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COMMISSION STAFF WORKING DOCUMENT

EVALUATION

**of the Implementation of the Free Trade Agreement between the European Union and
its Member States, of the one part, and the Republic of Korea, of the other part**

{SWD(2019) 103 final}

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INTRODUCTION

Purpose of the evaluation

The Free Trade Agreement (FTA) between the EU and its Member States and the Republic of Korea (hereafter referred to as “Korea”) is the first of a new generation of FTAs, characterised by its comprehensive nature and high level of ambition. It was considered important to conduct an evaluation of the implementation of the EU-Korea FTA, in line with the European Commission's new trade strategy "Trade for All”, as the lessons learned could help improve the implementation of this current FTA, the design of other EU FTAs that are currently being negotiated, as well as improve the implementation of EU FTAs that have been recently concluded. The conclusions of this evaluation can be further compared with the analysis carried out in the Trade Sustainable Impact Assessment (SIA) of the EU-Korea FTA,¹ which was carried out in 2007-2008 and which provides an in-depth analysis of the potential impacts of the FTA, in order to determine whether and to what extent these potential expected impacts have taken place.

The evaluation relies on a study available online², carried out by an external consultant in close cooperation with the Commission, further complemented by DG Trade economic analysis. The Final Report of the study is a source of useful information and economic analysis but does not represent the Commission's views. The Commission presents in the below sections its own evaluation as regards the findings and conclusions of the consultant presented in the Final report.

Scope of the evaluation

The evaluation of the implementation of the EU-Korea FTA provides an in-depth ex-post analysis of the performance of the EU-Korea FTA. It examines: the effectiveness and efficiency of the EU-Korea FTA in view of achieving its objectives; the relevance of the EU-Korea FTA regarding current trade issues faced by both EU and Korea; the coherence of the EU-Korea FTA with the EU-Korea Framework Agreement and with the objectives of the EU trade policy. In addition, the analysis of effectiveness includes an assessment of the impact of the implementation of the EU-Korea FTA on sustainable development in its economic, social and environmental dimensions, as well as on human rights.

The evaluation examines the impact of the EU-Korea FTA in the EU and its Member States. The evaluation covers the period from the date of the start of the provisional application of the EU-Korea FTA - 1 July 2011 until the date of the latest available data, i.e. between 2014 and

1 Trade Sustainability Impact Assessment (SIA) of the EU-Korea FTA: Final Report – (Phase 3), available at http://trade.ec.europa.eu/doclib/docs/2008/december/tradoc_141660.pdf

2 <http://trade.ec.europa.eu/doclib/html/157648.htm>

2016. In order to capture the impact of the implementation of the FTA, the evaluation also examines data prior to the start of the provisional application of the FTA.

The evaluation covers all areas of the EU-Korea FTA except those which have not yet been applied pending the final conclusion of the FTA, i.e. certain provisions of the Protocol on Cultural Cooperation and the criminal enforcement provisions with respect to the protection of intellectual property rights (IPR).

BACKGROUND

EU trade context and the EU-Korea FTA

In 2006 in its Communication "Global Europe"³ the European Commission set out a new approach on how the EU trade policy can contribute to stimulating growth and creating jobs in Europe. It made the case that in a globalised economy in which Europe sources and sells goods down long global supply chains, Europe's economic strength at home depended on its competitiveness in the world. The Global Europe strategy included an Action Plan for the EU's external competitiveness, which set out the intention of the European Commission to increasingly complement multilateral trade negotiations within the WTO framework with strategically-selected bilateral trade negotiations in order to liberalise tariffs further, to better address non-tariff barriers to trade, and to remain competitive among the EU's main trading partners, which had been actively negotiating FTAs with EU competitors. The Commission considered that bilateral FTAs could address many key issues that lay outside the current multilateral WTO framework such as investment, public procurement, competition, other regulatory issues and intellectual property rights enforcement.⁴

In order to address these objectives, the Global Europe strategy therefore proposed a "new generation" of carefully selected and prioritised FTAs which would be much more comprehensive in scope than the EU's previous bilateral Association and Economic Partnership Agreements. This new generation of FTAs would aim at a more ambitious level of trade liberalisation, focus on tackling non-tariff barriers through regulatory convergence, introduce internal mechanisms to monitor the implementation status and results, and include stronger provisions on intellectual property rights, competition, and sustainable development.⁵ Korea was identified as a priority partner under this new approach, given its large market potential, high level of protection with respect to imports from the EU, and a number of trade agreements with the EU's trade competitors. Negotiations with Korea were launched on this basis in 2007.

3 "Global Europe: Competing in the world", European Commission, 2006.

4 Commission Staff Working Document (SWD) - Annex to the Communication from the Commission on Global Europe, COM(2006) 567 final.

5 Global Europe strategy, section 4.2(ii) on Free Trade Agreements; see also the Commission Staff Working Document included as an Annex to the Global Europe Communication, COM(2006) 567 final.

The EU-Korea FTA subsequently became the first of this “new generation” of agreements which are comprehensive in scope and focus on substantially liberalising all trade in line with the Global Europe strategy. The EU-Korea FTA was also the first FTA negotiated by the EU with an Asian country. While certain aspects of this FTA are similar to previous EU FTAs (such as the provisions on tariff reduction), other aspects of the EU-Korea FTA break new ground in line with the more ambitious proposals under the Global Europe strategy, for example:

- Several chapters contain provisions that go beyond the relevant WTO obligations;
- The Annexes on electronic goods, motor vehicles and parts, pharmaceutical products and medical devices, and chemicals set out detailed sector-specific provisions;
- The chapter on services, establishment and e-commerce has broad coverage in terms of sectors and market access commitments;
- Chapter 13 on trade and sustainable development represents a novel approach for FTAs, linking trade with labour rights and environmental protection.

Other areas covered by the EU-Korea FTA in line with the specific recommendations for the EU’s new bilateral approach under the Global Europe strategy include competition, public procurement, intellectual property rights and geographical indications, and e-commerce. The EU-Korea FTA also provides for a comprehensive institutional framework to be established in order to oversee the implementation of the agreement. Specifically, the FTA created several committees and working groups which meet on a regular basis, providing both Parties with the means to discuss and cooperate on issues related to the FTA, as well as develop solutions for any problems that arise.

In October 2015, after the provisional application of the EU-Korea FTA in 2011, the EU announced its new trade and investment strategy “Trade for all”,⁶ which emphasises the growing importance of international trade as a source of job creation and enterprise growth in the European economy, and the need for securing a European foothold in global supply chains, as well as adjusting to trade in the digital age. It also covers issues of public procurement, competition, e-commerce, protection of innovation and regulatory cooperation. Additionally, it announced a commitment to greater transparency with regard to trade negotiations, as well as a commitment to using EU trade policy to promote key EU values such as sustainable development and human rights. The “Trade for all” strategy identified the EU-Korea FTA as a “prime example” of the new generation of EU FTAs and noted its success in limiting some of the negative transitional impacts of trade through adequate transition periods and safeguard clauses. It also drew on the early results of the EU-Korea FTA to provide recommendations for improving the effective implementation of future FTAs with respect to rules of origin, customs procedures and trade and investment promotion.

⁶ “Trade for all: Towards a more responsible trade and investment policy”, European Commission, 2015.

Objectives of the FTA

Article 1.2(2) of the EU-Korea FTA lists a total of eight objectives of the agreement:

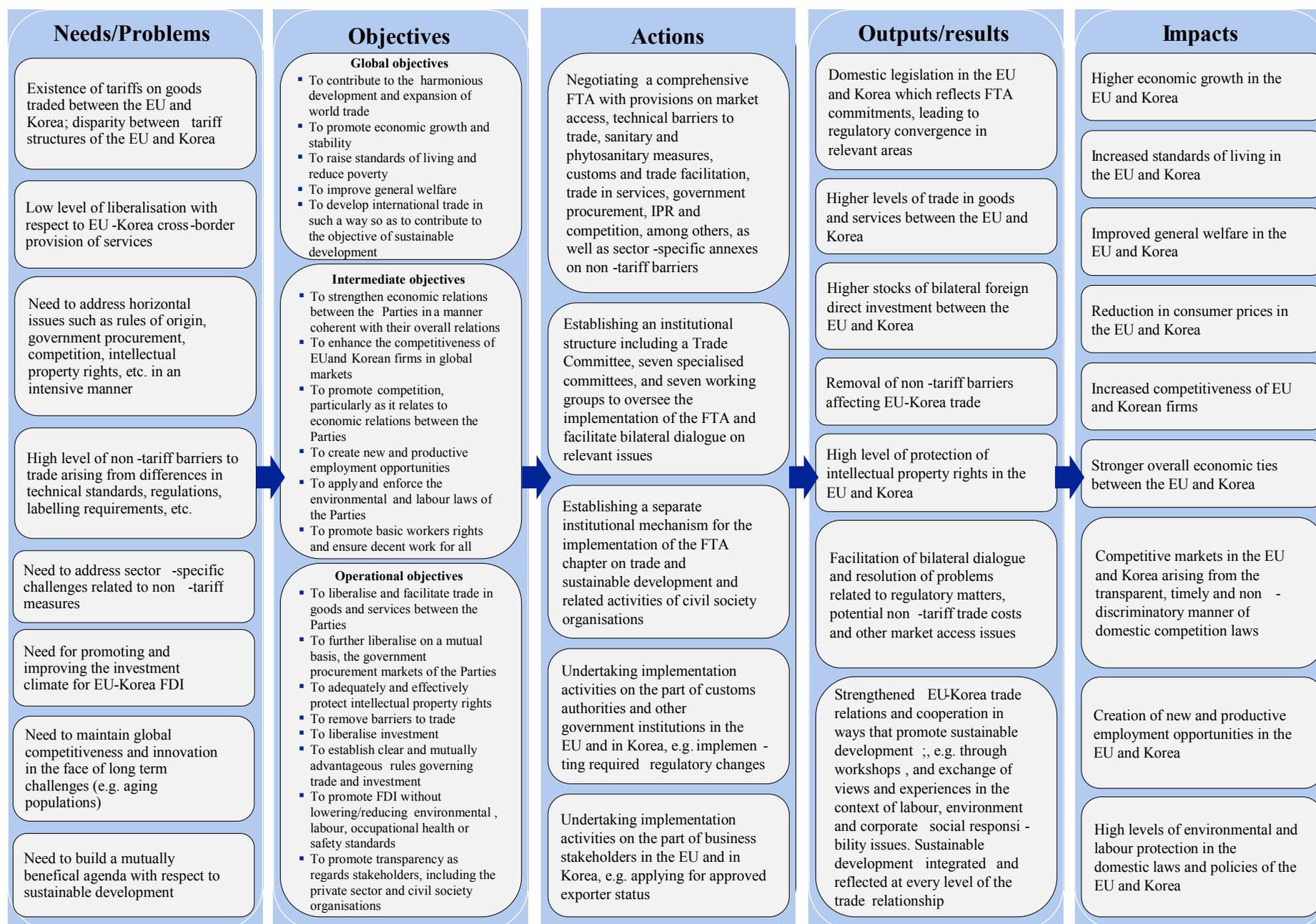
- a) *To liberalise and facilitate trade in goods* between the Parties, in conformity with Article XXIV of the General Agreement on Tariffs and Trade 1994;
- b) *To liberalise trade in services and investment* between the Parties, in conformity with Article V of the General Agreement on Trade in Services;
- c) *To promote competition in their economies*, particularly as it relates to economic relations between the Parties;
- d) To further liberalise, on a mutual basis, the *government procurement markets* of the Parties;
- e) To adequately and effectively *protect intellectual property rights*;
- f) To contribute, by removing barriers to trade and by developing an environment conducive to increased investment flows, to the *harmonious development and expansion of world trade*;
- g) To commit [...] to the development of international trade in such a way as *to contribute to the objective of sustainable development* and strive to ensure that this objective is integrated and reflected at every level of the Parties' trade relationship; and,
- h) *To promote foreign direct investment* without lowering or reducing environmental, labour or occupational health and safety standards [...]

Those objectives broadly reflect the needs and problems that were intended to be addressed through the EU's new bilateral trade approach as identified in the Global Europe strategy, i.e. the need to maintain global competitiveness by promoting openness and integration in the trade of goods and services with strategic partners in the face of stalled multilateral negotiations in the WTO; the need to address key horizontal issues such as investment, public procurement, competition, and IPR enforcement; the need to foster regulatory convergence in order to reduce non-tariff barriers to trade; and the need to strengthen sustainable development through bilateral trade relations.⁷

The objectives of the EU-Korea FTA and their links to the objectives pursued by trade liberalisation and FTAs more broadly are summarised in the below intervention logic, which shows the links between the needs and problems identified in the sustainability impact assessment (see section 2.2), the global, intermediate and operational objectives of the FTA, the actions undertaken, and the expected outputs/results and impacts.

⁷ Global Europe strategy, section 4.2(ii) on Free Trade Agreements; see also the Commission Staff Working Document included as an Annex to the Global Europe Communication, COM(2006) 567 final.

Figure 1: Intervention logic of the EU-Korea FTA



Ex-ante assessment of the FTA

As soon as negotiations for a Free Trade Agreement between the EU and Korea began in 2007, a sustainability impact assessment (SIA)⁸ was commissioned by the European Commission to assess the potential effects of the agreement on the EU and Korea in terms of expected economic, social and environmental impacts. The SIA found that Korea was a significant trade partner for the EU, but had a relatively limited share in overall EU external trade corresponding to roughly 2.8% of European imports and 2% of exports in 2006.⁹ Conversely, the EU formed a much larger share of Korea's external trade, comprising just under 14% of Korean exports and roughly 9% of Korean imports.^{10,11}

The SIA of the EU-Korea FTA was completed in 2008 and identified the following needs and problems related to trade between the EU and Korea:¹²

- The existence of tariffs on goods traded between the EU and Korea, in particular the disparity between tariff structures (with tariffs in Korea being significantly higher than the corresponding EU rates);
- A relatively low level of liberalisation with respect to the cross-border provision of services between the EU and Korea;
- The need to address horizontal issues such as rules of origin, government procurement, competition and intellectual property rights;
- A high level of non-tariff barriers to trade arising from differences in technical standards and regulations, labelling requirements, etc.;
- The need to address non-tariff measures in certain sectors, e.g. in the automobile, agricultural products and pharmaceuticals and cosmetics sectors;
- The need to promote investment and improve the investment climate for EU-Korea foreign direct investment;
- The need to maintain global competitiveness and innovation in the face of long term challenges, such as the aging populations in both the EU and Korea; and

8 Trade Sustainability Impact Assessment (SIA) of the EU-Korea FTA: Final Report – (Phase 3), available at http://trade.ec.europa.eu/doclib/docs/2008/december/tradoc_141660.pdf

9 SIA of the EU-Korea FTA: Final Report – (Phase 3), p. 46.

10 SIA of the EU-Korea FTA: Final Report – (Phase 3), p. 49.

11 For more detail and figures on the state of EU-Korea trade prior to the implementation of the FTA, see the analysis per FTA objective in the answer to EQ1 in section 5.1 of this report.

12 SIA of the EU-Korea FTA: Final Report – (Phase 3), pp. 250-260.

- The need to build a mutually beneficial agenda with respect to sustainable development that reflects the convergence in development levels between the EU and Korea.

The SIA anticipated significant, but not large, overall gains for Korea and modest gains for the EU relative to the size of the economy. In terms of social impacts, the SIA concluded that there were unlikely to be large inter-industry shifts in output and employment that could lead to disruption of labour markets in the EU or Korea as a result of the implementation of the FTA. The implementation of the agreement was not foreseen to have significant adverse environmental effects, since the projected expansion of trade was not predicted to utilise resources that are poorly managed or increase production that would lead to an expansion of pollution or other negative environmental externalities that are unregulated.¹³ The ex-ante estimations of the SIA are used throughout this paper to compare the initial expectations with the actual results observed since the provisional application of the FTA in 2011.

IMPLEMENTATION/STATE OF PLAY¹⁴

In line with the commitments undertaken by the EU and Korea, tariffs on the majority of goods fell to zero immediately after the start of the provisional application of the FTA. In certain industries, tariff cuts are being gradually phased-in. Before the start of the provisional application of the FTA, Korea had substantially higher import tariffs for European products than the EU had for Korean products. The FTA has corrected this imbalance. The EU-Korea FTA not only eliminated tariffs, but also succeeded in the reduction of non-tariff trade costs (NTTCs), which are caused by e.g. differences in technical standards, labelling requirements, etc.

The exports of goods from the EU to Korea have increased by about 60 percent from the period before the start of the provisional application of the FTA to the period after, with the pre-FTA average real value of quarterly exports rising from about EUR 7 billion to a post-FTA average of around EUR 11 billion. Korean exports also increased during this period, though at lower pace given the decrease in demand in the EU in the context of the financial crisis, i.e. from EUR 39.5 billion in 2010 to EUR 41.4 billion in 2016, an increase of 4.8%. This has turned the EU's trade in goods deficit of 11.6 billion EUR in 2010 into a surplus of 3.1 billion EUR in 2016.

The 2017 Annual report notes that the EU exports to Korea grew from 2% of total EU exports in 2010 to 2.6% in 2016, making Korea the EU's ninth largest export market in 2016 and eighth largest partner in terms of total trade. On the Korean side, despite a slight decline in the EU's share in total Korean exports, the EU's share in total Korean imports increased from 9.1% before the start of application of the FTA to 12.8% in 2016, making the EU the second largest origin of Korean imports (after China) and its third largest partner in terms of total

¹³ SIA of the EU-Korea FTA: Final Report – (Phase 3), pp. 254.

¹⁴ The data and the statistics in this SWD are based on the analysis carried out by the consultant as presented in the Final report.

trade (after China and the US). The Annual report concludes that in the "vast majority of areas the implementation [the FTA] works well and strongly supports economic development on both sides".¹⁵

With respect to services, after the start of the provisional application of the EU-Korea FTA, EU services exports to Korea grew from EUR 7 billion to about EUR 9 billion from 2011 to 2014 (the last year in our sample), an increase of 29%; imports grew even more strongly from EUR 4 billion to EUR 7 billion in the same period, an increase of 75%. The 2017 Annual report, however, found that EU service exports to Korea had increased by 49% between 2010 and 2015 (from EUR 7.4 billion to EUR 11.1 billion) and that EU service imports from Korea had increased by 32% between 2010 and 2015 (from EUR 4.7 billion to EUR 6.3 billion).¹⁶

With respect to the implementation of regulatory changes, the Korean government proceeded with the transposition of its FTA commitments into domestic legislation and administrative rules already before the start of the provisional application of the EU-Korea FTA. In addition, trade-related legislation in Korea has been amended since 2012 in areas such as customs procedures, general import and export procedures, standards and technical requirements, sanitary and phytosanitary requirements, as well as other areas. However, the observed regulatory changes cannot be mono-causally ascribed to specific commitments such as those of the EU-Korea FTA. No changes to EU legislation were required.

Concerning the implementation of customs-related provisions, the EU-Korea FTA is the first EU FTA where only self-certification (the origin declaration) is relied on for exporting goods. In order for exporters to be able to issue an origin declaration under the EU-Korea FTA and to then benefit from the tariff preferences of the FTA, they have to apply for approved exporter status ("AES"). The consultant concluded that, to a large extent, this system has worked satisfactorily, as confirmed by EU stakeholders. While preference utilisation rates ("PUR"s)¹⁷ for EU exports remain at a lower level compared to the Korean PURs, they have also increased significantly in recent years. In 2016, the Korean preference utilisation rate on the EU market was 87%, while the EU preference utilisation rate on the Korean market was 71% - in both cases the highest rate ever. This is also confirmed by the findings of the 2017 Annual

15 European Commission, Annual report on the implementation of the EU-Korea FTA, COM(2017) 614 final, p. 12.

16 Note however that the figures found in this study and the figures used in the European Commission's 2017 Annual Report are not always directly comparable, as this evaluation aimed to identify causal effects of the FTA while the 2017 annual report is based on descriptive trade data. Additionally, the data presented by this evaluation and the Commission's Annual Report cover slightly different time periods.

17 The preference utilisation rate (PUR) refers to the share of exports making use of the preferential tariffs. For example, the PUR of EU goods on the Korean market is given by the following ratio:

(The value of EU exports to Korea that enter Korea under the preferential tariffs)/(The value of all EU exports that are eligible for the preferential tariffs)

report of the European Commission on the implementation of the EU-Korea FTA ("The 2017 Annual Report")¹⁸.

As regards the promotion of competition in the Korean economy, the EU-Korea FTA had so far limited impact except for the increased competitive pressure on the Korea through increased trade in goods and services. Concerning public procurement, the results of the evaluation do not provide any evidence for an increase in Korean procurement from EU providers due to the FTA.

On IPR, Korea has advanced intellectual property rights legislation in general, which has been further improved through international agreements in recent years. No major issues concerning the initial list of geographical indications protected through the EU-Korea FTA were identified in the evaluation. The remaining specific problems with respect to implementation of the provisions of the FTA on protection of intellectual property include the extension of the initial list of GIs and the protection of the public performance rights of authors, producers and performers in Korea.

With respect to impacts of the FTA on consumers, the FTA improved welfare by slightly reducing prices and slightly increasing income in both the EU and Korea, with this effect being more pronounced in Korea. The effects of the FTA on wages are minor, but positive for all EU Member States and Korea. The EU-Korea FTA is assessed to have not changed the status quo of human and labour rights in Korea as they were when the FTA came into effect, in the sense that little change - positive or negative- relative to the 2011 situation and/or longer term trends can be observed regarding these rights. The only right for which a minor impact of the FTA can be determined is the right to food. According to the evidence from the economic analysis, food prices have decreased to a minor extent as a direct result of the FTA.

The environmental analysis shows that due to the EU-Korea FTA, CO₂ emissions in the EU would have increased by 0.12 percent if there were no emissions trading system (ETS) in place. Since the ETS covers most industrial CO₂ emissions in Europe, it most likely has prevented the realisation of these CO₂ emission changes. In Korea, emissions increase by 0.19 percent compared to the counterfactual situation of not having an FTA. The EU-Korea FTA leads overall to a net reduction of global CO₂ emissions by 4.1 million tonnes CO₂. This global CO₂ reduction can almost be fully ascribed to only two countries that suffer from trade diversion effects, namely China and the United States.

As regards the implementation structures for the EU-Korea FTA, the main one is the EU-Korea Trade Committee, which is co-chaired by the Korean Minister for Trade and the European Commissioner for Trade. The Committee has decision-making powers and supervises the work of all committees, working groups and other bodies established under the FTA. The Trade Committee meets on an annual basis. The FTA also established seven specialised committees and seven working groups to monitor and support the implementation

¹⁸ European Commission, Annual report on the implementation of the EU-Korea FTA, COM(2017) 614 final. Further details on trade flows between the EU and Korea can be found in section 5.1 of this synthesis report.

of specific provisions of the FTA. Those are: Committee on Trade in Goods, Committee on Sanitary and Phytosanitary Measures, Customs Committee, Committee on Trade in Services, Establishment and Electronic Commerce, Committee on Trade and Sustainable Development, Committee on Outward Processing Zones on the Korean Peninsula, Committee on Cultural Cooperation, Working Group on Motor Vehicles and Parts, Working Group on Pharmaceutical Products and Medical Devices, Working Group on Chemicals, Working Group on Trade Remedy Cooperation, Working Group on Mutual Recognition Agreements on Services, Working Group on Government Procurement, Working Group on Geographical Indications. In parallel to these committees and working groups, two bilateral, sector-specific dialogues also regularly take place, namely the Electronics Dialogue and the Intellectual Property Dialogue.

Additionally, Chapter 13 of the FTA provides for a separate institutional mechanism for consultation with civil society. It provides that the EU and Korea establish each a domestic advisory group (DAG), whose purpose is to advise on the implementation of the TSD Chapter. Representatives of the two DAGs are to meet annually at a Civil Society Forum (CSF) to conduct a dialogue encompassing sustainable development aspects of EU-Korea trade relations. These mechanisms have been implemented as envisaged in the EU-Korea FTA and have promoted dialogue between the EU and Korea concerning trade and sustainable development matters.

