0.04	-0.04	-0.05	-0.04	1.18	1.19	0.48	0.53

other_meat	-0.01	-0.01	0.00	0.00	-0.27	-0.22	-1.41	-1.18
dairy	0.07	0.07	-0.11	-0.11	-0.93	-0.91	0.38	0.48
wood_paper	0.00	0.01	-0.03	-0.03	-0.36	-0.31	-0.92	-0.72
fishing	-0.01	-0.01	-0.04	-0.04	0.11	0.12	-0.04	0.00
coal	-0.12	-0.12	-0.22	-0.22	-1.29	-1.10	-3.13	-2.37
oil	-0.06	-0.06	-0.10	-0.10	-0.10	-0.08	-0.44	-0.36
gas	-0.14	-0.14	0.74	0.74	0.16	0.19	-0.18	-0.04
minerals	-0.03	-0.03	-0.05	-0.05	0.36	0.37	0.71	0.75
other_food	0.01	0.02	-0.04	-0.03	0.11	0.16	-0.39	-0.16
bev_tob	-0.02	-0.02	-0.03	-0.03	0.50	0.55	-0.02	0.21
textile	-0.04	-0.03	-0.03	-0.03	0.51	0.57	-0.81	-0.56
chemicals	-0.05	-0.05	-0.03	-0.03	0.33	0.40	-0.95	-0.69
oil_pcts	-0.05	-0.04	-0.08	-0.08	-0.08	-0.02	-0.55	-0.29
metal_pcts	-0.02	-0.02	0.01	0.01	-0.48	-0.42	-1.88	-1.63
no_metal_pct	0.01	0.01	0.04	0.05	0.01	0.07	-0.36	-0.11
motor_equip	0.22	0.22	0.28	0.28	-1.54	-1.48	-3.23	-2.98
machinery	0.01	0.01	0.14	0.14	-0.80	-0.73	-3.43	-3.18
ele_other	-0.10	-0.09	-0.10	-0.09	0.09	0.15	-0.53	-0.27
electricity	-0.02	-0.02	-0.03	-0.03	-0.18	-0.12	-0.65	-0.40
utility	0.03	0.03	0.05	0.05	0.48	0.55	1.01	1.30
transport	-0.04	-0.04	-0.09	-0.09	-0.19	-0.11	-0.93	-0.59
communication	-0.01	-0.01	-0.02	-0.01	-0.06	0.00	-0.28	-0.03
financial	-0.02	-0.02	-0.04	-0.04	-0.16	-0.10	-0.46	-0.21
other_serv	-0.01	0.00	-0.01	-0.01	-0.06	0.01	-0.40	-0.12

4.1.2.2. Impact on core labour standards

New Zealand's approach to labour standards in FTAs

In New Zealand, both MFAT and the Ministry of Business, Innovation and Employment work jointly to address labour linkages in trade policy. MFAT has the lead on all trade issues, and the former provides advice and input in the conduct of regional and bilateral trade negotiations. Although New Zealand's institutional and policy framework is less formalized than the EU (see General report), New Zealand's government has asserted its

"commitment to ensuring that the rules of free and fair trade will be consistent with the rules of the International Labour Organisation."[99]

In practice, New Zealand's bilateral FTAs are commonly supplemented with institutional mechanisms (e.g. NZ-Thailand FTA, NZ-China FTA) designed to express the parties' commitments to address trade and labour linkages. A close examination of the NZ-China's Memorandum of Understanding on Labour Cooperation reveals similarities with the EU approach in at least three regards: 1) a generally soft regulatory approach characterized by promotional language; 2) a reference to the ILO Declaration on Fundamental Principles and Rights at Work; 3) a consultative and cooperative approach to dispute settlement.[100]

Within the context of TPP negotiations, New Zealand reasserted its commitment to addressing trade-labour linkages, while endorsing Washington's stricter approach to the enforcement of labour provisions in FTAs.

Indeed, TPP's chapter on labour both builds upon the framework developed by Washington over the past two and a half decades of FTA negotiations, and innovates in several regards.[101] This has led the US Trade Representative to claim that "TPP has the strongest protections for workers of any trade agreement in history". TPP refers both to the 1998 ILO Declaration and to the same set of "internationally recognized labour rights," yet does it in much more binding terms than a number of previous US FTAs, stating that parties "*shall adopt and maintain* in its statutes and regulations, and practices thereunder, the [core labour standards] as stated in the ILO Declaration" (emphasis added). TPP's labour provisions can be brought to dispute settlement (chapter 28) under the same terms (including potential trade sanctions) as other chapters if consultations fail to find an agreement. For New Zealand, this constitutes an unprecedented degree of enforceability that may have a future impact on its approach to trade-labour linkages.

Beyond enforceability, TPP's labour chapter breaks new ground both in terms of content and public engagement, albeit more in promotional language than binding terms. Perhaps the most visible labour provisions in TPP are the pre-ratification of legally binding "labour action plans" that require Vietnam, Brunei and Malaysia to implement legal and institutional reforms to meet a number of labour standards tailored to each labour action plan: e.g. regarding minimum wage law in Brunei, child labour in Brunei and Malaysia.[102]

Finally, TPP's labour chapter also breaks new ground for New Zealand and its trading partners with regard to its governance, and more specifically the many instruments designed to increase public engagement on labour issues. These provisions include, among others:

- a section on public awareness (art. 19.8) requiring access to administrative and judicial proceedings;
- mechanisms for public submissions (art. 19.9);
- the creation of a Labour Council (art. 19.12) composed of senior governmental representatives in charge of monitoring and assessing the implementation of the labour chapter, potentially liaising with relevant regional and international organisations like APEC or the ILO;

[99] Ministry of Business, Innovation and Employment, "Trade and Labour", available at: http://www.mbie.govt.nz/info-services/employment-skills/international-services/trade-and-labour.
[100] NZ-China's Memorandum of Understanding on Labour Cooperation (2008), available at: https://www.mfat.govt.nz/assets/_securedfiles/FTAs-agreements-in-force/China-FTA/MOU-NZ.pdf
[101] Signed in 1992, NAFTA was the first FTA to "include" labour provisions as side agreements.
[102] For more details, see ILO (2016), "Assessment of Labor Provisions in Trade and Investment Arrangements."

- the establishment or maintenance of a national labour consultative or advisory body including representatives of its labour and business organisations to provide views on the implementation of TPP's labour provisions (art. 19.14).

In short, TPP's labour chapter provides a new framework for New Zealand's trade-labour linkages, breaking new ground in enforceability, content and stakeholder consultation. Not all the provisions of its ambitious scope are subject to strict enforcement. As a result, TPP's ability to meet its promises will depend on political will on behalf of its parties and on the financial resources allocated to implement and monitor the agreement.

Expected scope of New Zealand-EU FTA and potential impact on core labour standards

As explained earlier, the trade and sustainable development chapter of the Korea trade agreement has become a template for trade-labour linkages in EU FTAs, as reflected by the similar scope of CETA's labour chapter or DG Trade's TTIP labour chapter proposal released in November 2015.[103] The final scope of TTIP's labour chapter is likely to be fiercely debated given the US's strong attachment to its enforcement measures over the past decade. However, the content of an EU-New Zealand FTA is likely to be subject to fewer controversies and in the light of New Zealand's flexibility on trade and labour, will likely follow the EU-Korea framework. Thus, we can reasonably expect that an FTA will provide a clear framework for the two parties to:

- commit to the ILO's core labour standards and the Decent Work Agenda;
- reassert their right to regulate labour issues;
- favour a consultative and cooperative approach to dispute settlement;
- establish *ad hoc* institutional procedures to:

– monitor the implementation of the agreement (Committee on Trade and Sustainable Development, Civil Society Forum, Domestic Advisory Groups),
– review alleged violations of the agreement (e.g. Panel of Experts),
– and conduct a yearly or five-year assessment of the FTA by incorporating feedback from stakeholders.

The prominence of ILO core labour standards in trade agreements (both in EU and US FTAs) makes them a logical starting point to discuss the social impact that an EU-New Zealand FTA might have on working conditions. Admittedly, the tensions between trade liberalization and the enforcement of international labour standards are admittedly of lesser concern in trade negotiations when two parties are both established democracies and advanced economies. Yet, the evidence below shows that industrialized countries are far from immune from transgression or non-enforcement of international labour standards. This section draws on the NORMLEX database to review recent cases submitted to the ILO's Committee of Experts that reflect contentious issues in the implementation of ILO standards in the EU and New Zealand (Table 24).

[103] European Commission (2015), "EU Textual Proposal. Trade and Sustainable Development," available at: http://trade.ec.europa.eu/doclib/docs/2015/november/tradoc_153923.pdf.

Table 24: ILO cases brought to CEACR in New Zealand and in the EU

ILO Core Labour standards	NEW ZEALAND Examples of cases reviewed by ILO Committee of Experts[104]	EUROPEAN UNION Examples of cases reviewed by ILO Committee of Experts
Freedom of association and the effective recognition of the right to collective bargaining (conventions 87 and 98)	Right to organise workers employed as "independent contractor"	Curtailment of right to strike in municipal administrations; collective bargaining rights of self-employed workers; Right of workers' organizations to elect their representatives in full freedom and to organize their activities and formulate their programmes
Elimination of all forms of forced or compulsory labour (conventions 29 and 105)	Privatization of prisons and prison labour; need for written consent; trafficking in persons	Work of prisoners for private enterprises; trafficking in persons; exploitation of foreign workers in an irregular situation; Imposition of sentences of imprisonment involving the obligation to work as a means of labour discipline
Effective abolition of child labour	Minimum age for admission to hazardous work (construction, agriculture and hospitality industries)	Child trafficking; identifying and reaching out to children at risk; Roma and street children
Elimination of discrimination in respect of employment and occupation	Gender pay gap	Discrimination with regard to employment and occupation; Equality of opportunity and treatment irrespective of race, colour and national extraction; gender pay gap; sexual harassment

Source: Author's analysis of ILO NORMLEX database.

Table 25: Impact of EU-New Zealand FTA on core labour standards

Core labour standards	Trade measures likely to have an impact	Likelihood of direct vs. indirect impact	Likelihood of major vs. minor impact	Magnitude of expected impact	Positive, neutral or negative impact
Freedom of association and right to	Trade in goods and services	Indirect	Likely	Minor	Neutral to positive for EU unions; neutral to negative

[104] Cases are selected from the NORMLEX database according to three criteria: 1) relevance to core labour standards; 2) nature of ILO comments (direct requests, as opposed to simple observation); 3) recency of the case (up to four years).

collective bargaining					for New Zealand unions
	Labour chapter	Direct	Likely	Minor	Positive
Elimination of all forms of forced and compulsory labour	Trade measures	Indirect	Unlikely	Minor	Neutral
	Labour chapter	Indirect	Unlikely	Minor	Neutral to positive
Effective abolition of child labour	Trade measures	Indirect	Unlikely	Minor	Neutral
	Labour chapter	Indirect	Likely	Minor	Neutral to positive
Elimination of discrimination in respect of employment and occupation	Trade measures	Indirect	Likely	Minor	Positive
	Labour chapter	Direct	Likely	Minor	Positive

Freedom of association and right to collective bargaining

Cases relating to freedom of association and the effective recognition of the right to collective bargaining are one the most common occurrences among those reviewed by the CEACR. Thus, despite the EU and New Zealand's adherence to Convention 98 (and Convention 87 for the EU), analysis of CEACR reports reveals several cases across the EU and in New Zealand where freedom of association and the right to collective bargaining are being infringed upon. This comes in a general context of declining union membership that is the result of both economic dislocation in the aftermath of the financial crisis and political reforms often hostile to unions.

Trade in goods and services under an EU-New Zealand FTA is likely to have only a minor impact on this core labour standard. These effects are likely to be confined to unionized sectors like manufacturing. Thus, unions in manufacturing sectors benefiting from tariff reduction under increased liberalization (e.g. motor equipment and machinery in the EU) may experience increasing bargaining power. Conversely, social dislocation and employment reallocation could result in diminishing bargaining power among New Zealand unions.

Given its current practice and the nature of this North-North trade agreement, the EU is unlikely to embrace a sanction-based approach to ILO compliance. Additionally, our analysis of the EU-New Zealand FTA's aggregate and sectoral impacts are not significant enough to prompt a set of reforms that would prop up labour standards in the EU or New Zealand. Thus, the impact that the EU-New Zealand FTA might have on unions' rights will

depend not only on the content of the agreement but also on the political will to enforce its provisions.

Because protecting freedom of association, collective bargaining and the right to strike can face considerable obstacles to enforcement, the success of a soft regulatory approach will depend on civil society inclusion in monitoring, sustained resource allocation and feedback loop mechanisms. First, evidence shows that transnational cooperation among trade unions can lead to knowledge transfer and resource aggregation. The support of transnational alliances and international institutions can bring visibility to cases of anti-union practices. This is reflected by the cooperation between North American unions under the North American Agreement on Labour Cooperation.[105] Yet, as the limited results of North American Free Trade Agreement (NAFTA)'s labour side agreement reveal, awareness is only one step toward effective enforcement of unions' rights. Second, monitoring programs must be funded adequately to allow sustained participation of labour organizations. Given the above-mentioned decline in unions' financial capacities, cooperative enforcement mechanisms are more likely to be effective if participation costs for labour (and other civil society) groups are minimized and if the latter perceive that their input matters. This is the third key element to ensure trade and sustainable development maximizes its positive externalities with regard to labour standards in general: designing feedback loop processes to ensure that monitoring and assessment measures lead to concrete responses from governments or bilateral institutions.

Elimination of all forms of forced and compulsory labour

EU and New Zealand cases of forced or compulsory labour that are subject to direct requests by the CEACR generally fall under three categories. The first category pertains to state-imposed forms of compulsory labour,[106] and more specifically to the work of prisoners. ILO Convention 29 concerning Forced or Compulsory Labour does not classify the work of prisoners who have committed a crime as "forced labour" provided they work "under the supervision and control of a public authority and that the said person is not hired to or placed at the disposal of private individuals, companies or associations" (Art. 2(2)(c)). Conversely, prison labour carried out on behalf of private enterprises requires voluntary consent to be in full compliance with Convention 29. Close examination of CEACR reports reveals that securing the written consent of prisoners working for private contractors is a common request of the CEACR in both New Zealand and Europe. However, both domestic regulation and international agreements limit the scope of competition between prison workers and labour in the free market. In New Zealand, inmate employment policy falls under the Department of Corrections.[107]

At the international level, Art. XX of GATT allows WTO members to adopt trade restrictive measures related to the products of prison labour. Thus, to the extent that there is very little, if any linkage between prison labour and EU-New Zealand trade, the potential impact of an EU-New Zealand FTA is unlikely to have any impact, whether through economic or rule-making channels. Indeed, while compliance with ILO conventions can admittedly be

[105] Stillerman, Joel (2003), "Transnational Activist Networks and the Emergence of Labor Internationalism in the NAFTA Countries." *Peer Reviewed Articles* (Sociology Commons), 11, available at: http://scholarworks.gvsu.edu/soc_articles/11; Kay, Tamara (2005), "Labor Transnationalism and Global Governance: The Impact of NAFTA on Transnational Labor Relationships in North America," *American Journal of Sociology* 111, no. 3 (November): 715-756.
[106] At the global level, this category represents 10% of all forms of compulsory labour. For more details on typology and statistics, see ILO (2014), "Profit and Poverty: The Economics of Forced Labour", available at: http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_243391.pdf
[107] See New Zealand Department of Corrections (2001), "Inmate Employment Policy", available at: http://www.corrections.govt.nz/__data/assets/pdf_file/0007/676087/inmateemployment.pdf

subject to cooperation, the potential of bilateral consultations may be more limited in this realm to the extent that the path to compliance with ILO conventions is clear, as shown by CEACR reports.

The second category of forced labour cases lies at the crossroads between labour standards and human rights and deals with human trafficking. It is a common issue raised by the ILO among EU members, which has gained greater significance with the current refugee crisis. These issues are examined in the Human Rights chapter (see chapter 9).

The third category of requests regarding the elimination of force labour (and more specifically Convention 29) has to do with the vulnerable situation of migrant workers and refugees. This issue has long been a common issue of CEACR comments and is discussed under the HR analysis.

To the extent that cases of forced and compulsory labour are only indirectly related to EU-New Zealand trade, and despite references to the Decent Work Agenda, the implementation of labour provisions are unlikely to have a major impact on these issues. And while bilateral cooperation through knowledge transfers may have positive effects under an EU-New Zealand FTA, the sensitive nature of immigration policies means that these questions might be more effectively addressed in other international fora than a bilateral trade agreement.

Effective abolition of child labour

As mentioned above, the fact that New Zealand has not ratified Convention 138 concerning Minimum Age for Admission to Employment does not mean that child labour is necessarily more common than in the EU, to the extent that it is regulated under both domestic laws and other ILO conventions ratified by New Zealand in different sectors (Conventions 10, 58, 59). However, the CEACR has recently pointed to inadequate monitoring of admission to hazardous work (especially in the construction, agriculture and hospitality industries). This issue has also been raised in a recent study by the New Zealand Work and Labour Market Institute at Auckland University of Technology.[108]

In the EU, all members have ratified Convention 138 on minimum age, while the EU Directive on the protection of young people at work (94/33/EC) states that EU members must prohibit the employment of children under the age of 15 or those still in full-time compulsory education. Most EU legislations set the minimum age at 15 or 16 and/or put restrictions with regard to the age of compulsory education.[109] However, the situation differs dramatically from one country to another with regard to the type of work by young persons. With the exception of agriculture, work by children under 15 years are generally concentrated in services (restaurants, supermarkets, petrol stations) or family work (cleaning, household assistance) that do not have a direct impact on international trade flows.[110] Thus, the prospect of an EU-New Zealand is not expected to affect the parties' practices through trade or the rule-making channels. However, the diversity of child labour cases in the EU and New Zealand (due to sectoral composition, cultural traditions and political will) shows that there is ample scope for cooperation.

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[108] Danaë Anderson (2010), "Safe Enough? The Working Lives of New Zealand Children", New Zealand Work and Labour Market Institute, available at: https://ojs.victoria.ac.**nz**/LEW/article/download/1696/1539.

[109] European Commission (n.d.), "Working Conditions - Young People at Work", available at: http://ec.europa.eu/social/main.jsp?catId=706&intPageId=209&langId=en.

[110] Labour Asociados Consultores (n.d.), "Study on Child Labour and Protection of Young Workers in the European Union, available at: http://ec.europa.eu/social/BlobServlet?docId=4200&langId=en.

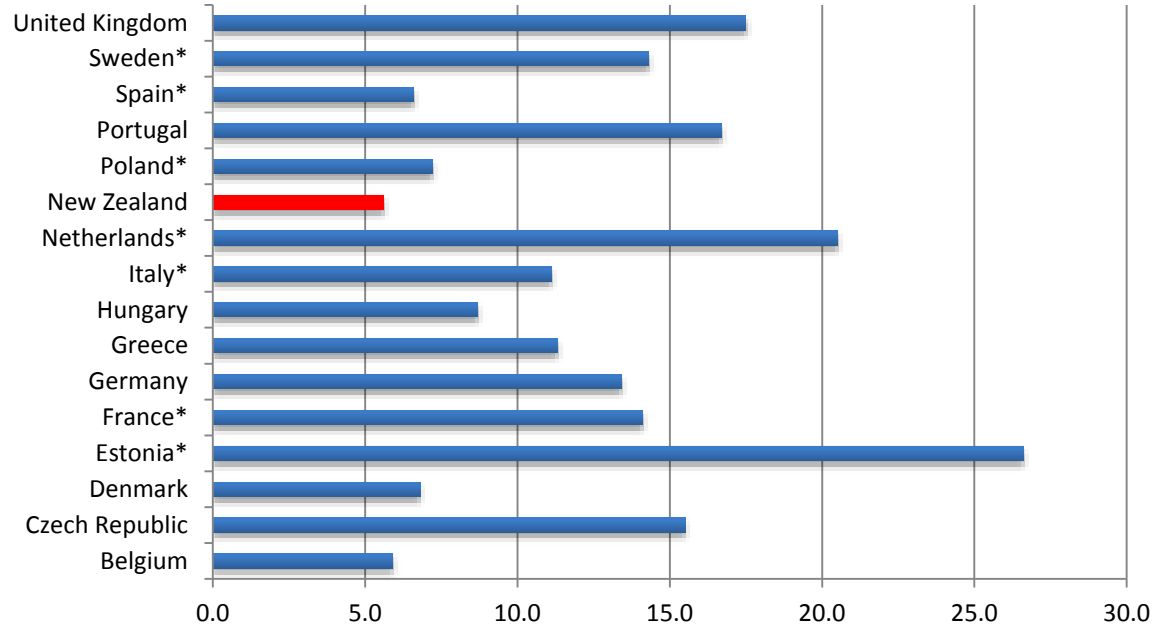
Exchange of information and best practices under cooperative mechanisms like a Civil Society Dialogue would be even more relevant with regard to some of the worst forms of child labour (Convention 182) that have a greater international dimension. This could be the case for child trafficking (see chapter 9 there), for the use of children in production and trafficking of drugs, and the use of children for pornography. Although the EU-New Zealand FTA is not expected to have a direct impact on any of these forms of child labour, bilateral cooperation encouraging knowledge transfers and policy learning are more likely to occur with an EU-New Zealand FTA than without. These information exchanges could be institutionalized under the trade and sustainable development chapter or, with regard to child pornography on the Internet, could fall under the electronic commerce chapter which, in the case of CETA, establishes a dialogue that "takes the form of exchange of information on the Parties" respective laws, regulations, and other measures on these issues, as well as sharing experiences on the implementation of such laws, regulations and other measures" (chapter 16, art. 16.6).[111]

Elimination of discrimination in respect of employment and occupation

Despite the two parties' ratification and application of Convention 100 concerning equal remuneration and Convention 111 on discrimination in respect of employment and occupation, a close study of CEACR reports reveals the persistence of gender-, race- and disability-based discrimination in both EU countries and New Zealand.

