

# EVALUATION OF THE IMPLEMENTATION OF THE FREE TRADE AGREEMENT BETWEEN THE EU AND ITS MEMBER STATES AND THE REPUBLIC OF KOREA

Stakeholder workshop – July 10, 2017

Study for the European Commission – Directorate General for  
Trade

*Prepared by Civic Consulting and the Ifo Institute*



**CIVIC**  
CONSULTING

# Welcome and introduction

# Team

- **Civic Consulting:** Economic and public policy consultancy with expertise in evaluation, impact assessment and EU and global economic & legal studies, including trade related. Civic Consulting leads a variety of EC framework contracts for evaluation/impact assessment (DG SANTE, DG CONNECT, DG JUST, CHAFEA)
- **Ifo Institute:** Leading European economic research institute, with a strong focus on trade. Recent work has focused on TTIP, global trade and economic wage inequality and other trade related analyses

# Objectives of the study

- To provide an **interim evaluation** of the implementation of the EU-Korea FTA. The evaluation examines:
  - The **effectiveness and efficiency** of the FTA in view of achieving its objectives
  - The **relevance** of the FTA regarding current trade issues faced by the EU and Korea
  - The **coherence** of the FTA with the EU-Korea Framework Agreement and with the objectives of the EU trade policy
- To analyse the impact of the implementation of the FTA on **sustainable development** in its economic, social and environmental dimensions, as well as on human rights

# Scope

- The evaluation covers the impact of the EU-Korea FTA in the EU and, to a certain extent, in Korea, with the main focus being on the **EU and Member States**
- The evaluation covers:
  - **All areas** of the EU-Korea FTA except certain provisions of the Cultural Protocol and the IPR criminal enforcement provisions that started to be implemented only after the final conclusion of the FTA in 2016
  - The period from the date of the **start of the provisional application** of the EU-Korea FTA (1 July 2011) until the **latest available data**
- Total of **10 Tasks**, specified in detail in TOR

# Methodology/1

- **In-depth literature review**
- **Carrying out case studies**
  - Automotive (passenger cars)
  - Agriculture
  - Electronic goods
  - Environmental goods/services
  - Postal services
  - Rules of origin
  - Use of tariff preferences
  - Implementation of institutional mechanisms of the TSD chapter

# Methodology /2

- **Broad-scale consultation:**
  - **Public consultation and surveys:** Online public consultation, Survey on SMEs , Survey on consumers (3 months, all surveys closed 06.03.2017, 63 responses)
  - **Approx 80 in-depth interviews** with businesses; EU and MS business associations; EC; ILO; EU, Korean and international trade unions; customs; other civil society organisations, including human rights organisation in EU/Korea
  - So far, input was received from approx **150 organisations and 6 individuals** from more than 20 MS that together account for 98 % of trade with Korea

# Methodology /3

- **Carrying out specific analyses**, including partial equilibrium and CGE analyses
  - Model bilateral trade flows between 42 countries using **gravity equation** with comprehensive set of fixed effects. This allows us to interpret the estimated effects as **causal** ones
  - Use causal trade effects estimated in the partial equilibrium analysis, translate them with the **Ifo 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** (e.g. real GDP changes)



# Consultation results /1

- Overall: Two-thirds of responses from companies (23) and business associations (21). In addition NGOs/consumer organisations (9), trade union (1), other (9, mostly individuals)
- **Main benefits** of the FTA according to companies/business associations:
  - Increased exports to Korea/to the EU
  - Increased imports from Korea/from the EU
  - More opportunities for cross-border investment
- Most respondents that had an opinion assessed that **access to Korean market for EU goods improved** (and vice versa). Others considered access to have remained the same. Largely similar picture regarding **services**, but few had opinions

# Consultation results /2

- Respondents have diverging views whether or not **non-tariff barriers for EU exporters** decreased, remained the same or even increased. Main NTBs affecting EU exporters:
  - Standards and other technical requirements
  - Conformity assessment
  - Labelling/marketing requirements
- Impact on consumers mostly considered to be positive in Korea and EU concerning **prices, choice/ availability, quality of goods and services** (some noted difficulty to assess the specific impact of the EU-Korea FTA on consumers, as also highlighted by a consumer organisation)

# Consultation results /3

- Majority of respondents indicated a **need to improve the EU-Korea FTA**
- Suggested improvements include:
  - Clarifying/improving the functioning of **origin declarations** and supporting documents
  - Simplifying/improving **rules of origin**
  - Eliminating **non-tariff barriers**
  - Including provisions regarding **regulatory cooperation**
  - Strengthening provisions/enforcement of **social/environmental/human rights standards**
  - **Strengthening the institutions** of the Chapter on Trade and Sustainable Development

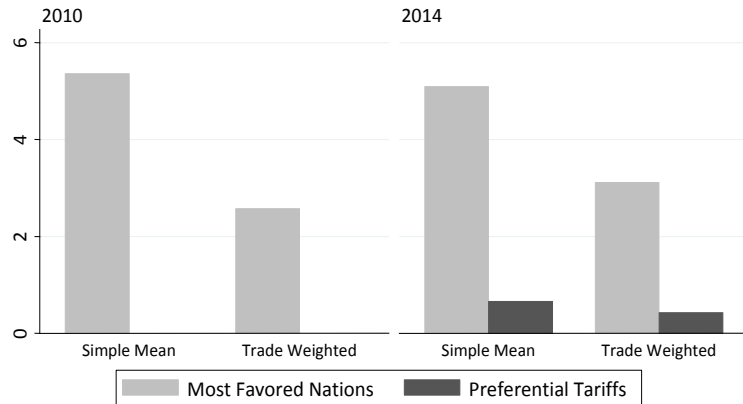
# Workshop agenda

Topic	Time
Registration	9.00-9.30
Welcome	9.30-9.35
Introduction	9.35-9.45
Results of the economic analysis	9.45-11.00
Analysis of FTA implementation	11.00-12.30
Conclusions morning session	12.30-12.45
<i>Break</i>	<i>12.45-14.00</i>
Analysis of impacts on SMEs	14.00-14.30
Results of the social analysis	14.30-15.15
Results of the human and fundamental labour rights analysis	15.15-16.00
Results of the environmental analysis	16.00-16.45
Conclusions afternoon session	16.45-17.00