A more detailed analysis of the impacts of the FTA is provided in the subsequent sections.

METHOD

Overview of approach

The evaluation examined the effectiveness and efficiency of the EU-Korea FTA in view of achieving its objectives, the relevance of the EU-Korea FTA regarding current trade issues faced by the EU and Korea, and the coherence of the EU-Korea FTA with the EU-Korea Framework Agreement and with the objectives of the EU trade policy.

This evaluation replies to five evaluation questions (EQs) related to the evaluation criteria of effectiveness, efficiency, coherence and relevance:

- EQ1: To what extent have the objectives as laid down in Article 1.1(2) of the EU-Korea FTA been achieved?
- EQ2: Has the EU-Korea FTA had unintended side effects, and if so, which ones?
- EQ3: To what extent has the EU-Korea FTA been efficient with respect to achieving its objectives?
- EQ4: To what extent has the EU-Korea FTA been coherent with the EU-Korea Framework Agreement and with current EU trade policy?
- EQ5: To what extent are the provisions of the EU-Korea FTA relevant for addressing current trade issues faced by the EU and Korea?

The evaluation is based on an external study carried out by CIVIC Consulting and Ifo Institute¹⁹. The findings of the study are presented in the Final Report of the study (hereinafter the "Final Report"). It is further complemented by internal analysis of the Commission services based on the Annual reports on the implementation of the EU-Korea FTA, the chief economist statistics and the experience from the FTA implementation.

The consultant used the following methodological tools to produce the analysis presented in its Final Report:

- *Review of literature and data*, covering a total of 160 reports, documents and academic articles, as well as data from numerous databases and sources including TARIC, WITS, COMEXT, UN-Comtrade, the World Input-Output Database (WIOD), the Exporter Dynamics Database (EDD) and others;
- *Stakeholder consultation*²⁰, consisting of:
 - an open public consultation;
 - a survey on the impact of the EU-Korea FTA on Small- and medium-sized enterprises (SMEs);
 - a survey on the impact of the EU-Korea FTA;
 - a civil society dialogue meeting;
 - a stakeholder workshop;
 - an evaluation website that informed stakeholders throughout the evaluation process.
 - A total of 94 *in-depth interviews*, covering EU and MS-level business associations, EU companies, government entities, and other stakeholders (including the International Labour Organization (ILO), European, international and Korean trade union federations, and other organisations in the EU and Korea);
- *Eight sectoral and cross-cutting case studies*, focusing on:
 - Automotive (passenger cars);
 - Agriculture;
 - Electronic goods;
 - Environmental goods/services;
 - Postal services;
 - Rules of origin;

19 Information about the study can be found at the consultant's website: <http://www.eukorea-eval.com/>

20 More information can be found at: <http://www.eukorea-eval.com/consultation/> and <http://ec.europa.eu/trade/policy/countries-and-regions/countries/south-korea/>, as well as Annex 2 of this SWD.

- Use of tariff preferences; and,
 - Implementation of institutional mechanisms of the trade and sustainable development (TSD) chapter.
- *A total of 15 specific analyses*, most notably a descriptive analysis of trade data regarding goods and services, an econometric analysis of trade flow data, a simulation analysis, analyses of FTA impacts on SMEs and consumers, a social analysis, an analysis of FTA impacts on human and labour rights, as well as an analysis of environmental impacts.

Limitations and robustness of the findings²¹

In certain areas, trade statistics used for the evaluation of the EU-Korea FTA have proven to be insufficient or limited, especially regarding services and trade activities of small- and medium-sized enterprises. Also, many databases offer only incomplete country or product samples. Inconsistent reporting of certain variables in specific countries make a detailed analysis even more challenging, particularly because a sound evaluation of a bilateral agreement such as the EU-Korea FTA requires information on global trade relations at a very detailed level. Furthermore, frequent changes in the definition of variables and differing methodologies of various statistical databases complicate empirical assessment. The consultant reviewed all of the available data and methodologies and selected the best possible approach in order to derive meaningful final results. There will always be limitations and difficulties associated with data collection and modelling however the consultants clearly identify these throughout the evaluation.

As regards the economic analysis, the data on tariffs used by the consultant is based on the integrated tariff database of the EU - "TARIC"²². Data on trade in goods were accessed through the COMEXT and the UN-Comtrade databases. COMEXT is managed by Eurostat, the official statistical office of the European Commission, and is assembled on the basis of Member States' national statistics. The UN-Comtrade database is the United Nations' official source for trade data and was used in order to have a closer look at the Korean perspective and in particular to benchmark the performance of EU exports vs. competitors' exports to Korea. The statistics used in the evaluation are from official EU and UN databases and are the most reliable data available.

Where the data was less comprehensive, e.g. in the area of social rights, as well as human and labour rights, disentangling the effect of the FTA posed some difficulties. The reported relationships only measure correlations, which do not imply causation. In these cases, the analysis therefore mostly consists of a comparison of trends in the pre-FTA and post-FTA periods, using the available data series and supported by complementary research.

²¹ See more information on the methods used in Annex X of this SWD, as well as in the Final Report.

²² For more details consult: https://ec.europa.eu/taxation_customs/business/calculation-customs-duties/what-is-common-customs-tariff/taric_en

Conclusions were triangulated with the results of the stakeholder interviews and the consultation, which covered more than 150 organisations and 6 individuals from Korea and the EU.

The general equilibrium model ("CGE") deployed in the economic analysis uses the World Input-Output Database ("WIOD") data which has both advantages and shortcomings. Due to the calculation by input-output linkages, the data also reflect internal trade. Over all, WIOD data seem consistent, less error prone, and reliable. On the other hand, trade models are subject to certain limitations. For instance, the Ifo Trade Model is static, which makes it unable to predict economic adjustment paths and costs.

Furthermore, this evaluation covers only a limited period of time after the start of the provisional application of the agreement in July 2011. Empirical studies show that the effects of FTAs unfold only gradually.²³ For many products, the agreement specifies phase-in schedules for tariff reductions. Horizontal provisions may take time to fully develop their effects. The same is true for the spread of information, e.g., related to procurement markets. Finally, some variables such as investment stocks accumulate only gradually over time. It is therefore possible that the present analysis underestimates the effects of the FTA.

In view of the above considerations, the consultant recommends that the collection and presentation of relevant trade statistics by responsible EU bodies is improved (e.g. made more consistent and/or comprehensive) to facilitate in-depth analysis of causal effects of EU trade agreements in the future.

Despite the above mentioned limitations, the Commission considers that the output of the study is of good quality and can be relied upon.

ANALYSIS AND ANSWERS TO THE EVALUATION QUESTIONS²⁴

As referred above, the evaluation replies to five evaluation questions related to the evaluation criteria of effectiveness (EQ1 and 2), efficiency (EQ3), coherence (EQ4) and relevance (EQ5). The following sub-sections provide detailed replies to those questions and are based on the findings of the consultant submitted in the Final report of the evaluation.

The evaluation criterion "*effectiveness*" refers to the extent to which an intervention has reached its objectives. In the case of the EU-Korea FTA it therefore concerns the extent to which the specific objectives as laid down in Article 1.1(2) (a) to (h) of the EU-Korea FTA have been achieved, as well as whether the FTA contributed to the overarching objectives laid down in the FTA Preamble, namely harmonious development and expansion of world trade,

23 Jung, Benjamin. "Gradualism and Dynamic Trade Adjustment: Revisiting the Pro-Trade Effects of Free Trade Agreements". *Economics Letters* 115 (2012): 63-66.

24 All figures provided in this SWD which are not otherwise cited are the results of the analysis as provided in the Final report of the study.

promotion of economic growth and stability, poverty reduction, raising standards of living, improvement of the general welfare and contribution to sustainable development.

EQ1: To what extent have the objectives as laid down in Article 1.1(2) of the EU-Korea FTA been achieved?

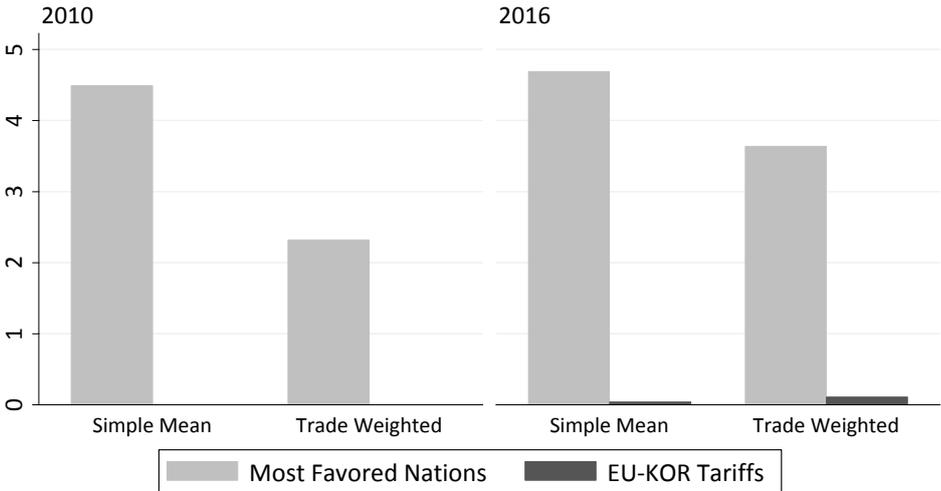
Objective (a): To liberalise and facilitate trade in goods between the Parties, in conformity with Article XXIV of the General Agreement on Tariffs and Trade

Prior to the provisional application of the FTA in 2011, the Korean exports to the EU were subject to average Most-favoured nation (MFN) tariffs of around 4.5%, while conversely, the EU exports to Korea were subject to average MFN tariffs of just under 8%. In line with the commitments undertaken by the EU and Korea in the FTA, tariffs on the majority of the goods fell to zero immediately after the start of the provisional application of the FTA in 2011.²⁵ In certain industries, in particular for sensitive agricultural goods, tariff cuts have been gradually phased in. Figure 2 below displays EU tariffs that were applied to MFN countries in 2010 (the last year for which MFN tariffs applied to Korea) and to Korea and MFN countries in 2016. While in 2010 MFN tariffs applied to Korean imports, after the start of the provisional application of the FTA both the simple average and trade-weighted tariffs imposed by the EU on Korean imports were drastically reduced to nearly zero.²⁶

25 There are various sources of data on tariffs. In this report, we rely on the integrated tariff database of the EU (TARIC). For further details, refer to https://ec.europa.eu/taxation_customs/business/calculation-customs-duties/what-is-common-customs-tariff/taric_en

26 The simple average of tariffs refers to an arithmetic average of all tariffs that are legally in force. Note that this average can change slightly over time when classifications change (as happened in 2011/2012). A drawback of this measure is, however, that simple averages are upward-biased in the case of very high single ad valorem tariffs that are not applied because of their prohibitive effect on trade for these goods. Hence, one can overcome this issue by weighting tariffs with the respective trade share to get a more accurate picture on the economic importance of tariffs. Trade-weighted averages can also be biased measures of the overall trade restrictiveness of tariffs: a product which is not traded at all because of a prohibitive tariff enters the average with a weight of zero. Also note that average tariffs can change over time because of changing weights even if product-level tariffs do not change.

Figure 2: EU tariffs on imports, Korea vs. MFN countries

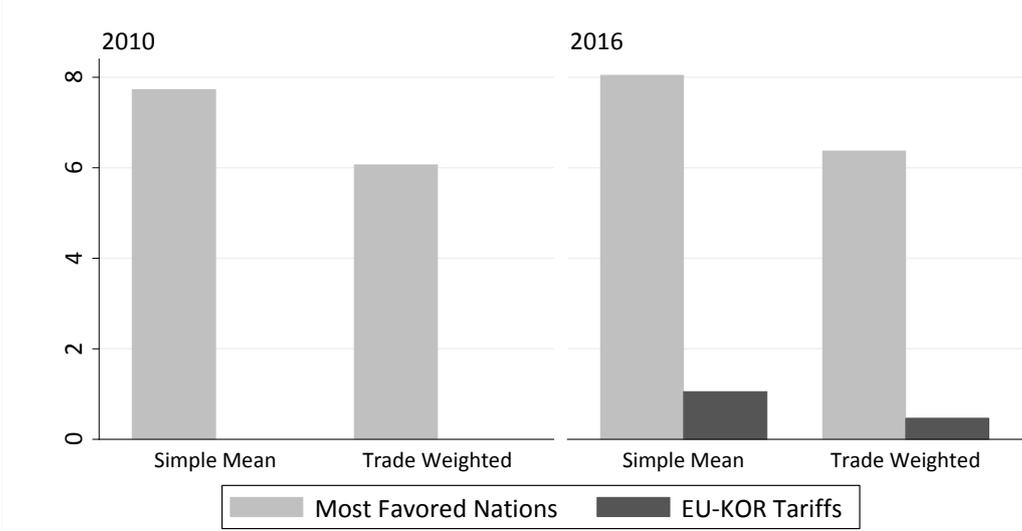


Source: CIVIC's own compilation, based on TARIC (2017), COMEXT (2017).

Before the provisional start of the EU-Korea FTA (in 2010), there were only MFN tariffs imposed between the EU and Korea. The EU-KOR tariffs indicated in this figure are those imposed from the EU on Korean imports in 2016 (the most recent year for which data are available). The difference between MFN tariffs (grey bars) and EU-KOR tariffs (black bars) in 2016 visualises the effectiveness of the EU-Korea FTA on tariff reduction.

Figure 3 below plots Korean tariffs on imports from the EU. At first glance, it stands out that Korean average tariffs before the start of the provisional application of the agreement (when MFN tariffs applied) were around 35 percent higher on average than EU tariffs. For 2016, MFN tariffs are observed as unchanged while preferential tariffs under the EU-Korea FTA fell to 1 percent and less than 0.5 percent, respectively, depending on whether simple averages or trade-weighted averages are examined. Hence, the absolute tariff reduction was quite substantial in both the EU and Korea.

Figure 3: Korean tariffs on imports, EU vs. MFN countries



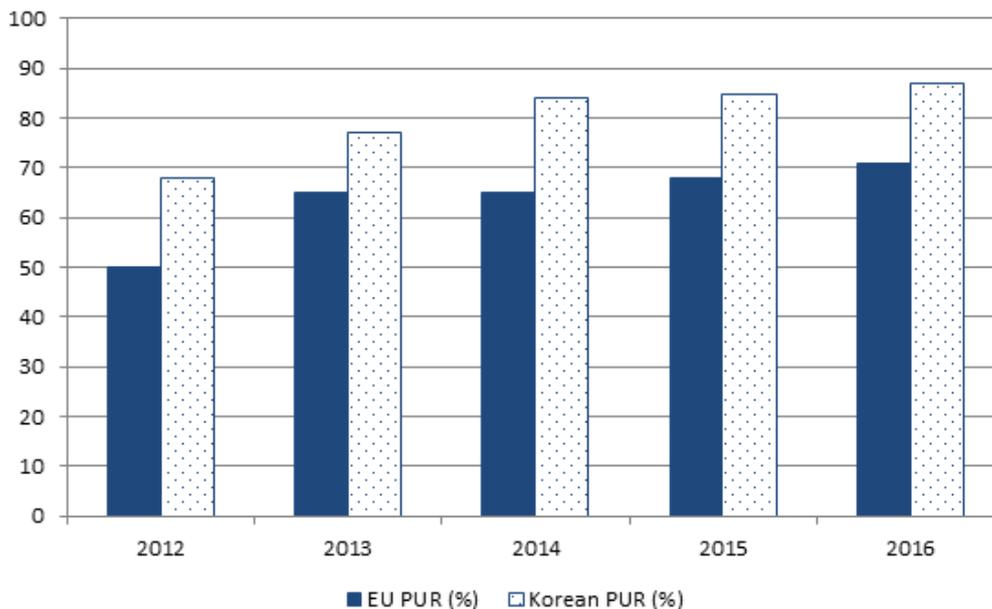
Source: CIVIC's own compilation, based on TARIC (2017), COMEXT (2017).

Before the provisional start of the EU-Korea FTA (in 2010), there were only MFN tariffs imposed between the EU and Korea. The EU-KOR tariffs indicated in this figure are those imposed from Korea on EU imports in 2016 (the most recent year for which data are available). The difference between MFN tariffs (grey bars) and EU-KOR tariffs (black bars) in 2016 visualises the effectiveness of the EU-Korea FTA on tariff reduction.

However, in 2016, five years after the start of the provisional application of the FTA, the tariff reduction schedule has not yet been fully implemented. About 55 percent of the overall tariff burden faced by EU exporters in Korea in 2010 (EUR 1.6 billion) disappeared in 2011. Overall, as of 2016, the phase-in of tariff reductions for EU imports from Korea has gone further than the phase-in of tariff reductions for EU exports to Korea. This can be seen through the difference in trade-weighted import tariffs in Figures 2 and 3 above.

Exporters have made extensive use of the preference utilisation rates (PUR) under the EU-Korea FTA as described above. Since the utilisation of tariff preferences requires certain requirements to be met, it cannot be expected that all firms use these preferences immediately at the start of the provisional application of the agreement. Rather, the share of exporters making use of the preferences gradually increases over time. Figure 4 shows that this is what has happened since 2011. The EU PUR increased from 50 percent in 2012 to 66 percent in 2013, remaining stable from 2013-2015 before increasing to 71 percent in 2016. In contrast, the Korean PUR increased steadily from 68 percent in 2012 to 87 percent in 2016.

Figure 4: Preference utilisation rates in Korea and the EU (%)



Sources: Own compilation, based on the EU-Korea FTA annual reports, 2013-2016.

The above figure shows that the EU PURs continue to be lower than the Korean PURs.²⁷ The reasons identified by this evaluation stem from stakeholders' consultation and literature review and are as follows:

- *Low MFN tariffs:* Low MFN tariffs can be a reason for not utilising FTAs, as there is a lower opportunity cost of not utilising preferential tariffs in sectors where MFN tariffs are low to begin with;
- *Government promotion and support for businesses:* The Korean government devotes substantial resources to educating companies and assisting them in using the EU-Korea FTA, contributing to the comparatively higher PURs;
- *Costs vs. benefits of utilising preferences:* Rules of Origin may lead companies in certain sectors not to take advantage of tariff preferences, due to the costs of calculating origin for companies that frequently change suppliers. Those costs may also exceed the benefits of the use of preferences or the difficulty of preparing AND keeping track of all the relevant documentation²⁸.

²⁷ Among the business respondents to the open public consultation, 9 out of 14 (64%) indicated that they make use of the tariff preferences under the EU-Korea FTA. Among those that have not made use of the preferences, reasons included not knowing how to take advantage of the tariff preferences, the tariff preferences not being relevant to companies' products, and "other" (one EU chemical company elaborated upon this as a lack of competitiveness with Korea).

²⁸ This was confirmed by participants in the stakeholder workshop on 10 July 2017, who noted that EU companies are deeply enmeshed in the global supply chain, which sometimes renders it impossible for manufacturers (especially in more complex industries) to identify where their materials originate from.

- *Requirements for AN "approved exporter status"*: Applying for an "approved exporter status" may be resource- and time-intensive. While it was burdensome at the beginning of the implementation of the agreement, it seems no longer an administrative constraint;
- *Direct transport requirement* : this prevents exporters trading via their regional hubs in Asia to benefit from the tariff preferences and,
- *Origin criteria not met*: few exporters whose products do not meet the origin criteria of the EU-Korea FTA are not eligible to use preferences (e.g. the diamonds exported from the EU to Korea are no longer cut and polished in the EU).

The lower EU preference utilisation rate did not, however, affect the effectiveness of the FTA to liberalise trade in goods. The exports of goods from the EU to Korea have increased by about 60 percent from the period before the start of the provisional application of the FTA to the period after, with the pre-FTA average real value of quarterly exports rising from about EUR 7 billion to a post-FTA average of around EUR 11 billion.²⁹ EU exports to Korea have strongly outperformed exports to other regional trade partners of the EU such as Japan and Taiwan. The relative importance of Korea as an export market for EU producers has increased from 2.0 percent to 2.5 percent after the agreement. Korean exports to the EU needed slightly more time to pick up but have then clearly outperformed EU imports from other regions.

Moreover, since the start of the provisional application of the FTA, the bilateral EU trade deficit in goods with Korea has turned into a surplus over time. Total EU exports to Korea have increased both because exporters sell higher quantities and because they sell at higher prices, signalling an upgrading of quality. A similar phenomenon can be observed for Korean exports to the EU. Both the number of products imported from Korea and the number of products exported to Korea increased significantly after 2011, suggesting gains in product availability in both the EU and Korea.

The econometric analysis showed that the EU-Korea FTA has increased EU exports to Korea on average by 54 percent and Korean exports to the EU by 15 percent between 2011 and 2014 (the last year with complete data)³⁰. The results of the econometric sectoral analysis indicate that 92 percent (49 out of 53) of the estimates of the effects of the EU-Korea FTA on EU exports to Korea are positive; 84 percent of those (41 out of 49 sectors) are statistically significant.³¹ This is a remarkable result in light of the wide heterogeneity across sectors and, even more importantly, in light of the short time span for which data are available.³²

29 Averages of the periods 2006-2011 (pre FTA) vs 2011-2016 (post FTA).

30 Note that as of the last year in the sample - 2014, the agreement was not fully phased in and the economic effects have certainly not fully ramped up either. Hence, the estimated effects can be understood as lower bounds of the long-run effects.

31 This refers to the 10 percent significance level.

32 Only two of the negative estimates are statistically significant. These estimates are for "Legal and accounting, management, consultancy" and "Advertising and market research".

Conversely, 73 percent (40 out of 55) of sectoral estimates of the EU-Korea FTA's effects on Korean exports to the EU are positive, and more than half of them are statistically significant.³³ In combination with the previous finding, this result confirms that the EU-Korea FTA had significantly stronger effects on EU exports to Korea than in the other direction. This is also in line with the SIA estimates.

Several sectors stand out based on their economic importance and the size of the trade effects. First, in the area of crop and animal production, the data suggests relatively symmetric trade-creating effects ranging between 28 percent (EU exports) and 34 percent (Korean exports). In fishing and aquaculture, the trade-creating effects amount to 102 percent for the EU, while there is no evidence for higher exports from Korea to the EU. In the area of processed food, beverages, and tobacco, the situation is relatively balanced with positive effects of 29 percent on EU exports and of 18 percent on Korean exports. Trade in textiles, apparel, and leather was also stimulated, but the effects do not come out as statistically significant. This is different for the manufacture of wood and cork, where, albeit from low initial levels, exports went up by 41 percent and 36 percent, respectively. In the area of manufacturing, one observes substantial trade creation effects that tend to be stronger for the EU than for Korea. One particularly important sector is the automotive sector. Here, the EU exports have increased by some 41 percent while the Korean exports have grown by 47 percent. In contrast, the area of other transport equipment has seen a much more asymmetric development, with EU exports having expanded by almost 80 percent (driven mostly by aircraft), while Korean exports (mostly consisting of ships) have not grown.

As regards the automotive sector, the results from the study point out to a discrepancy between the increased EU exports to Korea on one side and decreased sectoral value added of the automotive industry. This can be explained by the fact that the economic analysis of the consultant is based on the CGE model which does not take account of the spare capacity available in the automotive sector in the aftermath of the financial crisis which coincided with the provisional application of the FTA in mid-2011. Also, as the consultant further explains "in recent years, the EU automotive industry has undergone a process of servitisation and of international as well as intranational outsourcing. An increasing share of the value of output in the industry is made up by value added sourced from services industries, such as software development, or from other sectors such as electronics (the value-added of which increased by 0.39 percent in the EU).