The most common subject of the ILO's direct requests concerns the enduring gender pay gap. The CEACR's comments either highlight the need to address the pay gap or, in the ILO's tradition of regulatory and legal advice, request further information with regard to the implementation of anti-discrimination programs. As Figure 30 shows, unequal remuneration has been an enduring feature of labour markets in OECD countries (and elsewhere).

Figure 30: Gender pay gap, selection of countries, 2013 (difference between average gross hourly earnings of male and female employees as % of male gross earnings)



[111] Comprehensive Economic and Trade Agreement (CETA) between Canada and the European Union and its member states, available at: http://trade.ec.europa.eu/doclib/docs/2014/september/tradoc_152806.pdf.

*Source: OECD. * Data for 2010.*

The gender pay gap in both EU and New Zealand has receded yet subsists despite a wave of gender equity reforms over the past ten years. In the EU, these reforms have taken place at both national levels (e.g. France, Germany, Ireland, Denmark etc.) and at the supranational level within the framework of the "The Strategic engagement for gender equality". The Commission's 2010-2015 strategy for equality between women and men prioritised five key areas for action: 1) equal economic independence for women and men; 2) equal pay for work of equal value; 3) equality in decision-making; 4) dignity, integrity and ending gender-based violence; and 5) promoting gender equality beyond the EU. The 2015 report from the EU Commission underlined the progress accomplished during the 2010-2015 plan (rising employment rate among women, increasing participation in economic decision-making) and reasserted the relevance of its priorities for the 2016-2019.[112] In line with its pioneering efforts on behalf of gender equality and its high ranking on pay gap, New Zealand has long fought against various forms of discrimination (e.g. Equal Pay Act of 1972, Human Rights Act of 1993).

New Zealand's strong record for women's rights and the proliferation of legislation designed to measure and address gender-, race- and disability-based discrimination over the past few years provide great potential for international cooperation both at the ILO and under the cooperative mechanisms of the trade and sustainable development chapter. Here, robust stakeholder consultation mechanisms optimizing civil society inclusion are all the more crucial since women, but also ethnic minorities and disabled populations, remain underrepresented in both economic and political decision-making.

Beyond rule-making channels or cooperative mechanisms, an EU-NZ FTA may also impact the gender pay gap through trade effects. First, as female graduates outnumber male graduates in both New Zealand and the EU,[113] women skilled workers are more likely to reap more benefits from trade liberalization between two advanced economies. This scenario is, however, conditioned by sustained progress in women's participation in economic decision-making. Second, in countries where the gender pay gap is higher and employment discrimination more common, EU or New Zealand multinational corporations may provide new hiring opportunities for educated women. Third, trade and investment integration is conductive to changes in management practices, including gender equity and diversity policies. Indeed, increased competition between advanced economies, far from encouraging a regulatory race-to-the-bottom, can encourage companies to adopt gender equity measures as they compete for skilled workforce. As mentioned in the baseline section, given that salaries in exporting sectors are on average higher than in other sectors, an EU-NZ FTA may contribute to reduce the pay gap. Conversely, and beyond aggregate figures, the impact of an EU-NZ FTA on the gender pay gap is likely to be uneven across sectors, reflecting the sectoral effects described above.

4.1.3. Summary of key findings and recommendations

Using quantitative and qualitative methods, this chapter has analysed the potential impact of an EU-NZ FTA through trade, economic and rule-making channels. Overall, we expect the social impact of this trade agreement between two advanced open economies to be positive. However, the present study highlights both sector-specific risk factors that

[112] European Commission (2015), "Strategic engagement for gender equality 2016-2019", available at: http://ec.europa.eu/justice/gender-equality/files/documents/151203_strategic_engagement_en.pdf.
[113] European Parliament, "Women and Education in the EU", March 2015, available at: http://www.europarl.europa.eu/RegData/etudes/ATAG/2015/551301/EPRS_ATA(2015)551301_EN.pdf.

deserve to be addressed, as well as political opportunities that could help the two parties maximize the positive externalities arising from a stronger EU-NZ economic partnership.

With regard to macroeconomic trends, our key findings concerning the potential social impact of an EU-NZ FTA include:

- **Mixed but limited effects on workers reallocation**, with greater impact on New Zealand than in the EU. For the EU, the sectors expected to benefit the most from a bilateral FTA include motor equipment, machinery and gas. For New Zealand, the agricultural sector, and more specifically vegetables and fruits, ruminant meat, other meat, as well as minerals and utility services are among the sectors expected to reap the greatest gains from trade liberalization.
- Sector-specific risks with labour reallocation under increased liberalization, affecting increasingly competitive sectors in agriculture and manufacturing (machinery, motor equipment etc.).
- Positive long-term welfare effects for both the EU and New Zealand.
- Limited but positive wage effects for both unskilled and skilled workers in each trading partner – the impact being relatively more significant in New Zealand than the EU.

In short, the impact of an EU-NZ FTA on aggregate economic trends is expected to be broadly positive in the long turn. Yet, as is often the case in trade liberalization, many of these benefits will be broadly dispersed over time and across sectors, while negative externalities will be concentrated in a small number of sectors. As mentioned above, this means that both parties need to devote greater resources to a variety of policy instruments that can help mitigate the adjustment costs of trade liberalization that are at times more visible to the public than its more diffuse benefits. These tools include improving trade adjustment programs, allocating more resources to retraining in tradable goods sectors, reinforcing policy cooperation between trade policy initiatives and rural development programs etc.

With regard to compliance with ILO standards, our analysis reveals that both the EU and New Zealand provide strong protections for workers' rights but that even core labour standards remain subject to cases brought to the ILO. Although the enforcement of the future labour provisions of an EU-NZ FTA may not dramatically alter each party's labour laws, our study has highlighted cases where cooperative mechanisms might be most effective. These include:

- ensuring the participation of unions, labour and human rights organizations in the enforcement and monitoring of the FTAs' labour provisions and designing built-in feedback loop processes to ensure accountability;
- building on existing consultative mechanisms to foster cooperation on both national and transnational issues related to enforcement of core ILO standards and more specifically the elimination of worst cases of child labour, the elimination of discrimination (against disabled persons, ethnic minorities and women) as well as cases of forced labour that may also be dealt with under human rights protection mechanisms.
- building on New Zealand's strong record in gender equity and capitalizing on recent reforms on gender pay gap in EU countries to develop a common framework of best practices.

4.2. The Impact on Consumers from an EU-New Zealand FTA (Task

11)

4.2.1. State of Consumer Protection in New Zealand

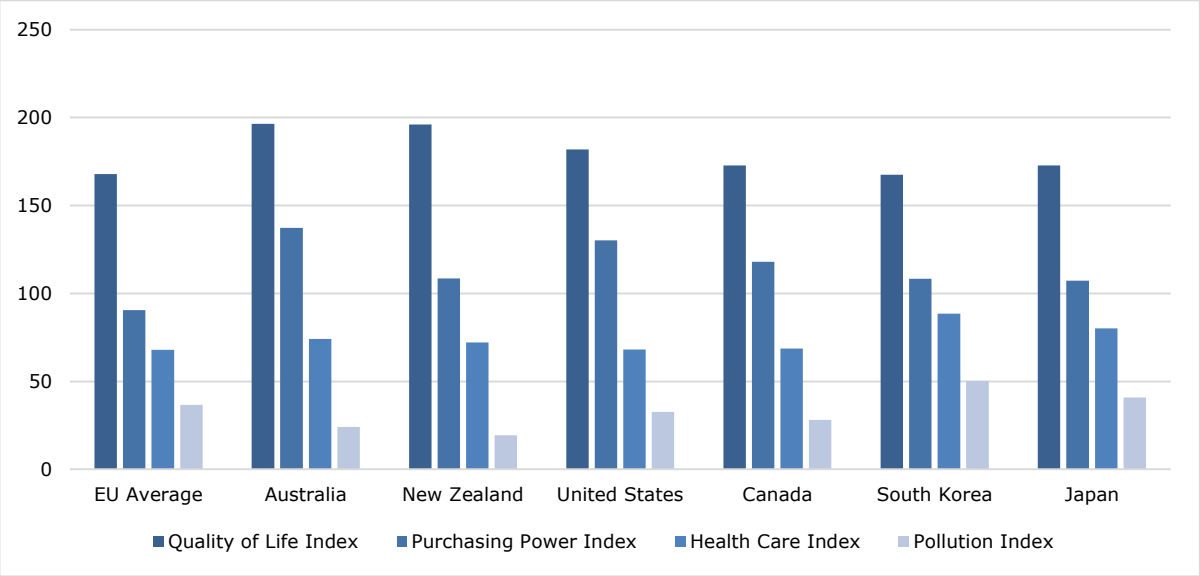
Consumer protection is key for New Zealand. New Zealand has implemented a comprehensive legislative package to protect consumers. New Zealand's national consumer protection legislation includes:[114]

- a Consumer Guarantees Act (CGA) providing guarantees for products, services, gas and electrical supply;
- a Fair Trade Act including unfair and banned trading conduct and special protection for certain consumer sales;
- a Credit Contracts and Consumer Finance Act;
- an Online Safety Act setting out consumer rights in response to online bullying, harassment and other harmful digital communications;
- a Contractual Remedies Act setting out rights to cancel a contract or seek compensation when buying products or services from a private seller;
- a Minor's Contracts Act protecting young people under 18 years of age making contracts, including which contracts are enforceable;
- Consumer Information Standards ensure that specific information is provided to consumers about certain products and services (e.g. care labelling, country of origin labelling, fibre content labelling, used motor vehicles information, water efficiency regulations);
- Product Safety Standards regulate particular products in order to prevent or reduce the risk of injury (six current Product Safety Standards in place);
- Unsafe Goods Notices including product bans to address safety issues.

The high level of consumer protection New Zealand and the EU is reflected by common national indicators of the quality of life, purchasing power, health and environmental standards (see Figure 31 and Figure 32). Data collected by NUMBEO as well as data surveyed by the OECD indicate that living standards in all countries are roughly at the same level as in the US and Canada. The same picture emerges from indicators reflecting air and water pollution, for New Zealand and the EU show high levels of quality. As concerns health care, both self-reported health as well as the quality of health care index show high values, which are also reflected in the data for general life expectancy (81.4 for New Zealand, and 80.1 years for the average of the EU countries).

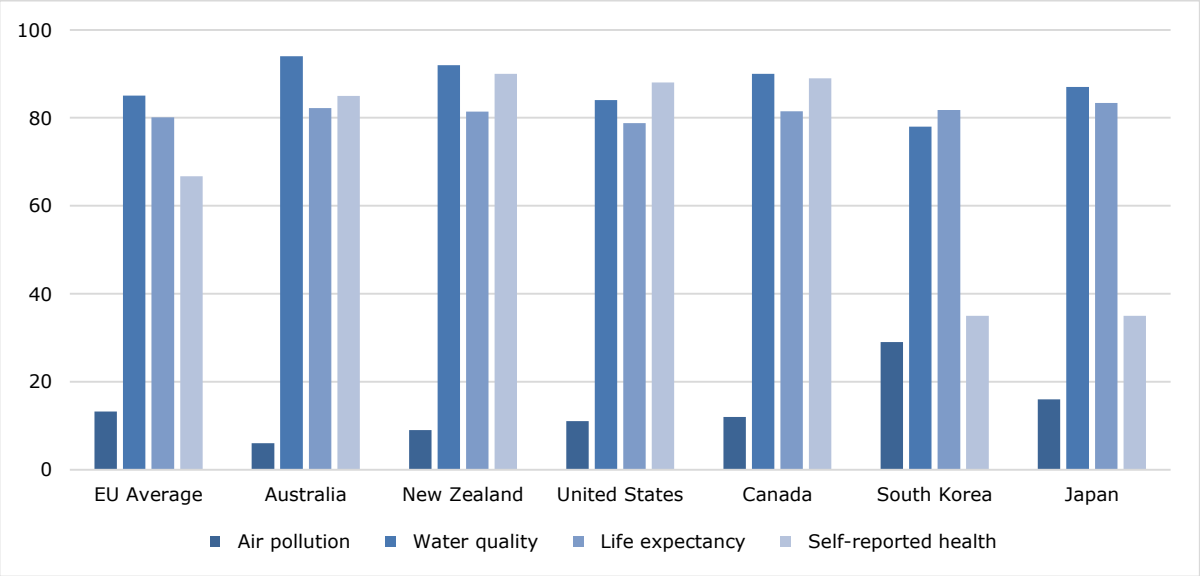
[114] See overview of New Zealand's consumer protection legislation, https://www.consumerprotection.govt.nz, accessed on 6 July 2016.

Figure 31: NUMBEO indicators of standard of living and consumer welfare



Source: NUMBEO 2016 Mid-Year Indices. Notes: The overall Quality of Life Index (higher is better) is an estimation of overall quality of life by using empirical formula which takes into account purchasing power index (higher is better), pollution index (lower is better), house price to income ratio (lower is better), cost of living index (lower is better), safety index (higher is better), health care index (higher is better), traffic commute time index (lower is better) and climate index (higher is better). The Health Care Index Health Care Index indicates the overall quality of the health care system, health care professionals, equipment, staff, doctors, cost, etc. The Pollution Index indicates the overall pollution in a country. The biggest weight is given to air pollution, then to water pollution/accessibility, two main pollution factors. Small weight is given to other pollution types.

Figure 32: OECD indicators of standard of living and consumer welfare



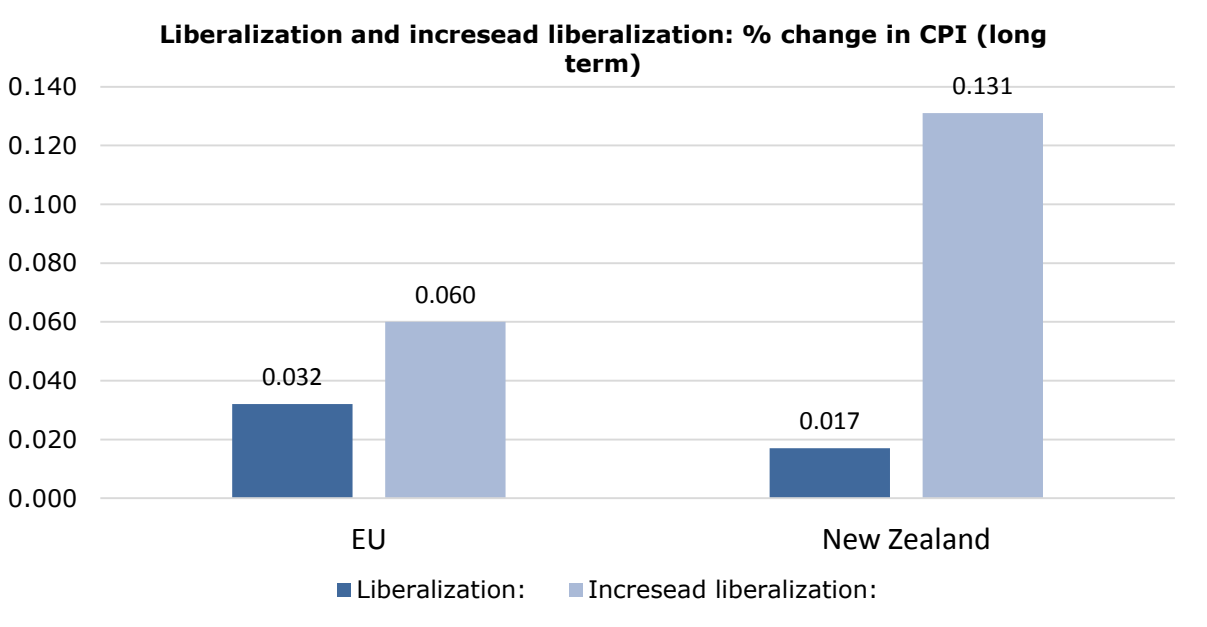
Source: OECD Better Life Index 2016. Notes: Air pollution indicates the population weighted average of annual concentrations of particulate matters less than 2.5 microns in diameter (PM2.5) in the air. Water quality indicates people's subjective appreciation of the environment where they live, in particular the quality of the water. Life expectancy measures how long on average people could expect to live based on the age-specific death rates currently prevailing. Self-reported health refers to the percentage of the population aged 15 years old and over who report 'good' or better health.

4.2.2. Quantitative Impact on Consumers in the EU and New Zealand - Based on CGE Modelling Results

According to DG Trade's internal analysis of the quantitative impact of liberalising trade under the two liberalization scenarios, quantitative changes in aggregate consumer prices in the EU and New Zealand are negligible only. Given that the estimation horizon of the analysis is 2030, both the total as well as the average annual FTA-induced change in regional consumer prices is estimated to be below the perception threshold. For example, under the ambitious scenario, New Zealand shows the highest relative change in aggregate consumer prices amounting to +0.131% for the long term. In other words, the average annual change in consumer prices amounts to 0.008% only (see Figure 33). Note that the CGE model applied implicitly assumes that every country's labour supply is fixed. The "fixed labour market closure" implies that any increase in demand for labour will be met by wage increases, which will in turn push up firms' costs, and will be eventually be passed on to consumers as higher prices.

Similarly, changes in average import prices are marginal for both liberalization scenarios. For the more ambitious scenario, the strongest expected changes in average import prices (vis-à-vis the rest of the world incl. the EU and New Zealand) are registered for New Zealand's imports of other meat products (-0.116%), gas (-3.38%), machinery (-1.64%), and motor vehicles and equipment (-1.57%).

Figure 33: Development of regional consumer price indices (CPI) after liberalization (long term)



Source: GTAP analysis conducted by the European Commission.

Also, as regards services in New Zealand, all the sectors including transport, communication, financial, utility and other services are expected to register a decline in their import prices, however, the decline is highest for financial services. Average EU imports prices are estimated to be at best marginally affected by the proposed trade liberalization measures (Table 26). The strongest decline is to be expected in ruminant meat (-0.81%).

Table 26: Development of regional import prices after liberalization

CHANGE IN IMPORT PRICES (%, LONG TERM)				
	LIBERALIZATION		INCREASED LIBERALIZATION	
	EU	NEW ZEALAND	EU	NEW ZEALAND
rice	0.03	-0.03	0.02	-0.05
cereals	0.03	0.03	-0.08	0.16
veg_fruit	-0.12	0.02	-0.12	0.05
oil_seeds	0.01	-0.01	0.02	0.00
sugar	0.04	-0.01	-0.07	-0.02
fiber_crop	0.00	-0.01	-0.01	0.00
ruminant_meat	0.21	-0.02	-0.81	0.09
other animal	-0.08	0.01	-0.09	0.02
other_meat	0.01	-1.16	0.02	-1.16
dairy	0.05	-0.95	-0.10	-0.95
wood_paper	0.03	-0.14	0.05	-0.12
fishing	0.00	-0.01	-0.04	-0.03
coal	-0.01	-0.04	-0.01	-0.28
oil	0.00	0.00	0.00	-0.03
gas	0.00	-0.01	0.01	-3.88
minerals	-0.03	-0.03	-0.04	-0.10
other_food	0.00	-0.39	0.02	-0.40
bev_tob	-0.12	-0.70	-0.10	-0.72
textile	0.01	-0.30	0.01	-0.63
chemicals	0.02	-0.23	0.04	-0.65
oil_pcts	0.00	-0.01	0.01	-0.03
metal_pcts	0.01	-0.32	0.03	-0.77
no_metal_pct	0.02	-0.35	0.03	-1.04
motor_equip	0.02	-0.82	0.04	-1.57
machinery	0.01	-0.52	0.03	-1.64

CHANGE IN IMPORT PRICES (%, LONG TERM)				
	LIBERALIZATION		INCREASED LIBERALIZATION	
	EU	NEW ZEALAND	EU	NEW ZEALAND
ele_other	0.00	-0.07	0.01	-0.26
electricity	0.03	0.01	0.05	0.02
utility	0.01	-0.86	0.02	-0.86
transport	-0.02	-0.76	0.00	-0.77
communication	0.01	-0.96	0.03	-0.96
financial	0.01	-0.98	0.03	-0.98
other_serv	-0.02	-0.65	0.00	-0.65

Source: GTAP analysis conducted by the European Commission.