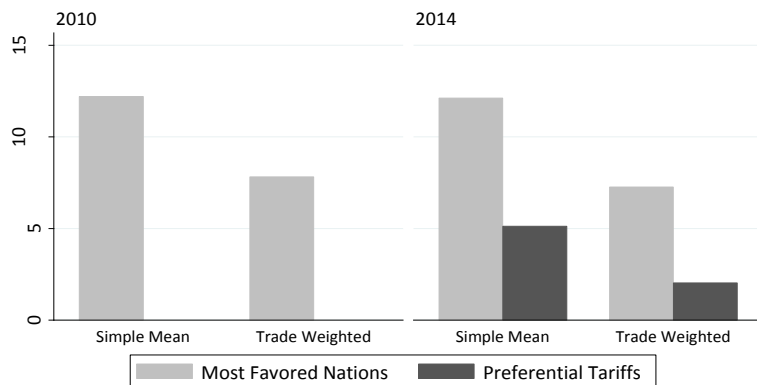
# Results of the economic analysis

# Evolution of tariffs

## EU tariffs on imports, Korea vs. MFN countries



## Korean tariffs on imports, EU vs. MFN countries

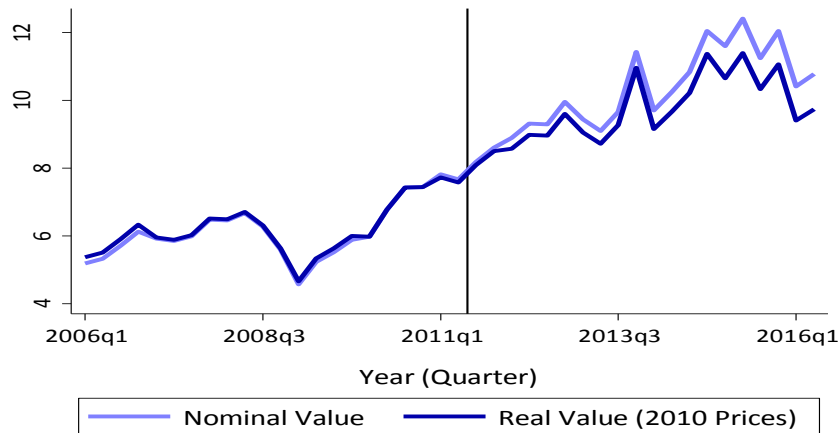


Source: Own compilation, based on WITS (2017), UN-Comtrade (2017).

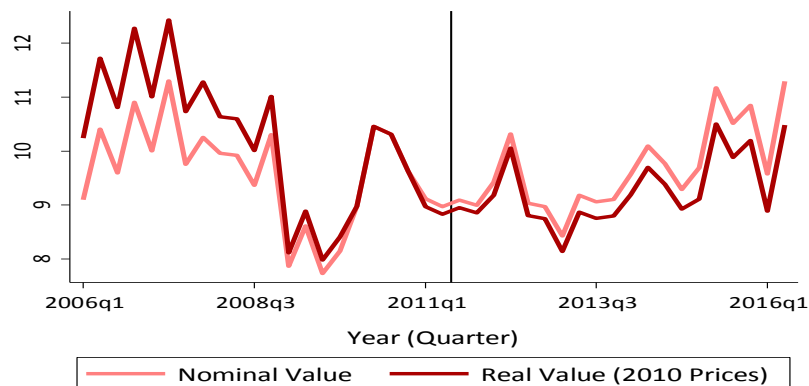
- Tariffs on majority of goods fell to zero immediately after start of the FTA. In certain industries, tariff cuts being gradually phased-in
- Simple mean and trade-weighted tariffs imposed by EU on Korean imports drastically reduced to around **0.5 %**
- Even though absolute tariff reduction higher in Korea than in the EU, remaining tariffs as of 2014 still more than negligible (in meantime **further reduced**)

# Evolution of trade in goods

*EU exports to Korea (quarterly, EUR billion)*



*EU imports from Korea (quarterly, EUR billion)*

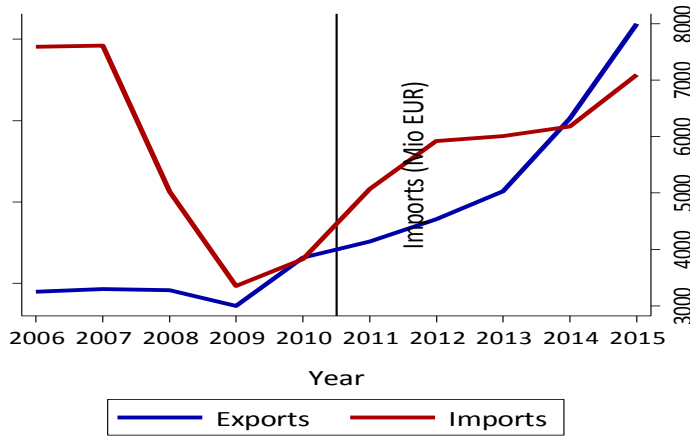


Sources: Own compilation, based on COMEXT (2017) and OECD (2016).

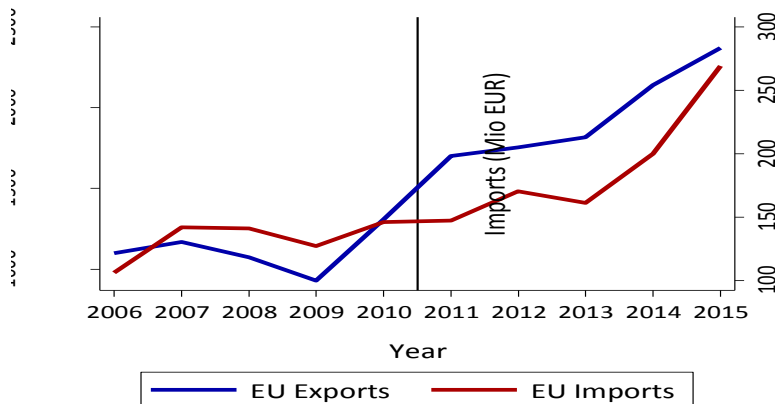
- Real **value of quarterly exports more than doubled** from EUR 4.6 billion to EUR 10.4 billion
  - Exports increased due to higher quantities and prices
- After FTA became effective, **imports** remained more or less unchanged for two years and then began to rise again
- The bilateral EU trade deficit in goods with Korea turned into a **surplus**