If the EU-Korea FTA has led to a shift in EU car production towards high-end vehicles which make greater use of advanced features, it is very well possible that the additional sales to Korea contain a smaller share of genuine value added generated in the automotive industry as it is delineated in the data. Technological progress and changing consumer preferences therefore lead to industry definitions becoming increasingly blurred and to the development from a manufacturing-driven automotive industry towards a computer science-based industry.

33 Only three of the negative estimates are statistically significant. The negative and statistically significant estimates are for "Water collection, treatment and supply", "Public administration and Defence", and "Undifferentiated goods- and services activities".

Stakeholders have also stressed the importance of premium vehicles as a driver of EU exports, attributing this to a growing Korean demand for such vehicles; moreover, the reduction in tariffs has had a larger effect on higher-value luxury cars, leading to the greatest price reduction (in absolute terms) in this segment."

Based on the above, the Commission considers that the FTA has succeeded in liberalising and facilitating trade in goods between the EU and Korea. The Commission also acknowledges the existence of certain factors which prevent the exploitation of the full potential of the FTA. Those relate mainly to the burdensome customs procedures:

- *the administrative burden related to the approved exporter status (AES)*. The application process to obtain an AES and the required documentation vary across Member States and can be time- and resource-consuming. Also, the exporters needed time to adapt;

- *the direct transport rule*. It is considered to be burdensome for some industries who use regional hubs in Asia such as Singapore;

- *the use of tariff preferences*. In spite of recent growth, EU preference utilisation rates (PURs) continue to be lower than Korean PURs.

The consultant recommends that the EU addresses the above issues accordingly. The Commission considers this recommendation pertinent. However, since in previous free trade agreements the AES was only optional, exporters needed time to adapt. The Commission has already taken a number of actions to improve the situation such as developing relevant web tools to assist exporters.

As regards direct transport, the Commission has already raised the issue on numerous occasions with the Korean authorities and hopes to be able to include this issue in an FTA amendments package.

The Commission notes the lower utilisation of PURs by the EU exporters. However, as with the AES, the EU exporters needed time to get acquainted with the FTA. This also explains the improvement of the EU PURs – their use has been steadily increasing from 50 percent in 2012 to 71 percent in 2016. To facilitate the information for the EU exporters, DG TRADE has started developing online tools to better assist companies. Besides the awareness, the limited use of PURs can be attributed to the specificities of certain sectors. For example, the PURs are much less used in the machinery, electronics and chemical sectors. This could be due to the complexity of the process to obtain proofs of origin for all the multiple product components as a result of the global value chain production.

A specific issue related to the Rules of Origin concerns the increase of the percentage of non-originating materials in cars which has been done for the first time in the EU-Korea FTA – it increased from 40 to 45%. With time it appeared that this rule is better adapted to the new market conditions due to increasing outsourcing practices and the degree of global integration in the automotive industry. Despite the initial fears, this view is now supported by the EU car industry. The 45% has now become the new template in the EU FTAs - it has been agreed with Vietnam, Canada and Japan and more recently in the framework of the revision of the Mexico agreement, with some temporary additional flexibilities.

One of the more controversial provisions of the EU-Korea FTA was the possibility for a Duty Drawback (DDB)³⁴. Previous EU FTAs prohibited DDB. During the negotiations of the EU-Korea FTA, the duty drawback was an issue of concern for the EU automotive sector. As described in detail in the case study on the automotive sector³⁵, the European Commission has regularly monitored the use of duty drawback. The Commission has proposed a special safeguard clause on duty drawback to address potential future increases of foreign sourcing by Korean manufacturers. This mechanism foresees a cap on the refundable duties if the trade figures show that there was a notable increase in foreign sourcing by Korean manufacturers. Specifically, it has examined the foreign content in Korean exports of electronics, textiles, cars, and car parts to the EU. Thus far, the Commission has concluded that the possibility for a duty drawback for the aforementioned products did not have any significant impact on the Korean use of inputs imported from its neighbouring countries³⁶. Furthermore, no problems concerning duty drawback were raised in the interviews with businesses and other relevant stakeholders or on the open public consultation.

Objective (b): To liberalise trade in services and investment between the Parties, in conformity with Article V of the General Agreement on Trade in Services³⁷

Trade in services between the EU and Korea was relatively underdeveloped prior to the FTA. Figure 5 presents the evolution of EU-Korea services trade volume since 2006.³⁸ Trade in services grew moderately until 2008, dropped sharply during the financial crisis and then recovered quickly. From 2011 to 2013, trade in services increased quite rapidly, whereas the growth decelerated on the upper end of the data. In constant 2010 prices, the trade volume increased from EUR 10 billion to almost EUR 15 billion over the whole period, thereby corresponding to an increase of slightly less than 50 percent.

34 Under the Duty Drawback system, the duties paid on parts and components used for the production of a final product can be refunded when the final product is exported.

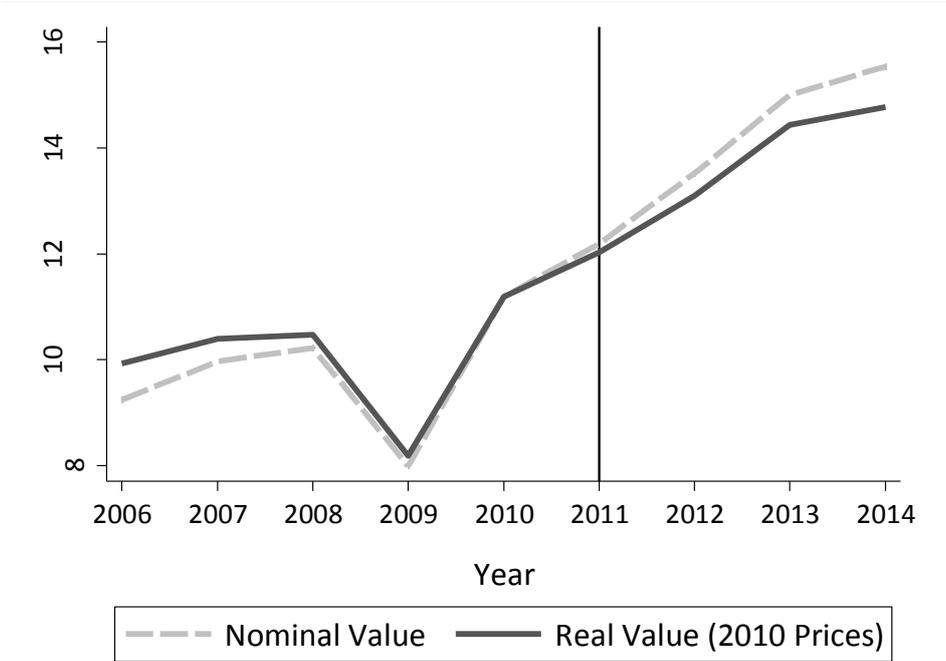
35 See section 10.1 of the Final Report.

36 See Annual reports on the implementation of the EU-Korea FTA: <http://ec.europa.eu/trade/policy/countries-and-regions/countries/south-korea/>

37 See Section X of the Final Report.

38 Data on the trade in services were accessed through the World Input-Output Database (WIOD). The WIOD was developed by leading institutes for economic research with funding from the European Commission. It covers a long time span (2000 to 2014) and comprises yearly statistics for all EU Member States and 15 other major economies. This data source was preferred to the database “Balance of payments - International transactions (bop)” by Eurostat, which underwent a change in methodology in 2013. Note that as this data concerns a very large data set of global trade flows, the data is not yet available for years beyond 2014.

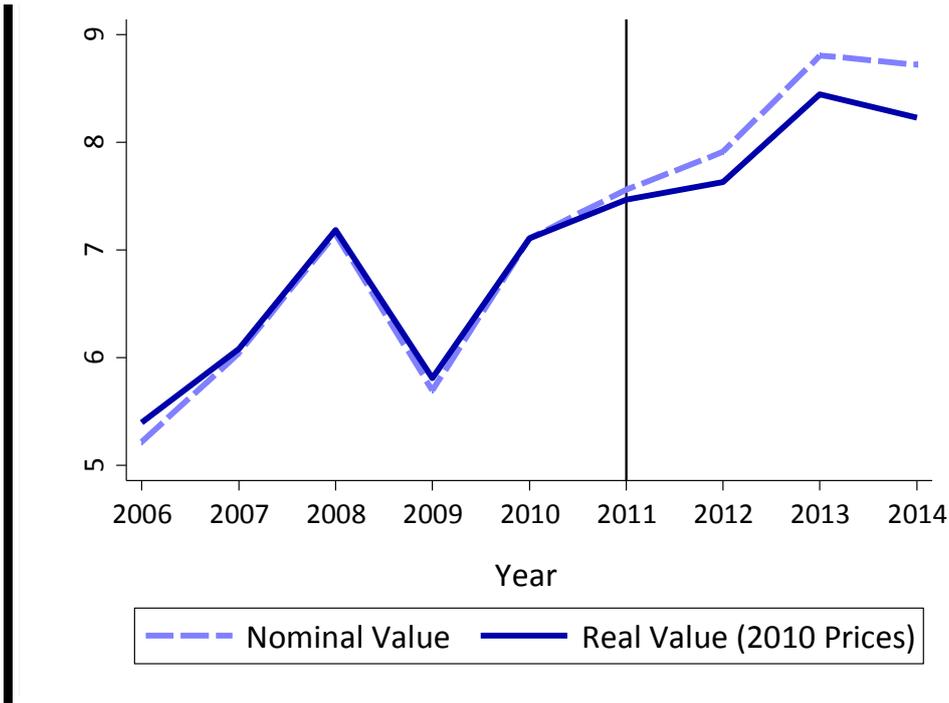
Figure 5: Services: EU-Korea trade volume (annually, EUR billion)



Sources: CIVIC's own compilation, based on WIOD (2017) and OECD (2016). The vertical line separates the period before the agreement from the one after the start of its provisional application. 2011 is, therefore, the first “treated” year.

The evolution of EU services exports to Korea is depicted in Figure 6, in which nominal as well as real values of EU exports in services to Korea are shown between 2006 and 2014. Already before the financial crisis, an increase in real terms of EUR 1.5 billion was recorded. However, this increase was offset in 2009. After the recovery in 2010 and 2011, exports of services grew moderately and peaked in 2013. In total, exports of services have risen from EUR 5.5 billion to EUR 8 billion in constant prices over the whole time span from 2006 to 2014, an increase of about 45%.

Figure 6: Services – EU exports to Korea (annually, EUR billion)

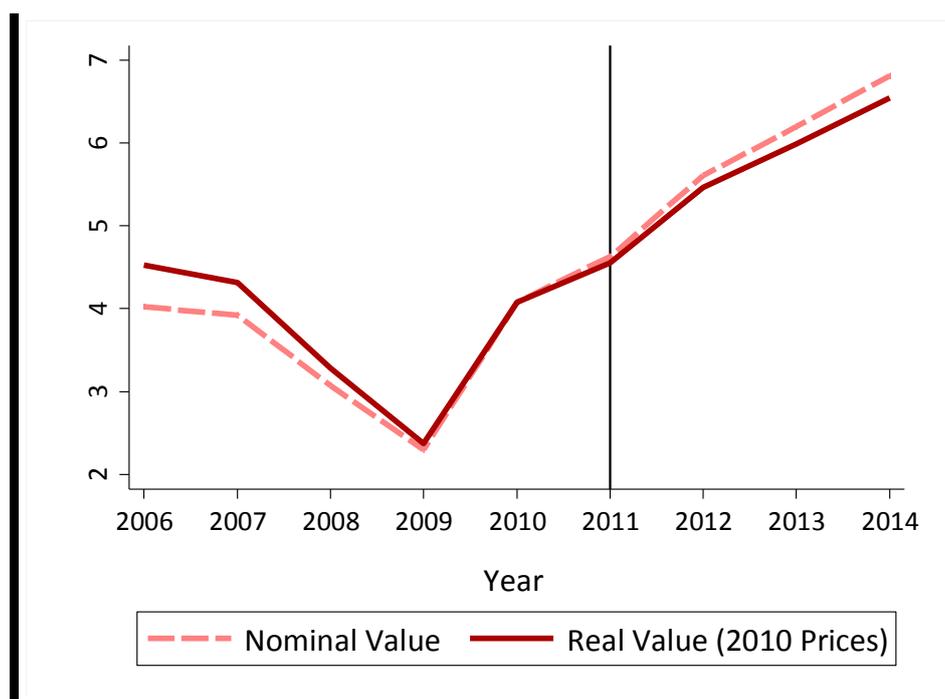


Sources: CIVIC's own compilation, based on WIOD (2017) and OECD (2016).

The vertical line separates the period before the agreement from the one after the start of its provisional application. 2011 is, therefore, the first “treated” year.

Figure 7 draws the same picture for EU imports in services from Korea. Again, a sharp drop during the financial crisis is followed by a rapid increase afterwards. Since 2009, EU imports of services continuously increased and, in contrast to the previous figure, this increase did not decelerate. Measured in constant prices, the trade volume increased from EUR 4.5 billion in 2006 (and 2011) to almost EUR 6.5 billion in 2014, an overall increase of about 44%.

Figure 7: Services – EU imports from Korea (annually, EUR billion)



Sources: Own compilation, based on WIOD (2017) and OECD (2016).

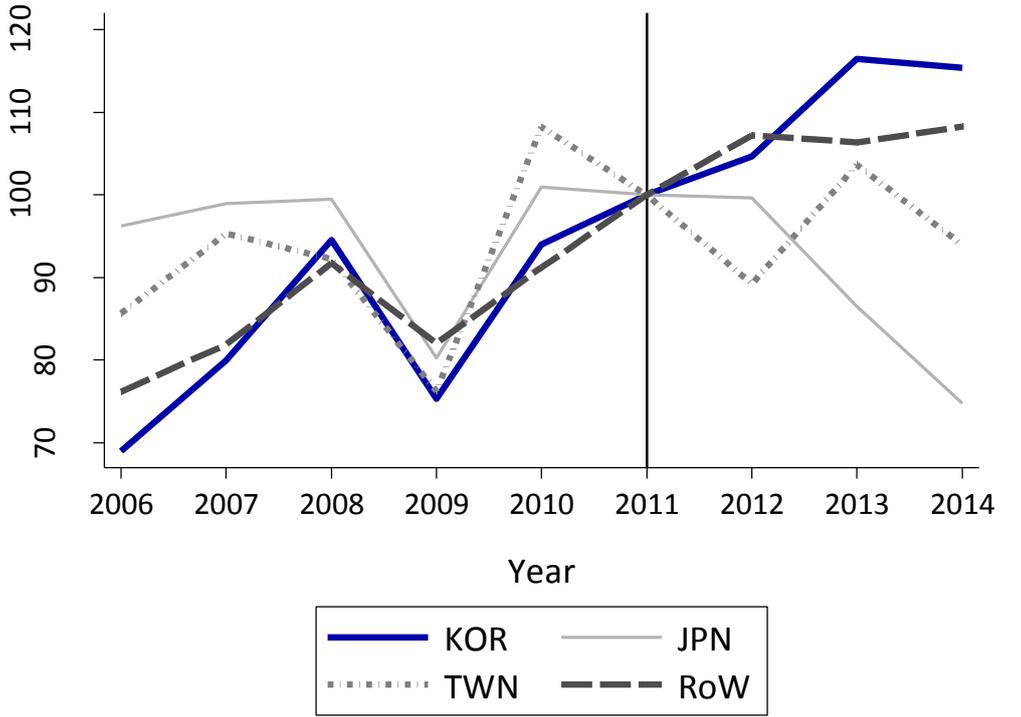
The vertical line separates the period before the agreement from the one after the start of its provisional application. 2011 is, therefore, the first “treated” year.

Figure 8 below illustrates the performance of EU services exports to Korea compared to Japan, Taiwan and the rest of the world (RoW).³⁹ As the trade volumes between these partners differ, all values are normalised to 100 for the base year 2011. Services exports to Korea had already increased significantly in the pre-FTA period. Compared to the initial level, services exports were more than 40 percent higher in 2011, thereby outperforming the other partner countries. With respect to the post-FTA period, the increase continued and ended at an almost 20 percent higher level in 2014. Again, exports to Korea were able to outperform services exports to Japan, Taiwan and RoW – see Figure 8. Thus, a positive causal effect on EU services exports is attributed to the FTA.⁴⁰

39 While figures show clear trends in the data, a causal interpretation cannot be easily determined. Identifying a causal effect would require a comparison of a world without a free trade agreement between the EU and Korea with a world with an FTA; of course, we cannot observe the former counterfactual world. However, we can compare the trade dynamics between the EU and Korea with trade between the EU and other partners that do not have an FTA with the EU. If these partner countries are similar to Korea, one could isolate the effect of the EU-Korea FTA on trade flows. Japan and Taiwan have been selected here for comparison (i.e. as a control group) as two economies that are relatively similar to Korea in terms of industry structure, and geographical and cultural distance to Europe.

40 This was also acknowledged by respondents to the open public consultation, as two-thirds of business associations and companies that had an opinion on whether the access to the Korean market for EU services had improved since the application of the EU-Korea FTA indicated that access had either slightly or very much improved.

Figure 8: EU services exports to Korea compared with other countries



Source: Own compilation, based on WIOD (2017).

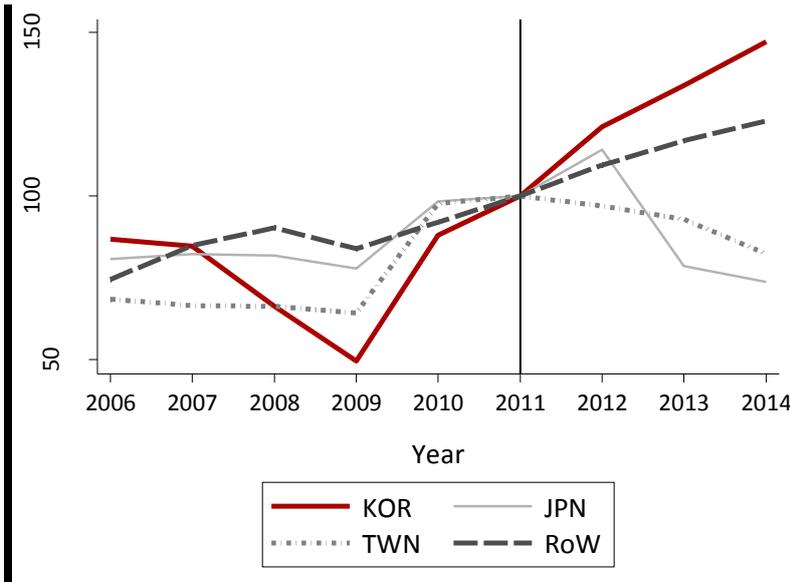
The vertical line separates the period before the agreement from the one after the start of its provisional application. 2011 is, therefore, the first “treated” year.

Addressing the question of relative trade performance for EU service imports as well, a similar picture needs to be drawn. Figure 9 highlights how EU service imports from Korea, Japan, Taiwan and the rest of the world have evolved over time. Focusing on the performance per period only, we observe service imports from Korea roughly in line with that of the other trade partners for the pre-FTA period. By contrast, for the post-FTA period, service imports from Korea increased drastically, thereby leaving behind imports from comparison countries. Again, the difference-in-differences approach allows us to conclude that FTA has had a clear positive impact on EU service imports from Korea.

The most recent numbers from Eurostat⁴¹ confirm a solid growth in the EU-Korea's relations with respect to trade in services: Korean exports to the EU grew 38% from 4,8 billion € in 2010 to 6,6 billion € in 2016 . EU services exports expanded 70% from 7,4 billion € to 12,6 billion € in the same period.

41 <http://ec.europa.eu/eurostat/web/international-trade-in-services/data/database>

Figure 9: EU Imports from Korea compared with other countries (annually, 2011=100)



Source: Own compilation, based on WIOD (2017).

The vertical line separates the period before the agreement from the one after the start of its provisional application. 2011 is, therefore, the first “treated” year.

In the area of services, the econometric analysis⁴² reveals strong heterogeneity across sectors; however, for many of them, one fails to find statistically significant effects of the FTA. Some effects are very large numerically (e.g., in the electricity and water sectors), but the level of trade was almost zero to start with, and still is. In these areas, the data reveal not trade of the service itself but of the goods relating to the provision of the service, such as turbines.

Specifically, there are substantial and rather symmetric trade creation effects for the construction industry: here, EU exports expanded by 39 percent while Korean exports grew by 26 percent. In retail trade, the econometric analysis yields positive effects of 54 percent and of 27 percent, respectively. In contrast, there are no statistically significant effects of the agreement on trade in postal services. Publishing or telecommunication services exports from the EU to Korea, in contrast, have benefited from the agreement, while Korean exports have not. In the area of financial services, there are strong trade creation effects on both sides, but again, the EU seems to benefit more than Korea from the agreement. For example, in the insurance sector, EU exports have more than doubled due to the FTA; Korean exports have grown by 30 percent. The picture is more mixed in other professional services. For example, no trade creation effects of the agreement are found for the advertising sector. In the health care sector, EU exports to Korea have more than doubled (+117 percent), while Korean exports to the EU have increased by only 6 percent.

⁴² For more details see the Final Report.

For both EU services imports and exports, financial and business services increased the most in absolute terms. Particularly for EU imports, this sector is quite dominant: it alone accounts for more than half of the total absolute increase. The second largest increase on the import side occurred for the wholesale and retail business, followed by transport and travel. Corresponding to the fact that it became the EU's second most important services export sector, growth in absolute terms of the construction business was also the second highest. Here again, transport and travel represent the number three sector in terms of absolute growth. These results broadly reflect the expectations set out in the SIA, which predicted an increase in the trade in services between the EU and Korea, especially with respect to financial services and particularly from the EU to Korea.^{43,44}

Accordingly, the Commission concludes that the EU-Korea FTA contributed to promoting trade in services and investment between the Parties, as expected in the SIA. There was a solid growth in the EU-Korea relations with respect to trade in services: Korean exports to the EU grew 38% from 4,8 billion € in 2010 to 6,6 billion € in 2016. EU services exports expanded 70% from 7,4 billion € to 12,6 billion € in the same period⁴⁵.

However, specific FTA implementation problems were detected due to, for example, lack of implementation of the postal services legislation in Korea.

One issue pointed out by the consultant is the exclusion of certain sectors (such as audio-visuals and air transport) from the liberalisation of services markets which, in the consultant's view, prevent the exploitation of the full potential of the FTA. The Commission recalls that the audio-visual and air transport services were not included in the Council mandate for the EU-Korea FTA negotiations. Air transport services are excluded from all FTAs as these activities are covered by separate sectoral bilateral agreements. Similarly, the EU excludes audio visual services from the liberalisations commitments in all of its FTAs. The EU-Korea FTA has, however, a Protocol on cultural cooperation. As for the economic impact, trade in audio-visuals and air transport does not seem to fall behind the growth in trade registered in other subsectors. The largest potential is found in the larger sectors such as tourism, business services, transport and delivery services as well as financial services. In addition, sectors such as professional services including legal services, architectural services are often considered to be key facilitators for expanding trade in services. A further deepening of the commitments in these areas can be considered. As both Korea and the EU have strong manufacturing bases, a further deepening of liberalisation commitments of the services sectors that align around manufacturing processes or after-sale services seems to have a considerable potential.

43 SIA of the EU-Korea FTA: Final Report – (Phase 3), p. 128, 192-4.

44 These results also correspond to the stakeholder feedback that was received as part of the open public consultation. Two-thirds of business associations and companies that had an opinion on whether the access to the Korean market for EU services had improved since the application of the EU-Korea FTA indicated that access had slightly or very much improved.