As both AUS and NZ show similar characteristics in terms of national consumer protection regulation as well as in their approaches to protect high consumer standards in their trade agreements, a discussion is provided in the general part on the impact on consumers.

5. ANALYSIS OF ENVIRONMENTAL IMPACTS (TASK 8)

5.1. New Zealand's Involvement in International Environmental Agreements and its Relation to the EU: Baseline

Multilateral environmental agreements

New Zealand has ratified most of the main multilateral environmental agreements (see Table 27). There is, however, a notable exception. New Zealand has not ratified the Nagoya Protocol, nor have several European Union members including Austria, Belgium, Croatia, Cyprus, Greece, France, Ireland, Italy, the Netherlands, Portugal, Poland, Romania, Slovenia, and Sweden (although almost all EU members have signed the Protocol). The protocol is meant to facilitate access to genetic resources and to provide the fair sharing of commercial benefits with provider countries.

Table 27: Multilateral Environmental Agreements signed by New Zealand

Treaty	Signature	Status
Basel Convention	18-Dec-89	Ratification
The Cartagena Protocol on Biosafety	24-May-00	Ratification
CBD	12-Jun-92	Ratification
CITES	10-May-89	Accession
CMS	01-Oct-00	Party
Kyoto Protocol	22-May-98	Ratification
Minamata Convention on Mercury	10-Oct-13	Signatory
Montreal Protocol	16-Sep-87	Ratification
Nagoya Protocol		
Rotterdam Convention	11-Sep-98	Ratification
Stockholm Convention	23-May-01	Ratification
UNCCD		Accession
UNFCCC	04-Jun-92	Ratification
Vienna Convention	21-Mar-86	Ratification

Source: https://www.informea.org/en/countries/NZ/parties

5.1.1. New Zealand's approach to sustainability in trade policymaking

In New Zealand, the Ministry of Foreign Affairs and Trade (MFAT) has the lead on both trade negotiations and international environmental issues. New Zealand's approach to trade-environment linkages has become gradually institutionalized over the past decade. New Zealand's FTA with Malaysia was paired with side agreements on labour and environmental cooperation. The NZ-Malaysia agreement on environmental cooperation mirrored in many regards the EU's cooperative and consultative approach to trade-

environment linkages. Among the key provisions contained in this bilateral agreement, the parties:

- acknowledge that trade and environment policies should be mutually supportive;
- respect each party's national sovereignty, while taking into account each party's level of economic development;
- state that environmental laws shall not be used for protectionist purposes;
- reaffirm their intentions to fulfil their international commitments (including MEAs)
- encourage bilateral cooperation in a long list of environmental areas of common interests;
- establish an Environment Committee composed of senior officials to design a program of cooperative activities and oversee their implementation;
- encourage stakeholder consultation on environmental issues, either under the purview of the Environment Committee or one of the parties; and
- establish consultative and cooperative mechanisms to solve bilateral disputes.[115]

With the NZ-Korea FTA (2015), trade-environment linkages gained greater prominence. Instead of addressing environmental issues in a side agreement or on an ad hoc basis in various provisions like SPS, TBT or investment, New Zealand committed to "an integrated approach to sustainable development" that dealt with environmental issues on par with other FTA chapters. Its framework built upon the multipronged approach developed in its Malaysia FTA and feature additional provisions whereby New Zealand:

- stressed its commitment to promote trade in environmental goods and services (art. 16.4);
- defined principles to improve transparency in environmental regulation affecting bilateral trade (art. 16.6);
- shifted from an exhortatory approach to stakeholder consultation ("Each Party may, where appropriate, provide an opportunity for its domestic stakeholders to submit views or advice") to a stricter commitment to seek external advice ("Each party shall provide an opportunity for its domestic stakeholders to submit views or advice.)";
- reasserts its cooperative and consultative approach to sustainability issue by explicitly stating that environmental issues are not subject to dispute settlement mechanisms.

In many regards, TPP's environment chapter builds upon the framework developed by New Zealand over the past two and a half decades of FTA negotiations. However, it innovates

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[115] NZ-Malaysia agreement on environmental cooperation (2009), available at: https://www.mfat.govt.nz/assets/_securedfiles/FTAs-agreements-in-force/Malaysia/mnzfta-environment-agreement.pdf.

in several regards, which led the MFAT to declare that "TPP's […] environment outcomes are the most comprehensive New Zealand has achieved in a Free Trade Agreement."[116]

Like most recent US FTAs, the TPP includes commitments by all parties to enforce their respective environmental laws and implement MEAs. The TPP uses a combination of cooperative and consultative instruments, leaving dispute settlement mechanisms (chapter 28) as a last resort (art. 20.23). Critics from both academia and civil society have described these mechanisms either as unenforceable or as much less effective than the MEAs themselves, to the extent that they are dependent on a party's ability to demonstrate that the non-enforcement of environmental obligations has trade-distorting effects.[117] Yet, for New Zealand, the fact that environmental issues are not excluded from dispute settlement mechanisms, is, at least on paper, a greater step towards enforceability.

Additionally, TPP's environment chapter includes a number of innovative provisions with regard to its regulatory scope and its governance. As far as content is concerned, the agreement drew praise from the US Trade and Environment Policy Advisory Committee for making new strides in protecting marine fisheries and eliminating certain fisheries subsidies (art. 20.16), (TEPAC).[118] The chapter also includes, among others, provisions on ozone layer protection (art. 20.5), marine protection from ship pollution (art. 20.6) trade and biodiversity (art.20.13) and conservation (art. 20.17). It also features a section entitled "Transition to a Low Emissions and Resilient Economy" (art.20.15) that according to TEPAC, falls short of addressing climate change in any substantive way.[119] Finally, while the parties do establish an intergovernmental Environment Committee in charge of assessing the implementation of the agreement (art. 20.19), the promotional nature of most provisions in the text, and the lack of specific measures on capacity-building raise many questions on the TPP's ability to fulfil its environmental promises. For the purpose of this study, TPP constitutes an interesting window into New Zealand's approach to trade-environmental linkages that offers lessons for the negotiations of an EU-New Zealand FTA, especially with regard to enforceability and capacity-building.[120]

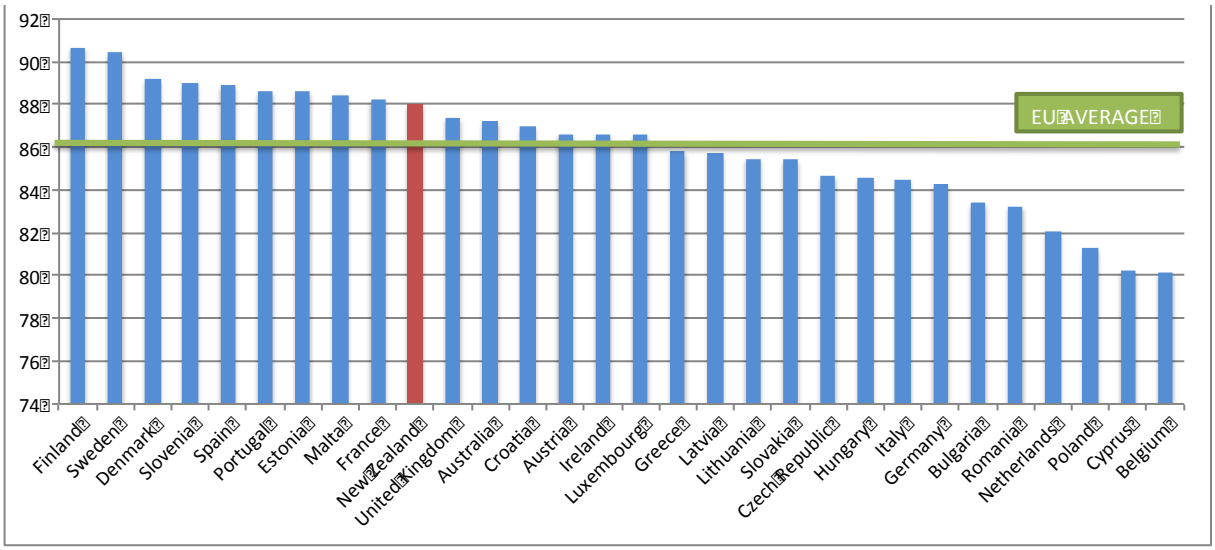
[116] New Zealand Ministry of Foreign Affairs and Trade, "Transpacific Partnership. Labour and Environment," undated, available at: https://www.tpp.mfat.govt.nz/assets/docs/TPP_factsheet_Labour-and-Environment.pdf.
[117] Wold, Chris. "Empty Promises and Missed Opportunities: An Assessment of the Environmental chapter of the Trans-Pacific Partnership", 2016, available at: https://law.lclark.edu/live/files/20857-assessing-the-tpp-environmental-chapter ; see also : Sierra Club, "TPP Text is "Concrete Evidence" of Toxic Deal," Nov. 5, 2015, available at: http://content.sierraclub.org/press-releases/2015/11/sierra-club-tpp-text-concrete-evidence-toxic-deal ; Patiño, Rodrigo Estrada, "Greenpeace Response to the Trans-Pacific Partnership Text," undated, available at: http://www.greenpeace.org/usa/news/greenpeace-response-to-the-trans-pacific-partnership-text/.
[118] In the United States, TEPAC is composed of environmental experts (academia, business, NGOs) providing advice to US negotiators on trade-environment linkages. They produce a report on each FTA. Trade and Environment Policy Advisory Committee (TEPAC), "The U.S.-Trans-Pacific Partnership Free Trade Agreement," 2015, available at: https://ustr.gov/sites/default/files/Trade-and-Environment-Policy-Advisory-Committee.pdf.
[119] Ibid, p. 3.
[120] TPP's environment chapter is available at: https://www.mfat.govt.nz/assets/_securedfiles/Trans-Pacific-Partnership/Text/20.-Environment-chapter.pdf

5.1.2. Overall environmental performance

In this section we benchmark New Zealand's environmental performance against relevant countries, such as OECD and EU countries, using the Environmental Performance Index (EPI)[121].

The EPI index allows us to assess a country's overall performance through 6 main aspects: water resources, fisheries, biodiversity, forest, climate and energy. In the 2016 edition of the index New Zealand ranked 11th worldwide. Its score is above the European average (Figure 34) and it outperforms 19 out of 28 EU countries.

Figure 34: EPI for New Zealand and European countries (2016)



Source: EPI 2016

Table 28: EPI in 2014 and 2016 shows the comparison in the overall score between New Zealand and the EU. Both show a similar improvement over the last two years.

Table 28: EPI in 2014 and 2016

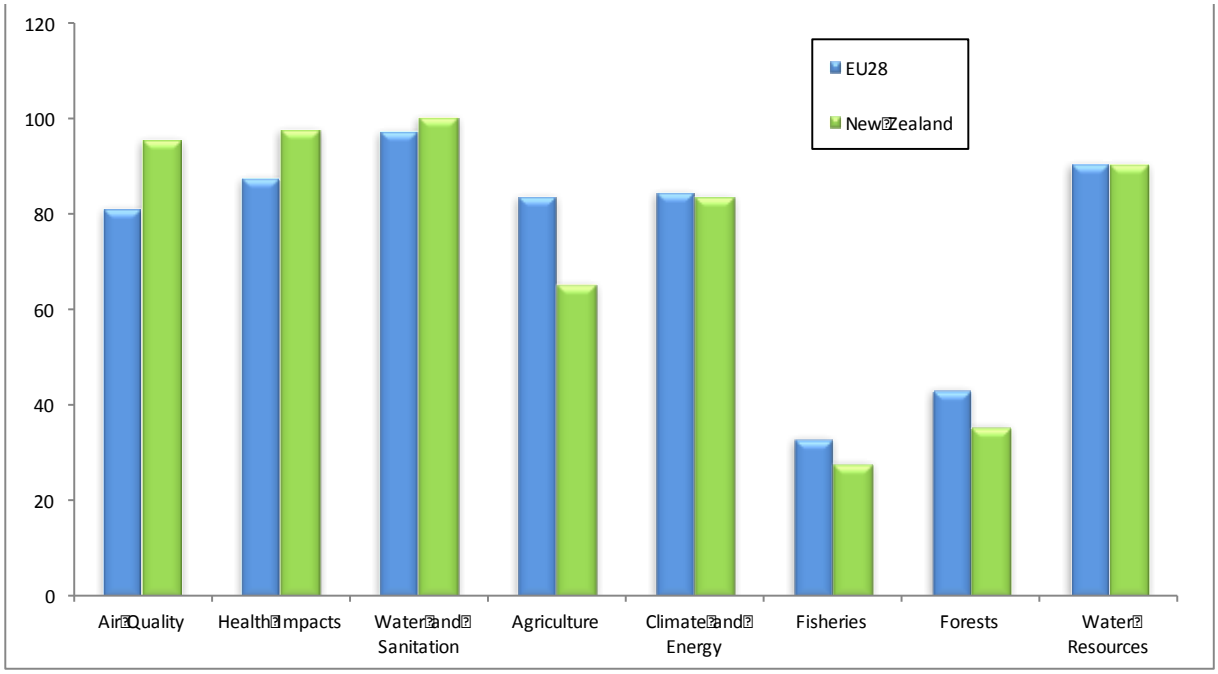
	2014	2016	Change
EU	72.4	86.0	13.6
New Zealand	76.4	88.0	11.6

Source: EPI 2014/2016

Figure 35 reports New Zealand and EU scores in the nine main EPI sub-categories. New Zealand performs better than EU averages in terms of air quality and health impact. However, it lags behind in terms of agriculture, where it scores very low in Nitrogen Balance subcategory, ranking 141st, and forestry and fisheries. Its worst performance is in the climate and energy category, where it ranks 150th for its trend in carbon emissions for electricity generation. The latter topics is given greater attention in the next sections. The EU and New Zealand show very similar scores for Climate and Energy and Water Resources.

[121] The index is provided by Yale Centre for Environmental Law & Policy (YCELP) and the Centre for International Earth Science Information Network (CIESIN) at Columbia University.

Figure 35: Scores in EPI sub-categories. EU28 and New Zealand in 2016



Source: EPI 2016

5.1.3. Environmental regulation

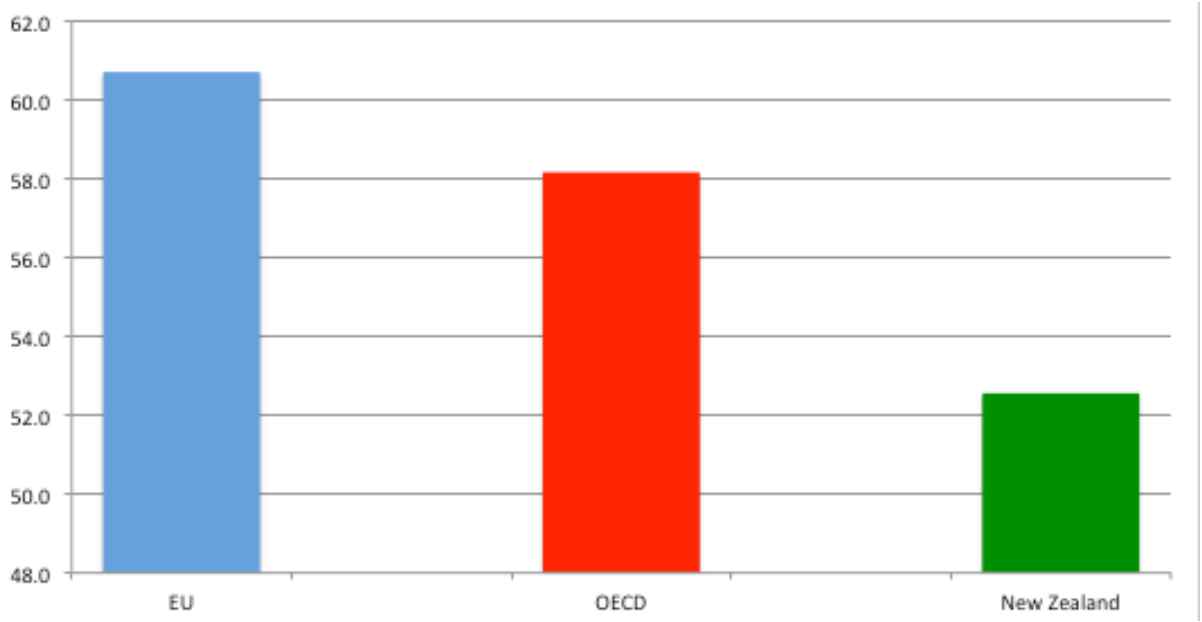
This section provides an overview of the state of environmental regulation in New Zealand from a comparative perspective with the EU. To do so, we review the most widespread summary measures of environmental regulatory stringency. We also examine each party's pledges for the Paris agreement on climate change.

The first measure is the Climate Laws, Institutions and Measures Index (CLIMI) provided by the EBRD in 2011. The index follows the framework provided in Dasgupta et al. (1995).[122] The index builds on the UN country reports, as well as on the National Communications to the United Nations Framework Convention on Climate Change (UNFCCC), which includes information of climate adaptation and mitigation measures adopted by national governments. It comprises four main areas: international cooperation; domestic climate framework; sectoral, fiscal or regulatory measures or targets; cross-sectoral fiscal or regulatory measures. The index refers to 2010. New Zealand scores very closely to the European average, with 16 European countries displaying a higher score.

A second measure of regulatory performance is the more recent edition of the Climate Change Performance Index (CCPI). The index is produced by Germanwatch and Climate Action Network Europe and assesses climate change policy together with current emission levels per capita, the trend in emissions projections, the deployment of renewable energy, and the energy intensity of the economy. New Zealand ranked 42 out of 61 nations in the 2016 release of the index, dropping 7 positions from the previous year (Figure 36). Its performance lies below both EU and OECD averages. Such a low performance overall is partly attributed to a very poor performance in terms of climate policies.

[122] Dasgupta, S., A. Mody, S. Roy and D. Wheeler (1995), 'Environmental Regulation and Development: A Cross-Country Empirical Analysis.' World Bank, Policy Research Department, Working Paper No. 1448.

Figure 36: Climate Change Performance Index, 2016



Source: Climate Change Performance Index (CCPI) by Germanwatch and Climate Action Network Europe

With regard to the Paris agreement, New Zealand's Intended Nationally Determined Contribution (INDC) is among the five industrialized countries rated "inadequate" by the Climate Action,[123] the other four being Australia, Canada, Japan and Russia. New Zealand's INDC 2030 target is a 30% reduction from 2005 levels, equivalent to 11% below 1990 levels of Green house gases (GHG) emissions excluding Land Use, Land Use Change and Forestry, which is likely to result in an increase in GHG emissions. All other industrial countries, except Canada, have proposed 2025 or 2030 goals significantly below 1990 levels. The EU's INDC target consists of reducing its domestic greenhouse gas emissions by at least 40% below 1990 levels by 2030.

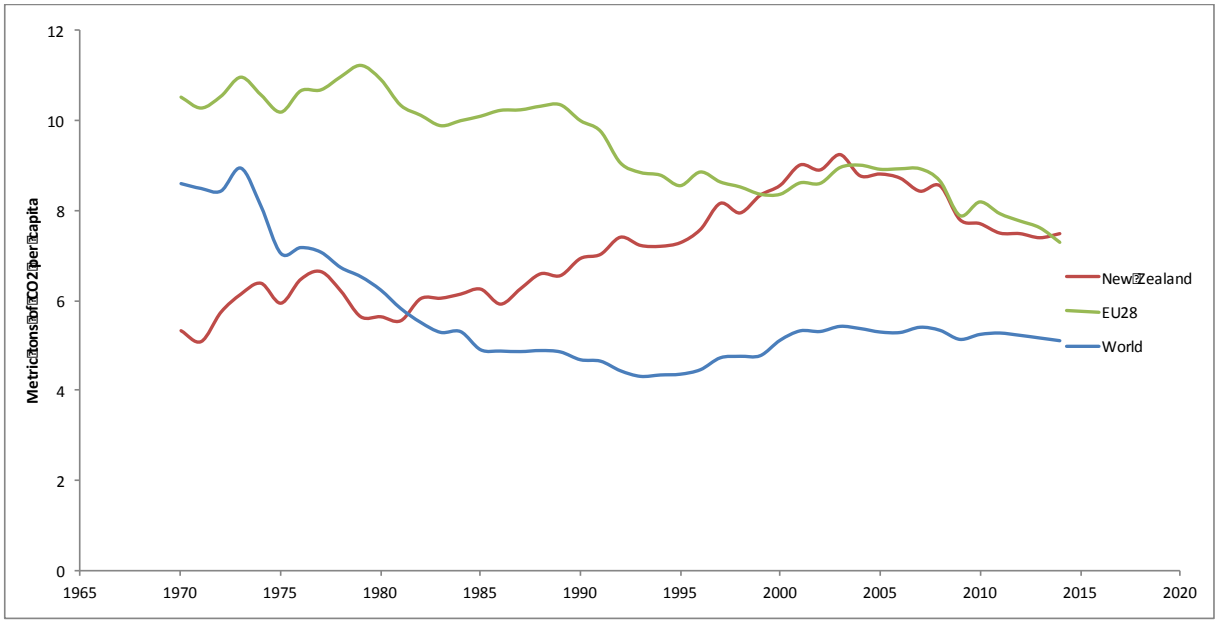
5.1.4. GHG Emissions

In this section we describe the trends in emission levels of CO_2 and of the most important types of GHG by EU and New Zealand's major sectors of the economy. New Zealand accounts for only 0.16% of global CO2 emissions while the EU contributes to 13% of global CO2 emissions (EIA, International Energy Statistics).