# Trade in goods: vehicles and agrifood

EU vehicle imports/exports to/from Korea



EU agrifood imports/exports to/from Korea



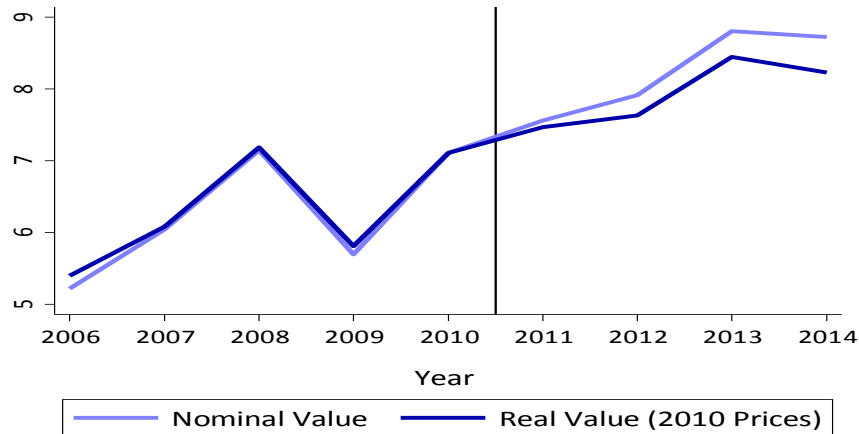
Sources: Own compilation, based on COMEXT (2017).

- Fall in EU vehicle imports from Korea over 2008-2009
- EU vehicle exports soared from EUR 2 billion in 2006 to **over EUR 8 billion** in 2015
- Over the post- FTA period, EU agrifood exports grew rapidly by roughly **41%**
- For Korean agrifood exports to the EU, a clear positive pattern emerges in the post-FTA period

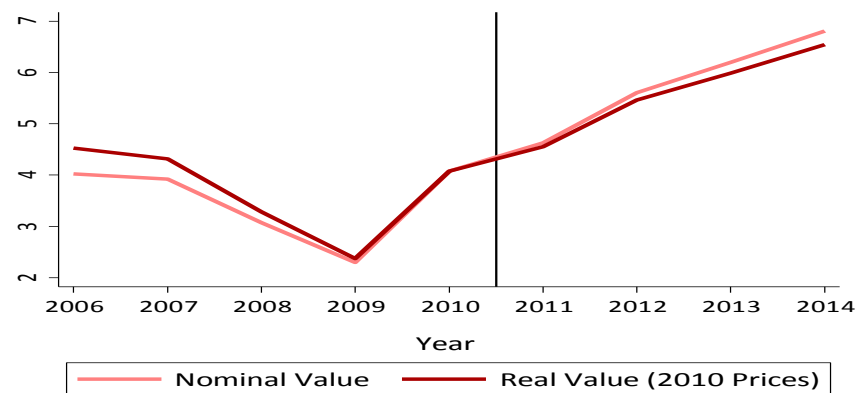


# Evolution of trade in services 1

*EU exports to Korea (annually, EUR billion)*



*EU imports from Korea (annually, EUR billion)*

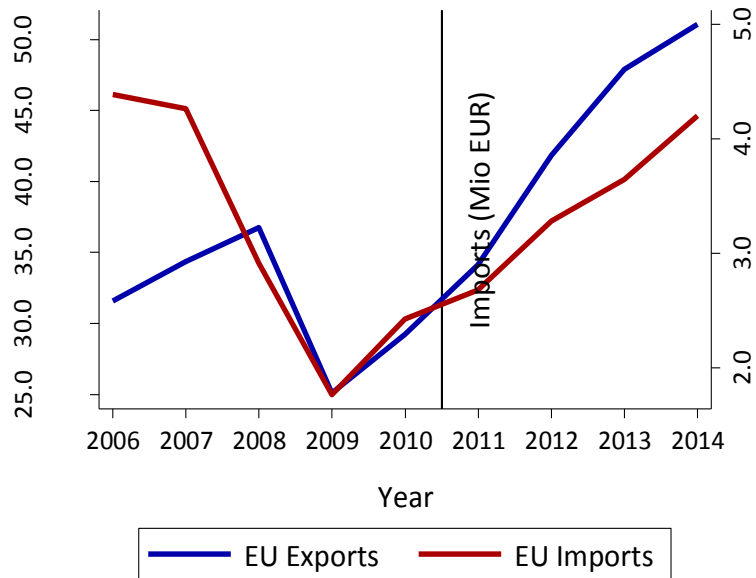


Sources: Own compilation, based on WIOD (2017) and OECD (2016).

- After the recovery in 2010 and 2011, **exports of services grew moderately** and peaked in 2013. EU services exports to Korea grew from EUR 7 billion to EUR 9 billion from 2011-2014
- **Imports** grew even more strongly from EUR 4 to 7 billion
- Share of Korea in EU services exports and imports increased from 2011 on

# Trade in services: postal

*EU postal imports/exports to/from Korea*

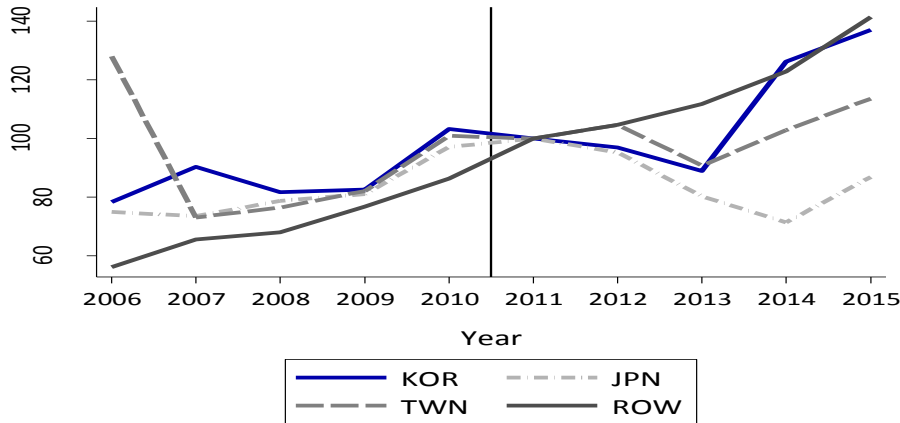


Sources: Own compilation, based on WIOD (2017).