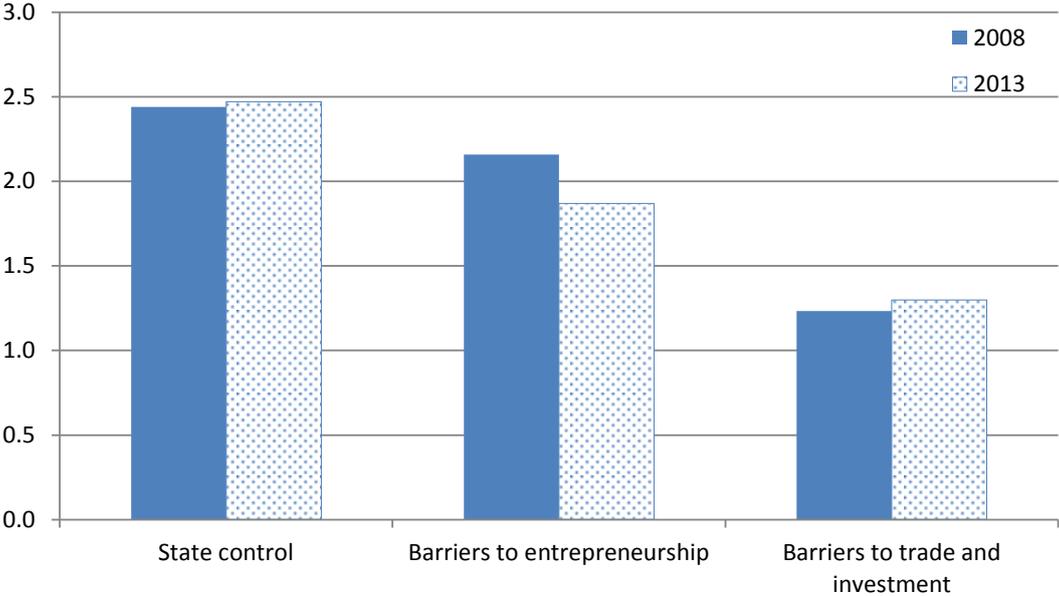
45 Data based on Eurostat.

Objective (c): To promote competition in their economies, particularly as it relates to economic relations between the Parties⁴⁶

Chapter 11 of the FTA concerns competition in the economies of the Parties. In addition to the provisions in Chapter 11, the EU and Korea concluded a bilateral Agreement concerning Cooperation on Anti-Competitive Activities in 2009,⁴⁷ in which the EU and Korea committed to cooperate in the application of competition law.

To measure differences in the competitive situation before and after the start of the provisional application of the EU-Korea FTA, the study considered the OECD Product Market Regulation (PMR) indicators.⁴⁸ In the following figure 10, the PMR data for 2008 and 2013⁴⁹ is examined, focusing on the composite indicators of *state control*, *barriers to entrepreneurship*, and *barriers to trade and investment*. The figure illustrates that Korea’s competitive situation does not appear to have changed significantly following the start of the provisional application of the FTA.

Figure 40: PMR indicators for Korea, 2008 and 2013



Source: Own compilation, based on OECD (2017).

46 Based on evidence provided in Section X of the Final Report.

47 <http://ec.europa.eu/competition/international/legislation/japan.pdf>

48 The OECD Product Market Regulation (PMR) indicators measure the degree to which policies promote or inhibit competition in areas of the product market where competition is viable. Koske, I. et al. (2015), “The 2013 update of the OECD’s database on product market regulation: Policy insights for OECD and non-OECD countries”, OECD Economics Department Working Papers, No. 1200, OECD Publishing, Paris. <http://dx.doi.org/10.1787/5js3f5d3n2vl-en>

49 Data for the period between 2008-2013 was not available.

Scores can range from 0-6, with lower scores denoting more competition-friendly areas.

The limited change in the quoted PMR indicator scores is consistent with the fact that the Korean economy continues to be dominated by industrial conglomerates. The four largest industrial groups (or *chaebols*)—Samsung, Hyundai, LG and SK—account for about half the value of the Korean stock market, with Samsung alone accounting for about one-fifth of Korean GDP. Additionally, about one-half of SMEs in Korea supply chaebol-affiliated firms.⁵⁰ Therefore, the scope for promoting free and undistorted competition in the Korean economy as a result of the FTA is rather limited

Subsidies are another important issue in the context of the EU-Korea cooperation on competition. Unlike many other FTAs, the EU-Korea FTA includes provisions on subsidies in the competition chapter.^{51,52} However, the Korean Monopoly Regulation and Fair Trade Act does not explicitly address any rules and regulations related to subsidies and/or state aid.⁵³ The desk research conducted for this evaluation furthermore found that no regulatory changes related to subsidies have been undertaken in Korea since the implementation of the FTA, an assessment that was shared by a number of Korean legal experts who were interviewed for this study. This is also reflected in the results of the open public consultation, where some EU stakeholders noted problems concerning state aid in Korea.⁵⁴ There is additionally a lack of transparency with respect to state aid in spite of Article 11.12 of the FTA, which states that both the EU and Korea shall report annually on the total amount, types and the sectoral distribution of subsidies which are specific and may affect international trade.

Based on the above analysis and surveys, the Commission concludes that the competitive situation in Korea does not appear to have changed significantly following the start of the provisional application of the FTA; and that the EU-Korea FTA so far has shown little impact on promoting competition in the Korean economy, other than by increasing the competitive pressure on the Parties through increased trade in goods and services.

50 OECD. *OECD Economic Survey for Korea 2014*.

51 Harrison (2014), p. 95.

52 However, these provisions extend only to goods sectors—the FTA does not address the issue of subsidies on services.

53 For further information confer to: Harrison, J. (ed. 2013), *The European Union and South Korea: the Legal Framework for Strengthening Trade, Economic and Political Relations*, Edinburgh: Edinburgh University Press.

54 For example, SEA Europe, which represents the maritime civil and naval industries in Europe, indicated that competition in Korea had become very much worse, with the Korean shipbuilding industry benefitting from state aid for several years in spite of overcapacity on the global market. For more details regarding the results of the stakeholder consultation, refer to Annex 2 of this synthesis report.

Objective (d): To further liberalise, on a mutual basis, the government procurement markets of the Parties

Chapter 9 of the EU-Korea FTA explicitly emphasises the importance of further liberalisation of the public procurement markets. The chapter also expands the commitments of both parties to areas that are not covered by the WTO Agreement on Government Procurement (GPA), namely public works concessions and Build-Operate-Transfer (BOT) contracts (e.g. highway construction).

Despite the efforts undertaken in the GPA and in regional trade agreements such as the EU-Korea FTA, Korea's integration into the global government procurement market remains very limited. While the Korean government procurement of foreign sourced goods by the Office of Supply averaged 9.9 percent of the agency's purchases in the period 1991-95 (i.e. immediately prior to Korea's accession to the GPA), this figure decreased substantially over time. At the time of the start of the provisional application of the EU-Korea FTA (2011), the share of foreign supplies in the total procurement operations of the central procurement agency (the Public Procurement Service, "PPS") was at 1.4 percent, and fell further to 0.9 percent as of 2015. Thus, rather than experiencing an increase in the foreign share in Korean government procurement following the plurilateral government procurement agreement of the WTO and the EU-Korea FTA, the government's import share actually decreased. The recent Trade Policy Review of the WTO⁵⁵ emphasises that this development occurred despite Korea's efforts to promote foreign supplied government procurement contracts through collective purchasing of foreign goods, the elimination of reserve deposit requirements for foreign procurement contracts, and the reduction of the documentation burden. Rather, the WTO hypothesises that foreign suppliers continue to lose ground due to the highly sophisticated and increasingly competitive domestic suppliers of manufacturing and construction services. Foreign supply of public procurement is mainly prevalent in the areas of research, transport, computer, communications and measuring equipment.

Changes in the procurement system that have increased the transparency of public procurement such as the introduction of the Korean Online E-Procurement System (KONEPS), set up in 2009, have not reversed this trend away from foreign supply. KONEPS helps digitalise the procurement procedure and, through a more efficient bidding process, aims at reducing the burden to the national budget.⁵⁶ According to a 2015 OECD assessment, KONEPS contributes substantially to the efficiency, effectiveness and integrity of public procurement in Korea, and facilitates competition by lowering barriers to entry for suppliers and other public procurement stakeholders.⁵⁷

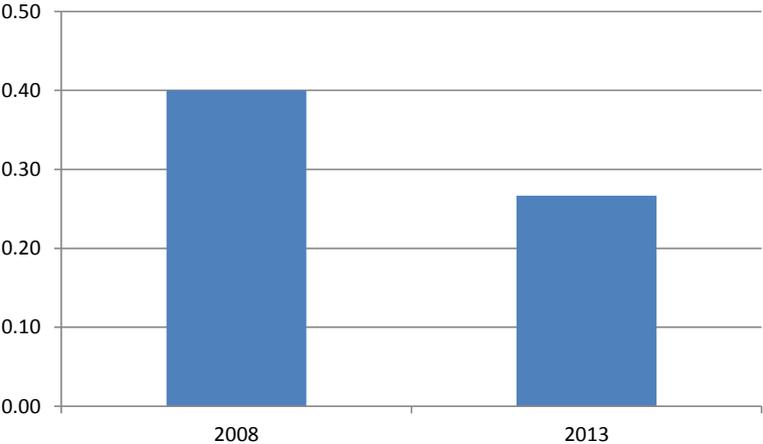
⁵⁵ WTO, Trade Policy Review WT/TPR/S/346 (16-4723), 2016. Note that the PPS handles about 30 percent of Korea's public procurement, as Korean public procurement remains largely decentralised in general.

⁵⁶ Korean Public Procurement Service (PPS), <https://pps.go.kr/eng/jsp/koneps/background.eng>

⁵⁷ WTO, Trade Policy Review WT/TPR/S/346 (16-4723), 2016.

Based on the OECD’s PMR indicators, the indicator of *differential treatment of foreign suppliers*, which covers “discrimination of foreign firms with respect to taxes and subsidies, public procurement, entry regulation and appeal and procedures”, has been examined.⁵⁸ This indicator is presented for Korea in 2008 and 2013 in Figure 11 below. As shown in the figure, the score for this indicator decreased during this period from 0.40 to 0.27, denoting a slight improvement. It is not possible to draw a definitive conclusion regarding the procurement situation in Korea on this basis alone, particularly as this indicator covers a wide range of discrimination issues regarding foreign firms. However, the development of this indicator hints at a possible small positive development for procurement for foreign suppliers in Korea following the start of the provisional application of the EU-Korea FTA.

Figure 11: Differential treatment of foreign suppliers in Korea, 2008 and 2013



Source: CIVIC's own compilation, based on OECD (2017).

The views among business respondents to the open public consultation conducted for this evaluation were split: about half of the respondents with an opinion on public procurement thought that access remained the same, whereas others stated that access had slightly improved or became worse. Additionally, the results of the open public consultation seem to confirm the continued existence of problems such as “local content requirements” in Korean public procurement contracts.⁵⁹ With respect to public procurement in the EU, the Korean Ministry of Trade, Industry and Energy (MoTIE) noted in a written statement that Korean companies have experienced difficulties in accessing information such as bidding announcements in the EU, and commented that both the EU and Korea need to make more efforts with respect to discrimination in public procurement.

The overall picture of the actual liberalisation of the Korean procurement market is therefore mixed. In light of the fact that the EU-Korea FTA incorporates the GPA for the most part with the addition of concessions/BOT, it is not surprising that the FTA as such does not lead to a

58 Koske et al., 2015.

59 See Annex 2 of this synthesis report for a summary of the open public consultation results related to government procurement.

noticeable increase in direct cross-border procurement. There are, however, some indications that EU suppliers are ranked first among foreign suppliers in 2016 in Korea, but essentially there is lack of relevant data to make a reliable statement in this respect. An increased EU investment could be a sign that indirect procurement via local subsidiaries has increased over time.

The Commission concludes that there is not enough reliable data to evaluate the actual participation of EU providers in Korean procurement procedures in the context of the FTA. Rather than experiencing an increase in the foreign share in Korean government procurement following the GPA and the EU-Korea FTA, the government's import share appears to have decreased during the evaluation period.

Objective (e): To adequately and effectively protect intellectual property rights

Chapter 10 of the FTA covers intellectual property and states that the Parties are to ensure an adequate and effective implementation of the international treaties dealing with intellectual property to which they are party, as well as provide protection in areas specifically mentioned in the chapter, e.g. for broadcast and public performance rights and geographical indications (GIs), listed in Annexes 10-A and 10-B of the FTA. This chapter also specifies enforcement measures for cases of infringement of IPR, including provisions regarding civil measures, procedures and remedies, and criminal enforcement and administrative and criminal procedures.

Similar to the EU, Korea has advanced intellectual property rights legislation in general, which has been further improved through international treaties as provided for in the EU-Korea FTA. Korea has committed to protecting IPR through several treaties, for example those of the World Intellectual Property Organization (WIPO), the Hague Agreement, the Marrakesh VIP Treaty and others. Korea therefore extended its IPR legislation and facilitated patent regulations and access through the Patent Act, Utility Model Act, Trademark Act, Design Protection Act, Unfair Competition Prevention, Trade Secret Protection Act and Act on Intellectual Property, and established an institution - the Presidential Council on Intellectual Property - to implement the legislation and monitor the progress. As an example of the strengthening of IPR, Korea expanded copyright protection to the duration of the author's life plus 70 years and to 70 years for the rights of producers and performers of sound recordings.⁶⁰

The evaluation of the protection of intellectual property in Korea before and after the provisional application of the EU-Korea FTA is based on the results of the World Economic Forum's (WEF) Annual Executive Opinion Survey, in which respondents provide a subjective assessment of the protection of intellectual property in a country on a scale of one (extremely weak) to seven (extremely strong).⁶¹ Apart from a peak in 2007-2008, Korea's average score

60 WTO, "Trade Policy Review" WT/TPR/S/346 (16-4723), 2016.

61 Klaus, Schwab. The Global Competitiveness Report 2014-2015. World Economic Forum.

for the strength of intellectual property protection has stayed mostly around 4,⁶² the rating in 2014/2015 of 3.7 being similar to the assessment regarding EU countries such as Poland, Italy and Hungary.⁶³ This lends support to the conclusion that IPR have been largely protected in Korea both before and after the start of the provisional application of the EU-Korea FTA.

Annexes 10-A and 10-B to Chapter 10 of the EU-Korea FTA list a total of 162 EU geographical indications (GIs) and 64 Korean GIs within the scope of protection of the FTA.

SIA has identified IPR enforcement and GI protection as the most pressing issues with respect to the protection of IPR in Korea. However, Korea made significant efforts in that respect and after the implementation of the FTA Korea has adopted stronger IPR legislation, has protected the EU GIs listed in the FTA Annexes and has been proactive in the enforcement of the GI protection⁶⁴. Nevertheless, discussions regarding expanding the list of protected GIs under the FTA are currently still ongoing, and no other GIs have yet been added to Annexes 10-A and 10-B since the start of the provisional application of the FTA.

Some specific problems concerning intellectual property rights protection in Korea remain, most notably concerning the protection of public performance rights of authors, producers and performers in Korea, where retail venues smaller than 3 000 m² are exempted from paying royalties for public performance. In practice, the vast majority of Korean businesses qualify for this exemption. Another issue relates to the requests of large Korean companies for the source code of software solutions, which EU providers are reluctant to provide. There is need for better design protection too.

The EU has already a highly-developed framework for intellectual property rights before the start of the FTA implementation. No problems with respect to the protection of Korean IPR in the EU were identified.

The Commission concludes that the FTA improved the protection of IPR rights in Korea and the EU, especially regarding IPR enforcement and GI protection. However, specific problems remain with respect to implementation of the provisions of the FTA on the protection of the public performance rights of authors, producers and performers in Korea and the extension of the initial list of EU GIs.

62 This assessment is supported by the results of the open public consultation conducted for this study. A large majority of business associations and companies that expressed an opinion on whether the protection of EU intellectual property rights in Korea improved since the application of the EU-Korea FTA indicated that such protection has remained the same. See Annex 2.

63 19 EU countries are ranked higher than 3.7.

64 According to expert interviews, and confirmed by the results of the open public consultation. Among the business associations and companies that expressed an opinion on intellectual property rights in the consultation, one third considered that the protection of intellectual property rights has improved in Korea, an example being Eucolait (the European Association of Dairy Trade), which even assessed that the protection of EU intellectual property rights in Korea has improved very much since the application of the EU-Korea FTA. The remaining two-thirds of responding stakeholders considered that the level of protection had remained the same. See the summary of stakeholder consultation results in Annex 2.

The Commission will continue to discuss and seek solutions to those IPR implementation issues in the IPR working group established under the EU-Korea FTA with the aim to produce tangible results.

Objective (f): To contribute, by removing barriers to trade and by developing an environment conducive to increased investment flows, to the harmonious development and expansion of world trade

Chapter 2 of the EU-Korea FTA contains a section on non-tariff measures, which is complemented by provisions on sectoral non-tariff measures in the annexes of the agreement. The focus of the agreement is not only the reduction of general non-tariff trade costs (NTTCs)⁶⁵ resulting from measures such as technical regulation but also the reduction of trade barriers at the sectoral level. For example, in order to reduce general non-tariff trade costs, the EU and Korea agreed to simplify conformity assessment procedures, improving foreign access to information and strengthening the protection of the supplier's product and intellectual property.

The econometric analysis used in the study allows for determining the causal effects of the FTA with respect to quantifying the magnitude of reduction of non-tariff trade costs, due to e.g. differences in technical standards, labelling requirements, double certifications, and sanitary and phytosanitary trade barriers. By estimating the total trade creation effects of the FTA sector-by-sector, knowing the tariff cuts that have actually happened, and using the trade elasticities in our CGE model, the reduction in NTTCs can be computed, which are by construction the residual part in explaining the observed trade creation effects.⁶⁶ However, the data do not allow for calculating any interpretable absolute level of non-tariff trade costs, but rather changes in NTTCs. NTTC reductions are highlighted as changes in ad valorem tariff equivalents in table 1 below.⁶⁷

65 NTTCs encompass all costs except tariffs that drive up the costs of international transactions relative to domestic ones. NTTCs can be further separated into non-policy induced NTTCs and policy induced NTTCs; the former include, among other things, costs related to cultural, geographical, or linguistic differences between countries. The economic impacts of tariffs and of non-tariff trade costs are potentially very different: tariffs raise tax income while non-tariff trade costs may involve a substantial waste of resources. Moreover, tariffs are often low compared to the costs of NTTCs. Therefore, the reduction of NTTCs is crucial for the agreement's effects on value added and GDP.

66 Not that while it is possible through this method to calculate the observed changes in NTTCs, this method does not indicate reasons why these changes have occurred. While in some cases there have been clear sector-specific efforts to reduce NTTCs (e.g. in the automotive sector, chemical and pharmaceuticals sector, etc.), in other cases we observe a reduction in non-tariff trade costs in many sectors that could only be affected by the general efforts to reduce non-tariff trade costs, i.e. there are no provisions in the FTA that would reduce non-tariff trade costs specifically in these sectors.

67 The estimates for the reductions in NTTCs are based on the Ifo trade model, using data from the Global Trade Analysis Project (GTAP) and the World Integrated Trade Solution (WITS) database (compiled by the World Bank based on national reports and in collaboration with other international institutions).

Table 1: Sectoral NTTC reduction for EU and Korean exports

Sector	NTTC reduction for Korean exports (%)	NTTC reduction for EU exports (%)
Agriculture	7.8	2.9
Automotive	5.6	2.6
Business services	5.5	0.0
Chemicals	5.5	1.2
Construction	3.2	5.4
Electronic equipment	0.0	25.3
Energy	9.2	14.6
Financial and Insurance services	1.9	7.8
Fishing	0.0	6.3
Machinery and equipment	1.5	9.3
Manufacturing	0.0	0.9
Metals	12.5	6.6
Other services	0.2	5.5
Processed food	3.1	5.1
Raw material	9.5	13.0
Telecoms	0.0	6.2
Textile	4.7	0.0
Trade	3.3	6.8
Transport	2.2	8.1
Utilities	4.0	19.1
Wood, paper and minerals	5.4	4.8

Source: GTAP, WITS, Ifo Trade Model. Table lists NTTC reductions until 2014, the last year for which data were available.

According to the study, as the table illustrates, the NTTC reduction for Korean and European exporters differed across sectors. More specifically:

- Within the *automotive sector*, a slightly asymmetric reduction in non-tariff trade costs can be noted, i.e. a 5.6 percent reduction for Korean exports compared to a 2.6 percent reduction for EU exports. However, the automotive industry emphasises the lack of regulatory convergence on Korea's part, pointing to the insufficient harmonisation of Korean regulations with UNECE

regulations (while also acknowledging slow progress in certain areas), and related certification and testing requirements.⁶⁸ This could explain the relatively small reduction in non-tariff trade costs for European exports.

- For the *chemicals sector* as a whole in the table above (which also encompasses *pharmaceutical products*), a slightly asymmetric reduction in non-tariff trade costs can be observed, namely a 5.5 percent reduction for Korean exports and a 1.2 percent reduction for EU exports.
- In the *electronics sector*, a highly asymmetric reduction in non-tariff trade costs in this sector is notable, namely a 25 percent reduction for EU exports compared to no change for Korean exports.
- For the *telecommunications sector* and the *financial and insurance services sector*, a highly asymmetric reduction in NTTCs is observed, i.e. a zero percent reduction for Korean exports compared to a 6.2 percent reduction for EU exports in the telecommunications sector and a 1.9 percent reduction for Korean exports compared to a 7.8 percent reduction for EU exports in the financial and insurance services sector.
- Also, an asymmetric reduction in non-tariff trade costs in the *transportation sector* can be noted, namely a 2.2 percent reduction for EU exports compared to an 8.1 percent reduction for Korean exports.

These conclusions are largely in line with the results of the case studies conducted for this evaluation on the automotive sector, the agricultural sector, the electronic goods sector, the environmental goods/services sector, and the postal services sector.⁶⁹

The NTTCs that continue to affect these sectors as identified in the case studies are summarised in the following table 2.

68 Also, due to the lack of inclusion of truck-tractors in the UNECE equivalence tables of the automotive annex (2-C), for this particular vehicle type Korea does not accept EU standards as being equivalent to Korean standards, which is a significant problem for EU automotive exporters.

69 These sectors were also among those identified by the SIA in which non-tariff barriers to trade are an important issue, namely automobiles, pharmaceuticals and cosmetics, agricultural products, textiles, legal/accounting services and financial services. See SIA of the EU-Korea FTA: Final Report – (Phase 3), p. 112.

Table 2: Causes of NTTCs affecting EU-Korea trade in case study sectors

Sector	Causes of non-tariff trade costs
Automotive	Insufficient harmonisation of Korean regulations with UNECE regulations
	Exclusion of petrol cars from Annex 2-C (the automotive annex to the EU-Korea FTA)
	Specific Korean requirements for vehicles and equipment, e.g. ground clearance requirements and vehicle width standards; compliance with the Korean radio act, etc.
	Specific Korean certification and testing requirements, e.g. certification of car parts, battery drop test, etc.
Agriculture	EU regionalisation system not recognised by Korea with respect to animal disease outbreaks
	Korean ban on imports of EU beef (motivated by a safeguard against BSE) still in effect; EU applications to export beef to Korea still pending
	Korean sanitary requirements are not transparent for animals/animal products
	Burdensome procedure for registering production establishments for animal products
	EU not considered a single entity, which poses problems with respect to veterinary certificates for animals/animal products
	Imports of EU soft raw milk cheeses banned by Korea
	Burdensome pest risk assessment required to export EU fruits and vegetables to Korea
Electronic goods	Test reports prepared by EU laboratories must be prepared in line with Korean standards, which EU laboratories are not always familiar with
	Korean Occupational Safety and Health Agency regulations requiring third-party certification for all imported electronic, electrical and mechanical products
Environmental goods/services	Insufficient harmonisation of Korean regulations with relevant international standards (e.g. IEC standards)
Postal services	Requirement for express service providers to use a Common Express Terminal at the Incheon International Airport for x-ray and inspection, which slows clearance times

Source: Case studies on the respective sectors, based on stakeholder consultation, interviews and complementary research.