In per capita terms, however, New Zealand's CO2 emissions are in line with average European level. Figure 37 plots emissions per capita in New Zealand, the EU and World averages. EU and New Zealand's emissions per capita are well above the global average. However, while EU emissions per capita have been decreasing steadily since the 1990s', New Zealand's emissions per capita have been on the rise since 1998 and have stabilized around European levels sharing the same downward trajectory since then.

[123] The Climate Action Tracker is an independent scientific analysis produced by four research organisations tracking climate action and global efforts towards the globally agreed aim of holding warming below 2°C, since 2009. The Climate Action Tracker Consortium is composed of Climate Analytics, Ecofys, NewClimate Institute and Potsdam Institute for Climate Impact Research. http://climateactiontracker.org/countries/australia.html and http://climateactiontracker.org/countries/newzealand.html

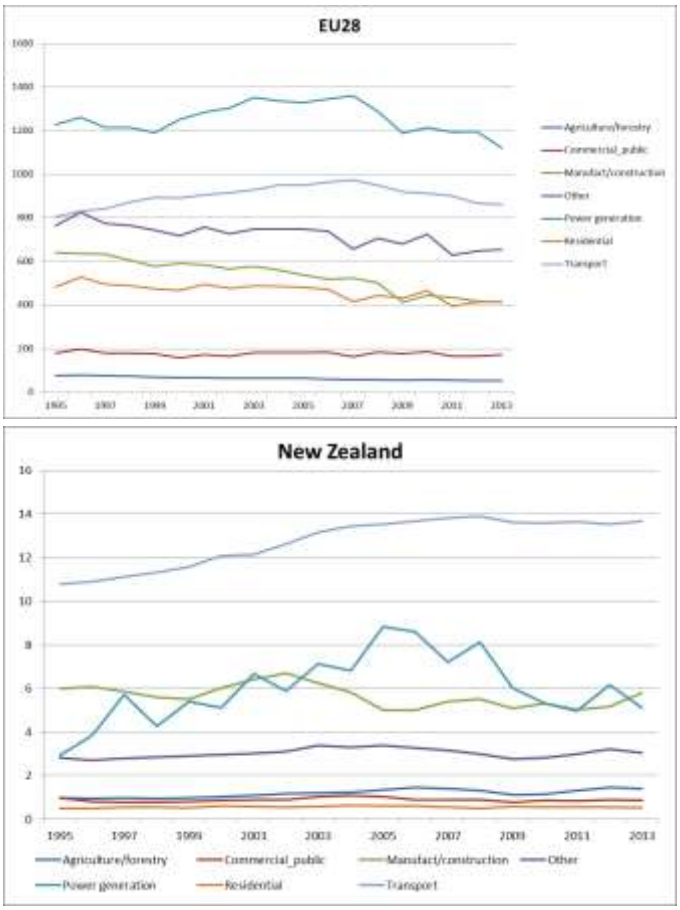
Figure 37: Emissions per capita in New Zealand and the EU



Source: Author's calculations from EDGAR (emissions) and WDI (population) – Emissions per capita in tons.

Trends in emissions by sectors are reported in Figure 38. The power generation sector dominates emissions in the EU. The major contributor to New Zealand CO2 emissions, instead, is by far the transport sector. The EU has experienced a decrease in emissions across most sectors of the economy. The largest drop has occurred in the manufacturing and agricultural sectors while the power generation and commercial sectors have shown a stable pattern over time. For New Zealand, with the exception of the power generation sector, all other sectors have maintained or increased their emission levels.

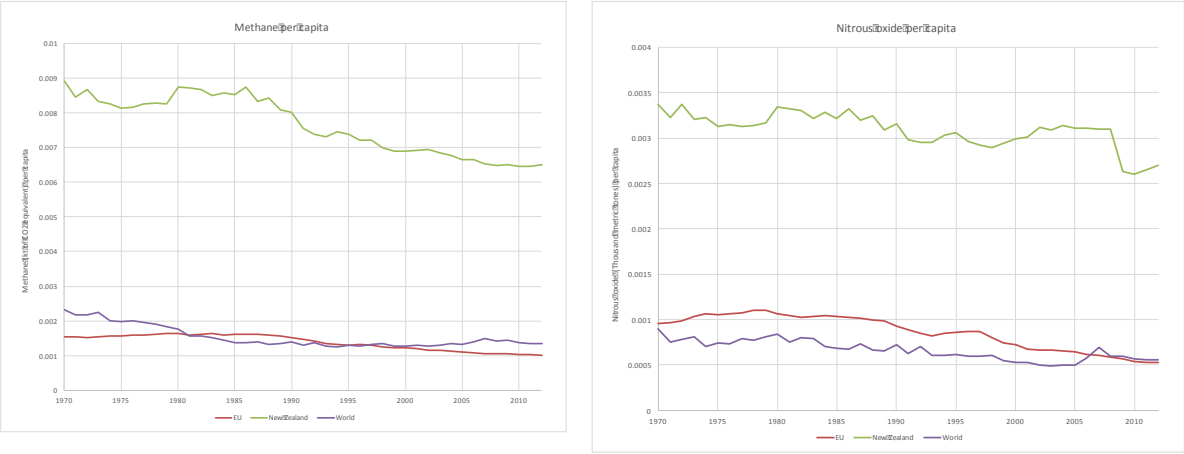
Figure 38: Emissions by sector in New Zealand and the EU



Source: Author's calculations from the EIA – Emissions in millions of metric tons (Mt)

With regard to other GHG, New Zealand is among the largest producers, in per capita terms, of both methane and nitrous oxide (using data from the Emission Database for Global Atmospheric Research and World Development Indicators). In particular, New Zealand ranks 5th for methane emissions per capita (the EU28 ranks 66th). New Zealand also ranks 5th in terms of nitrous oxide per capita (the EU ranks 43rd). Figure 39 shows that, despite the rapid decreases in emissions, New Zealand's GHG emissions still stand well above European levels for both methane and nitrous oxide. About one third of New Zealand's greenhouse gas emissions are produced by the ruminant livestock (sheep and cattle) sector while internationally the dominant sources of methane are rice paddies and wetlands. Overall, agriculture contributes to 48% of New Zealand's total GHG emissions. Because the EU-New Zealand FTA is likely to produce some expansionary effects on some the agricultural and animal sectors potential concerns are discussed below.

Figure 39: Methane (left) and Nitrous oxide (right) per capita in New Zealand and the EU28



Source: Author's calculations from EDGAR through World Bank portal (emissions) and WDI (population)

5.1.5. Power generation

New Zealand's electricity generation sector is particularly clean when compared to its European counterpart. It relies to a large extent on renewable sources, in particular hydroelectric power. Together with other renewable energy sources, hydropower contributes to almost 75% of total energy generation (Table 29). Renewable sources have increased their share of power generation over time reaching 21% in 2013. Overall, about 40% of primary energy supply in New Zealand comes from renewable sources including hydro.

Table 29: Electricity sources in New Zealand and the EU28

	1990	1995	2000	2005	2013
EU:					
Coal	40.00	35.12	31.75	29.77	27.47
Hydroelectric	11.26	12.18	11.86	9.49	11.47
Natural gas	7.48	9.85	15.96	20.32	15.71
Nuclear	30.85	32.36	31.45	30.32	27.15
Oil	8.70	8.38	5.91	4.33	1.90
Renewable sources	0.73	1.08	2.05	4.49	14.98
New Zealand:					
Coal	2.06	2.50	3.94	13.65	5.54
Hydroelectric	71.85	76.35	62.25	54.28	53.27
Natural gas	17.70	13.32	24.39	21.92	20.12

Nuclear	0.00	0.00	0.00	0.00	0.00
Oil	0.03	0.14	0.00	0.01	0.01
Renewable sources	8.15	7.51	9.25	9.95	20.98

Source: Author's calculations from the World Development Indicators – World Bank

5.1.6. Natural resources

Despite its abundance of natural resources and a relatively small population, New Zealand is a net importer of energy, mainly in the form of petroleum products. It imports about 17% of its energy use, however, well below EU countries that import on average about 50% of their energy needs (WDI, World Bank). New Zealand has abundant resources of coal, silver, iron ore, limestone and gold.

New Zealand's fisheries jurisdiction is amongst the largest in the world, covering some 4.5 million square kilometres (OECD). Fish catches grew rapidly until 1999, but then stabilized and have started decreasing since 2005 (FAO FishStat). According to the OECD the fisheries industry is the country's fifth largest exporting sector and focuses mainly on exports of fisheries products mainly from deep-water fishing.[124] Approximately 90% of New Zealand's seafood production is exported. According to the OECD 2011 Review of fisheries (OECD, 2012) New Zealand has developed an increased environmental focus in the management of fisheries in recent years and is expected to continue developing in this direction. With the Fisheries Act of 1996 New Zealand has established strong environmental obligations, including requirements to avoid, remedy, or mitigate any adverse effects of fishing on the aquatic environment. More recently the "Fisheries 2030" of 2009 seeks to achieve economic benefit through smarter use of fisheries resources, while protecting the health of the fishery and the marine environment. New Zealand also participates in international marine protection measures including the revised National Plan of Action for the Conservation and Management of Sharks and has ratified the FAO Agreement on Port State Measures to Prevent, Deter, and Eliminate IUU Fishing.

New Zealand's forest resource covers over 8 million hectares, or 29% of New Zealand's total land area. Indigenous forests make up the majority of this with 6.3 million hectares, planted production forest accounts for the remaining 1.7 million hectares According to Ewer et al (2006) Expansion of plantation forestry was the single most important driver of recent deforestation in New Zealand. Natural forest is practically all under protection and wood supply comes largely from tree plantations. The logging of native trees is governed by a permit system administered by the Ministry of Agriculture and Forestry (MAF) and must be shown to be sustainable. The country is also involved in some reforestation programmes.

New Zealand contains flora and fauna of such highly international significance and has been described as a biodiversity hotspot. A large effort to preserve biodiversity has been devoted to protect domestic flora and fauna form invasive species that constitute the most critical ecological challenge. New Zealand, however, does not have a dedicated threatened species legislation despite a large number of threatened species as in other countries such as the USA, Australia and Canada. New Zealand's native wildlife is protected under the Wildlife Act 1953 (WA 1953) that does not have a specific directive for the conservation of threatened species. This implies that is no legal process for the listing of threatened species

[124] OECD (2015) OECD Review of Fisheries: Policies and Summary Statistics, OECD Paris.

and their recovery. According to Seabrook-Davison (2010) the lack of such legislation is hindering the effective recovery of New Zealand's threatened species.

5.1.7. Air pollution

New Zealand scores higher than the EU in terms of air quality in the Environmental Performance Index. This is also evident in Table 30 that displays three different measures of exposure to particulate matter. While the EU shows a declining trend in PM2.5 concentrations, New Zealand shows a stable pattern over time. Still the EU average concentration level remains much higher. In 2013 about 78% of the European population was exposed to more than 10 of PM micrograms per cubic meter compared to just about 1.5% in New Zealand.

Table 30: Exposure to particulate matter in New Zealand and the EU over time

	2000	2005	2010	2013
EU28				
Mean population exposure to PM2.5	16.58	15.78	14.56	13.63
% exposed to more than 10 micrograms/m3	87.94	85.51	82.05	77.74
% exposed to more than 25 micrograms/m3	3.24	2.31	1.34	1.37
New Zealand				
Mean population exposure to PM2.5	8.514	8.520	8.616	8.632
% exposed to more than 10 micrograms/m3	1.552	1.564	1.574	1.544%
% exposed to more than 25 micrograms/m3	0	0	0	0

Source: Author's elaboration from OECD

As far as the two main pollutants, Nitrogen oxides (NOX) and Sulfur oxide (SOX), are concerned Table 31 provides a summary of the evolution of total emissions, in absolute and per capita terms, for the EU, and New Zealand. These pollutants are the results of industrial processes and engine combustion. Sulphur dioxide is emitted when fuels containing sulphur are combusted. It is a pollutant, which contributes to acid deposition, which in turn can lead to potential changes occurring in soil and water quality. Excessive levels of NOX mainly impacts respiratory conditions causing inflammation of the airways at high levels. While total emissions of both pollutants have substantially decreased in the last decade in the EU28, New Zealand has experienced an upward trend, although per capita levels have remained stable or decreased. While New Zealand's per capita emissions of air pollutants were comparable to, or even lower than the average EU levels in 2000, failure to reduce emissions has led to a large gap between the two regions in 2014, with New Zealand stabilizing at much higher levels.

Table 31: Emissions of pollutant by country and selected year

		2000	2005	2010	2014
NOX	**EU28**				
	Total emissions per capita	33.3	32.4	24.3	19.1

	Total man-made emissions	12171.2	11091.8	8701.4	7239.2
	New Zealand				
	Total emissions per capita	36.9	39.7	35.2	35.8
	Total man-made emissions	142.5	164.0	153.1	161.3
SOX	**EU28**				
	Total emissions per capita	23.8	16.4	10.3	6.7
	Total man-made emissions	8386.6	6095.8	3575.2	2625.7
	New Zealand				
	Total emissions per capita	18.4	22.6	16.9	16.5
	Total man-made emissions	70.9	93.6	73.6	74.2

Source: Author's elaboration from OECDstat. Values in tons.

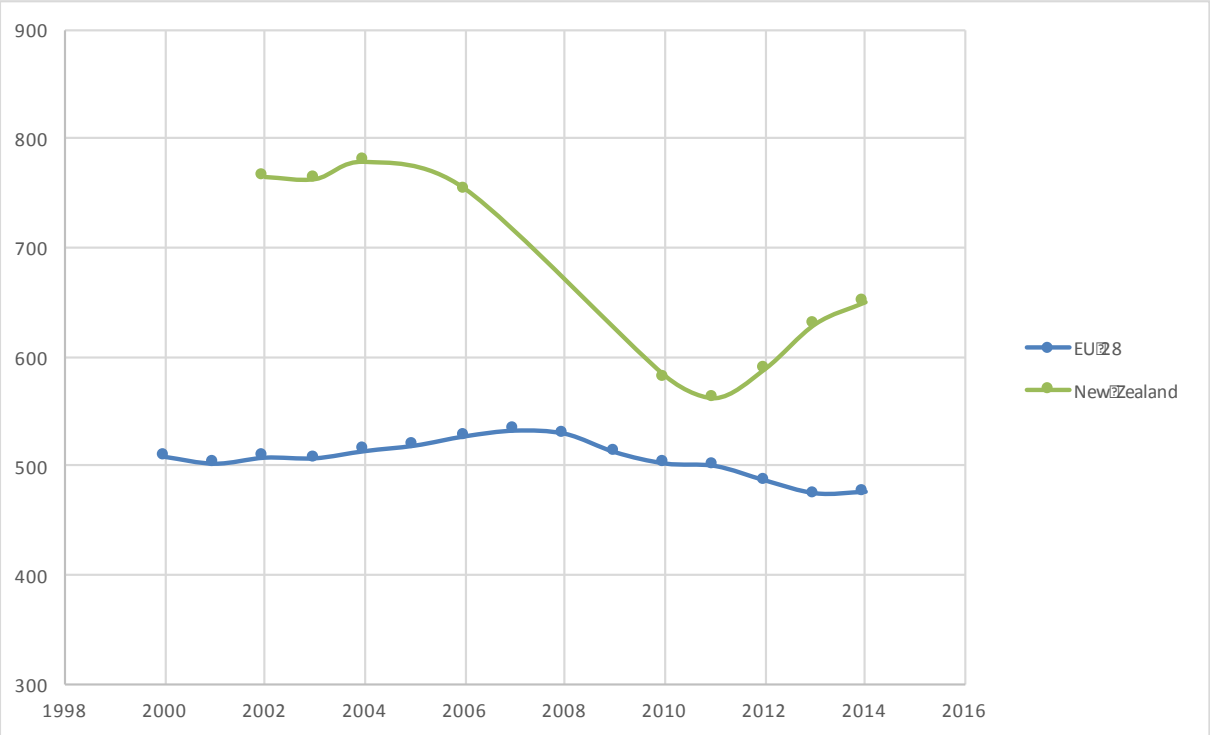
5.1.8. Waste

Statistics on waste production and management, in particular at a disaggregated level, are missing from main international sources such as the OECD or the waste atlas.[125] Our analysis, therefore, relies on more aggregated data.

New Zealand shows higher levels of per capita municipal waste than the EU (Figure 40: Municipal waste per capita over time). Moreover, while the EU has experienced a downward trend in the last decade, New Zealand's initial improvements have been followed by an upward steep trend since 2010. In 2011 New Zealand was the 11th largest producer of waste per capita. On the other hand, about 45% of New Zealand municipal waste is recycled, compared to 23% on average for the EU (source OECDstat).

[125] http://www.atlas.d-waste.com/.

Figure 40: Municipal waste per capita over time



Source: Author's elaboration from OECDstat. Data for New Zealand are available only for certain years.

In terms of e-waste, according to Baldé et al (2015) in Europe, the total e-waste generation was 11.6Mt in 2014 led by Germany (1.8Mt) and the United Kingdom (1.5Mt). Per capita values range between 15 and 20 kg per person across European countries. The EU is one of the few regions in the world to have a uniform legislation regarding the collection and processing of e-waste. New Zealand accounts for 0.09Mt e-waste. Relative quantities are similar to European levels and stands at 19kg per capita in New Zealand. In New Zealand, most e-waste is still going to landfill and is still classified as a non-priority waste stream as there is no restriction on e-waste sent to landfill. The increase in output for some sectors due to the EU-NZ FTA could potentially increase waste production. On the other hand, greater cooperation and sharing of best practices between the two partners could help reduce pollution at the global level. The extent to which it can impact e-waste trade, through the impact on trade with the rest of the world (in particular developing countries) is hard to quantify because of limited data but is expected to be limited.

5.2. Analysis

The first part of the analysis examines the impact of trade liberalization on CO2 emissions and land intensity in the EU and New Zealand. The analysis is based on the CGE modelling produced by DG Trade and includes the decomposition into scale, structural and technique (sector energy intensities, fuel mix and carbon factors effects). A Log Mean Divisia Index (LMDI) based on input-output tables is used for separating these different effects.

Table 32: Top 10 most positively affected sectors

EU		New Zealand	
Liberalization	**Increased liberalization**	**Liberalization**	**Increased liberalization**

N	Sector	%	N	Sector	%	N	Sector	%	N	Sector	%
1	Motor	0.1	1	Gas	0.2	1	Veg & fruit	1.9	1	Ruminant meat	5.3
2	Ruminant meat	0.1	2	Machinery	0.1	2	Utility	0.8	2	Other meat	4.7
3	Dairy	0.1	3	Motor	0.1	3	Beverage/tobacco	0.7	3	Utility	2.0
4	Other food	0	4	Wood/Paper	0.1	4	Chemicals	0.4	4	Veg & fruit	1.3
5	Machinery	0	5	Non-metallic	0	5	Oil products	0.3	5	Oil products	0.7
6	Non-metallic	0	6	Oil products	0	6	Ele other	0.3	6	Beverage/tobacco	0.6
7	Utility	0	7	Utility	0	7	other_serv	0.3	7	Communication	0.6
8	Oil products	0	8	Textile	0	8	communication	0.3	8	Other service	0.5
9	Wood/Paper	0	9	Electricity	0	9	electricity	0.3	9	Financial	0.4
10	Cereals	0	10	Chemicals	0	10	Gas	0.3	10	Electricity	0.4

Source: CGE results from DG TRADE. Long term changes, liberalization & increased liberalization scenario.