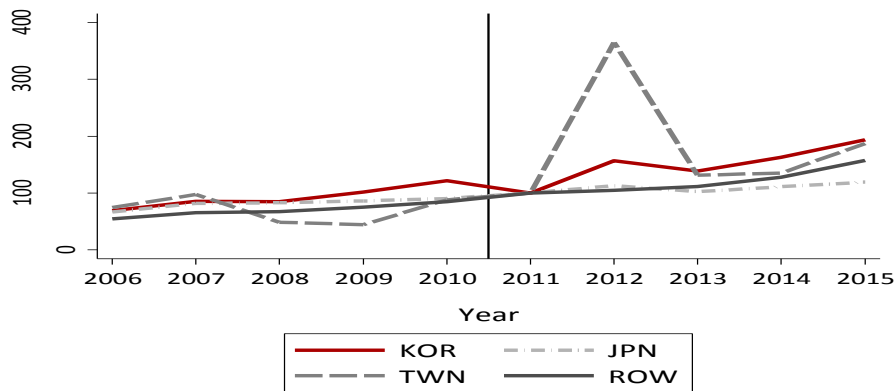
- In 2014, EU exports were **50% higher** than in pre-FTA years
- In contrast, postal and courier service imports from Korea particularly suffered during the financial crisis in 2008-2009, but recovered strongly beginning in 2010 and **returned to pre-crisis levels in 2014**

# Evolution of FDI

*Stock of FDI outflow from EU (annually, EUR billion)*



*Stock of FDI inflow to EU (annually, EUR billion)*



Source: Own compilation, based on Eurostat (2017)

- Yearly growth rate of stock of EU FDI in Korea went from 5% prior to the FTA to 8% thereafter; growth rate of stock of Korean FDI in EU went from 7% to 19%. This is a first indication that the **FTA promoted FDI**
- Due to volatile valuation of assets, no clear evidence that FTA caused outperformance of FDI between EU and Korea compared to other countries

# Econometric analysis: methodology

## ■ Partial equilibrium

- Latest version of WIOD trade data. Sample for main estimation includes 56 sectors; estimation based on >1.5 million observations
- Main specification uses econometric panel data methods on bilateral sector-level trade flows for 2000-2014. Technique is well suited to **isolate causal effects of the FTA** as opposed to other determinants of bilateral trade

## ■ General equilibrium

- Ifo Trade Model used is CGE model: estimation of parameters conducted on same data used as baseline for simulation exercise
- Model assumes perfect competition and full employment
- Use data from Global Trade Analysis Project (GTAP)

# Econometric analysis: partial equilibrium /1

- The EU-Korea FTA was **effective in promoting trade** between the EU and Korea.
  - FTA increased EU exports to Korea on average by 52% and Korean exports to the EU by 14% (lower bounds)
  - 92% of sectoral estimates of effects of FTA on EU exports are positive, 73 % of sectoral estimates of effects of FTA on Korean exports are positive (WIOD classification)
  - Impact has been stronger for goods than for services
- The impact of the EU-Korea FTA was **asymmetric**, with effect of FTA on EU exports to Korea significantly larger compared to effects on Korean exports to the EU, possibly because it takes longer for Korea to take advantage of large EU market

# Econometric analysis: partial equilibrium /2

- Selected results of the sectoral analysis:
  - **Processed food, beverages, and tobacco:** +29 % EU exports, +18 % Korean exports
  - **Automotive manufacturing:** +41 % EU exports, +47 % Korean exports
  - **Chemicals/chemical products manufacturing:** 21 % EU exports, +39 % Korean exports
  - **Construction:** +39 % EU exports, +26 % Korean exports
  - **Health care:** +117 % EU exports, +6 % Korean exports
- Presence of explicit horizontal provisions in FTA /economic spill-over factors imply that **positive trade creation effects occur even in sectors where FTA does not specify sectoral commitments**

# Econometric analysis: general equilibrium /1

Sector Description	EU Imports		EU Exports	
	Tariff Reduction (%)	NTB Reduction (%)	Tariff Reduction (%)	NTB Reduction (%)
Agriculture	0.3	9.5	24.3	2.9
Automotive	4.7	5.6	7.4	2.6
Business services	0.0	5.5	0.0	0.0
Chemicals	1.0	5.5	5.4	1.2
Construction	0.0	3.2	0.0	5.4
Electronic equipment	1.4	0.0	0.9	25.3
Energy	0.0	6.4	4.1	14.6
Financial and Insurance services	0.0	1.8	0.0	7.8
Fishing	1.6	0.0	15.9	6.3
Machinery and equipment	0.1	1.6	4.9	9.3
Manufacturing	0.0	0.0	5.8	0.9
Metals	0.0	9.9	4.1	6.6
Other services	0.0	0.2	0.0	5.5
Processed food	5.65	5.2	30.8	5.1
Raw material	0.0	9.2	1.2	13.0
Telecoms	0.0	0.0	0.0	6.2
Textile	0.2	4.7	8.9	0.0
Trade	0.0	3.3	0.0	6.8
Transport	0.0	2.4	0.0	8.1
Utilities	0.0	4.1	0.0	19.1
Wood, paper and minerals	0.1	5.3	3.0	4.8

# Econometric analysis: general equilibrium /2

## ▪ Macroeconomic effects of FTA

- EU **GDP** increased by EUR 4.4 billion, Korea by EUR 4.9 billion
- In relative terms, Korea experiences larger benefits (0.3 % of GDP) than the EU (0.03 % of GDP)
- Gains in **GDP per capita**: EUR 9 for EU; EUR 97 for Korea
- Small gains in **wages** in all MS and Korea: 0.04% for EU; 0.59% for Korea
- **Openness** (ratio of total trade over GDP) increased from 86.9% to 87% for the EU; from 130 to 136% for Korea