As table 2 illustrates, in all goods sectors other than agriculture, most NTTCs relate to the aforementioned technical barriers. Important NTTCs also remain in the SPS area, in particular for beef, but also for dairy products, fruits and vegetables. The responses to the open public consultation on the EU-Korea FTA confirmed that barriers related to standardisation, conformity assessment and labelling are considered to be among the most relevant non-tariff barriers in Korea affecting EU-Korea trade.⁷⁰ Other NTTCs relate, inter alia, to electronics, cars and machinery.

Those findings are largely in line with the Commission's recent Report on Trade and Investment Barriers,⁷¹ which acknowledges that Korea is still ranked fifth highest in terms of the number of trade and investment barriers registered in the Market Access Database (17, on the same rank as Indonesia), while at the same time observing a "particularly positive trend" in Korea, where "only one new barrier was registered in 2016 while five barriers were eliminated".

Despite the abovementioned remaining NTTCs such as differences in technical standards, labelling requirements, etc., the Commission considers that the FTA contributed to a significant reduction of non-tariff trade costs (NTTCs), as indicated in the above statistics. The NTTC reduction for Korean and European exporters differs across sectors. Even in sectors without explicit measures towards elimination of NTTCs mandated by the FTA, a reduction of NTTCs can be observed. However, in line with the recommendation by the consultant, the Commission considers that further efforts are needed by the EU and Korea to address the remaining NTTCs. The Commission will continue raising those NTTCs with the Korean authorities and in the relevant fora such as the FTA Committees and bilateral meetings.

Objective (g): To commit, in the recognition that sustainable development is an overarching objective, to the development of international trade in such a way as to contribute to the objective of sustainable development and strive to ensure that this objective is integrated and reflected at every level of the Parties' trade relationship

Chapter 13 of the EU-Korea FTA covers trade and sustainable development (TSD). Chapter 13 is complemented by an Annex on the cooperation on trade and sustainable development.

Implementation of TSD institutional mechanisms

⁷⁰ For example, several EU companies and business associations in the chemical sector commented specifically on the implementation and modification of Korea REACH (The Act on the Registration and Evaluation of Chemicals) as being burdensome for EU exporters. Significant non-tariff barriers were also cited by ACEA for the automotive sector. A German company in the food-manufacturing sector cited the lack of progress in the negotiation of a veterinary certificate for poultry products as a problem concerning trade in animals and animal products between the EU and Korea. See the summary of stakeholder consultation in Annex 2.

⁷¹ http://trade.ec.europa.eu/doclib/docs/2017/june/tradoc_155642.pdf

On basis of a detailed analysis of the implementation of the TSD institutional mechanisms – the Committee for Trade and Sustainable Development (CTSD), the two domestic advisory groups (DAGs), and the civil society forum (CSF) – the study concludes that these mechanisms have been implemented as envisaged in the EU-Korea FTA, and have promoted dialogue between the EU and Korea concerning TSD, as is also recognised by stakeholder responses to the open public consultation and in stakeholder interviews.⁷² However, this study has also identified some issues that affect the functioning of the DAGs and the CSF, which mainly refer to the composition of the DAGs. The requirement specified in Article 13.12.5 that the DAGs comprise “independent representative organisations of civil society in a balanced representation of environment, labour and business organisations as well as other relevant stakeholders” appears to be only partially fulfilled for both groups. In the case of the EU DAG, labour and business organisations are well represented, but only one organisation explicitly representing environmental interests is a member. With regard to the Korean DAG, close to half of its representatives are members of academia, rather than representatives of civil society organisations.

Furthermore, while the TSD institutional mechanisms have been implemented as envisaged, in some respect the commitments regarding the objective of sustainable development made in the TSD chapter lack clarity regarding their implications in practice, beyond the indicative list of areas of cooperation listed in Annex 13 of the FTA. Some civil society stakeholders responding to the open public consultation also considered that the TSD institutional mechanisms ought to be strengthened, and that better monitoring and enforcement mechanisms related to the TSD provisions needed to be put in place.

Impact on human and labour rights

Human and labour rights considerations are an important component of the EU trade policy.⁷³

In line with DG TRADE's Guidelines on the Analysis of Human Rights Impacts In Impact Assessments For Trade-Related Policy Initiatives,⁷⁴ the analysis began with a screening process to discern which human rights were likely to have been affected by the EU-Korea FTA.⁷⁵ Based on the results of the screening, the in-depth discussion was focused on the

72 The large majority of respondents (mainly civil society organisations and citizens/academia) who had an opinion on whether the EU and Korean Domestic Advisory Group (DAG) and the Civil Society Forum (CSF) contributed to the implementation of the trade and sustainable development chapter thought that the EU DAG contributed either very much or moderately in this respect. See Annex 2.

73 In this analysis “human rights” are defined as also including the fundamental rights enshrined in the Charter of Fundamental Rights of the EU, in line with guidance published by DG TRADE. See: European Commission - Directorate-General for Trade. Guidelines on the Analysis of Human Rights Impacts in Impact Assessments for Trade-Related Policy Initiatives. Brussels, 2015.

74 http://trade.ec.europa.eu/doclib/docs/2015/july/tradoc_153591.pdf

75 The screening was conducted based on the normative framework of international human rights as defined in core UN human rights conventions, the fundamental ILO conventions on core labour standards, the Charter of Fundamental Rights of the European Union, the European Convention on Human Rights, regional human rights conventions and customary international law.

following human and labour rights, some of which (e.g. the right to peaceful assembly and association) also constitute sensitive issues in Korea:

- Elimination of discrimination in respect of employment and occupation;
- Right to Peaceful Assembly and Association, and the Right to Join Trade Unions
- Right to Just and Favourable Conditions of Work and the Right to Rest and Leisure⁷⁶
- Right to Adequate Living Standard (Right to Food)

The EU-Korea FTA is assessed to have not changed the status quo of human and labour rights in Korea⁷⁷ as it was when the FTA came into effect, in the sense that little change (positive or negative) relative to the 2011 situation and/or longer term trends can be observed regarding these rights.⁷⁸ The only right for which a minor impact of the FTA can be determined is the right to food as shown in Table 3 below.

Table 3: Price changes in agrifood products in Korea due to the implementation of the EU-Korea FTA

Sector	Price change in Korea (%)
Agriculture	-0.21
Processed food	-0.70

Source: GTAP, WITS, Ifo Trade Model.

For the product sectors presented above, the FTA resulted in a negative price change, i.e. lower prices of food for Korean consumers. This finding is consistent with the SIA conducted for the EU-Korea FTA, which pointed out that Korean food prices are among the highest in the OECD and predicted that the FTA may have cost of living benefits with respect to increasing the supply of competitively-priced food products in Korea.⁷⁹

⁷⁶ We also considered under this heading the issue of the rights of migrant workers, which have been indicated by interviewees as an issue of concern.

⁷⁷ This analysis mainly focuses on human and labour rights in Korea. The results of the quantitative economic analysis show that the EU-Korea FTA has had a significantly larger economic impact on Korea relative to the EU, with an increase in real GDP for Korea by 0.3 percent. In contrast, the FTA increased real GDP for the EU28 only marginally (by 0.03 percent), due to the much larger size of the EU economy. A larger economic impact implies more significant effects on human and labour rights, for example via changes in wages, consumption and employment. Moreover, the literature review and stakeholder interviews indicated concerns regarding fundamental labour rights violations in Korea, which provided an additional rationale for considering related aspects in-depth.

⁷⁸ See the human and labour rights analysis in section 8 of the final report of this study.

⁷⁹ SIA of the EU-Korea FTA: Final Report – (Phase 3), section 9.5, p. 156

Potential impacts on human rights were not systematically assessed in the SIA that was prepared for the EU-Korea FTA.⁸⁰ However, in the social impact analysis, the SIA predicted that the FTA was unlikely to have any significant adverse effects on gender equality in Korea. The SIA did expect that the FTA could have an impact on working conditions and quality of work, but could not predict whether the net effect would be positive (through the need to adjust to EU standards) or negative (if certain sectors were to come under pressure to reduce costs).⁸¹ The results of the human rights analysis conducted by the present evaluation also concluded that little change has been observed since 2011 in either direction.

Civil society stakeholders, as well as the European Parliament in a recent resolution remain concerned about the lack of progress in the area of labour rights in Korea during the evaluation period. Also, Korea has not yet ratified four of the eight ILO fundamental conventions. However, it is not possible to distinguish the impact of the FTA from the pre-existing political context of the country, which was unfavourable to unions even before the application of the FTA, as several interviewed stakeholders suggested. The Commission shares the concerns of the European Parliament and civil society on the lack of implementation by Korea of labour commitments (see below).

Impact on the environment

Based on modelling results, the EU-Korea FTA has led to a limited but notable reduction of global CO₂ emissions, which more than compensated any additional CO₂ emissions due to increased trade between the EU and Korea. Specifically, the causal CGE analysis conducted for this study indicates that due to the EU-Korea FTA, CO₂ emissions in the EU would have increased by 0.12 percent if there were no emissions trading system in place in the EU. In Korea, emissions increased by 0.19 percent compared to the counterfactual situation of not having an FTA. However, the EU-Korea FTA leads overall to a net reduction of global emissions by 4.1 million tonnes CO₂. The global CO₂ reduction can almost be fully ascribed to just two countries that suffer from trade diversion effects, namely China and the United States, whose relatively emission-intensive exports were replaced by cleaner ones from the EU or Korea. The descriptive analysis of indicators concerning other environmental areas, such as air pollution, water quality, biodiversity, waste management and deforestation, does not indicate any observable effect of the EU-Korea FTA in these areas.

80 Since 2012, SIAs are required to systematically assess the potential human rights consequences of proposed trade agreements. The EU-Korea SIA was prepared in 2008 before this requirement came into effect.

81 SIA of the EU-Korea FTA: Final Report – (Phase 3), section 4.4, p. 80-86. “The FTA can be expected to have impact on working conditions, health & safety standards (via regulatory approximation) and quality of work along the lines of the “decent work” indicators as identified by the EU and ILO. This effect can be both direct, due to the need to adjust to and comply with EU standards for the sectors that are seeking market access to the EU, or less tangible, more indirect, differed in time or even negative, depending on the timeframe for implementation of the liberalisation and the structure of the sector.” (p. 83)

Other potential environmental effects of the EU-Korea FTA and accompanying cooperation activities identified in the course of this evaluation relate to an increased trade in environmental goods and services (with trade volume doubling from less than EUR 1 900 million in 2006 to EUR 3 800 million in 2015, mostly increasing in the post-FTA period of 2011 to 2015).

These results generally correspond to the predictions in the SIA, which did not foresee significant adverse environmental impacts resulting from the FTA, but did predict a potential mitigation challenge from increased energy use in the EU and Korea due to an increase in production and trade flows.⁸² As noted above, while this predicted increase did materialise, it has been more than fully offset by trade diversion effects from China and the USA. The SIA also predicted that the FTA would lead to an increase of trade flows of environmental products in both directions between the EU and Korea,⁸³ which was supported by the conclusions of the case study on environmental goods and services.

The Commission services therefore conclude that the TSD Chapter has introduced institutional mechanisms and a number of commitments on labour and environment which have not existed previously in the bilateral relationship. These TSD Chapter commitments and institutional mechanisms are also enhanced through the framework agreement.

Over the evaluation period the TSD institutional mechanisms have been implemented as envisaged and have promoted dialogue on TSD between the EU and Korea. This has led to more cooperation between the EU and Korea on for example the implementation of ILO Convention 111 on discrimination in employment and on Emissions Trade Systems, which can promote a better mutual understanding and implementation of the TSD Chapter.

So far the EU-Korea FTA have not changed the status quo of human and labour rights in Korea in the evaluation period as it was when the FTA came into effect, in the sense that little change (positive or negative) relative to the 2011 situation. The evaluation period is too short to have a reliable assessment of longer term trends regarding these rights. Despite regular dialogue in the context of the TSD Committee, concerns remain regarding the lack of progress in Korea with regard to respecting and implementing the TSD commitments related to fundamental labour rights.

As regards the impact on the environment, the EU-Korea FTA has led to a limited but notable reduction of global CO₂ emissions. No other environmental impacts could be attributed to the FTA.

82 SIA of the EU-Korea FTA: Final Report – (Phase 3), p. 22.

83 SIA of the EU-Korea FTA: Final Report – (Phase 3), p. 22, 200-1. “The potential economic benefits of increased productivity and enhanced technology especially in the sphere of environmental goods and services could translate into the development of, and the increased use and diffusion of, clean technologies. Improving the investment climate and enhancing protection of intellectual property rights will provide benefits in terms of investment and innovation in clean technologies.” (p. 22)

The consultant recommends that in order to have more clarity as regards the practical implications of the TSD chapter, the EU and Korea should commit to developing a TSD work programme according to their own priorities, and to regularly report on its implementation and the outcomes achieved to create a process of accountability. In addition, the consultant considers that it is important to have a balanced representation of civil society organisations in the Domestic Advisory Groups and to include representatives of civil society organisations that represent consumer interests.

The Commission has serious concerns in the area of trade and sustainable development, i.e. on insufficient progress on the ratification and implementation of fundamental ILO conventions and on non-respecting of the principles concerning the fundamental ILO rights in Korea. The Commission will continue to engage closely with the new Korean government, which has made a commitment to the ratification of remaining ILO fundamental conventions and promoting the society where the labour is respected, in order to address them, and continue its cooperation with the EU DAG and with the Civil Society Forum comprised of stakeholders from all sides. In this respect, the Commission will examine the consultant's recommendation as regards the possibility to develop a mutually agreed work programmes with Korea as a way to improve implementation.

The Commission used a multitude of other channels to communicate its concerns regarding the labour rights situation in Korea and to press for further progress. The concerns were raised at the meetings of the Committee on Trade and Sustainable Development and the Trade Committee, in correspondence from the Commissioner for Trade to her Korean counterpart and in numerous bilateral contacts, including by the EU Delegation in Korea.

On 17 December 2018 the EU formally requested government consultations with Korea regarding the implementation of the trade and sustainable development chapter of the EU-South Korea free trade agreement, specifically with regard to labour commitments. As mentioned, the EU has two key concerns with regard to Korea's implementation of the commitments on trade and sustainable development: 1) the respect for the International Labour Organisation (ILO) fundamental principles of freedom of association and the right to collective bargaining; 2) the outstanding ratification by Korea of four fundamental ILO Conventions: two concerning freedom of association and the right to collective bargaining and two concerning forced labour. Both issues are closely interrelated and require a number of labour reforms in Korea. The Commission is of the view that the consultations will provide an extra channel of communication to find an amicable and mutually satisfactory solution to the EU's concerns.

Objective (h): To promote foreign direct investment without lowering or reducing environmental, labour or occupational health and safety standards

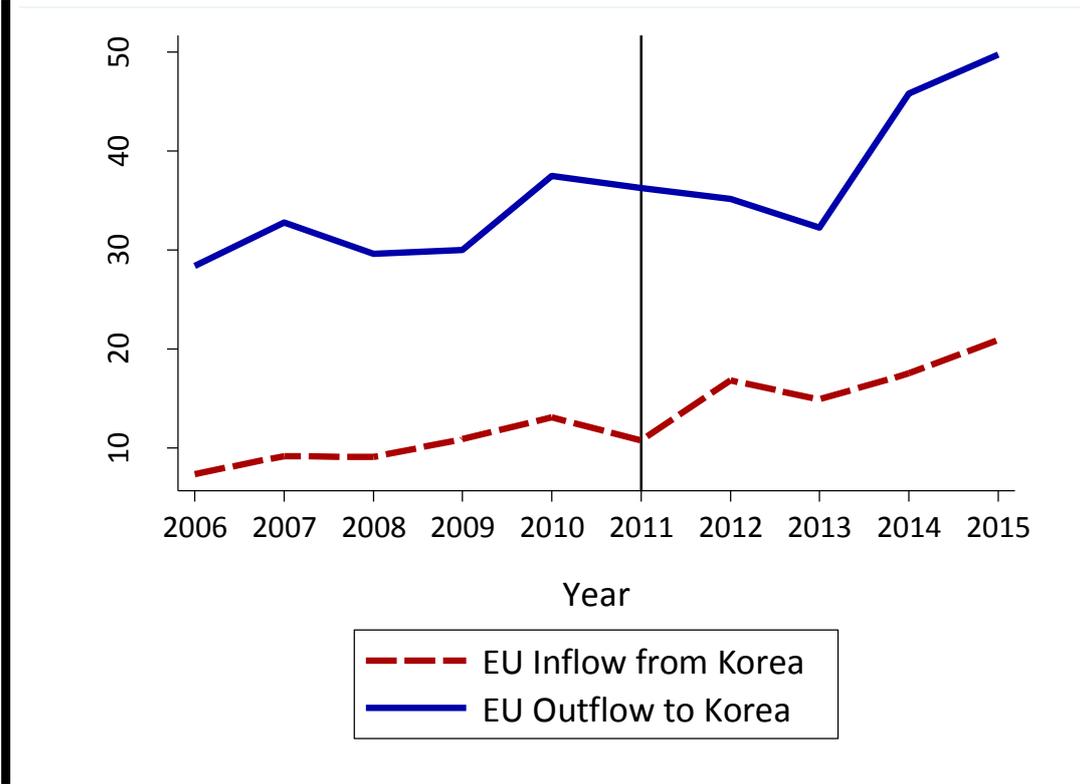
Investment provisions of the EU-Korea FTA include but are not limited to market access regulations. In concrete terms, these prohibit both the EU and Korea from undertaking measures such as limitations on the number of establishments of foreign firms, limitations on minimum domestic share-holdings, and limitations on total number of operations or on the total quantity of output. Moreover, the national treatment clause in combination with the most

favoured nation clause expresses the willingness of both parties to significantly encourage foreign direct investments.

To gain a better understanding of whether that goal has been reached, Figure 12 depicts the FDI stock of EU companies in Korea (outbound FDI) and the counterpart of Korean firms in the EU (inbound FDI).⁸⁴ While the noticeable difference in absolute values among the two positions is due to Korea being a relatively small economy, a closer look at the respective growth rates is of greater interest. During the pre-FTA period, the annual growth rate of the stock of EU FDI in Korea was 5 percent and for inbound stocks the figure was around 7 percent. In the post-FTA years the recorded average growth rates are higher and reach 8 percent and 19 percent, respectively. All in all, despite the fluctuations (especially for the outflows during the financial crisis), a clear positive trend is observed in the FDI stocks owned by the partner country. The increase is stronger in the post-FTA period.

84 Data on foreign direct investment were accessed through the Eurostat “Balance of payments—International transactions (*bop*)” and the OECD databases. In *bop*, yearly flows and stock data are available for the period 2004 to 2014 for the EU27 and 2008 to 2014 for the EU28.

Figure 12: Stock of bilateral foreign direct investments (annually, EUR billion)

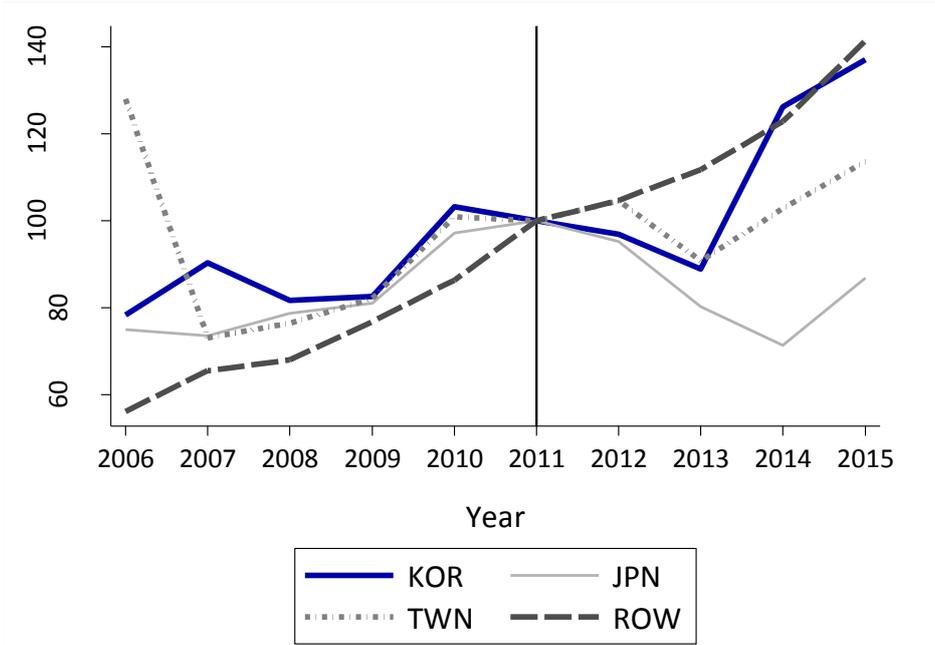


Source: Own compilation, based on Eurostat (2017).

The vertical line separates the period before the agreement from the one after the start of its provisional application. 2011 is, therefore, the first “treated” year.

The following figure compares the FDI outflow from the EU to Korea with the FDI outflows to a control group of other countries in the region.

Figure13: Stock of FDI outflow from the EU to selected countries (annually, EUR billion)



Source: CIVIC's own compilation, based on Eurostat (2017).

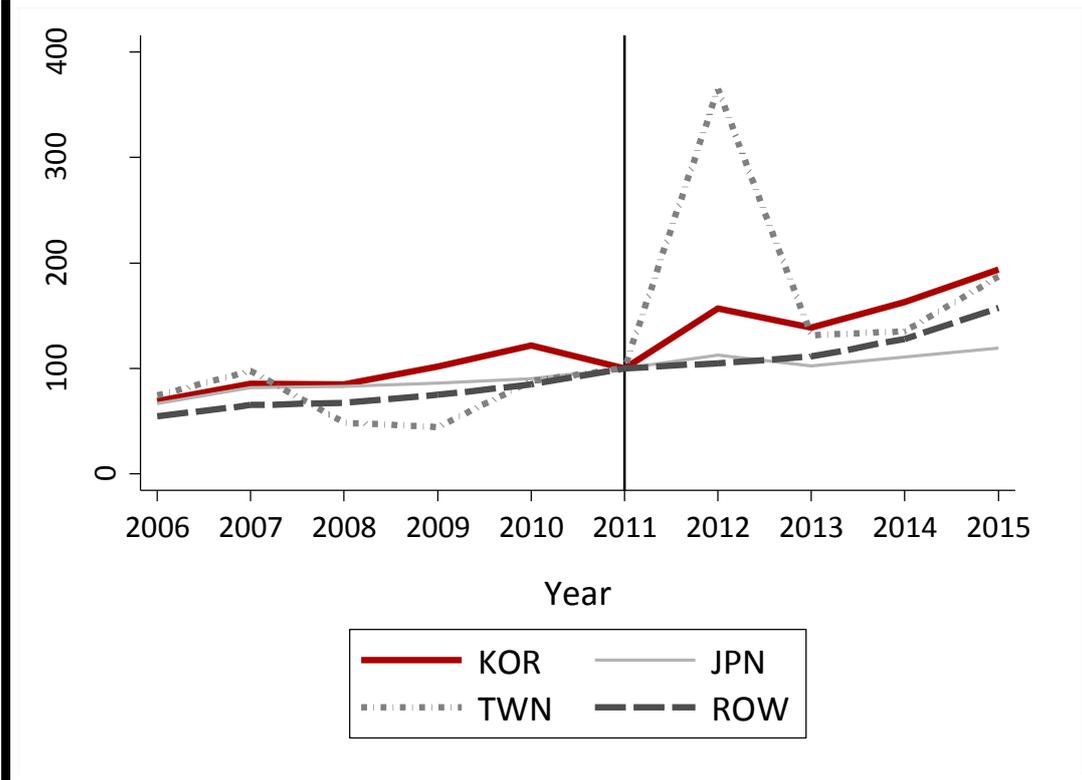
The vertical line separates the period before the agreement from the one after the start of its provisional application 2011 is, therefore, the first “treated” year.