The analysis mainly refers to the sectors most affected by the FTA. Table 32 shows the sectors that are expected to benefit most from the FTA according to both the liberalization and increased liberalization scenario, and the respective impact. Among these sectors are some environmentally sensitive sectors such as animal production, agriculture and natural resources. Potential concerns are discussed below. At the same time, we consider also possible offsetting impacts related to sectors that are likely to experience a reduction in output. Moreover, an analysis of the impact of the FTA on energy, natural resource use, and biodiversity follows and aims at identifying the sensitive environmental sectors most affected by the FTA as well as the potential risk factors.

5.2.1. Impact on CO_2 emissions

In this section we discuss the implications that the FTA is likely to have on CO2 emissions. According to the DG Trade CGE modelling, the global impact on CO2 emissions is negligible. The FTA is expected to increase emissions in the long term in Europe by 0.04%, and in New Zealand by 0.64% in the increased liberalization scenario (Table 33). This suggests that overall, the FTA is expected to have a negligible impact on global CO2 emissions.

Table 33: Change in CO_2 emissions in the scenarios (long term impact, %change)

	Liberalization	Increased liberalization
EU	0.03	0.04
New Zealand	0.29	0.64

Source: DG TRADE CGE modelling results

Using the model data we decompose this effect into scale, structural and technique effects (intensity, fuel mix and emission factor).

Table 34: Decomposition of the impact on CO_2 emissions (in %)

	EU 28	New Zealand
Scale effect	0.03	1.19
Composition effect	-0.01	-0.31
Intensity effect	0.00	0.13
Technique effect (fuel mix & emission factor)	0.04	-0.22
Total effect	0.05	0.78

Source: Author's elaboration using input-output tables from DG Trade simulations

Table 34 reports the results of the LMDI decomposition.[126] Effects are expressed in percentage change. It shows that the increase in emissions due to the increase in the scale of production, at a given factor, output mix, and state of technology, is mitigated by a negative composition effect in both the EU and New Zealand. This suggests that the FTA is likely to induce in the long term a reallocation towards lower emission intensive sectors that is represented by the negative sign of the composition effect. The emission intensities of different sectors in New Zealand and the EU are reported in Table 35. Sectors accompanied by a plus sign are the top 5 sectors benefitting from the FTA. Those accompanied by a minus sign are the most negatively affected. In the case of the EU, this is likely to be due to an expansion of the low emission intensive wood, paper, machinery, and motor vehicle sectors and the contraction of the food and animal production sectors. In the case of New Zealand, the composition effect is much smaller in relative terms. This can be partially explained by the fact that among the most positively affected sectors there are some highly emission intensive sectors such as oil products and meat production.

Table 35: CO_2 Intensity by sector and FTA impact

EU				New Zealand			
FTA impact	**Sector**	**CO_2 intensity**	**Rank**	**FTA impact**	**Sector**	**CO_2 intensity**	**Rank**
	Electricity	446.649	1		Electricity	1	552.476
	Transport	205.675	2		Transport	2	486.411
+	Non-metallic	51.583	3		Gas	3	186.013
	Oil products	43.097	4		Non-metallic	4	134.358
	Cereals	38.788	5	+	Oil products	5	98.401

[126] These results were obtained using an Input-output table that covers only firms, therefore emissions due to households and government consumption were excluded. The effects were subsequently rescaled to reflect the overall impact as estimated by the CGE model.

	Fishing	35.584	6		Chemicals	6	81.846
+	Gas	32.506	7	+	Other Meat	7	54.56
	Fibre crop	31.203	8	+	Bovine meat	8	51.879
-	Oil Seeds	25.451	9		Rice	9	47.214
	Metal Products	15.755	10		Minerals	10	42.986
-	Veg/Fruit	15.548	11		Oil	11	36.855
-	Sugar	12.349	12		Fishing	12	32.567
	Coal	11.81	13		Dairy	13	31.287
	Chemicals	11.435	14		Wood/Paper	14	26.845
-	Rice	11.175	15		Metal Products	15	25.762
-	Bovine meat	10.408	16		Other food	16	21.964
	Oil	10.299	17		Beverage /Tob	17	21.838
	Minerals	8.688	18	-	Cereals	18	21.369
	Other Meat	8.306	19		Coal	19	18.832
	Beverage/Tob	7.924	20	-	Fibre crop	20	17.316
	Dairy	7.072	21	+	Veg/Fruit	21	16.961
+	Wood/Paper	6.511	22	-	Textile	22	12.733
	Other food	4.578	23		Electronics	23	11.937
	Utility	3.107	24	+	Utility	24	9.565
	Other Services	2.735	25	-	Motor vehicles	25	7.302
	Textile	2.578	26	-	Machinery	26	4.519
	Communication	2.21	27		Communication	27	3.872
+	Machinery	1.691	28		Other Services	28	3.864
+	Motor vehicles	1.399	29		Financial	29	0.229
	Electronics	1.167	30		Sugar	30	0
	Financial	0.986	31		Oil Seeds	31	0

Source: Author's calculation from input-output tables. In the column headed „FTA impact" we indicate with + the five most positively affected sectors and with the sign- the five most negative affected sectors in the increased liberalization scenario.

In the EU the positive scale effect is also mitigated by a decrease in emission intensity within sectors. This is not the case in New Zealand where energy intensity has been foreseen to increase. New Zealand, however, is expected to experience a reallocation towards a cleaner fuel mix that would only partly compensate for this effect as shown by the negative technique effect.

5.2.2. Impact on land-use[127]

In this section we discuss the implications for land use. Table 36 summarises the impact on land intensity as modelled by the DG Trade CGE model. The table shows a minor decrease in land intensity in the EU. A moderate increase (0.99%) is, instead, expected in New Zealand, most likely due the expansion of the ruminant meat and the vegetable and fruit sectors. This suggests that, keeping overall output constant, land use would increase by about 1%. Possible implications are discussed below.

Table 36: Impact on land intensity

	Change in land use intensity
EU28	0.55%
New Zealand	0.99%

Source: Author's elaboration using DG Trade input-output tables

5.2.3. Impact on air pollution

Even though the CGE model used by DG Trade to estimate the impact of the FTA does not provide estimates of the impact on SOX and NOX emissions, we can gain some insight by exploring air pollution (SOX and NOX) by sectors in the three parties as summarized in Table 37. In the EU, similarly to New Zealand, the major sources of NOX are mobile (i. e. transport).

Table 37: NOX (left) and SOX (right) by sector in New Zealand and the EU, 2010

	NOX (%)		SOX (%)	
Sector	**EU**	**New Zealand**	**EU**	**New Zealand**
Agriculture	3.07	0.44	0.10	0.00
Industrial combustion	12.83	19.29	27.32	39.25
Industrial processes/product use	2.35	1.68	6.16	13.96
Miscellaneous	0.32	0.00	3.59	5.81
Other Mobile Sources	15.13	16.12	2.45	11.12
Other combustion	8.11	1.56	15.08	4.66

[127] Land use intensity is measures by total land used over output. An increase in land use intensity can result from an expansion of or a shift towards more land intensive sectors.

Power stations	18.57	15.38	45.02	14.52
Road Transport	39.50	45.54	0.19	10.68
Waste	0.12	0.00	0.09	0.00

Source: Author's calculations from OECDstat

Although the EU sectors that are expected to benefit most from the FTA involve combustion processes, the impact is very small and therefore does not pose particular concern. The figure shows that the contribution of agriculture to air pollution is very negligible, therefore the positive impact on some agriculture sectors in New Zealand do not raise particular concerns in terms of air pollution. The only source of potential concern is the impact on electricity and oil products in New Zealand. Because electricity is mostly generated from clean sources, mainly hydropower, concerns are limited to the oil products sector. As discussed earlier, the lack of improvement in both NOX and SOX per capita emissions over the last decades indicates that no major gains in efficiency are expected to offset the possible negative effects on the environment. Nevertheless, the expected impact is small: 0.7% in the long term (under the increased liberalization scenario). This implies only minor localized concerns about air pollution.

5.2.4. Impact on demand for energy and natural resources

Table 38 shows the 10 most energy intensive sectors for the EU and New Zealand. The two parties share a similar energy intensity profile with oil products topping the list. Oil products and electricity appear among the most positively affected sectors and the most energy intensive sectors. The oil products sector, particular, is the most intensive in terms of use of oil, coal and gas. Nevertheless, the long-term impact is small and, therefore, is not expected to exercise particular pressure on energy demand.

Table 38: Most energy intensive sectors by country

EU		New Zealand	
Oil products	0.29	**Oil products**	0.47
Coal	0.17	**Metal products**	0.13
Electricity	0.15	**Electricity**	0.11
Gas	0.06	**Wood & paper**	0.05
Non-metallic products	0.06	**Chemicals**	0.04
Metal products	0.05	**Gas**	0.04
Chemicals	0.04	**Non-metallic products**	0.03
Wood & paper	0.04	**Coal**	0.02
Beverage/tobacco	0.03	**Other meat**	0.02
Minerals	0.03	**Minerals**	0.02

Source: Author's elaboration using DG Trade input-output tables. Figures indicate value of energy use (coal, gas, oil and electricity) divided by value of output.

As for the paper and wood sector in the EU, which is one of the largest users of timber resources, it is expected to benefit from the FTA, but with a negligible impact. Therefore, we do not expect the FTA to induce pressure on domestic and imported natural resources in the EU. In New Zealand the expansion of the agriculture sector is associated with an increase in land use. The vegetable and fruit sector is particularly land intensive and is expected to grow by 1.3% in the long term (increased liberalization scenario). This could raise some concerns that are further discussed below.

5.2.5. Impact on environmental goods and services

Lower trade barriers to environmental goods and services can contribute to increased access to such goods with notably important consequences for the environment. In particular, increased access can yield positive environmental benefits in terms of improved resource-use efficiency and pollution prevention. Increased trade in these goods and services can increase competition and induce greater innovation. Being part of the Environmental Goods Agreement, the EU and New Zealand will experience the benefits of increased trade in environmental goods through that agreement that is expected, if successful, to reach a settlement before negotiations on the EU-New Zealand FTA are concluded.[128] We, therefore, do not envisage substantial additional benefits from this FTA.

5.2.6. Potential risk factors

In this section we identify potential risk factors for the EU and New Zealand, i.e. environmental aspects that are currently under pressure, and discuss how increased trade can impact them. In particular, the analysis relates to the sectors that are most likely to experience an expansion due to the FTA and sectors where the countries perform particularly poorly.

Among the most affected sectors in New Zealand are the oil products and utility sectors which are likely to increase CO2 emissions. The impact on CO2 emissions has been discussed above and are not revisited in this section. Among the top 5 most positively affected sectors are the animal and food sector and some agricultural sectors. The implications are discussed below. Limited concerns arise in the case of the EU given the very small impact across all sectors.

With regard to the Environmental Performance Index discussed above, New Zealand has a relatively low score in Forestry, Agriculture and fishery. These three topics are also discussed separately below together with other concerning factors.

5.2.6.1. Impact on Forestry

In the EPI, New Zealand ranks 87 out of 180 in the forestry sub-index due to high levels of deforestation. It has experienced a non-negligible drop from 2014 to 2016. According to Global Forest Watch, New Zealand ranked 35th in terms of forest cover during the 2001-2014 period. [129] EU countries show an average rank of 69 in the EPI forestry sub-index but rank 33rd (on average) in terms of terrestrial protected areas.

[128] On the EGA, see Development Solutions. 2015. "Trade Sustainability Impact Assessment on the Environmental Goods Agreement" prepared for DG Trade. Available at: http://trade.ec.europa.eu/doclib/docs/2016/january/tradoc_154130.pdf.
[129] http://www.globalforestwatch.org/country/AUS.

The results from the DG Trade CGE modelling show a negative impact on the wood and paper sector. This suggests that there are no expected negative effects on deforestation through an expansion of the timber sector.

On the other hand, the positive impact on the agricultural (vegetable and fruit) and animal sectors, together with an expected increase in land use and intensity in New Zealand, could pose some concerns due to possible expansionary effects on agricultural land.

As far as the EU is concerned the EU-NZ FTA is expected to benefit the wood and paper sectors, which are primary user of forestry products. The impact, however, is small (0.1%) and, therefore, is not expected to raise concerns in terms of pressure on forestry resources.

5.2.6.2. Impact on Fishery

New Zealand shows a poor performance in the fisheries sub-index. This is mainly due to the depletion of fish stocks where New Zealand ranks 122nd. The Fish Stocks indicator in the EPI is a measure of the proportion of a country's total catch that comes from overexploited or collapsed fish stocks. Overexploitation occurs when a fish stock is harvested at levels that exceed the species' capacity for reproduction and replacement.

New Zealand has, however, shown signs of improvement. According to the OECD,[130] New Zealand is cited as a positive example of successful sustainable management since the percentage of fish stocks above the overfishing threshold declined by 7 percentage points from 25% in 2009 to 18% in 2013.

The results of the DG Trade GCE modelling show no impact on the fishing sector for either the EU or New Zealand. Moreover, the limited impact on economic growth caused by the FTA is likely to have a negligible impact on fish consumption. Therefore, we do not envisage particular concerns about the impact of the FTA on fisheries.

5.2.6.3. Impact on Animal Production

The FTA is expected to have an expansionary impact on the animal sector in New Zealand. In particular ruminant meat is expected to grow by 5.3% in New Zealand and other meat products by 4.7%.

Both intensive (industrial) and non-intensive (traditional) forms of meat production result in the release of greenhouse gases. Additional environmental hazards include deforestation, desertification, overuse of freshwater, inefficient use of energy and diverting food for use as feed.[131] According to UNEP, New Zealand scores third, after the USA and Australia, in terms of meat consumption per person (just below 120kg per person per year).[132] Europeans consume slightly more than 76kg per year.

An increase in animal production can results in an increase in emissions of methane (CH4) and nitrous oxide (N2O), as well as from chemical nitrogenous (N) fertilizers used to produce the feed. The livestock sector is responsible for one third of GHG emissions in New Zealand and the country shows very high levels of per capita emissions of methane. Nevertheless, its share of global emissions is small and limits the concerns for global GHG emissions. The expected impact on animal production, however, still carries some concerns due to increased stress on natural resources such as biodiversity as discussed below.

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[130] OECD. 2016., The Ocean Economy in 2030, OECD Publishing, Paris. Available at: http://www.oecd.org/environment/the-ocean-economy-in-2030-9789264251724-en.htm.
[131] Janzen, H.H. 2011. What place for livestock on a re-greening earth? Animal Feed Science and Technology, 166-167, 783-796.
[132] UNEP. 2012. UNEP Global Environmental Alert Service (GEAS), October 2012 release.

According to Schmid and Kilchsperger (2010) the organic and non-organic animal welfare legislation in New Zealand is highly comparable to EU legislation in several points. New Zealand is continuously working to improve the welfare of its production animals whilst maintaining a balance between the welfare needs of these animals, the economics of production and ethical considerations. This is facilitated by New Zealand's temperate climate that provides good conditions for extensive farming of cattle that is the preferred technique in this country. In New Zealand cattle can be treated with hormonal growth promotant (HGP), although the products cannot be exported to the EU. Therefore, we expect that the expansion of the meat sector should pose no particular concerns about animal welfare.

5.2.6.4. Impact on agriculture, biodiversity and the ecosystem

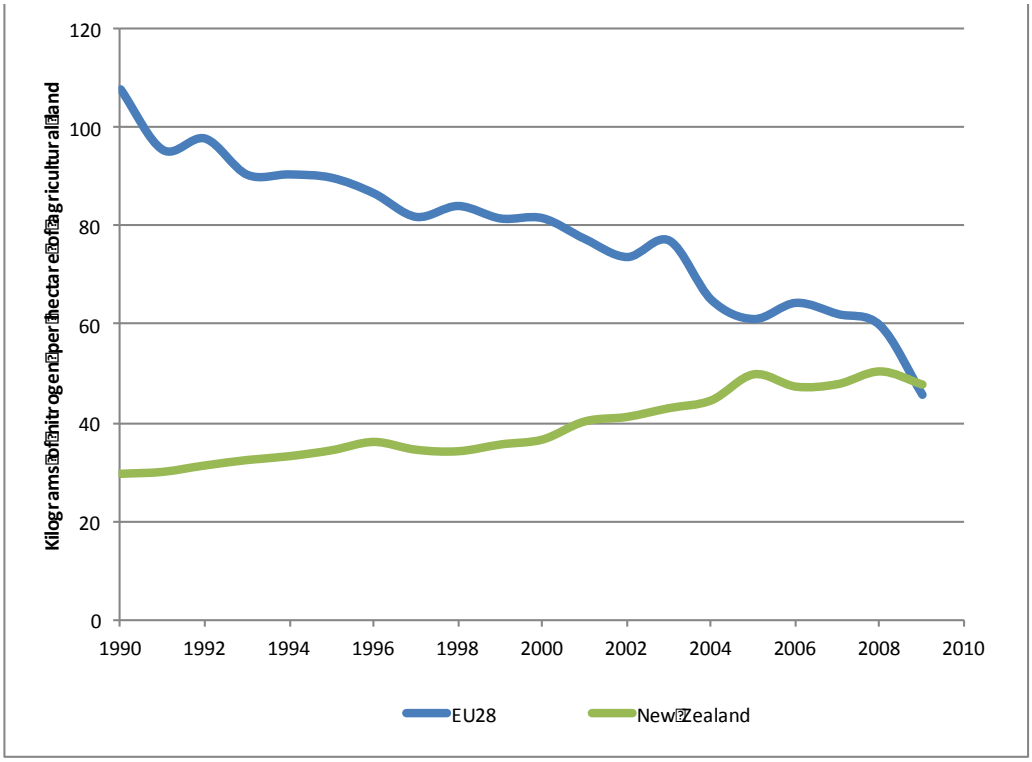
New Zealand performs poorly in the EPI's agriculture sub-index. The low score is due to a poor performance in terms of nitrogen use efficiency (84) and nitrogen balance[133] (141 out of 180). According to the OECD, the use of inputs in agriculture is a major driving force leading to pressure on the environment.[134] New Zealand is one of the most biologically diverse countries in the world, with a large portion of endemic species and excessive use of agricultural inputs could threaten its ecosystems and biodiversity. Agriculture, for example, can be a source of water pollution through the discharge of pollutants and sediment to surface and/or groundwater and the net loss of soil by poor agricultural practices. Unfortunately, data on water quality is lacking for New Zealand. We, therefore, focus on nitrogen and pesticides use in agriculture to gauge the environmental impact of agriculture expansion.

For the majority of OECD countries, the use of inputs has decreased since 1990. This is confirmed by EU trends. A notable exception, however, is New Zealand, (and Australia, Canada, Greece, Ireland, Portugal, Spain and Turkey).

As shown in Figure 41, New Zealand used similar levels of kilograms of nitrogen per hectare of agricultural land in 2010. However, while European countries have experienced rapid improvements since 1990, New Zealand has undertaken the opposite trajectory increasing the amount of nitrogen used in agriculture over time. It is also worth noting that, on average, the EU performs poorly in terms of Nitrogen use in agriculture. Despite a comparable level in 2009, New Zealand's EPI still ranked 141st. Similarly, New Zealand has experienced the largest increase (more than double) in phosphorus balance during the period 1990-92 to 2002-04 among OECD countries (OECD, 2011). The use of pesticides has also increased although to a much smaller extend (4%) while it has decrease among most OECD countries over the same period. The increase in inputs is attributed to both a growth in livestock and fertilizers use.

[133] "The Nitrogen balance provides information about the absolute flow of nitrogen that is not captured in agricultural products and therefore potentially available for losses. However, the Nitrogen balance gives no information on the efficiency of nitrogen fertilizer utilization in a production system or a country." Source: OECD 2010.
[134] OECD. 2008. Environmental Performance of Agriculture at a Glance, OECD Paris. Available at: http://www.oecd.org/greengrowth/sustainable-agriculture/40953155.pdf ; OECD. 2010. Nitrogen use efficiency as an agro-environmental indicator, OECD Paris. Available at: www.oecd.org/tad/sustainable-agriculture/44810433.pdf.

Figure 41: Nitrogen balance per hectare of agricultural land over time



Source: Author's elaboration from OECDstat.

In the agriculture sector in New Zealand irrigation plays a key role and farming is a major water user (62% of total water). Water used in agriculture has more than doubled over the period 1990-2000 (OECD, 2008) and the increase use of nitrogen and pesticides raise concerns about increased run-offs and the contamination of waterways and groundwater and deteriorating effects for the aquatic ecosystems. The risk of soil erosion in New Zealand, instead, is very low.