# Econometric analysis: general equilibrium /3

## ■ Microeconomic effects of FTA

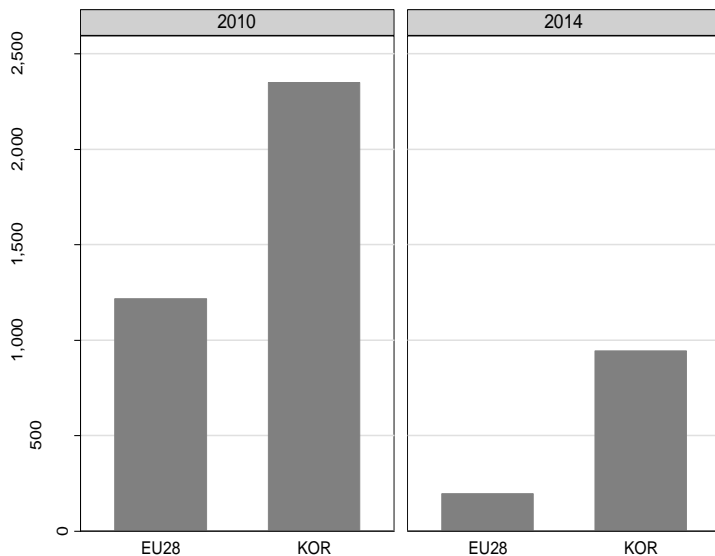
- Sectoral value added effect positive in all EU MS
- Germany, France, Italy, UK are main drivers
- Machinery and electronic equipment sectors profit most; agriculture and processed food sectors gain as well
- Sectoral value added results must be interpreted with caution, because sectoral definitions are becoming increasingly blurred

## ■ Trade structure

- Korea increases exports and imports towards/from EU by 25% and 42%, respectively, exports to RoW increase 1.7%
- FTA has led to some relatively minor trade diversion effects which are concentrated in the East Asian Region (China, Japan)

# Impact on the EU Budget

## *Tariff income from bilateral trade in the EU and Korea*



Source: Own compilation, based on WITS (2017), Deutsche Bundesbank (2016).

- Total revenues have fallen in both the EU and Korea
  - **EU tariff revenues decreased from EUR 1.2 billion to EUR 200 million**
  - Korean revenues declined from EUR 2.4 billion to slightly below EUR 1 billion
- Increase in economic activity led to some minor increases in tax revenue; replacing tariffs with more efficient taxes likely to result in overall efficiency gains

# Impact on the informal economy

- Increased import penetration/international competition can lead to shrinkage of formal employment. Higher export participation can lead to opposite result. Literature argues that these effects are most relevant in developing countries.
- Overall, we find no evidence that would suggest that the EU-Korea FTA had any discernible effect—positive or negative—on the structure and size of the informal economy in Korea
- **The effects of the EU-Korea FTA are too small and both the EU and Korea are too advanced in terms of development** for the agreement to have any discernible and statistically significant effect on these variables

# Impact on (least-) developing countries

- FTA had **average positive effects on real GDP** for developing and least developed countries
  - Developing countries able to increase exports to the EU but not to Korea, compared to counterfactual scenario without the FTA.
- Comparatively small effects on developing countries, compared e.g. to effects TTIP would be expected to have:
  - Least Developed Countries: Real GDP Change 0.003%
  - Other Developing Countries: Real GDP Change 0.005%

# ***Discussion and Q&A***

- Do you have any questions or comments regarding these interim results?
- Are you aware of any data/evidence that would support or contradict the results of the economic analysis, or could provide an additional perspective?

# **Analysis of FTA implementation**

# Effects on reduction of NTBs /1

- Focus of EU-Korea FTA not only the reduction of general NTBs but also at the **sectoral level** (Annexes on Electronics, Motor vehicles & parts, Pharmaceuticals/ medical devices, Chemicals)
- Based on econometric analysis, clearly identifiable **NTB reductions** for Korean and European exporters after application of FTA
- NTB reductions differed across sectors. Even in sectors with no concrete NTB elimination by the FTA, general provisions/**spill-over effects** led to reduction in NTBs
- The largest NTB reduction for the EU took place in the **electronic equipment sector**, with overall decrease of 25%
- However, significant **barriers remain**, as evidenced by our sectoral case studies and consultation results

# Effects on reduction of NTBs /2

Sector	NTB reduction for Korean exports (%)	NTB 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, 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



# NTBs affecting case study sectors

- **Automotive**
  - Insufficient harmonisation of Korean and **UNECE regulations**
  - Exclusion of **petrol cars** from Annex 2-C of the FTA
- **Agriculture**
  - Burdensome procedure for **registering production establishments** for animal products
  - EU **regionalisation** system not recognised by Korea with respect to animal disease outbreaks
- **Electronics**
  - Korean regulations requiring **3<sup>rd</sup> party certification** for all imported electronic, electrical and mechanical products
- **Postal**
  - Requirement for express service providers to use **Common Express Terminal** at the Incheon International Airport for x-ray and inspection

# Case study on rules of origin

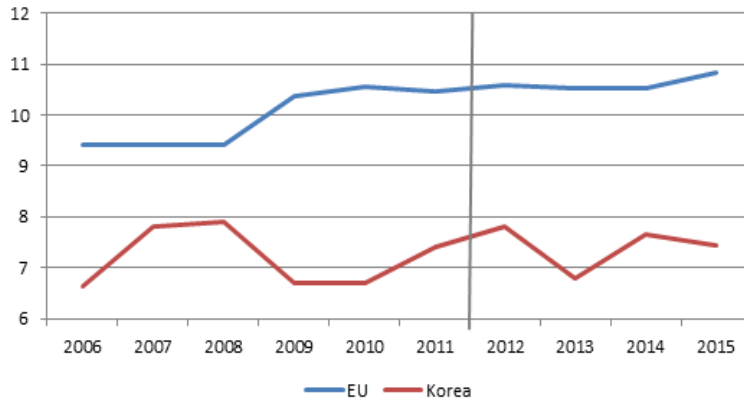
- **Definition of originating products** – no problems reported with specific definitions, but RoO not harmonised across FTAs
- **Origin declarations** – no problems reported
- **Approved exporter status** – application process/required documentation varies across MS (with differences in administrative burdens); Korea Customs is reported to have questioned companies' status/requested additional documentation, in some cases causing delays
- **Direct transport rule** – problematic for certain industries (chemicals; spirits) that use logistical hubs, e.g. in Singapore
- **Duty drawback** – no problems reported