As the previous figure illustrates, in the pre-FTA period, the growth of EU FDI to Korea was in line with that of Japan, higher than that of Taiwan and lower than other economies. In the post-FTA period, the negative years of 2011-2013 were followed by a remarkable recovery in 2014 and a moderate increase in 2015, putting FDI to Korea on the upper end of the country comparison group. From this analysis, an outperformance of EU FDI in Korea induced by the FTA in comparison to Japan and Taiwan can be identified.

With respect to the FDI inflow to the EU from Korea, Figure 14 below shows that in the period prior to the implementation of the FTA, the growth rates of Korean-owned EU stocks were in line with those of the control group. In the post-FTA period, however, Korea clearly outperforms both Japan and RoW in terms of investment in the EU. It is noteworthy that the peak in the Taiwanese FDI position was probably caused by a large unique transaction or a measurement error,⁸⁵ and thus is not of particular interest. This one-time peak fell back to a higher level than 2011 and ends up registering a slightly worse performance than Korea in 2015.

⁸⁵ Measurement errors and unique transactions bias are more relevant if the overall FDI volume is relatively low. Compared to the other countries chosen, Taiwanese FDI in the EU is relatively small.

Figure14: Stock of FDI inflow in the EU from selected countries (annually, EUR billion)



Source: CIVIC's own compilation, based on Eurostat (2017).

The vertical line separates the period before the agreement from the one after the start of its provisional application. 2011 is, therefore, the first “treated” year.

No unambiguous positive impact of the FTA on FDI inflows from Korea is supported by the data. However, it can be concluded that a slight positive effect on FDI outflows to Korea is observable.⁸⁶ FDI dynamics slightly outperform those observed for other countries in the control group in the post-FTA period. This evolution goes along with the deeper trade integration in both goods and services sectors as a result of the FTA. These findings are also in line with the expectations of the SIA, which predicted that the FTA would likely increase FDI flows in both directions between the EU and Korea, but particularly from the EU to Korea.⁸⁷

Based on the above, the Commission services conclude that the stock of bilateral foreign direct investment (FDI) between the EU and Korea increased over time, showing that the FTA seems to have positively influenced investment between Korea and the EU Member States. However, due to a lack of specific data, it is not possible to come to a final conclusion

86 This conclusion also generally reflects the stakeholder feedback that was received during the open public consultation. The majority of business associations and companies that had an opinion on whether the environment for EU direct investments in Korea had improved since the application of the EU-Korea FTA indicated a slight improvement for EU FDI in Korea.

87 SIA of the EU-Korea FTA: Final Report – (Phase 3), p. 195, 257.

regarding the impacts of EU FDI in Korea on environmental, labour or occupational health and safety standards. The social analysis, the human and labour rights analysis and the environmental analysis did not indicate negative impacts of the FTA.

Based on the above sectoral analysis, it can be concluded that the EU-Korea FTA has been effective in achieving the objectives laid down in Article 1.1(2) of the FTA despite certain challenges and remaining issues. As regards the FTA contribution to the overarching objectives of harmonious development and expansion of world trade, promotion of economic growth and stability, poverty reduction, raising standards of living, improvement of the general welfare and contribution to sustainable development⁸⁸, it is too early to draw definitive conclusions due to the fact that those objectives require a longer period of time to produce tangible results, hence at the time of the evaluation the data available was limited.

EQ2: Has the EU-Korea FTA had unintended side effects, and if so, which ones?

Based on the study, the Commission considers there are no unintended (negative) side effects of the EU-Korea FTA with respect to the economic, social, human/labour rights and environmental dimensions. What constitutes an unexpected (positive) side effect, the EU-Korea FTA led to a limited but notable reduction of global CO₂ emissions, which more than compensated for any additional CO₂ emissions due to increased trade between the EU and Korea.

EQ3: To what extent has the EU-Korea FTA been efficient with respect to achieving its objectives?

Trade per se is not end in itself, but is rather a tool to benefit people. The analysis therefore considered the key benefits from the FTA to be the welfare gains from trade in the form of an increase in GDP, as well as increased choice (product variety), product quality and lower prices for consumers. The main costs of the FTA are administrative costs for businesses and the costs of financing the institutional structure of the FTA, as well as adjustment costs (e.g. to employees who have to change their industries).⁸⁹

The elimination or reduction of tariffs pursuant to the FTA⁹⁰ represents a cost to the government in the form of lost tariff revenue; however, these losses for the EU budget due to reduced tariff income are not economic costs, but are rather a redistribution of government

⁸⁸ Although the Commission considers it too early to draw definitive conclusions regarding the FTA's contribution to sustainable development, it has nevertheless provided the tools for the launch of consultations regarding the implementation of Korea's commitments pursuant to the International Labour Organisation conventions.

⁸⁹ Due to the limitations of the analysis, the Ifo trade model allows for the quantification of gains (e.g. increased GDP) but does not allow for the quantification of adjustment costs. However, these costs tend to be short-lived in nature and have little effect on total welfare effects.

⁹⁰ Recall that EU tariff revenues decreased as of 2014 from roughly EUR 1.2 billion to EUR 200 million as a result of the EU-Korea FTA, thus by more than 80 percent.

income (tariff income) to consumers in the form of lower prices. Thus, the elimination of tariffs corresponds to a tax cut for consumers. In addition to this redistribution of government income to consumers, gains from trade following a tariff reduction through an FTA also occur if products are now traded that were formerly (with higher tariffs) not traded, i.e. if new transactions occur that were previously hindered by the higher tariff costs. This increase in trade due to the reduction in tariffs corresponds to a reduction in the so-called 'deadweight loss' (i.e. in economic inefficiency) and therefore represents a net welfare gain as well as a net improvement in efficiency for the entire economy.

In contrast to the elimination of tariffs, a reduction of NTTCs to trade is economically non-neutral: non-tariff trade costs, e.g. due to double certification, different product standards, differences in sanitary and phytosanitary regulation, etc. may involve a substantial waste of resources for firms that serve foreign markets. These costs translate into higher product prices and thus lower purchasing power for consumers. The NTTC reductions observed in most sectors as a consequence of the EU-Korea FTA (see Table 1 above) therefore create welfare gains. With the CGE model applied for this evaluation these gains can be estimated and causally attributed to the FTA. The results take both tariff and non-tariff trade costs into account and are therefore an adequate measure for changes in welfare. Overall, the economic gains from the agreement are symmetrically distributed in absolute values between the EU and Korea. The EU has seen an increase in GDP by about EUR 4.4 billion (measured in 2015 prices) due to the FTA, and for Korea by - EUR 4.9 billion. The larger benefits for Korea in relative terms due to the FTA are not surprising, given the fact that the EU is about ten times as big a market for Korean products than Korea is for EU products.

These results are broadly in line with the initial expectations set out in the SIA. The ex-ante CGE modelling carried out for the SIA predicted a modest GDP increase for Korea between 0.2% (in a simulation using standard elasticities) and 0.6% (using reduced import substitution elasticities). For the EU25, the SIA predicted marginal effects and the actual gains estimated by the model used in this study confirm the SIA' expectations.

On the cost side, administrative costs arise as a result of the FTA for businesses with respect to complying with rules of origin requirements. These costs are typically more burdensome for SMEs than for large companies. Administrative burdens, such as those related to obtaining approved exporter status,⁹¹ but also to the additional documentation requested by the Korean Customs authorities, may contribute to EU preference utilisation rates that continue to be lower than Korean PURs.⁹² Most business stakeholder responses in the open public

91 In order for exporters to be able to issue an origin declaration under the EU-Korea FTA and to then benefit from the tariff preferences of the FTA, they have to apply for approved exporter status, unless they export consignments of products whose total value does not exceed EUR 6 000. National customs authorities are responsible for granting exporters this status, provided they have offered to the satisfaction of the customs authorities all guarantees necessary to verify the originating status of their products, as well as fulfil the other requirements of the Protocol on RoO. Approved exporters are granted a customs authorisation number from the customs authority of their country, which will appear on the origin declarations the exporter in question issues.

92 For more details, see the discussion regarding EU vs. Korean PURs in section 5.1 of this synthesis report.

consultation indicated that administrative burdens remained the same since the application of the FTA, although some respondents mentioned increased administrative burdens associated with the documentation required to prove the origin of goods under the FTA.⁹³ Costs also accrue to the EU for the costs of financing the institutional structure of the FTA, such as working group meetings, as well as related to monitoring and reporting requirements concerning the FTA.⁹⁴

The analysis also identified inefficiencies related to the direct transport clause in the Protocol on Rules of Origin, which states that products must be transported directly between the EU to Korea and vice versa in order to benefit from the tariff preferences of the FTA. Interviewed stakeholders confirmed the widely held view that the current rules are problematic for certain sectors: this provision particularly affects EU exporters who make use of logistical hubs (mostly Singapore) for operations such as repackaging and labelling prior to distributing their products to various Asian markets (relevant e.g. for exporters in the spirits and chemical industries). In order to benefit from the preferential tariffs of the FTA, some companies have chosen to ship goods directly from the EU to Korea. However, in these cases, companies cannot react swiftly to demand fluctuations, as shipping from the EU to Korea can take well over a month. Already in December 2011 the EU-Korea FTA Customs Committee discussed the issue of “redrafting of the provision on direct transport”,⁹⁵ without the agreement having been amended thus far.

Based on the above analysis, the Commission concludes that the EU-Korea FTA has been, in general, efficient with respect to achieving its objectives. However, some inefficiencies remain, as described above, that have a certain impact on the efficiency of the FTA.

EQ4: To what extent has the EU-Korea FTA been coherent with the EU-Korea Framework Agreement and with current EU trade policy?

The EU-Korea Framework Agreement was signed on 10 May 2010 and entered into force on 1 June 2014, replacing the original 1996 agreement. As a review of the agreement

93 In their comments, four EU respondents (three in the chemicals sector, one in the textiles sector) specifically described increased administrative burdens associated with the documentation required to prove the origin of goods under the FTA. Some workshop participants also noted that while the initial acquisition of this approved exporter status is not particularly difficult, companies often have problems when proving the originating status of their goods. See the summary of stakeholder consultation in Annex 2 of this synthesis report for more detail on stakeholder perceptions of administrative costs.

94 The Commission has provided annual reports on the implementation of the EU-Korea FTA, and presented results of the monitoring the evolution of imports and exports of Korean products in sensitive sectors potentially affected by duty drawback such as cars, car parts, textiles and consumer electronics, see e.g. SWD(2017) 345 final, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017SC0345&from=EN>

95 *Annual Report on the Implementation of the EU-Korea FTA*. European Commission, 2013.

concludes,⁹⁶ while the agreement is broad in scope, it does not contain particularly detailed obligations and focuses mainly on two types of provisions. The first category of provisions establishes obligations for the Parties related to shared values, such as attachment to democratic principles, human rights etc. in Article 1 of the agreement. The second category of provisions calls for cooperation in a wide range of areas such as trade and investment, economic policy dialogue, business cooperation, taxation, customs, competition policy, information society, science and technology, energy, transport, maritime transport policy and consumer policy. Finally, the agreement also creates an institutional framework within which the cooperation takes place.

The EU-Korea Framework Agreement therefore serves as the basis for greater cooperation on a wide spectrum of areas of mutual interest matters at bilateral, regional and global levels such as security, human rights and climate change. Its signing was part of both sides' commitment to upgrade their relationship to the level of a strategic partnership, which was anticipated to further strengthen their bilateral dialogue and cooperation in regional and global affairs.⁹⁷

The Framework Agreement is coherent with the EU-Korea FTA, which is *inter alia* safeguarded through cross-references and linkages. Article 9 of the Framework Agreement on trade and investment explicitly refers to the "agreement establishing a free trade area" (the EU-Korea FTA) as a "specific agreement giving effect to the trade provisions of" the Framework Agreement. It refers to Article 43 of the Framework Agreement, which provides that both Parties can adopt "specific agreements in any area of cooperation falling within its scope"—the FTA being one such agreement. The same Article stipulates that such specific agreements shall be "an integral part of the overall bilateral relations" and shall form "part of a common institutional framework". The Framework Agreement establishes a Joint Committee "to facilitate the implementation and to further the general aims of this Agreement as well as to maintain overall coherence in the relations and to ensure the proper functioning of other agreement between the Parties" (Article 44(2)).⁹⁸ In this aim of creating overall coherence in the relations, it again links to the FTA, which provides for a comprehensive institutional framework on its own.⁹⁹ However, there is no overlap regarding tasks or responsibilities of the institutions established under the FTA and the Framework Agreement. Based on a review of the agreements, and the results of the stakeholder interviews, the

96 Harrison, James, "Overview of the EU-Korea Framework Agreement", in James Harrison (ed.), *The European Union and South Korea: The Legal Framework for Strengthening Trade, Economic and Political Relations*, Edinburgh University Press, 2013, pp. 149-159. 150.

97 "South Korea." European Commission: Directorate-General for Trade, 1 July 2016. Web. 07 July 2016.

98 While trade-related issues can appear on the agenda of the Joint Committee, the Joint Committee would not take decisions on these matters.

99 Note that the original text of the Framework Agreement did not define the rules of procedure or role of the Joint Committee, though in May 2016 rules of procedure were adopted (see <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016D0845&from=en>.)

evaluation did not identify any overlaps or contradictions concerning other aspects of the two agreements.

With respect to EU trade policy in general, the EU-Korea FTA was one of the first of the “new generation” of FTAs which are comprehensive in scope and focus on substantially liberalising all trade in line with the Global Europe strategy. The EU-Korea FTA was also the first FTA negotiated by the EU with an Asian country. In line with the specific recommendations of the Global Europe strategy, the EU-Korea FTA broke new ground in including detailed, sector-specific provisions; addressing key horizontal issues such as investment, public procurement, competition, and IPR enforcement; promoting regulatory convergence in order to reduce non-tariff barriers to trade; and including a Chapter on trade and sustainable development, linking trade with labour rights and environmental protection. The objectives of the EU-Korea FTA are broadly coherent with the objectives set out in the Global Europe strategy.¹⁰⁰

In October 2015, the EU announced its new trade and investment strategy “Trade for All”,¹⁰¹ which intended to make EU trade policy more responsible by basing it on the three key principles of effectiveness, transparency, and values, including a commitment to sustainable development. The “Trade for all” strategy identified the EU-Korea FTA as a “prime example” of the new generation of EU FTAs and noted its success in limiting some of the negative transitional impacts of trade through adequate transition periods and safeguard clauses. It also drew on the early results of the EU-Korea FTA to provide recommendations for improving the effective implementation of future FTAs with respect to rules of origin, customs procedures and trade and investment promotion. Therefore, while the FTA predates the “Trade for all” strategy and certain commitments of the strategy go beyond the provisions of the FTA, other key aspects of the FTA, such as the sustainable development provisions, can be considered to be largely coherent with the “Trade for all” strategy.

Based on the above analysis the Commission considers that The EU-Korea Framework Agreement is linked to the EU-Korea FTA, without there being overlaps or contradictions between the agreements. The FTA is in general coherent with the EU trade policy, including the Global Europe strategy and key aspects of the 2015 “Trade for all” strategy. However, as the FTA predates the “Trade for all” strategy, certain commitments made therein go beyond the provisions of the FTA.

EQ5: To what extent are the provisions of the EU-Korea FTA relevant for addressing current trade issues faced by the EU and Korea?

The current trade issues faced by the EU and Korea can be divided in two categories: issues which fall within the scope of the FTA (the so called "FTA implementation issues") and issues which fall outside the scope of the FTA (which would require amendments of the

¹⁰⁰ See section 2.2 of this synthesis report for more detail.

¹⁰¹ “Trade for all: Towards a more responsible trade and investment policy”, European Commission, 2015.

FTA). To the first category belong issues such as the implementation of the FTA financial services commitments, postal services, SPS, TSD, GIs, copyright. To the second category belong issues such as the inclusion of truck-tractors in Annex 2-C of FTA and update of the Rules of Origin Protocol (the direct transport rule and re-entry of repaired goods) .

Several issues falling in the first category have been successfully resolved, for example those related to financial services, and thus the FTA proved relevant to address them. On others, Korea has made limited progress or no progress, for example as regards implementation of the TSD chapter, the extension of the EU GI list, the removal of the ban on EU beef and the guaranteeing of public performance rights.

As regards the second category, the situation has been more challenging since the FTA does not include relevant obligations either for the EU or for Korea. However, the institutional mechanisms of the FTA - committees and working groups - have provided a useful forum to discuss those issues and raise the awareness of the other Party about existing trade problems. Ultimately, certain issues would require amendments of the current FTA provisions.

The Commission therefore concludes that the FTA provisions continue to be relevant for addressing current trade issues. However, in order to tackle more effectively a number of them, certain FTA amendments would be necessary.

CONCLUSIONS

This evaluation found that the performance of the FTA is largely in line with the ex-ante expectations that were set out in the SIA. The ex-ante CGE modelling carried out for the SIA predicted a modest GDP increase for Korea between 0.2% (in a simulation using standard elasticities) and 0.6% (using reduced import substitution elasticities). For the EU25, the SIA predicted an effect on GDP of marginal significance. The actual gains estimated by the model used in this study fall within the predicted ranges in the SIA, and foresee an increase in GDP by about EUR 4.4 billion (measured in 2015 prices) due to the FTA and for, Korea by EUR 4.9 billion.

The SIA also predicted increases in the trade in services between the EU and Korea (especially with respect to financial services) and in FDI flows, which were confirmed in this evaluation. With respect to social and environmental impacts, the results of this evaluation also confirmed the expectations set out in the SIA, namely that there were unlikely to be major disruptions in the labour markets in the EU or Korea and that the agreement was not foreseen to have significant adverse environmental effects. Although the SIA did predict a potential environmental mitigation challenge from increased energy use in the EU and Korea due to an increase in production and trade flows, the results of this evaluation show that the resulting increase in CO₂ emissions has been more than fully offset by global emission reductions through trade diversion effects. With respect to the predicted impacts on human rights, the EU-Korea FTA is assessed to have not changed the status quo of human and labour rights in Korea except for a minor positive impact on the right to food, which is also in line with the expectations of the SIA.

This evaluation of the EU-Korea FTA concludes that the FTA has been *effective* in achieving several of the specific objectives of the agreement set out in Article 1.1(2)(a) to (h) of the FTA, although in some cases, remaining issues limit the FTA from exploiting its full potential. Specifically:

- The FTA has been effective in *liberalising and facilitating trade in goods* between the EU and Korea. Due to the FTA, exports of goods to and from Korea have increased substantially from the period before the start of the provisional application of the FTA and after it. Absolute tariff reduction was quite substantial in both the EU and Korea. Further simplification work is needed in relation to reducing the administrative burden to obtain an AES, the direct transport rule and the use of tariff preferences.
- The FTA has contributed to the liberalisation of *trade in services and investment*. EU services exports to Korea grew considerably, as did service imports from Korea.
- The EU-Korea FTA has had so far limited effect on *promoting competition* in the Korean economy. The Korean economy continues to be dominated by industrial conglomerates (*chaebols*).
- The EU-Korea FTA has had so far limited effect on *further liberalising the government procurement* market in Korea. The results of this evaluation do not provide enough data and evidence for an increase in Korean procurement from EU providers due to the FTA.
- The EU-Korea FTA has contributed to the protection of the *intellectual property rights*, in particular IPR enforcement and protection of geographical indications. Similar to the EU, Korea has advanced its IPR legislation in general, which has been further improved through international agreements in recent years. Some specific issues remain such as the protection of public performance rights of authors, producers and performers in Korea, as well as the extension of the original list of EU GIs.
- The EU-Korea not only eliminated tariffs but also succeeded in *the reduction of non-tariff trade costs*. Further work is needed as regards certain NTTCs on standardisation, conformity assessment, labelling, and SPS measures, as well as the inclusion of truck tractors in the UNECE equivalence tables of the automotive annex (2-C) of the FTA.
- The EU-Korea FTA has had so far limited effect to contributing to the objective of *sustainable development*. The TSD institutional mechanisms have been implemented as envisaged and have promoted dialogue on TSD between the EU and Korea. During the evaluation period Korea has so far made little progress to implement its TSD commitments on labour rights.
- As for its environmental effects, the EU-Korea FTA has led to a limited but notable *reduction of global CO₂ emissions*.

- The FTA has *boosted bilateral foreign direct investment (FDI)*. Due to a lack of specific data, it is not possible to come to a final conclusion regarding the impacts of EU FDI on Korean environmental, labour, or occupational health and safety standards; however, the social analysis, environmental analysis and human and labour rights analysis did not indicate negative impacts of the FTA.

As regards the EU-Korea FTA contribution to the overarching objectives of harmonious development and expansion of world trade, promotion of economic growth and stability, poverty reduction, raising standards of living, improvement of the general welfare and contribution to sustainable development¹⁰², it is too early to draw definitive conclusions due to the fact that those objectives require a longer period of time to produce tangible results, hence at the time of the evaluation the data available was limited.

No unintended (negative) *side effects* of the EU-Korea FTA with respect to the economic, social, human and labour rights, and environmental dimensions were identified in the evaluation.

With respect to *efficiency*, while the FTA implementation results in some costs, including administrative costs for businesses (e.g. to apply for approved exporter status) and the costs of financing the institutional structure of the FTA for the EU, both EU Member States and Korea experienced on balance notable gains in welfare due to the FTA. However, some inefficiencies were identified, including the effects of the direct transport clause for certain industries, the administrative burdens in some countries for applying for approved exporter status, and the continued existence of certain NTTCs, which have a certain impact on the efficiency of the FTA.

The EU-Korea FTA is assessed to be *coherent* with the EU-Korea Framework Agreement.

The FTA provisions continue to be relevant for addressing current trade issues, although in some cases respective FTA amendments would be necessary to tackle some issues more effectively.

In conclusion, the evaluation demonstrated that the EU-Korea FTA, after 5 years of implementation, works quite well in terms of achieving its specific objectives. It seems also on track to achieve its overarching objectives.

The FTA has clearly in practice contributed to the liberalisation and facilitation of trade in goods, services and investment.

¹⁰² Although the Commission considers it too early to draw definitive conclusions regarding the FTA's contribution to sustainable development, it has nevertheless provided the tools for the launch of consultations regarding the implementation of Korea's commitments pursuant to the International Labour Organisation conventions.

The few issues which have been identified as affecting the performance of the FTA have had limited impact and do not require major changes to the FTA. The vast majority of areas the implementation works well and strongly supports economic development on both sides. This was also recognised in the resolution of the European Parliament which was adopted on 18 May 2017.

Full and correct implementation of the EU-Korea FTA continues to be of key importance for the Commission, in order to bring the expected benefits to both sides. The Commission is taking all necessary steps to continue its efforts in that direction.

As regards *longer term effects of the EU-Korea FTA*, it is too early to draw definitive conclusions about the attainment of the overarching objectives of the FTA. Indeed, this evaluation covers only a limited period of time after the start of the provisional application of the agreement in July 2011. For many products, the agreement specifies phase-in schedules for tariff reductions. Horizontal provisions will take time to fully develop their effects. The same is true for the spread of information, e.g., related to procurement markets. Finally, some variables such as investment stocks accumulate only gradually over time. It is therefore possible that the present analysis underestimates the effects of the FTA.

Therefore, the Commission will carry out a follow-up evaluation after a period of several years when the full effects of the FTA are observable. It would then also be possible to compare the longer term effects of the EU-Korea FTA with the effects of other 'new generation' FTAs concluded by the EU (such as CETA) or with the effects of FTAs concluded by Korea with third countries. . In that respect, there is a need for improvement of the collection and presentation of relevant trade statistics by responsible EU bodies to facilitate the in-depth analysis of causal effects of EU trade agreements in the future.