In New Zealand the FTA is expected to have some positive impact on agricultural and animal activities as summarize in Table 39. The expansion of the vegetable and fruit sector, together with the expansion of the animal sector, could constitute a potential threat to biodiversity and water resources depletion. The increase in land use and intensity (by 1.5% in the long run) and the increasing levels of nitrogen used in agriculture, as well as in the animal sector (production of animal feed), pose some concerns about the potential negative implications for ecosystems. Moreover, livestock production, including the production of feed, is highly demanding in terms of water and could also potentially reduce grassland ecosystems (findings on the impact of livestock on grassland ecosystems show mixed results, (Olff and Ritchie, 1998)). On the other hand, fruit and vegetables show low levels of water demand. Moreover, the FTA is also expected to have a negative impact on other agricultural sectors such as cereals, fibre crop, rice, sugar and oil/seeds that is likely to relax the pressure on the use of resources in agriculture. Overall, we identify a moderate concern for the impact of the FTA on the environment due to the expansion of some agricultural and animal sectors.

Table 39: Most energy intensive sectors by country

Agricultural sectors	Liberalization		Increased liberalization	
	EU	New Zealand	EU	New Zealand
Rice	0.0	-0.3	-0.1	-0.9
Cereals	0.0	-1.1	-0.1	-1.7
Veg_fruit	-0.1	1.9	-0.1	1.3
Oil_seeds	-0.1	-0.3	-0.1	-1.2
Sugar	0.0	-0.3	-0.2	-1.2
Fiber_crop	0.0	-0.4	0.0	-1.6
Ruminant meat	0.1	-0.5	-0.6	5.3
Other meat	0.0	-0.8	-0.1	4.7

Source: CGE results from DG TRADE

6. ANALYSIS OF HUMAN RIGHTS IMPACTS

6.1. Baseline: Human Rights in New Zealand

Under the Human Rights Act 1993, the Human Rights Commission, New Zealand's national human rights institution, has the responsibility to promote respect for human rights in New Zealand internally and to prepare a National Plan of Action for Human Rights, thus monitoring implementation of different international commitments and Universal Period Review recommendations.

Externally the New Zealand Agency for International Development (NZAID) has a commitment to protect and promote human rights in the Pacific region and globally, with a link to its trade agreements, as stated in the 'Operating Principles for Trade and Development Assistance' part of Harnessing International Trade for Development[135] policy paper. NZAID refers to adherence to international human rights conventions, including those related to labour standards, and the promotion of gender equity. Bilaterally, previous agreements and on-going negotiations, to which New Zealand is a party, include reference to labour rights, right to cultural participation, and indigenous minority rights.

The literature reviewed shows few existing assessments on the impact of its trade agreements on third countries and on human rights where the literature primarily focuses on the impact of the Trans-Pacific Partnership (see Appendix 2). These findings are taken into consideration in the screening of issues.

6.1.1. Existing commitments of New Zealand

Core Universal Human Rights' Treaties, to which New Zealand is a signatory include: International Convention on the Elimination of All Forms of Racial Discrimination (ICERD,1972), International Covenant on Economic, Social and Cultural Rights (ICESCR,1978) with Article 8 withdrawn for the metropolitan territory, International Covenant on Civil and Political Rights (ICCPR,1978) with Reservations for Articles 10 (2) (b), 10 (3), 14 (6), 20, 22, Optional Protocol to ICCPR (ICCPR-OP,1989), Second Optional Protocol to ICCPR, aiming at the abolition of the death penalty (ICCPR-OP 2,1990), Convention on the Elimination of All Forms of Discrimination against Women (CEDAW,1985), Optional Protocol to CEDAW (OP-CEDAW,2000), Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT,1989), Optional Protocol to CAT (OP-CAT,2007), Convention on the Rights of the Child (CRC,1993), Optional Protocol to CRC on the involvement of children in armed conflict (OP-CRC-AC,2001), Convention on the Rights of Persons with Disabilities (CRPD,2008).[136]

Core treaties to which New Zealand is not a party include Optional Protocol to ICESCR (OP-ICESCR) Optional Protocol to CRC on the sale of children, child prostitution and child pornography (OP-CRC-SC, signature only, 2000), International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (ICRMW), Optional Protocol to CRPD (OP-CRPD) and International Convention for the Protection of All Persons from Enforced Disappearance.

Other main relevant international instruments to which New Zealand is a party include: Convention on the Prevention and Punishment of the Crime of Genocide, Rome Statute of the International Criminal Court, Palermo Protocol, 1951 Convention relating to the Status

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[135] New Zealand Agency for International Development, 2008. Harnessing International Trade for Development – 'NZAID Policy Paper'. NZAID, Wellington.

[136] Office of the High Commissioner, http://tbinternet.ohchr.org/_layouts/TreatyBodyExternal/Treaty.aspx?CountryID=9&Lang=EN.

of Refugees and the 1961 Convention on the reduction of statelessness (except the 1954 Convention relating to the status of Stateless Persons), Geneva Conventions of 12 August 1949 and Additional Protocols (except Protocol III), ILO fundamental conventions (except No. 87 concerning Freedom of Association and Protection of the Right to Organize and No. 138 concerning Minimum Age for Admission to Employment) and UNESCO Convention against Discrimination in Education.[137]

6.1.2. Human rights record of New Zealand

New Zealand has a solid record of protecting civil and political rights. In 2014, the UN did issue New Zealand with 155 recommendations for its human rights' record as part of its universal period review, covering issues of racism, violence and poverty[138]. The Human Rights Commission of New Zealand produced a comprehensive report *Human Rights in New Zealand 2010* which aimed to assess New Zealand's alignment with its international obligations. Themes which emerged from the review include unresolved issues regarding the Treaty of Waitangi, lack of diversity in public participation and representation, insufficient progress in resolving poverty issues, and violence. The UN Human Rights Council also identified ongoing human rights issues in New Zealand, with focus on the disproportionate representation of Maori in the criminal justice system[139], violence against women[140], and concerns about refugee and asylum-seeker treatment, and the United Nations Working Group on Arbitrary Detention expressed concern that some asylum seekers were detained in the prison system[141]. Both of these organizations were reinforced by the report *Fault lines: Human Rights in New Zealand,* funded by the New Zealand Law Commission, which highlighted human rights failures in the countries, spanning from child poverty, disabled people's rights, the systematic disadvantage of Maori, and gender equality.[142]

In this section, we discuss New Zealand's political record of human rights as reported by the New Zealand Government, the New Zealand Human Rights Commission, the United Nations Human Rights Council and other international bodies.

6.1.2.1. Right to highest attainable standard of physical and mental health

New Zealand generally reports high levels of health, but in New Zealand's previous UPR serious concerns have been raised regarding the high number of cases of family violence

[137] Evidence compiled based on the 2009 UPR Review of New Zealand: http://lib.ohchr.org/HRBodies/UPR/Documents/Session5/NZ/A_HRC_WG6_5_NZL_2_E.pdf
[138] New Zealand Human Rights National Plan of Action 2015-2019. Available at: https://www.immigration.govt.nz/about-us/media-centre/newsletters/settlement-actionz/actionz4/new-zealand-human-rights-national-plan-of-action-2015-2019.
[139] Indigenous Justice Clearinghouse. (2007). *Over-representation of Maori in the criminal justice system: an exploratory report.* Available at: http://www.indigenousjustice.gov.au/resources/over-representation-of-maori-in-the-criminal-justice-system-an-exploratory-report/.
[140] Human Rights Council, 2014. *Report of the Working Group on the Universal Periodic Review New Zealand*. Available at: https://documents-dds-ny.un.org/doc/UNDOC/GEN/G14/131/43/PDF/G1413143.pdf?OpenElement
[141] Statement at the conclusion of its visit to New Zealand (24 March- 7 April 2014) by the United Nations Working Group on Arbitrary Detention. Available at: http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=14563&LangID=E.
[142] McGregor, Judy et al., 2015. Fault lines: Human Rights in New Zealand. Available at: http://www.waikato.ac.nz/__data/assets/pdf_file/0004/248782/NO-watermark-Fault-lines-Human-rights-in-New-Zealand.pdf.

and child abuse, often the result of child poverty.[143] The New Zealand government acknowledged that "women and children experienced an unacceptably high rate of family violence; the Government was determined to eradicate that problem".[144] The government has implemented a whole-of-government approach to addressing family violence.[145] Some key developments since New Zealand's last periodic review address these concerns and include: "establishment of cross-government initiatives to combat family violence"[146]; enactment of Vulnerable Children Act 2014[147]; repeal and replacement of section 59 of the Crimes Act 1961[148], as well as broader policies targeting reduction of poverty and greater recognition of rights for all vulnerable groups. Overall, New Zealand's different assistance programmes aim to ensure "an adequate standard of living and provide opportunities for all to participate fully in society, regardless of ethnicity or gender".[149]

With regards to child poverty, both a recent UNICEF report[150] and OECD data[151], show that New Zealand underperforms with regards to securing the rights of their children. The New Zealand Family Violence Clearinghouse[152] research also reviews in-depth the policy and practice recommendations, which have been taken on by the Government. New Zealand's efforts in this respect have been commended by UPR members, recognising that child poverty has been a priority for the NZ government.[153]

6.1.2.2. Rights of Indigenous peoples

Statistics New Zealand estimates the number of Maori in New Zealand to be over 710,000 at the end of 2015.[154] Many reviews of New Zealand's human rights record touch on the relationship with and treatment of the Maori. Amnesty International also identified ongoing human rights issues in New Zealand, with a focus on the disproportionate representation of Maori in the criminal justice system. This has been confirmed by a report of the Department of Corrections on the "over-representation of Māori in the criminal justice

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[143] United Nations Office of the High Commissioner for Human Rights. *Human Rights Committee considers the report of New Zealand*. Available at: http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=17228&LangID=E.
[144] Human Rights Council, 2014. *Report of the Working Group on the Universal Periodic Review New Zealand*, page 4. Available at: https://documents-dds-ny.un.org/doc/UNDOC/GEN/G14/131/43/PDF/G1413143.pdf?OpenElement.
[145] Idem.
[146] Human Rights Committee, International Covenant on Civil and Political Rights. Consideration of reports submitted by States parties under article 40 of the Covenant pursuant to the optional reporting procedure Sixth periodic report of States parties due in 2015, page 3. Available: https://documents-dds-ny.un.org/doc/UNDOC/GEN/G15/165/37/PDF/G1516537.pdf?OpenElement.
[147] Idem.
[148] Allowing the use of reasonable force for the purposes of correction.
[149] Human Rights Committee, International Covenant on Civil and Political Rights. Consideration of reports submitted by States parties under article 40 of the Covenant pursuant to the optional reporting procedure Sixth periodic report of States parties due in 2015, page 17. Available: https://documents-dds-ny.un.org/doc/UNDOC/GEN/G15/165/37/PDF/G1516537.pdf?OpenElement.
[150] UNICEF, 2015. The State of the World's Children 2015. Available at: http://sowc2015.unicef.org/.
[151] OECD Family Database, 2016. CO2.2: Child poverty. Available at: http://www.oecd.org/els/family/CO_2_2_Child_Poverty.pdf.
[152] See https://nzfvc.org.nz/?q=node/947.
[153] Human Rights Council, 2014. *Report of the Working Group on the Universal Periodic Review New Zealand*, page 7. Available at: https://documents-dds-ny.un.org/doc/UNDOC/GEN/G14/131/43/PDF/G1413143.pdf?OpenElement.
[154] Statistics New Zealand. Māori Population Estimates: Mean Year ended 31 December 2015. http://www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/MaoriPopulationEstimates_HOTPMYeDec15.aspx.

system".[155] In response, in 2013 the Government implemented the Youth Crime Action Plan aiming to reduce crime and recidivism for young Māori, in particular.

At an institutional level, the Treaty of Waitangi, which recognizes Maori ownership of their lands and other properties and gave the Maori same rights as British citizens, is not formalized as domestic law, and the UN Committee on the Elimination of Racial Discrimination (CERD) notes that this makes it "difficult for Maori to invoke its provisions before courts and in negotiations with the Crown".[156] However, the New Zealand Government is working to remedy the Maori's historical claims under the Treaty.[157]

The New Zealand Government has an additional challenge in combating systematic discrimination and disadvantage. For example, the Maori are overrepresented in the criminal justice system both as offenders and victims: Maori make up 15% of the general population, but account for half of the prison population[158]. The Government is designing initiatives to combat these statistics, such as a police programme aimed at collaborating with the Maori to reduce repeat offending and victimization, and working with courts which operate under New Zealand law but take Maori values into account[159].

Multiple actions have been taken to address the socio-economic differences, experienced by the Indigenous population as recognised in the consideration of reports submitted by States under article 40 of the International Covenant on Civil and Political Rights.[160]

6.1.2.3. Rights of Migrants, refugees and asylum seekers

The Immigration Act of 2009 governs immigration in to New Zealand, underpinned by the international humanitarian conventions, such as the Universal Declaration on Human Rights, the ICCPR, and the International Covenant on Economic, Social, and Cultural Rights (ICESCR), among others. New Zealand complies with its international obligations. Recently, New Zealand agreed to resettle an additional 750 Syrian refugees over the next two and a half years, and has taken steps to align its definition of trafficking with international standards.

6.2. Analysis

6.2.1. Overview of screening results

Since human rights are interrelated and cross-cutting, we look at a selection of human rights, which are likely to be affected by the EU-New Zealand FTA, based on the screening of inputs from New Zealand stakeholders[161]; literature review and experience of previous

[155] Department of Corrections, 2007. Over-representation of Māori in the criminal justice system. An exploratory report. Available at: http://www.corrections.govt.nz/__data/assets/pdf_file/0004/672574/Over-representation-of-Maori-in-the-criminal-justice-system.pdf.
[156] UN Committee on the Elimination of Racial Discrimination (2007). Consideration of reports submitted by States Parties under Article 9 of the Convention. Concluding observations of the Committee on the Elimination of Racial Discrimination: New Zealand. CERD/C/NZL/CO/1715 August 2007, page 3.
[157] Settling historical Treaty of Waitangi claims. Available at: https://www.govt.nz/browse/history-culture-and-heritage/treaty-of-waitangi-claims/settling-historical-treaty-of-waitangi-claims/.
[158] United Nations Office of the High Commissioner for Human Rights. *Human Rights Committee considers the report of New Zealand*. Available at: http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=17228&LangID=E.
[159] United Nations Office of the High Commissioner for Human Rights. *Human Rights Committee considers the report of New Zealand*. Available at: http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=17228&LangID=E.
[160] Human Rights Committee, International Covenant on Civil and Political Rights. Consideration of reports submitted by States parties under article 40 of the Covenant pursuant to the optional reporting procedure Sixth periodic report of States parties due in 2015. Available: https://documents-dds-ny.un.org/doc/UNDOC/GEN/G15/165/37/PDF/G1516537.pdf?OpenElement.
[161] New Zealand Foreign Affairs and Trade. Public submissions on the proposed EU FTA. Available at: https://www.mfat.govt.nz/en/trade/free-trade-agreements/agreements-under-negotiation/eu-fta/call-for-public-submissions-on-the-proposed-eu-fta/.

IAs, as well as linking the analysis below to the economic, social and environmental qualitative and quantitative analysis presented in the previous chapters. Some of the human rights issues are addressed in detail elsewhere and are only briefly summarised in this section, in particular:

- impact of the two liberalization scenarios on the **right to adequate standard of living** and in particular on reallocation of workers, differences between skilled and unskilled workers in the Analysis of social impacts, see section 4;
- impact of the two liberalization scenarios on rights of children and prohibition of child labour and protection of young people at work, women, people with disabilities, see Social impact chapter, Impact on Core Labour Standards, section 4.1.1.2;
- impact of the two liberalization scenarios on right to consumer protection, see Consumer impact chapter, section 4.2;
- impact on **freedom of expression, association and peaceful assembly, and right to participate in public and political life** of the Commission's proposal of the Investment Court System, as well as comparison to investment provisions in FTAs signed by New Zealand in the Market Access and Regulatory Obstacles to Investment, see section 3.3.2.

Table 40 summarises possible impacts of various trade measures, but also identifies crosscutting or general human rights that may cause concern or benefits for an FTA. These use as a reference general International and European commitments in the area, as well as the text of the EU-Canada FTA and the proposals, tabled in the scope of the TTIP negotiations. These agreements are used as a reference due to the fact that the potential EU-New Zealand FTA is also signed between two developed countries, which have committed to liberalization through the adherence to multilateral commitments.

Table 40: Possible impacts of various trade measures

Measure	Summary of measure	Human rights that may be affected (expected)	Evidence
Transparency and inclusiveness in the negotiations	Process of conducting stakeholder consultations Inclusiveness of the process	Freedom of expression, association and peaceful assembly, and right to participate in public and political life Rights of indigenous people Rights of migrants, refugees and asylum seekers	Negotiation process 'Right to regulate' for states
Trade in goods and services	Liberalise trade in goods over a transitional period and reducing barriers to trade in services. Key channels:	Right to adequate standard of living Right to highest attainable standard of	GDP change Aggregate welfare

	Positive impact through lowering of tariff lines can lead to price decreases, leaving more disposable income to people, also possible expenditure on health items. Positive impact through improved quality and price of services through competition.	physical and mental health Right to take part in cultural life Right to property Rights of indigenous people Rights of migrants, refugees and asylum seekers	Effects on skilled versus unskilled labour Water resources Quality of services
Investment provisions and public procurement	FDI can contribute to technology upgrades and more efficient and cleaner production methods using less energy in metallurgy, chemicals, and machinery. Positive impact through foreign capital can give boost to sectors in which this is not possible with the (limited) amounts of domestic capital. Contribute to technological updates and cleaner production methods.	Right to an adequate standard of living Right to property Freedom of expression, association and peaceful assembly, and right to participate in public and political life Rights of indigenous people Rights of migrants, refugees and asylum seekers	Investor protection provisions Right to regulate
Regulatory cooperation	Promoting cooperation between the Parties and respective public or private organisations Positive impact through the cooperation in fields relevant for the improvement of standard of physical and mental health Positive impact through increasing the standards on social and environmental issues	Right to an adequate standard of living Right to highest attainable standard of physical and mental health	Right to regulate Cooperation in other fora

The provisions we look at may have a direct or indirect impact on the rights reviewed. The selected human rights result from the screening of the literature, human rights

commitments and actual records in the EU and New Zealand. As supported in the literature and guidance to Human Rights Impact Assessments (HRIAs), priority setting is necessary in terms of those elements of the agreements, which should be subject to an assessment, as well as a focus on most vulnerable groups.

6.2.1.1. Transparency and inclusiveness in the negotiation process

In line with the framework described earlier, one of the goals of the stakeholder consultations, conducted by the Directorate-General for Trade, is to improve the transparency of trade policy initiatives. As highlighted in the *Guidelines* and in the academic literature, consultations bolster the **right to participate in the conduct of public affairs**, a human right enshrined in the International Covenant on Civil and Political Rights.

Thus we combine assessing the track record of the EU and New Zealand in including human rights' commitments and conducting Human Rights Impact Assessment. With regards to the former, this is important since much of the literature identifies that the inclusion of human rights' clauses supports the recognition of human rights norms. At the same time, we place stronger focus on the second element – whether and how the three countries have conducted HRIAs. The process of conducting HRIAs supports the **right of citizens to take part in the conduct of public affairs**, directly or through freely chosen representatives (ICCPR Art. 25(a)). This is further supported by ICCPR Art.19(2): **the right to seek, receive and impart information and ideas of all kinds**. Inclusive participation is also highlighted by United Nations Special Rapporteur on the right to food De Schutter who states that the "human rights impact assessment should consider the views of the communities directly affected by the trade or investment agreement by ensuring participation in the conduct of the assessment. For this participation to be meaningful, those consulted should be provided with all the available information on the potential impacts, and the assessment should refer explicitly to their concerns and how these concerns could be addressed."[162]

This study feeds into the impact assessment conducted by the Commission and includes an assessment of whether the process conducted is itself participatory, inclusive, and transparent. Conducting HRIAs itself makes negotiation processes more participatory, inclusive, and transparent; and thereby, contributes both to the enjoyment of HRs by individuals and to the fulfilment of HR obligations by governments. The public consultation, designed by the Commission services, addresses both gathers detailed views on the future trade and economic relationship between the European Union and New Zealand and raises awareness of the initiative. The online public consultation was conducted between by the Directorate General for Trade between the 11 March and 3 June 2016. The wide consultation was targeted at all interested stakeholders via responses to 51 questions, where the DG is to publish the results, unless stakeholders require anonymity.

New Zealand conducts National Interest Analysis (NIAs) to assess the impact of a prospective agreement and its accompanying memorandums on New Zealand. NIA assess the TPP from the perspective of its impact on New Zealand and New Zealanders. They include the reasoning behind New Zealand to become a party to an agreement, advantages and disadvantages that would accrue from New Zealand across the different chapters of a proposed agreement, and the legal obligations that would be imposed on New Zealand

[162] A/HRC/19/59/Add.5 para. 45.

under the agreement. Though the NIA includes considerations about the broad area of social, cultural and environmental effects, the methodology for assessing this has to be further explored due to issues raised by stakeholders.[163]

The process for public submissions in New Zealand about a proposed free trade agreement between New Zealand and the European Union[164] took place from December 2015 to March 2016, where this is seen as the one step of the mechanism for outreach and consultations with stakeholders. The Government published 24 submissions covering key sectoral and thematic issues.