# Case study on use of tariff preferences

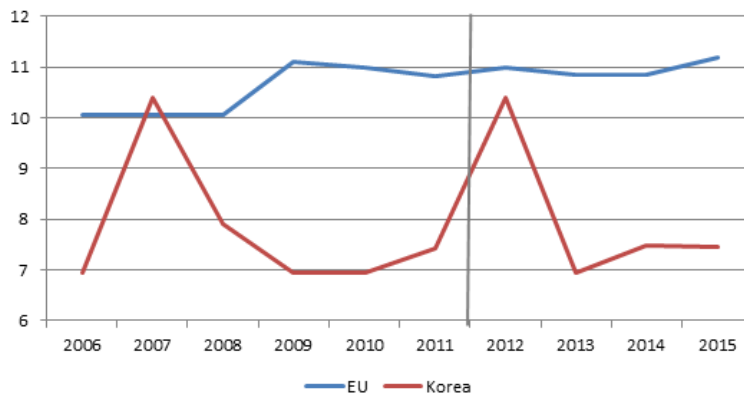
- EU PUR on Korean market lower (65% in 2015) than Korean PUR on EU market (84 %)
  - Since 2011, PURs increased more for Korean exports relative to EU
- Reasons for (non-)utilisation of preferences:
  - **Costs** (e.g. software for origin calc.) may exceed duty **savings**
  - **Government promotion/support for businesses** (Korean government conducts FTA seminars, publishes info online, established FTA call centre, etc.)
  - **Regulatory changes** (relevant for minerals sector: Korean tax loophole that encouraged importing EU oil using preferences was abolished)
  - **Lack of fulfilment of origin criteria** (mining, machinery sectors)
  - **Requirements for approved exporter status** (administrative burden, MS with lower requirements seem to have higher PUR)

# Regulatory changes undertaken /1

*Cost to export (100 USD per container)*



*Cost to import (100 USD per container)*



Source: Own compilation, based on World Bank Group - Doing Business Indicators (2017).

- **Wide range of amendments to trade-related legislation** in Korea even before application of FTA, but cannot be mono-causally ascribed to FTA
- Effects of amendments on trade costs
  - Document requirements for export and import, times connected to trade relations, **trade costs have been broadly stable**

# Regulatory changes undertaken /2

## ■ Consultation results

- A majority of stakeholders that have an opinion consider that regulatory changes in Korea were fully or at least partly made, or were not needed in the area relevant to the respondent
- However, a relevant sub-group of respondents indicated that required regulatory changes have not 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.

# Implementation of other FTA areas /1

- **Competition:** EU-Korea FTA commits the Parties to applying their competition laws in transparent and non-discriminatory manner, and removing trade distortions from subsidies
  - Stakeholders noted some problems, including “abuse of a dominant position” and “state aid” (but low number of responses).
  - Issue of subsidies further analysed, focusing on post-FTA regulatory changes by Korea (no such changes made)
- **Government procurement:** Korea’s integration into the global government procurement market limited. FTA did not impact this trend. Reasons include, according to WTO, highly sophisticated and increasingly competitive domestic suppliers
  - Stakeholders most frequently noted “local content requirements” as a problem (again, small number of respondents)

# Implementation of other FTA areas /2

- **Intellectual property rights:** Korea extended IPR legislation, facilitated patent regulations and access and established the Presidential Council on Intellectual Property to implement legislation/monitor progress. 165 EU GIs and 63 Korean GIs protected under FTA, no significant problems identified (but remaining issues: e.g. public performance rights)
- **Institutional set-up:** based on published information and interviews, institutional set-up functions as intended
- **Dispute settlement** mechanisms have not yet been used
- **E-commerce:** services sectors that also include e-commerce activities benefit from the FTA, likely that the provisions on e-commerce had an impact

# Issues that may prevent exploiting the full potential/benefits of the FTA

- **OECD Trade Facilitation Indicators** show that the EU and Korea perform well compared to other countries, with scores in the areas analysed (governance and information; rulings, procedures and fees; formalities; border agency cooperation) always at least **two-thirds of the maximum score for 2015**. Indicators also show improvements over the evaluation period for one or both of the Parties in all areas
- Issues which may prevent exploiting the full potential of the FTA include the continued existence of **NTBs**; **administrative/other burdens** related to rules of origin; issues related to the **use of tariff preferences**; and issues related to the **scope** of the FTA



# ***Discussion and Q&A***

- Any questions or comments regarding these interim results?
- Any data/evidence that would support or contradict our analysis, or could provide additional perspective? For example:
  - Estimates regarding costs of specific NTBs at firm level?
  - Specific factors that affect the use of tariff preferences?
- Regarding the economic dimension, are there in your view:
  - Areas in which effectiveness of the FTA could be improved?
  - Unintended side-effects of the FTA? Inefficiencies?
  - Needs that are not addressed?
  - Contradictions in relevant EU policies?