ANNEX 1: PROCEDURAL INFORMATION

• EVIDENCE, SOURCES AND QUALITY

Each case study was based on in-depth desk research (covering past studies and reports, academic literature, documents received from stakeholders, and the text of the agreement itself), the results of the economic analysis, the results of the stakeholder consultation and the complementary surveys, and the in-depth interviews conducted throughout the study.

The evaluation is based on an external study carried out by CIVIC Consulting and Ifo Institute¹⁰³. The findings of the study are presented in the Final Report of the study (hereinafter the "Final Report"). It is further complemented by internal analysis of the Commission services based on the Annual reports on the implementation of the EU-Korea FTA, the chief economist statistics and the experience from the FTA implementation.

The consultant used the following methodological tools to produce the analysis presented in its Final Report:

- *Review of literature and data*, covering a total of 160 reports, documents and academic articles, as well as data from numerous databases and sources including TARIC, WITS, COMEXT, UN-Comtrade, the World Input-Output Database (WIOD), the Exporter Dynamics Database (EDD) and others;
- *Stakeholder consultation*¹⁰⁴, consisting of:
 - an open public consultation;
 - a survey on the impact of the EU-Korea FTA on Small- and medium-sized enterprises (SMEs);
 - a survey on the impact of the EU-Korea FTA;
 - a civil society dialogue meeting;
 - a stakeholder workshop;
 - an evaluation website that informed stakeholders throughout the evaluation process.

103 Information about the study can be found at the consultant's website: <http://www.eukorea-eval.com/>

104 More information can be found at: <http://www.eukorea-eval.com/consultation/> and <http://ec.europa.eu/trade/policy/countries-and-regions/countries/south-korea/>, as well as Annex 2 of this SWD.

- A total of 94 *in-depth interviews*, covering EU and MS-level business associations, EU companies, government entities, and other stakeholders (including the International Labour Organization (ILO), European, international and Korean trade union federations, and other organisations in the EU and Korea);
- Eight *sectoral and cross-cutting case studies*, focusing on:
 - Automotive (passenger cars);
 - Agriculture;
 - Electronic goods;
 - Environmental goods/services;
 - Postal services;
 - Rules of origin;
 - Use of tariff preferences; and,
 - Implementation of institutional mechanisms of the trade and sustainable development (TSD) chapter.

A total of 15 specific analyses, most notably a descriptive analysis of trade data regarding goods and services, an econometric analysis of trade flow data, a simulation analysis, analyses of FTA impacts on SMEs and consumers, a social analysis, an analysis of FTA impacts on human and labour rights, as well as an analysis of environmental impacts.

Key elements of the specific analyses were:

- (1) Description and initial inspection of data at a disaggregate level and using—where appropriate—econometric tools to obtain simple conditional correlations with the purpose of obtaining first insights into the data. This includes trade data (goods and services), various margins of trade (extensive and intensive), foreign direct investment (FDI) and different leads and lags (to capture anticipation and phase-in effects). This also presents key statistics on measurable trade policy instruments (tariffs) and tariff income (for the pre-agreement situation), as well as the number of jobs associated with the agreement.
- (2) Econometric analysis of the relevant trade flow data at the appropriate level of aggregation to obtain causal estimates of the relevant parameter required for a full general equilibrium analysis of the EU-Korea FTA.

(3) Simulation analysis with the help of a computable general equilibrium (CGE) model to obtain information on how the status quo (with the FTA in place) compares to a counterfactual situation (without the FTA in place) in terms of bilateral trade flows, aggregate welfare, sectoral employment, wages, workers' purchasing power, government income, greenhouse gas emissions, and other equilibrium objects of interest.

The research and analyses described above were carried out by a team of experts from Civic Consulting and Ifo Institute. The method applied was in line with the proposed methodology; however, the interview process was substantially extended to ensure a full coverage of all regions of the EU, all key exporting and importing countries, and various Member States. Altogether, input was received from more than 20 Member States which together account for 98% of the EU trade with Korea.

Limitations and robustness of the findings

The general aim of the statistical and econometric analysis methods employed for this study was to identify the causal effects of the EU-Korea FTA on various outcomes, which required addressing confounding factors. The difference-in-difference approach used does this in a rigorous manner; the availability of bilateral panel data for many country pairs and years (the estimation is based on more than 1.5 million observations) allowed for dealing with essentially all other determinants of trade in a non-parametric way.

In certain areas, however, the trade statistics used for the evaluation of the EU-Korea FTA have proven to be insufficient or limited, especially regarding services and trade activities of small- and medium-sized enterprises. Also, many databases offer only incomplete country or product samples. Inconsistent reporting of certain variables in specific countries makes detailed analysis even more challenging, particularly because a sound evaluation of a bilateral agreement such as the EU-Korea FTA requires information on global trade relations at a very detailed level. Furthermore, frequent changes in the definition of variables and differing methodologies of various statistical databases complicate empirical assessment.

Where the data was less comprehensive, e.g. in the area of social rights, as well as human and labour rights, disentangling the effect of the FTA posed some difficulties. The reported relationships only measure correlations, which do not imply causation. In these cases, the analysis therefore mostly consists of a comparison of trends in the pre-FTA and post-FTA periods, using the available data series and supported by complementary research. Conclusions were triangulated with the results of the stakeholder interviews and the consultation, which covered more than 150 organisations and 6 individuals from Korea and the EU.

The WIOD data on which the CGE analysis is based have both advantages and shortcomings. Due to their calculation by input-output linkages, they also reflect internal trade. Internal trade means that the 50 sectors of a country not only trade internationally but also within the country. These internal connections are important for understanding a country's production network, which again is essential for a general equilibrium analysis. However, with this major advantage comes also a minor drawback: due to reasons of symmetry, a sector's total output needs necessarily to equate to the sector's total input. Due to reporting and measurement errors, statistical discrepancies occur. They are caught by a balancing sector ("inventory") which equates the identity between inputs and outputs. For the purpose of our analysis, we have not taken this balancing sector into consideration. However, these discrepancies are relatively small and are unlikely to follow a systematic pattern. Thus, they should not bias the results of the study systematically. For the sake of completeness, one has to mention that other trade data technically face the same problem: export values, as reported by an exporting country, often slightly differ from the respective import values reported by the counterparty. Over all, WIOD data seem consistent, less error prone, and reliable. Hence, they fit best for our analysis and satisfy our requirements with respect to internal trade.

The general equilibrium model which is used in the economic analysis is based on structural estimates of model parameters. This means that these parameters are based on data and thus, they reflect the world as we observe it; hence, parameter uncertainty is minimised. However, trade models are subject to certain limitations. For instance, the Ifo Trade Model is static, which makes it unable to predict economic adjustment paths and costs. This static nature allows only a before/after analysis but we do not know how and when exactly adjustments, e.g. sector reallocation, occur. The model does not allow trade to affect innovation and technology choice, and therefore does not feature dynamic gains from trade. These dynamic gains from trade could include technological spill-overs. The model operates under perfect competition, meaning that firms have zero profit margins; therefore, there are no pro-competitive gains from trade either. Pro-competitive gains from trade occur if firms have less market power after a trade liberalisation. Then, they are likely to decrease their profit margins which will be redistributed to consumers. As consumers would gain more than firms lose, there are positive overall effects. Moreover, the model deals in particular with aggregate gains from trade and omits distributional effects. In this context, two aspects are worth noting: first, because the model omits a number of mechanisms through which trade leads to welfare gains, it is likely to underestimate the long-run aggregate gains. Thus, the estimates presented in the report are conservative in nature. Second, while the omission of adjustment costs is a limitation of the model, these costs tend to be short-lived in nature. Research shows that they have relatively little effect on total welfare effects of trade agreements. The model includes labour as the only production factor and abstracts from capital. Thus, it cannot predict capital flows (FDI) nor distributive effects (how rents are allocated between capital owners and workers).

Furthermore, this evaluation covers only a limited period of time after the start of the provisional application of the agreement in July 2011. Empirical studies show that the effects of FTAs unfold only gradually. For many products, the agreement specifies phase-in schedules for tariff reductions. Horizontal provisions may take time to fully develop their effects. The same is true for the spread of information, e.g., related to procurement markets. Finally, some variables such as investment stocks accumulate only gradually over time. It is therefore possible that the present analysis underestimates the effects of the FTA.

Note that all figures provided in this report which are not otherwise cited are the results of the analysis as provided in the final report for this study.

ANNEX 2: SUMMARY OF STAKEHOLDER CONSULTATION

RESULTS OF THE STAKEHOLDER CONSULTATION

This annex provides a summary of the consultation activities conducted in the framework of this evaluation, consisting of an open public consultation, a survey on consumer interests and sustainable development (survey on consumers), a survey on small- and medium-sized enterprises (survey on SMEs), and a total of 94 interviews with stakeholders in the EU and Korea, as well as a civil society dialogue and a stakeholder workshop in Brussels.

Public consultation and survey on consumers

The open public consultation and the survey on consumers were carried out from December 2016 to March 2017. In addition to introductory questions aimed at collecting information about the respondent, including questions regarding trade activities with Korea for companies and business associations, the questionnaire consisted of 15 short sections regarding various aspects of the EU-Korea FTA and EU-Korea trade. Topics covered included trade in goods/services, customs procedures, non-tariff barriers, regulatory changes and sustainable development, among others. The questionnaire then concluded with a set of general closing questions. Note that a full set of figures showing the results of the open public consultation and survey on consumers can be found in the Annex to Part 2 of the final report for this study.

Overview of responses

The open public consultation and the survey on consumers received 50 responses and seven responses, respectively. The majority of responses were submitted by business associations and companies;¹⁰⁵ some NGOs, consumer organisations, a trade union,¹⁰⁶ and individual citizens/academics also provided responses. As the survey on consumers consisted of a subset of questions from the public consultation that were more relevant to consumer organisations and NGOs, the results of the survey on consumers are presented together here with the results of the public consultation.

Trade activities with Korea

The large majority of companies/member companies of business associations that responded to the consultation are either currently involved in EU-Korea trade or are planning or

105 A comprehensive range of sectors was represented in the responses from companies and business associations, with manufacturing being the most common. All types of companies (independent, subsidiary, and controlling) were represented, as were all sizes, from micro companies (1-9 employees) to large companies (250 or more employees). The vast majority of respondents were based in the EU.

106 In the following, NGOs, consumer organisations and trade unions are referred to as “civil society organisations”.

exploring the possibilities for EU-Korea trade in the future. Only one respondent (an EU company in the beverages sector) does not intend to engage in EU-Korea trade.

Similarly, the majority of companies/member companies of business associations that responded to the consultation currently have cross-border investments, had such investments in the past, or are planning or exploring the possibilities to invest in the future. Others do not intend to make such investments.

Over half of companies that responded to the consultation have made use of the tariff preferences under the EU-Korea FTA. Among those that have not made use of the preferences, reasons included not knowing how to take advantage of the tariff preferences, the tariff preferences not being relevant to companies' products, and "other" (one EU chemical company elaborated upon this as a lack of competitiveness with Korea).

Market access for goods under the EU-Korea FTA

The large majority of companies and business associations that had an opinion assessed that access to the Korean market for EU goods and access to the EU market for Korean goods has either very much improved or slightly improved since the application of the EU-Korea FTA. Most other companies and business associations were of the opinion that market access remained the same.

Several respondents (EU business associations representing various sectors, including transport, machinery, and electronic equipment) who viewed that access to the Korean market for EU goods remained the same commented on the introduction of new non-tariff trade costs, which counteracted the benefits associated with tariff reduction (see below for further details).

The majority of other stakeholder groups (civil society organisations and individual citizens/academics) had no opinion or did not provide input regarding market access in the EU and Korea.

Customs procedures under the EU-Korea FTA

Companies and business associations were divided in their views concerning how costs of customs procedures and time required for customs clearance when exporting from the EU to Korea have been impacted since the application of the FTA, with the largest group of those having an opinion indicating that costs/time remained the same. Of the remaining companies/business associations, several indicated that costs/time decreased slightly or, in contrast, that they increased slightly. Most respondents from other stakeholder groups had no opinion.

The most common customs-related problems observed in both Korea and the EU were 'transparency/publication of and access to trade regulations', and 'import or export documentation requirements'. Also noted as a problem by a larger group of respondents were 'customs inspections' (in Korea). With respect to transparency of trade regulations in Korea,

three respondents (all EU business associations) commented on transparency problems specifically related to regulations of the Korea Occupational Safety and Health Agency (KOSHA).

The majority of respondents who observed customs problems in Korea or the EU also incurred costs as a result. Most costs were reported as either very or moderately significant.

Customs-related provisions of the EU-Korea FTA

With respect to the functioning of customs-related provisions of the EU-Korea FTA, the large majority of companies and business associations expressing an opinion were satisfied with approved exporter status, rules of origin, and administrative cooperation (in all cases with a minority indicating that they were rather not or not at all satisfied with these provisions). Companies and business associations were nearly evenly split in terms of their views on the direct transport provision—slightly more than half of those with an opinion were very or rather satisfied, with the others either rather not or not at all satisfied. While no clear sectoral patterns were discernible in most answers, the group of business stakeholders unsatisfied with the direct transport provision included cross-sectoral organisations (BusinessEurope) and sectoral organisations/companies in the chemicals (Fecc, Cefic), basic metals, food products and beverages sectors (FoodDrinkEurope), and the engineering industries (Orgalime).

Non-tariff barriers

Companies and business associations were divided in their views regarding non-tariff barriers (NTBs) for EU exporters due to measures applied by Korea after the application of the FTA: slightly under half of those with an opinion thought that non-tariff barriers had increased in Korea, while others thought they decreased slightly or remained the same.¹⁰⁷

There is not always a clear sectoral pattern in the responses: those respondents that were of the opinion that NTBs had decreased slightly included a cross-sectoral organisation (BusinessEurope) as well as business associations/companies in the following sectors: production of food, dairy products (European Dairy Association), office administration and other business support activities, and production of chemicals and chemical products. In contrast, respondents that assessed that non-tariff barriers for EU exporters have even increased slightly or very much due to Korean measures included business associations in the following sectors: chemicals (Fecc, Cefic), and engineering/technology (Orgalime, German Engineering Association – VDMA, Technology Industries of Finland).¹⁰⁸ Finally, business

107 Only very few respondents commented on non-tariff barriers for Korean exporters due to EU measures, with their answers split between a slight decrease of NTBs, a slight increase or assessing they remained the same. Key specific NTBs mentioned by these respondents were 'other NTBs' (relating to the implementation of chemicals-related legislation in the EU) and licensing requirements and prohibitions. Due to the very limited number of responses received from Korean stakeholders, most of the few respondents that had an opinion concerning this question came from the EU.

108 All three listed organisations indicated that non-tariff barriers increased very much.

associations that indicated NTBs remained the same came from the following sectors: automotive (ACEA), dairy trade (Eucolait) and manufacturing.

The most common non-tariff barriers in Korea highlighted by respondents across all represented sectors were standards and other technical requirements, conformity assessment, and labelling and marking requirements. Several EU companies and business associations in the chemical sector commented specifically on the implementation and modification of Korea REACH (The Act on the Registration and Evaluation of Chemicals)¹⁰⁹ as being burdensome for EU exporters. Significant non-tariff barriers were also cited by ACEA for the automotive sector. A German company in the food-manufacturing sector cited the lack of progress in the negotiation of a veterinary certificate for poultry products as a problem concerning trade in animals and animal products between the EU and Korea.

The majority of respondents reported that they incurred very significant or moderately significant costs resulting from non-tariff barriers they experienced.

Respondents who indicated at least one non-tariff barrier were split in their views on their causes, with some attributing them to issues that are out of scope of the FTA, and others pointing to FTA implementation problems.

Investment

The majority of business associations and companies that had an opinion on whether the environment for EU direct investments in Korea had improved since the application of the EU-Korea FTA indicated a slight improvement for EU FDI in Korea. Most of the remaining business associations and companies with an opinion considered that it had remained the same.¹¹⁰

Two responding companies noted problems concerning investment protection in Korea, which included discrimination against non-national investors, seizure of assets without proper compensation, and restrictions on international capital transfers. The only business association with an opinion in this respect (Cefic) commented that in general, Korea maintains a rather solid rule of law, also regarding investment protection. However, based on the input of Cefic members, the lack of due process in the Korean court system was considered an issue.

109 Note that the Korean government has passed the K-REACH Amendment Act, which among other things abolishes an annual reporting requirement and introduces a pre-registration scheme for companies planning to register existing substances; the amended K-REACH legislation is expected to enter into force on 1 July 2018. (See <https://chemicalwatch.com/58115/south-koreas-cabinet-passes-biocides-law-and-amended-k-reach>.)

110 Note that most frequent answer of business associations and companies was 'no opinion/don't know' (as was indicated by all respondents from civil society organisations and individual citizens/academia). Regarding the question on the environment for Korean FDI in the EU, an even lower number of respondents had an opinion (and provided various answers: slightly improved/remained the same/slightly worse).

When asked if costs were incurred due to these problems, two of the three respondents confirmed they incurred moderately significant costs as a result (mostly for Korean lawyers, as one respondent specified).

Trade in services

Two-thirds of business associations and companies that had an opinion on whether the access to the Korean market for EU services had improved since the application of the EU-Korea FTA indicated that access had slightly or very much improved. The remaining business respondents with an opinion considered that it had remained the same.¹¹¹ Four of the respondents had observed problems concerning trade in services between the EU and Korea (in Korea), referring most frequently to 'discrimination against non-national service providers' and 'other problems'.

Four of the respondents had observed problems concerning trade in services between the EU and Korea (in Korea), referring most frequently to 'discrimination against non-national service providers' and 'other problems'.¹¹²

Sanitary and phytosanitary measures

Only relatively few companies and business associations expressed an opinion whether trade in EU animals/animal products with Korea had become easier after the application of the EU-Korea FTA. Three out of six respondents with an opinion considered that the overall difficulty remained the same. (Eucolait, which indicated that trade remained the same, commented, however, on the Korean ban on soft raw milk cheeses and a lack of clarity and transparency in the current procedure for registering plants in Korea.) Two respondents considered that trade had become easier and one company indicated that trade had become much more difficult (the latter, an EU food manufacturer, cited difficulties exporting processed pork products to Korea, but did not elaborate further on the type of difficulties). Given the few opinions received, it is difficult to draw a conclusion whether the FTA has contributed to addressing effectively existing SPS barriers to trade.

The most common problems reported concerning trade in animals/animal products in Korea were 'transparency regarding national sanitary requirements' and 'approval of establishments for products of animal origin'. 'Import controls', 'recognition of disease-free areas' and 'non-application of relevant international standards' were also cited.

111 Note that most frequent answer of business associations and companies was 'No opinion/don't know' (as was also indicated by nearly all respondents from civil society organisations and individual citizens/academia). Regarding the question on access to the EU market for Korean services, only 2 respondents had an opinion (slightly improved/remained the same).

112 Respondents that indicated 'other problems' suggested that "procedures are never specified clearly and authorities never give a final answer".

Intellectual property rights

Two-thirds of business associations and companies that expressed an opinion on whether the protection of EU intellectual property rights in Korea improved since the application of the EU-Korea FTA indicated that such protection has remained the same. The remaining respondents with an opinion indicated that protection of IPR has improved in Korea, with one of them (Eucolait) commenting on the protection of geographical indications (including a number of prominent cheese names) being included in the scope of the FTA.

With respect to the protection of Korean IPR in the EU, all business associations and companies with an opinion indicated that such protection has remained the same since the application of the FTA.¹¹³

The most frequently noted IPR-related problems were indicated with respect to designs and “other” areas in Korea. Concerning the latter, one respondent (an EU company in the beverages sector) indicated that they had to submit complete recipes and manufacturing processes to the Korean authorities before they could obtain a license for their products, even though these constitute business secrets. Another respondent (the European Games Developer Federation (EGDF)) indicated that Korean producers often duplicate existing European mobile games, leading local consumers to believe that the duplicates are original applications.

Public procurement

Among the companies and business associations who had an opinion regarding whether access to public tenders for EU suppliers in Korea improved since the application of the EU-Korea FTA, views were split: half thought that access remained the same, whereas others stated that access slightly improved or became worse.¹¹⁴

“Local content requirements” were cited by the most respondents as an area in which problems concerning public procurement were observed in Korea. Other problems noted by respondents included ‘lack of transparency on procurement opportunities’, ‘lack of clarity of the applicable rules, and/or of the applicable procedures’, ‘lack of access to tenders of state owned companies/public undertakings’, ‘lack of access to government tenders at the sub-central level’, and ‘discrimination through technical specifications’. Among the respondents who indicated problems, two reported incurring costs as a result.

Competition policy

113 Note that the most common response across all respondents was ‘no opinion/don’t know’ with respect to IPR in the EU and Korea.

114 The majority of companies and business associations, as well as all civil society organisations and individual citizens/academia responded with ‘no opinion/don’t know’. No respondents indicated views concerning public procurement in the EU.

With respect to whether free and undistorted competition in the Korean economy has improved since the application of the EU-Korea FTA, responses among companies and business associations were mixed: slightly under half of the respondents with an opinion indicated that competition remained the same; the remainder indicated that competition in Korea had either slightly improved or become very much worse. SEA Europe, which indicated that competition in Korea had become very much worse, commented on the Korean shipbuilding industry, which has benefited from state aid for several years in spite of overcapacity on the global market.

In terms of competition in the EU economy, slightly more than half of companies and business associations with an opinion indicated that competition had remained the same since the application of the FTA. Among the other respondents with views, ‘slightly improved’, ‘slightly worse’, and ‘very much worse’ were all chosen.

The most commonly reported competition-related problems in Korea were ‘abuse of a dominant position’, ‘state aid’, and ‘companies being granted special or exclusive rights or privileges’. (‘Cartels’ and ‘vertical or horizontal restrictions of competition’ were also cited as problems in Korea.) Five company/business association respondents who reported problems also indicated that they incurred costs as a result—three reported moderately significant costs, and two indicated very significant costs.

Regulatory changes and administrative burdens/compliance costs

A majority of respondents with an opinion consider that required regulatory changes to implement commitments from the EU-Korea FTA in Korea were either fully or partly made, or were not needed in the relevant area. However, a relevant sub-group of business associations indicated that required regulatory changes have not been made. In the follow up question, respondents were asked to specify the FTA provisions for which regulatory changes have not or only partly been made. ‘Technical barriers to trade’, ‘market access for goods’, and ‘sector-specific annexes on non-tariff barriers’ were considered to be common provisions for which regulatory changes have not been made or have only been partially made in Korea.¹¹⁵ The respondents (among them Cefic and Fecc) who indicated insufficient regulatory changes with respect to the sector-specific annexes on non-tariff barriers referred specifically to the aforementioned Korea REACH legislation in connection to the sector-specific annex on chemicals. ACEA also commented on a proposed Extended Producers Responsibilities bill in Korea that would become a significant burden for EU automotive manufacturers, as well as the overall concern that Korea has not harmonised its national requirements to international standards.

With respect to regulatory changes in the EU, the majority of companies and business associations with a view indicated that required regulatory changes were either fully or partly

¹¹⁵ The most common response among companies and business associations concerning regulatory changes in both Korea and the EU was ‘don’t know’.

made, with one EU company indicating that no regulatory changes were required in the relevant sector.

The majority of companies and business associations with an opinion on whether administrative burdens related to customs procedures had increased since the application of the EU-Korea FTA indicated that such burdens had increased; others indicated that these burdens remained the same or decreased slightly.

With respect to changes in other administrative burdens and substantive compliance costs since the application of the FTA, the majority of companies and business associations with an opinion indicated that these burdens remained the same. (Among the other respondents with views in this area, BusinessEurope indicated that these burdens decreased slightly, and the European Games Developer Federation indicated that they increased slightly.)