In the consultations on the EU-New Zealand FTA, a number of stakeholder submissions urge the New Zealand government to lead the negotiations in a more transparent and inclusive way, compared to the approach of the government in the TPP negotiations. In a similar vein, the submission by the New Zealand Human Rights Commission calls for an alignment of New Zealand with EU's Trade for All Strategy vis-à-vis "greater transparency and participation of stakeholders in the negotiation process, the creation of investment courts to replace the investor state dispute settlement processes and proper consideration of human rights."[165] Moreover, the New Zealand Human Rights Commission highlights that an agreement between the EU and New Zealand "creates an unprecedented opportunity to set a new human rights benchmark in international agreements and new standards in the area of how investor/state disputes are resolved."[166] A number of the contributions also highlight the benefits of the EU proposed investment provisions in the scope of the EU-Canada FTA and the TTIP. These are tackled further below.

It is also the case with New Zealand that it does not conduct in-depth impact assessment on the impact in third-countries and on the human rights dimensions in particular. Examples of the inclusion of chapters on trade and labour and trade and the environment or Memorandum of Understanding (MOU) on labour cooperation are present in the Trans-Pacific Partnership, China-New Zealand FTA[167], Malaysia-New Zealand FTA[168] and the Trans-Pacific Strategic Economic Partnership Agreement among Chile, New Zealand, Singapore and Brunei Darussalam[169]. The MOUs provide a forum for countries to work together in a practical way to promote sound labour and environment policies and

[163] New Zealand Foreign Affairs & Trade. Public submissions on the proposed EU FTA. Available at: https://www.mfat.govt.nz/en/trade/free-trade-agreements/agreements-under-negotiation/eu-fta/call-for-public-submissions-on-the-proposed-eu-fta/.
[164] New Zealand Foreign Affairs & Trade. Public submissions on the proposed EU FTA. Available at: https://www.mfat.govt.nz/en/trade/free-trade-agreements/agreements-under-negotiation/eu-fta/call-for-public-submissions-on-the-proposed-eu-fta/.
[165] New Zealand Human Rights Commission (2016). Submission on the proposed Free Trade Agreement negotiations between New Zealand and the European Union. Available at: https://www.mfat.govt.nz/assets/_securedfiles/FTAs-in-negotiations/EU-FTA/7.-NZ-Human-Rights-Commission.pdf.
[166] New Zealand Human Rights Commission (2016). Submission on the proposed Free Trade Agreement negotiations between New Zealand and the European Union. Available at: https://www.mfat.govt.nz/assets/_securedfiles/FTAs-in-negotiations/EU-FTA/7.-NZ-Human-Rights-Commission.pdf, at p. 1.
[167] Entered into force 1 October 2008.
[168] Ministry for Foreign Affairs and Trade, New Zealand (n.d.). *NZ-Malaysia Free Trade Agreement.* Available at: https://www.mfat.govt.nz/en/trade/free-trade-agreements/free-trade-agreements-in-force/malaysia-fta/
[169] Entered into force between May and November 2006.

practices, but it does not contain enforceable commitments on the parties beyond what is already present in international conventions.[170]

Within the main agreements, New Zealand also includes specific exceptions linked to cultural aspects and its indigenous populations. For example, in the Trans-Pacific Strategic Economic Partnership Agreement, the agreement states that: 'Provided that such measures are not used as a means of arbitrary or unjustified discrimination against persons of the other Parties or as a disguised restriction on trade in goods and services, nothing in this Agreement shall preclude the adoption by New Zealand of measures it deems necessary to accord more favourable treatment to Maori in respect of matters covered by this Agreement including in fulfilment of its obligations under the Treaty of Waitangi'.[171] National Interest Analysis also refers to cultural effects, noting that the FTA contains safeguards to ensure that there are no adverse effects on New Zealand cultural values including Maori interests.

From this overview, it is clear that New Zealand stakeholders find substantial benefits in an EU-New Zealand FTA and raise limited potential negative impact. The consultation processes is still on-going, but the first steps towards an inclusive and transparent process have been taken both in the EU and New Zealand. It is important for stakeholders' concerns to also be reflected in the negotiation positions and texts.

Given the historical background where New Zealand has included explicit reference to Maori rights vis-à-vis different aspects, it is expected that this will also feature in the EU-New Zealand agreement and that in this way the FTA will not disproportionately affect the Indigenous peoples.

6.2.1.2. Trade in goods and services

The effects of trade in goods and services and the elimination of customs duties may have a positive or negative impact on human rights, depending on the aggregate impact on the economies as well as sectors affected. The liberalization of the markets of the two countries over a transitional period and according to the two liberalization scenarios affect indirectly a number of the rights discussed above.

On one hand, the liberalization of trade in goods in certain sectors can have a positive impact through lowering of tariff lines, which can lead to price decreases. This leaves more disposable income to people, also possible expenditure on health items. Thus the reduction and removal of barriers to trade in goods and services can improve the **right to adequate standard of living**, the **right to highest attainable standard of physical and mental health**, **right to take part in cultural life**, and **right to property.**

Further to the earlier analysis (see section 3), with increase in GDP, wages and aggregate welfare, the disposable income of the population in New Zealand and the EU will increase. The increase in trade in goods and services between the two countries will in the long term increase the number of jobs, quality of jobs, wages, household income and the affordability of essential goods and services The effects, however, are not in the same direction across all sectors, where shifts across sectors are more pronounced. The effects of the two

[170] Ministry for Foreign Affairs and Trade, New Zealand (n.d.). *NZ-China Free Trade Agreement.* Available at: https://www.mfat.govt.nz/en/trade/free-trade-agreements/free-trade-agreements-in-force/china-fta/.
[171] Article 19.5: Treaty of Waitangi.

liberalization scenarios, under the assumptions of the model, show different impact on shifts of employment across industries, less pronounced in the case of the conservative liberalization scenario.

In other studies, it is discussed that the liberalization of trade in services could lead to improved provision of health services through competition, improving the **right to highest attainable standard of physical and mental health**, while strengthening new economic opportunities created by the agreement could lead to strengthening the **right to work** and **right to adequate standard of living**.

Liberalization in trade in goods and services has to take into consideration the effects on most vulnerable groups, where for New Zealand these are Indigenous peoples, migrants, refugees and asylum seekers. At this stage, prior to opening the negotiations the effect on these groups is unknown, where the FTA is not likely to increase the pressure on these groups.

6.2.1.3. Investment Provisions and Public Procurement

In 2011 the UN Human Rights Council endorsed the "Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework", thereafter ("Guiding Principles"), developed by the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises.[172] Guiding Principle 9 reads that "States should maintain adequate domestic policy space to meet their human rights obligations when pursuing business-related policy objectives with other States or business enterprises, for instance through investment treaties or contracts." This Principle is relevant both for the area of public procurement but also in terms of the investment provisions (see below).

The European Charter of Fundamental Rights strengthens the constitutional status of human rights in the EU legal order as well as the role of public purchasing in securing sustainable development.[173] The Directive on public procurement[174] as part of the Europe 2020 Strategy for Smart, Sustainable and Inclusive Growth[175] has a provision allowing "procurers to make better use of public procurement in support of common societal goals such as protection of the environment, higher resource and energy efficiency, combating climate change, promoting innovation, employment and social inclusion and ensuring the best possible conditions for the provision of high quality social services."[176]

The EU and New Zealand have also committed to the objectives of the United Nations Guiding Principles on Business and Human Rights (UNGPs). Stakeholders have highlighted this particularly vis-à-vis investment protection but also more generally, highlighting UNGP Principle 9 requires States to ensure that trade and investment obligations do not constrain their ability to meet their human rights obligations.[177] Due to the level of existing

[172] UNHRC (2011). Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework. http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf.
[173] DIHR-ICAR (2014). Briefing Note: Protecting Human Rights through Government Procurement. http://www.humanrights.dk/files/media/dokumenter/business/unwg_8_may_workshop_icar_dihr_procurement_final.pdf.
[174] COM (2011) 896.
[175] COM (2010) 2020.
[176] Explanatory memorandum, COM (2011) 896, p.2. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0896:FIN:EN:PDF.
[177] New Zealand Human Rights Commission (2016). Submission on the proposed Free Trade Agreement negotiations between New Zealand and the European Union. Available at: https://www.mfat.govt.nz/assets/_securedfiles/FTAs-in-negotiations/EU-FTA/7.-NZ-Human-Rights-Commission.pdf.

commitments in both the EU and New Zealand, the likelihood of a negative impact of the agreement on human rights is low. At the same time, efforts by the Parties vis-à-vis the obligations to respect, protect and fulfil human rights and fundamental freedoms could improve cooperation in ensuring policy coherence (Guiding Principle 8) as well as the promotion of these principles multilaterally. The EU is a signatory to the Agreement on Government Procurement in the WTO while New Zealand has recently acceded to the GPA in August 2015.

In light of the proposed approach by the EU, we draw on the previous chapter on investment in relation to Task 4 (section 3.3). Building on the description of the differences between the previous system and the latest proposal, we study the possible impact on the realisation of human rights.

As indicated earlier, there has been a real concern with questions of regulatory space, including in relation to human rights with regards to both the dispute settlement system as well as the substantive rules of investment. The UN Committee on Economic, Social and Cultural Rights (CESCR) describes the disproportionate protection for the rights of investors in the Investor-State Dispute Settlement as the "most controversial aspect of FTAs".[178] Common criticism against ISDS includes the concern that ISDS undermines the actions of government in protecting human rights, the environment as well as equitable development.[179] This has been seen as a restriction of a country's right to regulate or causing regulatory chill, precluding the state from fulfilling its obligation to regulate for the aim of protecting human rights. In terms of the substantive provisions, this disproportionate treatment in favour of investors has also been seen in the requirement that investors receive "fair and equitable treatment."[180] The CESCR has noted that the wording of such provisions has allowed permissive interpretation in favour of investors. Another set of concerns include the arbitral process itself including *inter alia* lack of transparency; conflicting awards; participation of judges on an ad hoc basis, which could be in a conflict of interest situation. New Zealand's approach to the inclusion of investment provisions is outlined in depth in section 3.3.2, which defines the right to regulate and arbitration and dispute settlement.

The new provisions, proposed by the EU as part of the TTIP negotiations and the CETA agreement respond to a number of the criticisms raised towards the dispute settlement system, featured in previous agreements and is also combined with other aspects of investment provisions. With the EU's new protections, the human rights impact in terms of regulation is likely to be minimal. The section on Investment (3.3) highlighted both the changes to the dispute settlement side (the new ICS), and changes to the substantive rules (clarification of the right to regulate, the meaning of FET, indirect expropriation).

In terms of the impact on human rights, one of the advantages of the new system is that it is tailor-made to the party, with whom the EU is negotiating and amendments can be made to the number of judges and other key provisions.[181] Article 2 of the EU proposal for the TTIP also clearly safeguards a State's right to regulate in order "to achieve legitimate

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[178] ESCR-Net, 2016. Briefing Note on Trade and Investment. Available at: https://www.escr-net.org/resources/briefing-note-trade-and-investment, at p.5.
[179] Ibid at p. 6.
[180] Ibid at p. 6.
[181] European Commission, 2016. CETA: EU and Canada agree on new approach on investment in trade agreement. Available at: http://europa.eu/rapid/press-release_IP-16-399_en.htm.

policy objectives, such as the protection of public health, safety, environment or public morals, social or consumer protection or promotion and protection of cultural diversity."[182] The article further clarifies that the provisions do not prevent the Party to "change the legal and regulatory framework", therefore, bringing greater certainty that states have the right to regulate in order to fulfil its obligations in the protection of human rights and avoiding the likelihood of "regulatory chill". Similarly, in the CETA agreement this is covered in section D, Article 8.9.

The protection of legitimate public welfare objectives is also safeguarded under the expropriation provisions (Annex I of the TTIP proposal and Annex 9-A of the CETA text), where "non-discriminatory measures are designed and applied to protect legitimate public welfare objectives, such as health, safety and the environment, do not constitute indirect expropriations" unless it is "manifestly excessive".[183] Both the CETA text and the TTIP proposal also address the transparency of the proceedings, by applying the UNCITRAL Transparency Rules[184] (CETA Article 8.36; TTIP Proposal Article 18). This has been seen as an improvement to previous international investment provisions, which do not include such reference.

The Commission's proposal of the Investment Court System as it has been included in the TTIP proposal and the CETA texts marks an improvement towards securing the regulatory space for both parties to the agreement to be able to regulate in the public interest. Depending on the final provisions of an agreement, if similar to the CETA text, will not affect negatively the fulfilment of human rights in the EU and New Zealand and it will have positive impact on **freedom of expression, association and peaceful assembly, and right to participate in public and political life** through increased possibility for the monitoring and access to rulings and processes associated with arbitration.

Further to the changes proposed and the existing commitments of both Parties to the UN Guiding Principles on Business and Human Rights, the investment provisions are not likely to have a negative impact on human rights in the EU and New Zealand. The institutionalisation of the ICS system in the agreement with New Zealand has the potential to stimulate a broader discussion on the inclusion of investment provision in trade agreements and the form these provisions take.

In light of the proposed provisions in TTIP and CETA and the increasing call of stakeholders for the government to move away from the inclusion of dispute settlement and other provisions in FTAs, the likelihood of provisions protecting the right to regulate is very high and thus has an indirect effect on a range of human rights.

6.2.1.4. Regulatory Cooperation

The potential for regulatory cooperation in order to remove trade-limiting or even prohibiting measures, could as discussed vis-à-vis services, could increase the quality of products and the affordability of essential goods and service, therefore improving the right

[182] European Commission, 2015. Commission draft text TTIP – investment. Article 2.1. Available at: http://trade.ec.europa.eu/doclib/docs/2015/september/tradoc_153807.pdf. European Commission (2016). Comprehensive Economic and Trade Agreement (CETA), Article 8.9. http://trade.ec.europa.eu/doclib/docs/2016/february/tradoc_154329.pdf.
[183] European Commission, 2015. Commission draft text TTIP – investment. Annex I. Available at: http://trade.ec.europa.eu/doclib/docs/2015/september/tradoc_153807.pdf. European Commission (2016). Comprehensive Economic and Trade Agreement (CETA), Annex 8-I. http://trade.ec.europa.eu/doclib/docs/2016/february/tradoc_154329.pdf.
[184] http://www.uncitral.org/uncitral/en/uncitral_texts/arbitration/2014Transparency.html.

to an **adequate standard of living** and the **right to highest attainable standard of physical and mental health.**

The promotion of cooperation between the Parties and respective public and private organisations can bring positive impact through intensified in fields relevant for the improvement of standard of physical and mental health as well as through increasing the standards the Parties support vis-à-vis human rights linked to social and environmental rights.

6.2.2. Potential human rights impacts of the FTA on New Zealand and the European Union

6.2.2.1. Right to an adequate standard of living

Right to an adequate standard of living is guaranteed under Article 11 of the International Covenant on Economic, Social and Cultural Rights. The Committee on Economic, Social and Cultural Rights has issued several General Comments explaining the components of this right, which includes the **right to adequate housing** (General Comments 4 and 7), **the right to food** (General Comment 12), the **right to water** (General Comment 15) as well as **the right to social security** (General Comment 19). The General Comments elaborate on the criteria, which need to be taken into consideration for this right to be fulfilled. The right to an adequate standard of living is also enshrined in the EU Charter of Fundamental Rights under Article 34. An adequate standard of living has been taken to imply "living above the poverty line of the society concerned".[185]

Based on the results of the economic analysis from the CGE and the analysis in the previous chapters, the impact of an EU-New Zealand FTA on the **right to an adequate standard of living** is potentially positive in the long turn. The aggregate welfare effects are positive for both partners under both liberalization scenarios with more pronounced results in the increased liberalization scenario. Under the assumptions of the model, real wages are expected to rise for both partners and for both skilled and unskilled workers. The differences between the two liberalization scenarios have been explored in chapter 4.

In terms of the changes in real wages, aggregate welfare and percent change in GDP, the model shows positive impacts for both the EU and New Zealand, despite the fact that in the case of the EU these are more modest. These potential positive effects may impact positively the **right to an adequate standard of living**, both through the effects on unskilled labour but also indirectly by increasing the aggregate welfare, particularly in the increased liberalization scenario.

The **right to water**[186] features as part of the **right to adequate standard of living**. The environmental section of the study assessed that both New Zealand and the EU are committed to ensuring the preservation of water resources and are signatures of the main multilateral agreements in the area. Areas of slight concern noted earlier, which could affect the right to adequate standard of living through changes to wildlife and biodiversity include the expected expansion of the vegetable and fruit and the animal sectors that are associated with an increase in land use and intensity and are characterised by an

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[185] Icelandic Human Rights Centre. The Right to an Adequate Standard of Living. Available at: http://www.humanrights.is/en/human-rights-education-project/human-rights-concepts-ideas-and-fora/substantive-human-rights/the-right-to-an-adequate-standard-of-living. This has been defined by the World Bank as: "The expenditure necessary to buy a minimum standard of nutrition and other basic necessities and a further amount that varies from country to country, reflecting the cost of participating in the everyday life of society." Ibid.

[186] The water quality within the EU is addressed and protected in Drinking Water Directive (Council Directive 98/83/EC of 3 November 1998).

increasingly inefficient use of nitrogen (see chapter on Environment). However, the expected impact on the environment is minimal as it is mitigated by the fact that the FTA favours relatively less energy- and emission-intensive sectors leading to a reallocation of production towards cleaner sectors in the both the EU and New Zealand.

6.2.2.2. Freedom of expression, association and peaceful assembly, and right to participate in public and political life

In the summary presented above on the potential provisions in the agreement and associated measures (such as the transparency and inclusiveness of the agreement), the gathered evidence suggests that the potential FTA between the EU and New Zealand will not impact negatively the **political and civil rights** of the populations.

The review highlighted that the stakeholder consultation processes in EU and New Zealand though similar are reflected differently in the ensuing treaty-making process. In the case of New Zealand, stakeholders have voiced concerns that the prospective negotiations with the EU will follow similar pattern to those with the TPP partners and therefore, a detailed assessment on human rights impacts will not be concluded and Parliament will remain responsible to vote only on the implementing legislation. This, however, is a domestic issue and the negotiations are unlikely to bring changes in the legislation at the current time. In New Zealand stakeholders also highlight the example of the EU as a system, providing more opportunities for stakeholder engagement during the negotiations.

The consultation of stakeholders at different stages of the negotiation process in the EU system provides an opportunity for civil society organisations and interested parties to raise concerns timely, so that they can be reflected in the negotiations.

At the current stage of the proceedings, the study cannot comment on the opportunities for adopting transparency measures and the publication of documentation, often raised by stakeholders in both Parties.

6.2.2.3. Right to highest attainable standard of physical and mental health

The **right to the highest standard of physical and mental health** is protected by ICESCR under Article 12. It is covered under Article 3 of the EU Charter of Fundamental Rights, which protects the physical and mental integrity and under Article 35 which safeguards the right to adequate access to health care. As discussed earlier, in the current study we assessed the potential positive and negative effects on health through the following channels:

- liberalization of trade in goods could lead to cheaper food imports and greater expenditure on health items;
- liberalization of trade in services could lead to improved provision of health services through competition;
- new economic opportunities created by the agreement could lead to strengthening the right to work and right to adequate standard of living;
- cooperation on environmental issues to better health.

In the study of the potential impact on health and health-related issues we take into consideration the availability of previous methodologies and indicators: UN Special Rapporteur on the Right to Health has developed a series of indicators on access to health depending on the availability of data,[187] Also New Zealand and the EU Member States are

[187] Hunt, P and MacNaughton, G. (2006). Impact Assessments, Poverty and Human Rights: A case study using the right to the highest attainable standard of health. UNESCO, New York.

all parties to the International Covenant on Social, Economic and Cultural Rights (ICSECR) and the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and thus have a duty to protect these rights.

NZ stakeholders point to further positive effects through the commitment on the side of NZ and the EU to explore mechanisms for cooperation in line with the Global Harmonization Task Force on Medical Devices.[188] One of the recommendations made is the "inclusion of language by which European and New Zealand parties commit to consistent principles supporting an ethical framework for business practices within which medical technology companies operate." [189]

Based on the CGE modelling and the results derived from the economic, social and environmental impacts, at this stage provisions on trade in goods and services, public procurement and investment, as well as regulatory cooperation, are likely to enhance the **right to health** and the **right to the highest standard of physical and mental health.** Both the EU and New Zealand have committed to not reduce standards, which may affect health and the FTA can only improve cooperation in the area.