# **Analysis of impacts on SMEs**

# Empirical literature on SMEs

- Literature shows that trade liberalisation has important implications for the size distribution of firms
- Different firms react differently to **falling trade costs**. What matters is not size per se, but degree of **competitiveness** of firms, the **quality** of their products, and **innovative capacity** (see Melitz, 2003)
  - Lower import barriers **increase domestic competition**. This is most painful for firms with relatively low competitive strength
  - Lower export barriers **open up new opportunities** for domestic firms; prerequisite is marketable products at competitive prices
- In reality, **SMEs often tied to larger exporters**; through the latter they become indirect exporters themselves. These effects are invisible in official trade data

# Impact on SMEs /1

- Indirect evidence:
  - Number of products exported from EU to Korea increased considerably after application of the FTA. This could indicate that **new firms have been drawn into exporting their products**
  - FTA has reduced NTBs quite substantially. NTBs often take the form of **fixed costs**, making it more likely that medium-sized firms can begin exporting to Korea
  - Some information also available from Exporter Dynamics Database (due to data limitations, only possible to provide statistical evidence for Belgium and Spain)

# Impact on SMEs /2

- Belgium: FTA has benefited **existing exporters from the lower parts of the initial sales distribution (1<sup>st</sup> quartile)** more than exporters from higher parts of the distribution

Belgium					
		2006	2010	2013	Change (%, 2013 vs. 2010)
KOR	Number	1 146	1 339	1 318	-2
	Mean sales	919 600	992 633	1 107 240	12
	1 <sup>st</sup> Quartile	7 823	4 038	8 217	<b>103</b>
	Median	38 205	28 300	44 336	<b>57</b>
	3 <sup>rd</sup> Quartile	249 539	195 598	302 996	<b>55</b>
Average RoW	Number	668	757	681	-10
	Mean sales	557 223	612 110	678 354	11
	1 <sup>st</sup> Quartile	10 647	10 235	11 097	8
	Median	47 418	49 210	49 469	1
	3 <sup>rd</sup> Quartile	208 217	213 829	229 057	7

# Impact on SMEs /3

- **Spain:** the FTA has activated **new firms** into exporting to Korea, and these firms are **smaller** than firms that exported to Korea prior to FTA (mean sales did not change much)

Spain					
		2006	2010	2013	Change (%, 2013 vs. 2010)
KOR	Number	2 509	2 516	2 924	16
	Mean sales	252 948	359 704	364 820	1
	1 <sup>st</sup> Quartile	2 539	2 413	2 072	-14
	Median	17 587	17 004	15 949	-6
	3 <sup>rd</sup> Quartile	81 046	98 096	101 235	3
Average RoW	Number	1 593	1 804	1 923	7
	Mean sales	370 627	234 122	254 319	9
	1 <sup>st</sup> Quartile	3 791	4 065	3 751	-8
	Median	17 732	19 567	19 316	-1
	3 <sup>rd</sup> Quartile	74 596	85 319	86 516	1

# ***Discussion and Q&A***

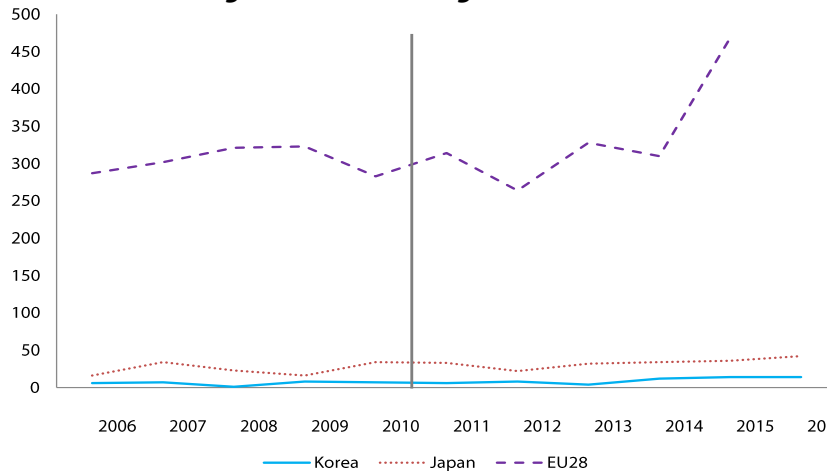
- Any questions or comments regarding these interim results?
- Any data/evidence that would support or contradict our analysis, or could provide additional perspective? For example:
  - Examples of impacts on SMEs (either in general or in specific MS)?
  - Specific factors that affect SMEs?
- In an SME perspective, are areas in which effectiveness of the FTA could be improved? Needs that are not addressed?

# Results of the social analysis

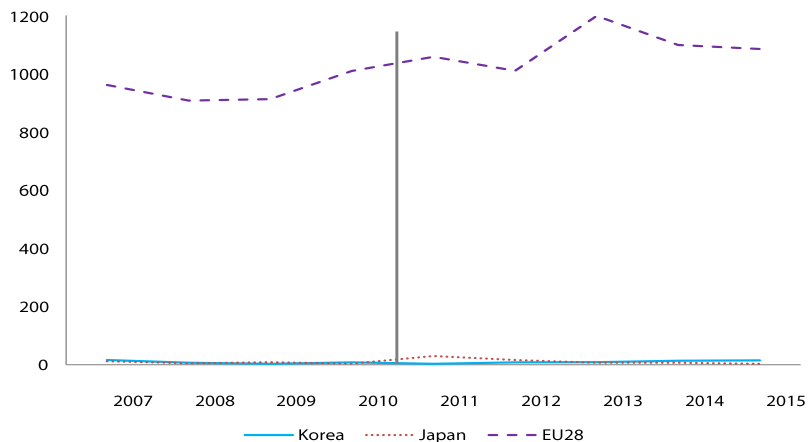


# Impact on consumers /1

Evolution of RAPEX notifications



Evolution of RASFF notifications



- No trends in **product safety/food safety** notifications identified that would indicate an increase in unsafe products entering the EU since the application of the FTA (number of RAPEX/RASFF notifications remained largely **stable** regarding Korean products)
  - **RAPEX**: most notifications for Korean products related to motor vehicles (e.g. recalls)
  - **RASFF**: most notifications for fruits/vegetables; fish/fish products

# Impact on consumers /2

- Number of products traded has increased for EU and Korean exports → **consumer choice** has increased
- **Prices reduced** due to FTA:
  - Price changes induced by the FTA for the EU are much smaller in size compared to Korea (due to different size of economies)
  - In Korea, consumer price changes in all sectors are negative (only in one sector no change). In the EU, minor price reductions in a majority of sectors (in remaining sectors mostly unchanged)
  - Low income consumers typically spend a larger income share on tradable goods (food, manufacturing goods), thus tend to benefit more from trade liberalisation (in relative terms)
    - FTA **improves welfare** by (slightly) reducing prices and (slightly) increasing income in both the EU and Korea