In their comments, four EU respondents (three in the chemicals sector, one in the textiles sector) specifically described increased administrative burdens associated with the documentation required to prove the origin of goods under the FTA. Additionally, ACEA commented on new requirements for procedures of certification and aftermarket surveillance, technical documents, and shifted penalty conditions for the automotive industry. The EGDF noted inter alia the need to obtain a rating certificate from the Korean Game Rating and Administrative Committee in order to publish games that aren't suitable for minors under 18 years of age. FoodDrinkEurope also commented on the burden of the direct transport rule on businesses that use trade distribution hubs in other Asian countries.

Domestic advisory groups and civil society forum

The large majority of respondents (mainly civil society organisations and citizens/academia) who had an opinion on whether the EU and Korean Domestic Advisory Group (DAG) and the Civil Society Forum (CSF) contributed to the implementation of the trade and sustainable development chapter thought that the EU DAG contributed either very much or moderately in this respect.

'Recommendations not taken into account' was the most common problem mentioned concerning the EU DAG and the CSF, whereas 'lack of coordination/cooperation' was mentioned the most often as a problem concerning the Korean DAG. In their comments, two respondents (ClientEarth and the Austrian Federal Chamber of Labour) brought up the fact that the EU and Korea have not yet entered into formal consultations regarding labour rights in Korea. In contrast, BusinessEurope commented that in spite of initial difficulties, positive developments have taken place with respect to these institutional mechanisms, such as the participation of ILO representatives at the CSF since 2015, the participation of both DAG chairs at the meetings of the Committee on Trade and Sustainable Development, and the participation of the Korean Federation of Industry at the 2017 CSF.

Impact on consumers

All civil society organisations with an opinion indicated that there have been impacts on Korean and EU consumers due to trade between the EU and Korea since the application of the EU-Korea FTA. The majority of companies and business associations with an opinion also indicated that there have been impacts in this respect.

In terms of specific impacts on consumers in Korea, the majority of companies, business associations, and citizens/academic respondents with an opinion indicated either very positive or slightly positive impacts on the prices of goods and services and the choice/availability of goods and services following the application of the EU-Korea FTA. Civil society organisations tended to view neutral impacts in these areas. Respondents in all groups were divided in their views on positive versus negative impacts in other areas, such as safety of goods and services and protection/enforcement of consumer rights.

The price and choice of goods and services were also viewed as areas in which positive impacts were observed in the EU (no clear patterns among stakeholder groups were observed here). It should also be noted that very negative impacts in the areas of quality, sustainability, and safety of goods and services, information available to consumers, protection and enforcement of consumer rights, and consumer trust in enforcement and redress mechanisms were noted by two EU civil society organisations.

In contrast, several respondents commented that it is difficult to assess the specific impact of the EU-Korea FTA on consumers. In particular, the *vzbv*—a German consumer organisation—stated that consumer organisations are not in the position and do not have the means to assess the consequences of FTAs on consumers.

Impact on sustainable development

Approximately half of respondents with a view (a mix of all stakeholder groups) indicated that EU-Korea trade has contributed either very much or moderately to economic development, social development and environmental protection, with the other half indicating that EU-Korea trade did not contribute to these aspects of sustainable development.

Social impacts: The majority of business associations and companies with an opinion indicated that there have not been social impacts (e.g. related to labour rights, employment, wages, gender-related issues, etc.) due to trade between the EU and Korea. Civil society organisations with a view were split, with approximately half indicating that there have been social impacts, and the other half indicating there have been no such impacts. In terms of specific social impacts in Korea, two respondents (an EU business association and a Korean NGO) indicated either a very positive impact or slightly positive impact on employment (in terms of number of jobs), household incomes, freedom of association/effective recognition of the right to collective bargaining, elimination of all forms of forced or compulsory labour, effective abolition of child labour, social dialogue, and gender related issues. For the EU, one respondent (an EU trade union) noted a slightly positive impact on freedom of association/effective recognition of the right to collective bargaining, elimination of

discrimination in respect of employment and occupation, social dialogue, and gender-related issues. In contrast, two respondents (an EU NGO and an EU consumer organisation) indicated a slightly negative or very negative impact on social dialogue, employment (number of jobs), social protection and poverty reduction in the EU.

Environmental impacts: The majority of businesses and companies and all citizens/academic respondents with an opinion indicated that there have not been environmental impacts in the EU and Korea since the application of the EU-Korea FTA, whereas the majority of civil society organisations with an opinion considered that there have been such impacts. For Korea, one EU company commented on higher quality EU products imported into Korea having longer endurance. Three respondents indicated either a slightly negative or very negative impact on air pollution. Concerning the latter, ClientEarth and Transport & Environment brought up the negative impacts of e.g. exports of diesel vehicles to Korea in light of the recent findings concerning the manipulation of emission control systems in diesel cars. For the EU, two EU civil society organisations also noted negative impacts with respect to waste, energy use and mix, water resources, and transport.

Human rights impacts: The majority of respondents with a view (a mix of all stakeholder groups) indicated that there have not been human rights impacts (e.g. regarding non-discrimination) due to trade between the EU and Korea since the application of the EU-Korea FTA in 2011, neither in Korea nor in the EU. One respondent (an EU NGO) who did indicate such impacts also provided feedback on specific impacts in the EU. Specifically, this respondent indicated slightly negative impacts on the right to work and the right to non-discrimination and equality.

Closing questions

Additional comments/issues that respondents further elaborated upon in the last section of the consultation included:

- Harmonising product certifications and product testing procedures would be ideal;
- The process of applying for approved exporter status should be simplified;
- Rules of origin should be simplified and made more flexible;
- The FTA may have negative impacts on employment.

Some of the main improvements resulting from the EU-Korea FTA listed by respondents included:

- Creation of an institutional framework to address regulatory and other issues;
- Tariff elimination;
- Increased trade between the Parties;
- Introduction of a chapter on trade and sustainable development.

The most problematic areas of the EU-Korea FTA listed by respondents included:

- Functioning of the institutional set-up;
- Inadequate enforcement of social/environmental/human rights standards;
- Increased administrative burden;
- Continued existence of non-tariff barriers;
- Origin declarations and supporting documents.

The majority of respondents across all stakeholder groups indicated that they see a need to improve the FTA. Some improvements cited included:

- Clarifying/improving the functioning of origin declarations and supporting documents;
- Eliminating non-tariff barriers;
- Including provisions regarding regulatory cooperation;
- Simplifying/improving rules of origin;
- Strengthening provisions/enforcement of social/environmental/human rights standards;
- Strengthening the institutions of the Chapter on TSD.

Survey on SMEs

Six responses were received for this survey. One respondent had 1-9 employees, another had 50-249 employees, and the other four indicated had 250 or more employees. Represented sectors included manufacturing, retail trade, and agriculture. All respondents were aware of the EU-Korea FTA.

All respondents indicated that access to the Korean market for EU goods had either improved or remained the same. However, in spite of this, three respondents indicated that the EU-Korea FTA had a very negative impact on their sector of production, e.g. because they could not compete in terms of price against cheaper Korean imports. Notably, only one respondent indicated that they had made use of the tariff preferences under the EU-Korea FTA.

When asked to specify the main benefits resulting from the EU-Korea FTA, three of the companies that export to Korea cited “increased exports to Korea/to the EU (compared to exports to other destinations)”; also cited were “more opportunities for cross-border investment”, “higher output of products/services”, and “higher employment”.

In terms of challenges and problems encountered in trading with Korea, the following issues were among those cited: “complex customs procedures”; “lack of transparency regarding trade rules”; “high compliance costs relative to the value of goods exported”; “standards and technical requirements”; and, “problems in terms of fair competition with Korean companies”. In total, four of the six respondents indicated that there is a need to improve the EU-Korea FTA.

Stakeholder interviews

As mentioned previously, a total of 94 stakeholder interviews were conducted with business associations, companies, government entities, trade unions, research institutes, NGOs, and other organisations at the EU and Member State-level, as well as in Korea. An overview of the interviews conducted is presented in the table below.

Table 2: Overview of stakeholder organisations interviewed

Type of stakeholder	Number interviewed
Company	25
Business association	36
Government	21
NGO/other organisation	5
Trade union	3
Research institute/academia	4

Source: Civic Consulting.

The interview process began with exploratory interviews in the inception phase of the evaluation, and continued throughout the study. The majority of interviews focused on the eight case study topics, though several interviews focusing on other sectors and topics, as well as cross-cutting interviews, were also conducted. Interviews were mostly held by phone or face-to-face, though some interviewees preferred to provide their answers in writing.

Key themes of the interviews are summarised below:

- *Market access:* The EU-Korea FTA has had a very positive impact with respect to increasing EU exports of goods to Korea, though some challenges still persist;
- *Non-tariff barriers:* Non-tariff barriers still pose significant problems to trade with Korea in some sectors, e.g. the automotive, agriculture, electronics, and chemicals sectors;
- *Rules of origin:* The definitions of originating products in the EU-Korea FTA are not harmonised with those of other EU FTAs, leading to some administrative burdens as EU exporters have to perform different origin calculations. This could be one potential factor affecting the use of tariff preferences;
- *Direct transport provision:* The current rules are problematic for certain sectors (e.g. beverages and chemicals). This provision particularly affects EU exporters who make use of logistical hubs for operations such as repackaging and labelling prior to distributing their products to various Asian markets;
- *Chapter on TSD:* The permanent institutional mechanisms foreseen by Chapter 13 of the FTA (the CTSD, the two DAGs, and the CSF) have been

implemented in line with the provisions of the agreement, though there are still serious concerns regarding labour rights violations in Korea;

- *Institutional set-up*: The institutional set-up consisting of the Trade Committee, specialised committees and working groups functions as intended.

Civil society dialogue and stakeholder workshop

Civil society dialogue

A one-day civil society dialogue (CSD) was held in Brussels on October 18, 2016. The purpose of the CSD was to present the inception report to civil society and exchange views on issues relevant for the evaluation. The following aspects of the inception report were presented:

- Methodology for the case studies;
- Methodology for the economic analyses and other analyses;
- Consultation strategy and tools.

The discussion with participants focused on the analysis of human and labour rights in Korea, the analysis of non-tariff barriers, and the case studies, among other areas. The feedback received from this CSD was taken into consideration in the preparation of the interim technical report of the evaluation.

Stakeholder workshop

A one-day stakeholder workshop on the interim results of the evaluation was held in Brussels on July 10, 2017. The purpose of the workshop was to present and discuss interim results, as well as to obtain additional input from interested stakeholders to be considered in the final stage of the evaluation. Specifically, the following aspects of the interim technical report were presented:

- Results of the economic analysis;
- Analysis of FTA implementation;
- Analysis of impacts on SMEs;
- Results of the social analysis;
- Results of the human and labour rights analysis;
- Results of the environmental analysis.

The discussion with participants covered public performance rights in Korea, effects of the FTA across EU Member States, the reduction of non-tariff barriers, the use of origin declarations, the direct transport clause, preference utilisation rates, and the implementation of the chapter on trade and sustainable development, among others. Workshop discussions were taken into consideration in the preparation of the final report of the evaluation.

ANNEX 3: SUMMARY OF METHODS AND MODELS USED IN THE EVALUATION

This annex provides a technical summary of the partial equilibrium and general equilibrium analyses used in this evaluation. For details on other aspects of the methodology, see section 4 of this synthesis report.

Partial equilibrium analysis

In the partial equilibrium analysis, simple statistical modelling is used to isolate the effects of the EU-Korea FTA on bilateral trade flows. Holding other determinants of trade (such as income levels, aggregate price levels, etc.) constant, the FTA's effects on bilateral trade costs are focused on. This serves as an important input into the general equilibrium (GE) analysis (summarised subsequently) where incomes, price levels, and so on are allowed to adjust and to affect bilateral trade flows.

Bilateral trade is determined by a large number of factors; a large literature, recently surveyed by Head and Mayer (2015), studies these factors.¹¹⁶ Broadly speaking, bilateral trade flows are driven by (i) characteristics of the exporter, (ii) the demand of the importer, and (iii) by bilateral factors:

- (i) *Characteristics of the exporter*: This relates to the elements which impact the exporter's competitiveness such as factor costs (wages, the cost of energy, of land, or of capital) and the productivity at which these production factors are used (driven by institutional quality and the availability of various public goods). How much a country wishes to supply to foreign partners depends also on the degree of local competitive pressure: the larger it is, the bigger the incentives to seek foreign markets;
- (ii) *Demand of the importer*: This describes the demand capacity of the importer, i.e., mainly the expenditure on traded goods, which is determined by the level of income and by the degree of economic development (richer countries have different spending patterns than poorer ones). Importantly, demand for foreign goods is also shaped by the overall degree of competitive pressure in the market: if it is low, prices are generally high, and consumers or intermediate import users find it more worthwhile to buy foreign goods;
- (iii) *Bilateral factors*: Trade between two countries is determined by the size of bilateral trade costs such as tariffs or non-tariff trade costs, transportation costs (often seen as a function of geographical distance), other transaction costs (information costs, communication costs, translation costs, costs related to

¹¹⁶ Head, Keith, and Thierry Mayer. "Gravity Equations: Workhorse, Toolkit, and Cookbook". *Handbook of International Economics, Vol 4*. Elhanan Helpman, Gita Gopinath and Kenneth Rogoff. 2015. 131-195.

dealing with bridging different legal or cultural environments), and so on. Anderson and van Wincoop (2004) argue that trade costs are very large, often exceeding 50 percent of the pure production costs of a good or service, and that tariffs are typically small relative to the total.¹¹⁷ However, some bilateral variables are only seemingly bilateral. While the bilateral nominal exchange rate between some countries, say the EU and Korea, is an important determinant of bilateral trade between them, one can think of it as depending on exporter and importer characteristics separately. The reason is that the euro/won exchange rate can be thought of as the product of the euro/USD exchange rate and the USD/won exchange rate.¹¹⁸ The exchange rates are relative to some third country, and can be considered as exporter or importer specific rather than truly bilateral.

Trade costs are affected by free trade agreements through their effects on non-tariff trade costs, tariffs, and on other, not directly policy-related, trade costs which are shaped by interactions on the market place (e.g., the depth of financial markets dealing with the currencies of the partner countries). In this study, we use simple statistical modelling to isolate the effects of the EU-Korea FTA on bilateral trade flows. Holding other determinants of trade (such as income levels, aggregate price levels, etc.) constant, we focus on the FTA's effects on bilateral trade costs. This serves as an important input into the subsequent general equilibrium (GE) analysis where we allow incomes, price levels, and so on, to adjust and to affect bilateral trade flows.

To this end, we model bilateral trade flows between 42 countries (including all EU countries) using a gravity equation¹¹⁹ with a comprehensive set of so-called fixed effects.¹²⁰ This allows us to interpret the estimated effects as causal ones: other determinants of trade have been accounted for such that the effects reported indeed represent the additional trade due to the agreement.

For the main estimation of aggregate effects of the EU-Korea FTA, the latest version of the WIOD trade data is used, and equations similar to those applied in Aichele, Felbermayr, and Heiland (2016) for use in the Ifo Trade Model.¹²¹ The latest

117 Anderson, James E, and Eric van Wincoop. "Gravity With Gravitas: A Solution To The Border Puzzle". *American Economic Review* 93.1 (2003): 170-192.

118 In fact, any third country exchange rate can be used. The US dollar (USD) is only an example.

119 Gravity trade models predict trade flows between countries based on economic size (calculated e.g. on the basis of GDP) and geographical distance.

120 Fixed effects are fixed parameters used in statistical modelling that aim to control for unobserved heterogeneity between the observational units.

121 Aichele, Rahel, Gabriel Felbermayr, and Inga Heiland. *Going Deep: The Trade and Welfare Effects of TTIP Revised*. 2016. Ifo Working Paper No. 219.

developments in the empirical gravity literature as summarized by Yotov, Piermartini, Monteiro, and Larch (2016) are incorporated.¹²²

The main specification uses econometric panel data methods on bilateral sector-level trade flows for the period 2000-2014. The sample for the main estimation includes all 56 sectors in the sample (i.e., goods and services trade). The estimation is based on more than 1.5 million observations. Additionally, Baier, Yotov, and Zylkin (2016) demonstrate that the effects of FTAs can be asymmetric.¹²³ The effects of the EU-Korea FTA in the model are therefore allowed to be different for EU exports to Korea and for Korean exports to the European Union.

Finally, in addition to accounting for the specific effects of the EU-Korea FTA, which are of primary interest here, the main specification also controls for the presence of any other regional trade agreement that may have impacted trade between the countries in the sample during the period of investigation.

General equilibrium analysis

Simulation analysis with the help of a computable general equilibrium (CGE) model was used in this evaluation to obtain information on how the status quo (with the FTA in place) compares to a counterfactual situation (without the FTA in place) in terms of bilateral trade flows, aggregate welfare, sectoral employment, wages, workers' purchasing power, government income, greenhouse gas emissions, and other general equilibrium objects (e.g. macroeconomic variables) of interest, including also effects on third countries (trade diversion). As these variables respond simultaneously to each other, thereby creating so-called feedback effects, a general equilibrium approach is required to clearly disentangle what drives the results.

The modelling approach used in this study is as data-driven as possible. We use the causal trade effects estimated in the partial equilibrium analysis (see above), translate them with the help of a standard trade model into the amount of trade cost reduction that must have occurred to generate the trade effects, and feed these into that same model to estimate general equilibrium effects.

The Ifo Trade Model used in this analysis is a CGE model, which falls into the class of New Quantitative Trade Theory (NQTT) models. This means that the estimation of parameters (essentially trade elasticities and the trade cost effects of the agreement in question) is conducted on the same data that are used as the baseline for the simulation exercise. However, the theoretical basis of the model is standard and comparable to other

122 Yotov, Yoto et al. An Advanced Guide to Trade Policy Analysis: The Structural Gravity Model. Geneva: UNCTAD and WTO, 2016.

123 Baier, Scott, Yoto Yotov, and Thomas Zylkin. On The Widely Differing Effects Of Free Trade Agreements: Lessons From Twenty Years Of Trade Integration. 2016. School Of Economics Working Paper Series, 2016-15.

CGE models. It is a stochastic, multi-sector, multi-country Ricardian model of the type developed by Eaton and Kortum (2002),¹²⁴ extended to incorporate rich value chain interactions by Caliendo and Parro (2015),¹²⁵ broadened to include non-tariff barriers by Aichele et al. (2014), and described in general terms by Costinot and Rodriguez-Clare (2014).¹²⁶ The pioneering work by Eaton and Kortum (2002), in particular the characterisation of technology as a random variable, allows us to obtain analytical results which make sure that the estimation of model parameters can be carried out in a consistent way based on a specific equilibrium relationship obtained from the model itself (the gravity equation).

The model assumes perfect competition and full employment. This is a standard assumption in similar exercises; see Costinot and Rodriguez-Clare (2014) for a survey of recent modelling advances. The reason is that there are no universally accepted frameworks that allow for linking trade policy to labour market outcomes.¹²⁷ Besides this technical aspect, there are good economic reasons for keeping unemployment rates constant for the modelling exercise. Lower trade barriers typically lead to an expansion of both exports and imports. Jobs are created in export-oriented firms and industries, but destroyed in import-competing ones. If lower trade costs lead to an asymmetric expansion of imports and exports, so that the trade surplus of a country grows or falls, the net balance of job creation and destruction might be positive or negative. Trade agreements such as the EU-Korea FTA aim to be “balanced”, i.e., reciprocal, so that they lead to a more or less proportionate expansion of both imports and exports, in particular in the long-run. Trade surpluses are usually not seen to be a function of trade costs but of macroeconomic variables such as exchange rates, interest rates, or the stance of fiscal or monetary policy which are not negotiated in trade agreements. Moreover, permanent imbalances would lead to financing constraints and are therefore not generally sustainable.

The assumption of constant overall employment has strong implications for sectoral effects: when one sector expands, at least one other sector must shrink. If the FTA draws more individuals into employment, such negative sectoral effects could be minimised. Because the model does not allow for this possibility, sectoral effects must be interpreted with care. Moreover, it is important to note that the Ifo Trade Model uses a standard

124 Eaton, Jonathan et al. "Trade and the Global Recession". *American Economic Review* 106.11 (2016): 3401-3438.

125 Caliendo, Lorenzo, and Fernando Parro. "Estimates of The Trade And Welfare Effects Of NAFTA". *Review of Economic Studies* 82.1 (2015): 1-44.

126 Costinot, Arnaud, and Andrés Rodríguez-Clare. "Trade Theory with Numbers: Quantifying the Consequences Of Globalization". *Handbook of International Economics*, Vol 4. Elhanan Helpman, Gita Gopinath and Kenneth Rogoff. 2014. 197-262.

127 This is not to say that there are no trade models which would allow for unemployment; see Felbermayr and Prat (2013) or Helpman et al. (2013) for recent surveys. Felbermayr (2015) analyses labour market effects of a potential EU-US trade agreement and surveys the pertinent literature.

static Ricardian framework. This means that trade is motivated by differences between countries in patterns of sectoral comparative advantages. Trade is impeded by trade costs—tariff and non-tariff ones, as well as by trade barriers imposed by geography, culture, or history. The Ricardian framework is very well established in economics. As the division of labour between countries becomes finer, consumers gain access to cheaper goods and producers gain access to cheaper intermediate inputs.

However, there are alternative engines for growth that are not taken into account in the model. The mechanisms behind them are described in Annex II of the final report for this study. Taking them together, we identify lower bounds to the real output and welfare gains of the EU-Korea FTA, i.e. the estimates provided in the general equilibrium analysis are conservative in nature.

The Ifo Trade Model requires detailed data on input-output relations between domestic and foreign sectors as inputs, and treats cost shares as constant (assuming Cobb-Douglas technologies); emissions are treated as (undesired) outputs and their output-coefficients are taken from the data as well. As with all other available CGE models, the framework does not endogenise FDI; this has to be taken into account in the interpretation of results.

Similar to almost all other CGE models, data from the Global Trade Analysis Project (GTAP) is used. The most recent available data set (GTAP 9.1) refers to the year of 2011, the year of the start of the provisional application of the EU-Korea FTA. The model is updated such that it reflects the trade policy landscape as observed in 2015. Starting in 2011, the effects of all free trade agreements as of 2016 are taken into account, which enables us to identify the pure causal effect of the EU-Korea FTA. In short, the results are based on world input-output structures that existed in 2011, which is the year of the start of the FTA's provisional application, but model the global trade linkages as of 2016. To obtain general equilibrium-consistent estimates of the causal effects of the EU-Korea FTA, the analysis compares this observed status quo situation with a simulated counterfactual situation in which the EU-Korea FTA is assumed to be non-existent (counterfactual scenario). To do so, tariff cuts as observed in the data and reductions in other trade costs as implied by the ex-post analysis of the agreement in the partial equilibrium analysis are counterfactually undone in the simulation model. More precisely, the estimated causal trade effects of the agreement are translated into trade cost reductions using the trade elasticities applied in the Ifo Trade Model (Aichele et al., 2016) and decomposed into the directly observable tariff and the non-observable non-tariff components using the model structure.

The resulting general equilibrium objects (trade values, sectoral value added, sectoral employment, wages, prices, GDP, tariff incomes, and greenhouse gas emissions) can be compared with their respective status quo counterparts. By construction, the difference is due to the agreement. It captures all general equilibrium feedback, e.g. those through trade diversion effects or changes in aggregate income. In contrast, the gravity estimates from the partial equilibrium analysis described in the previous section refer to partial equilibrium effects of the agreement, because incomes and aggregate prices are taken as

given. The advantage of this approach is that no direct measures of observed reductions in non-tariff barriers (NTBs) are needed, and the simulation exercise is cleanly tied to the gravity estimation.

The Ifo Trade Model allows for drawing conclusions about the EU-Korea FTA on the structure of bilateral trade flows at the GTAP 9.1. level of aggregation, aggregate trade (volumes and openness measures), levels of value added, employment, emissions, and price levels, both at the sectoral and on the aggregate levels, wages and overall price levels, measures of real per capita GDP and of welfare (compensating variation measures).