Rights of vulnerable groups: indigenous peoples; migrants, refugees and asylum seekers

The rights of indigenous peoples are protected by the UN Declaration on the Rights of Indigenous Peoples, the International Labour Convention (ILO) on the Rights of Indigenous and Tribal Peoples in Independent Countries, No.169 and by the International Labour Convention (ILO) on the Rights of Indigenous, Tribal and Semi-Tribal Populations in Independent Countries, No. 107. The EU has two new programmes entitled "Global public goods and challenges" and "Support for civil society organizations and local authorities" prioritizing the fight against poverty and supporting inclusive growth. In both documents, EU committed itself to maintain indigenous peoples as a focus of attention given their disadvantage in all societies. The rights of migrants, refugees and asylum seekers are protected by the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families. Within the EU, the rights of migrants, refugees and asylum seekers are protected under the right to asylum outlined in Article 18 of the EU Charter of Fundamental Rights.

6.3. Conclusions: impact on human rights

In this section, we summarize the link between the potential inclusion of certain clauses and the specific human rights indicated above. Further to the analysis, we conclude that there is a likely positive impact in the long term through the conclusion of the trade agreement. The human rights impact will be indirect channelled through increases in the number of jobs, quality of jobs, wages, household income and the affordability of essential goods and services. It will also be positively affected through strengthened regulatory cooperation as well as stimulating inclusiveness and transparency both in the application of investment provisions but also the general conduct of the negotiations.

In Table 41 we combine the results for both liberalization scenarios since the difference in impact will mostly result through increased welfare and thus the fulfilment of the **Right to adequate standard of living.** This is quantified and detailed in chapter 4.

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[188] Medical Technology Association of NZ (2016). Submission to Ministry of Foreign Affairs & Trade. Available at: https://www.mfat.govt.nz/assets/_securedfiles/FTAs-in-negotiations/EU-FTA/4.-Medical-Technology-Association-of-NZ.pdf

[189] Ibid at 5.

Table 41: Analysis of trade measures

	Human rights that may be affected	Likelihood of direct vs. indirect impact	Likelihood of major vs. minor impact	Magnitude of expected impact	Positive, neutral, or negative impact? EU	Positive, neutral, or negative impact? New Zealand
Transparency in the negotiations	Freedom of expression, association and peaceful assembly, and right to participate in public and political life	Direct	Likely	Major impact	Neutral to positive	Neutral to positive
Trade in Goods and Services	Right to adequate standard of living Right to highest attainable standard of physical and mental health	Indirect	Likely	Minor impact	Positive vis-à-vis trade in goods in the long term, but possible negative effect from liberalization in trade in goods in specific sensitive sectors due to reallocation; Positive with regards to trade in services	Positive vis-à-vis trade in goods in the long term, but possible negative effect from liberalization in trade in goods for vulnerable groups and groups in specific sensitive sectors due to reallocation; Positive with regards to trade in services
Investment provisions	Right to an adequate standard of living Freedom of expression, association and peaceful assembly, and right to participate in	Indirect	Likely	Minor impact	Positive	Positive

	public and political life					
Regulatory cooperation	Right to an adequate standard of living Right to highest attainable standard of physical and mental health	Indirect	Likely	Minor impact	Positive	Positive

The findings of our analysis point to a more likely positive than negative impacts in terms of human rights. This conclusion is supported by input received from stakeholders in New Zealand, where submissions to ongoing stakeholder consultations point to the positive impact of the potential FTA on the access and enjoyment of specific rights.

Appendix 1

Table 42: International conventions

Specific Human Rights	Convention
Right to a fair hearing	ICCPR, Article 14
Right to privacy	ICCPR, Article 17
Freedom of expression, association and peaceful assembly, and right to participate in public and political life	ICCPR, Article 19: right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds ICCPR, Article 22: right to freedom of association ILO Convention No.87: Freedom of Association and Protection of the Right to Organise Convention ILO Convention No.98: Right to Organise and Collective Bargaining Convention
Right to an adequate standard of living	International Covenant on Economic, Social and Cultural Rights (ICESCR), Article 11
Right to highest attainable standard of physical and mental health	ICESCR, Article 12
Right to take part in cultural life	ICESCR, Article 15a
Right to property	Universal Declaration of Human Rights, Article 17 International Convention on the Elimination of All Forms of Racial Discrimination, Article 5

Indigenous peoples	UN Declaration on the Rights of Indigenous Peoples International Labour Convention (ILO) on the Rights of Indigenous and Tribal Peoples in Independent Countries, No. 169 International Labour Convention (ILO) on the Rights of Indigenous, Tribal and Semi-Tribal Populations in Independent Countries, No. 107
Migrants, refugees and asylum seekers	International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families

Appendix 2

Table 43 Overview of studies on third-country effects

Study	Methodology and Assumptions (if applicable)	Scope	Conclusions & recommendations
Gao, H. (2016) China-New Zealand Free Trade Agreement.[190]	Discussion of negotiating process, substantive provisions and joint 2nd year review conducted by NZ/China.[191]	Full agreement between China and New Zealand, no particular reference to human rights and third country effects.	Concludes that Memorandum of Understanding on Labour and the Environment Cooperation Agreement (ECA) do not create many substantive obligations; Reaffirming the existing commitments under relevant international instruments. Similarly IPR chapter does not create any specific commitments, Parties reaffirm their commitment to the TRIPS Agreement and other multilateral IP agreement e.g. Berne Convention
Sandrey, R. (2013). The New Zealand-China Free Trade Agreement: Implications for South Africa	Bilateral trade analysis between China and New Zealand	Full agreement, reference only to the Memorandum of Understanding on Labour but does	Concludes that the China-NZ FTA is likely to affect South Africa's manufacturing sector (in particular clothing). No effect from the MoU and labour cooperation

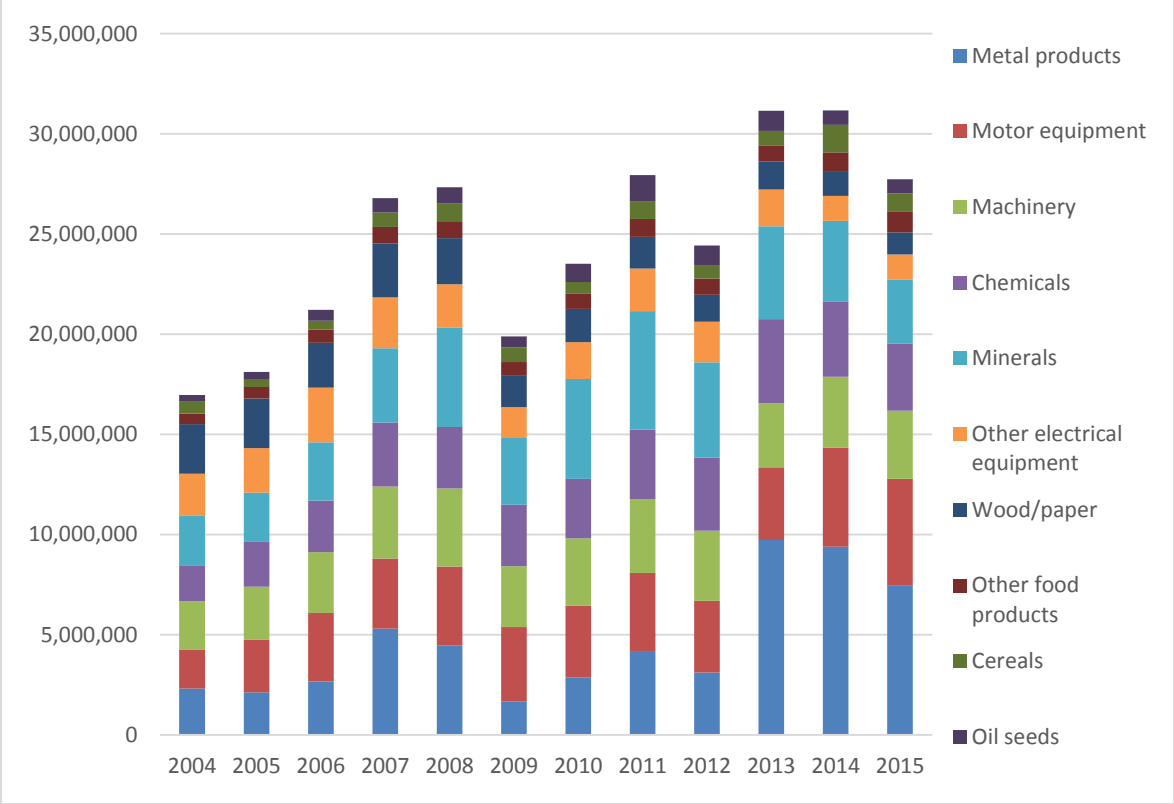
[190] Gao, H.S. (2016). China-New Zealand Free Trade Agreement (February 7, 2014). Simon Lester & Bryan Mercurio (eds.), Bilateral and Regional Trade Agreements: Case Studies, Cambridge University Press, pp. 77-96, 2016; Singapore Management University School of Law Research Paper No. 4/2016. Available at SSRN: http://ssrn.com/abstract=2728863.
[191] Ministry of Foreign Affairs and Trade (2011). China-New Zealand Free Trade Agreement 2-year Review Joint Report.

		not discuss human rights effects.	provisions.
Kelsey, J. (2011) The case for a human rights impact assessment of the proposed Trans-Pacific Partnership Free Trade and Investment Agreement.[192]	Includes a literature review and comparison of international commitments associated with human rights. Examines the concept of human rights impact assessments as part of other negotiation processes; argues the need for disclosure of information as a pre-requisite to the effective exercise of the right to participate in public affairs.	Full TPP agreement.	Explains that a supplementary dossier is to be provided that identifies relevant human rights issues with regard to four areas: health, livelihood, impact on indigenous peoples and democratic decision-making. However, currently this document is not available. Makes the case for a human rights impact assessment of the TPP Agreement. Predicted impacts of the TPP in New Zealand include: introduction of 'investor state dispute resolution allowing corporations to sue the government, weakening of the Pharma regime and challenges to GE food labelling laws' (p.2).
Labonté et al. (2016). The Trans-Pacific Partnership Agreement and health.[193]	Health impact review leading to a summary estimation of the most significant health impacts of the TPP agreement.	During screening stage established various links between FTAs and health based on a review of existing frameworks in the public health literature; during scoping stage focused on specific health risks, which could result from the TPP agreement Does not consider particular countries.	Argue that there are a number of potentially 'serious health risks', linking trade to health: access to medicines, reduced regulatory space, investor-state dispute settlement (ISDS), and environmental protection and labour rights. Also consider health benefits, but does not expect these to be equitably distributed.

[192] See also: Kelsey, J. (2015). How the Trans-Pacific Partnership Agreement can impact on alcohol policy: http://alcoholaction.co.nz/wp-content/uploads/International-response.pdf.
[193] Labonté, R. et al. (2016). The Trans-Pacific Partnership Agreement and health: few gains, some losses, many risks. Globalization and Health (2016) 12:25, DOI 10.1186/s12992-016-0166-8.

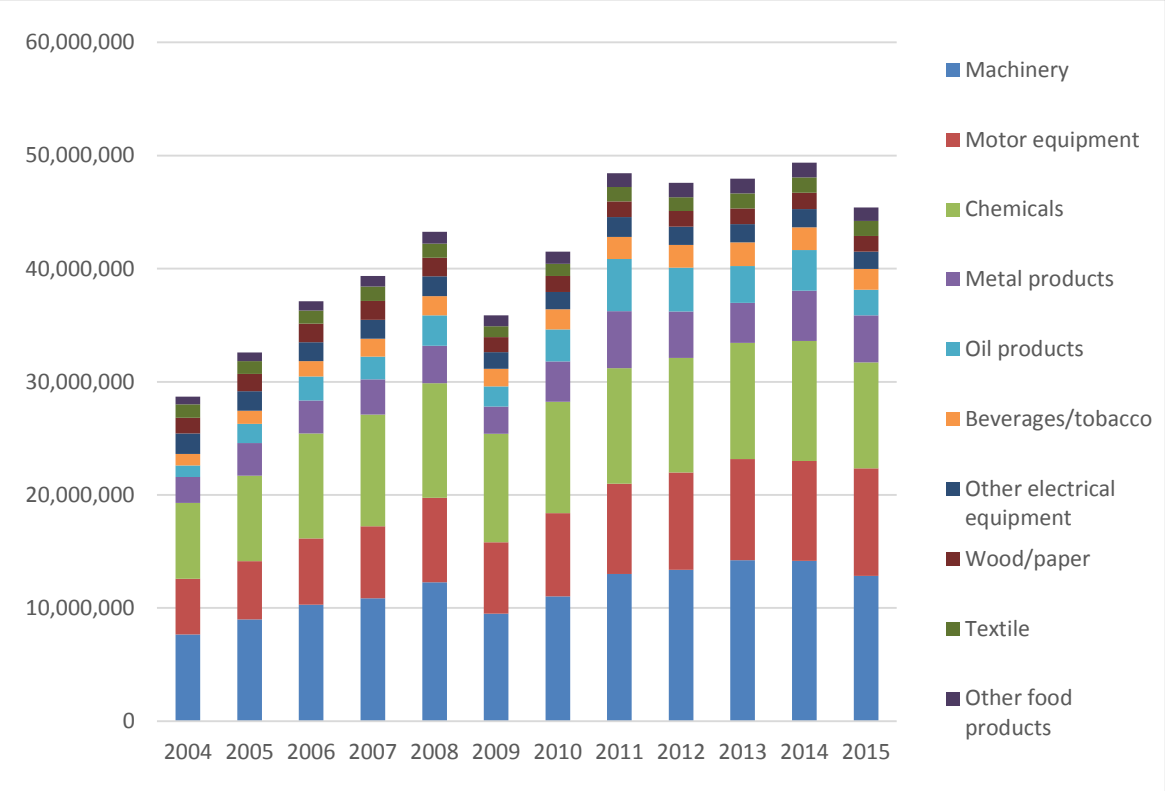
ANNEX 1: OVERVIEW OF EU-CANADA AND NEW ZEALAND-CANADA TRADE IN GOODS FLOWS

Figure 42: Top 10 EU-Canada sector imports of goods, 2004-2015 (thousand Euros)[194]



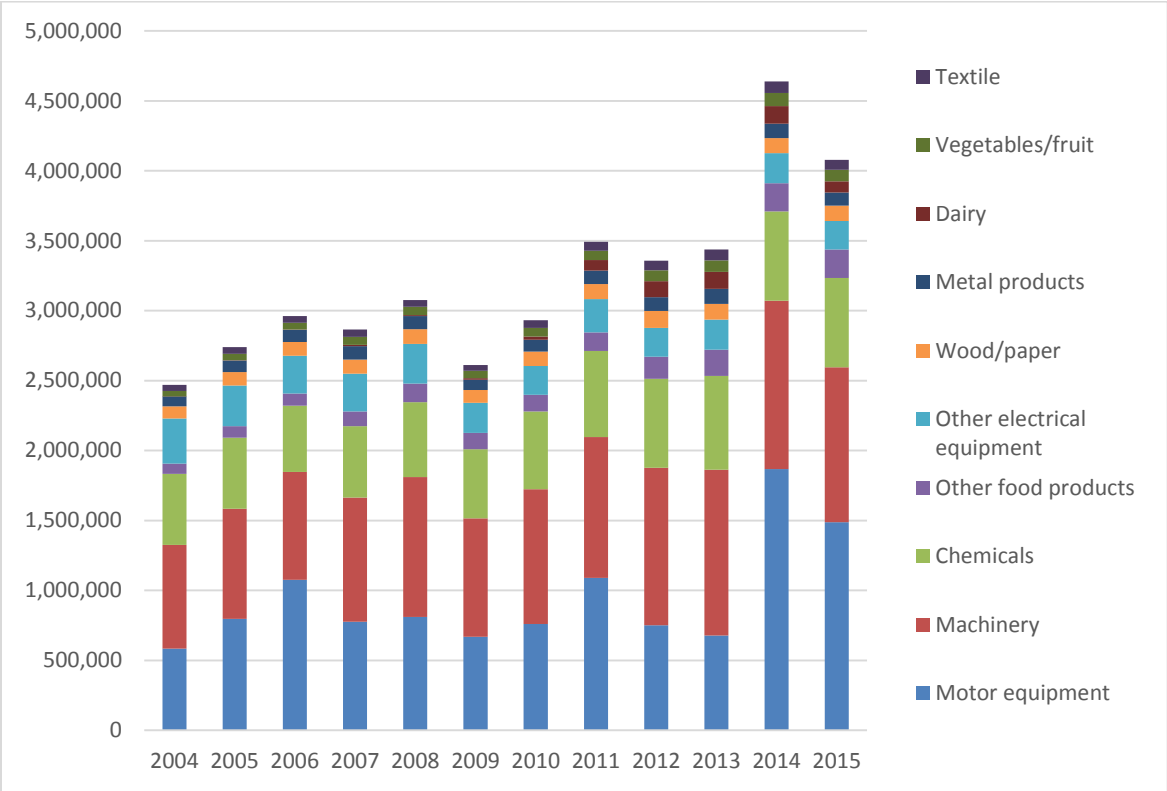
[194] UN Comtrade, own calculation on the basis of the sectoral aggregation used in the CGE model.

Figure 43: Top 10 Canada-EU sector imports of goods, 2004-2015 (thousand Euros)[195]



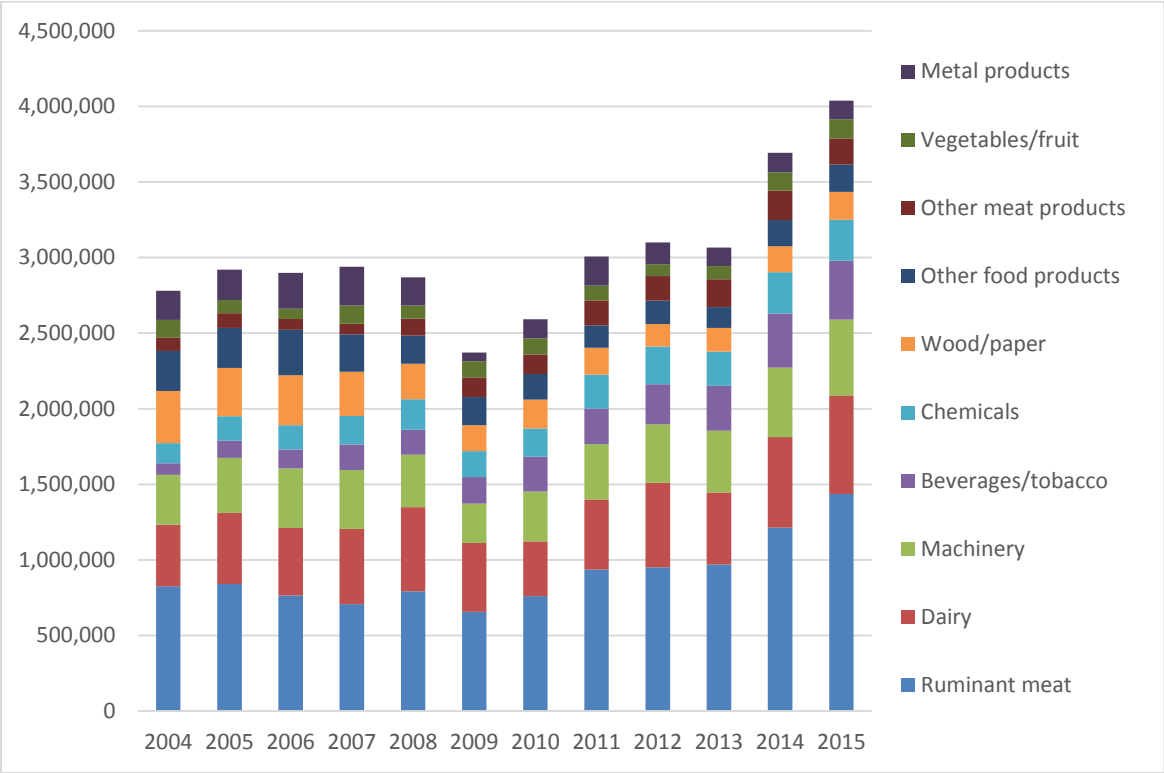
[195] UN Comtrade, own calculation on the basis of the sectoral aggregation used in the CGE model.

Figure 44: Top 10 New Zealand-USA sector imports of goods, 2004-2015 (thousand Euros)[196]



[196] UN Comtrade, own calculation on the basis of the sectoral aggregation used in the CGE model. In the case of the aggregated dairy sector, data only represents the value of the individual "MIL" GTAP sector, as "RMK" GTAP sector data was unavailable.

Figure 45: Top 10 USA-New Zealand sector imports of goods, 2004-2015 (thousand Euros)[197]



[197] UN Comtrade, own calculation on the basis of the sectoral aggregation used in the CGE model. In the case of the aggregated dairy sector, data only represents the value of the individual "MIL" GTAP sector, as "RMK" GTAP sector data was unavailable.

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