# Impact on consumers /3

Sector	Price change in the EU (%)	Price change in Korea (%)
Agriculture	-0.03	-0.21
Automotive	-0.17	-0.69
Business services	0.00	0.00
Chemicals	-0.03	-0.28
Construction	-0.01	-0.05
Electronic equipment	-0.02	-0.37
Energy	-0.01	-0.01
Financial and Insurance services	0.01	-0.02
Fishing	-0.10	-0.02
Machinery and equipment	-0.05	-1.29
Manufacturing	0.00	-0.09
Metals	-0.07	-0.19
Other services	0.00	-0.01
Processed food	-0.03	-0.70
Raw material	0.00	-0.04
Telecoms	0.00	-0.01
Textile	-0.01	-0.39
Trade	0.00	-0.10
Transport	-0.02	-0.89
Utilities	0.00	-0.06
Wood paper and minerals	0.00	-0.26

# Implementation of TSD institutional mechanisms /1

- **Committee on Trade and Sustainable Development (CTSD)**
  - Has met (roughly) annually since 2012-2017
  - Korean ratification of fundamental ILO conventions, resource efficiency/green growth, combatting trade in illegally harvested timber, and corporate social responsibility were key themes
- **EU and Korea DAGs**
  - Have met separately several times per year since 2012 (in total 32 times)
  - Topics raised in the DAGs feed into the annual meeting of the Civil Society Forum

# Implementation of TSD institutional mechanisms /2

- **Civil Society Forum (CSF)**
  - Taken place (roughly) annually since 2012, often back-to-back with CTSD
  - Korean ratification of fundamental ILO conventions, various environmental issues such as emission trading and cooperation on climate change, and corporate social responsibility were key themes discussed
- **Other mechanisms** (consultation, panel of experts) have not yet been activated

# Implementation of TSD institutional mechanisms /3

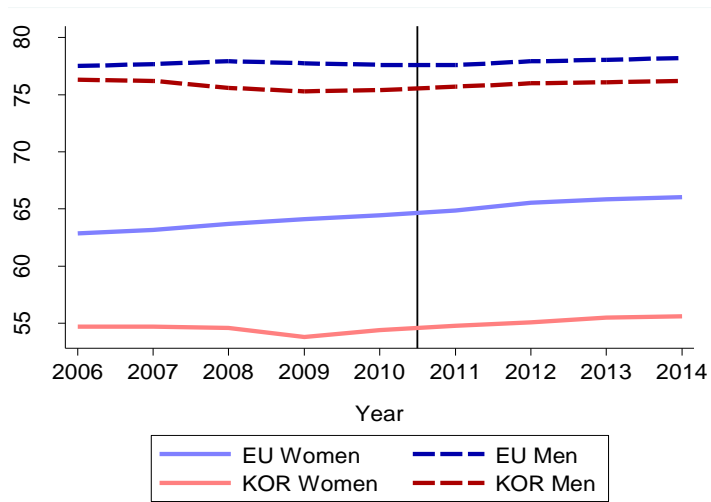
- Results of the implementation of TSD institutions:
  - **Exchange of views and experiences** during meetings of DAGs, CSF and CTSD
  - **Publication** of discussion papers, reports and opinions
  - Organisation of **workshops**
  - Presentation by and discussion with the **ILO**
  - **Cooperation projects** under the EU Partnership Agreement
- Permanent institutional mechanisms foreseen by Chapter 13 the FTA (the CTSD, the two DAGs, and the CSF) have therefore been implemented in line with the provisions of the agreement during the evaluation period and **produced relevant outputs**
- **Issues identified:** Composition of DAGs, communication issues

# Implementation of TSD institutional mechanisms /4

- TSD institutional mechanisms have **promoted dialogue** between the EU and Korea concerning TSD, and some legal, institutional and political changes have been noted by ILO as a consequence in the area of labour rights (most notably with respect to **re-engagement with the ILO** in Korea)
- However, **lack of progress in the area of labour rights** in Korea during the evaluation period, as emphasised by civil society stakeholders as well as the European Parliament in a recent resolution

# Social impacts: labour force participation

*Labour force participation rate by sex*



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

- In the EU and Korea, male labour force participation rates are higher and remain roughly flat
- Labour force participation rate for women in the EU follows an **upward trend** and rose from 63 to 66%
- Korean female participation rate began **rising in 2010 and ends at 56%**
- **No notable impact** of FTA



# Social impacts: wages

- Effects of FTA are **small, but positive for wages** in all EU Member States and Korea

Country	Wage Change (%)	Country	Wage Change (%)
AT	0.04	IE	0.05
BE	0.05	IT	0.03
BG	0.03	LT	0.02
CY	0.07	LU	0.02
CZ	0.07	LV	0.03
DE	0.05	MT	0.44
DK	0.03	NL	0.04
ES	0.02	PL	0.04
EE	0.04	PT	0.02
FI	0.04	RO	0.06
FR	0.03	SK	0.15
GB	0.02	SV	0.13
GR	0.02	SE	0.03
HR	0.36	KOR	0.59
HU	0.07		

# Social impacts: employment - overview

Sectors	EU28	Korea
	Change sectoral employment (1000 employees)	
Agriculture	12	-9
Automotive	-9	29
Business services	-29	26
Chemicals	-1	7
Construction	-5	-1
Electronic equipment	8	1
Energy	-14	2
Financial and Insurance services	-5	-6
Fishing	0	0
Machinery and equipment	40	-4
Manufacturing	0	1
Metals	3	6
Other services	-12	-21
Processed food	3	-1
Raw material	-1	0
Telecoms	-2	-1
Textile	1	1
Trade	3	-20
Transport	8	-7
Utilities	0	1
Wood paper and minerals	0	-2
<i>Displacement Index (%)</i>	<i>EU28 = 0.11</i>	<i>Korea = 0.28</i>

- **Displacement index measures fraction of workers that had to change sectors due to FTA**
- Index for **EU is 0.11**, which is a normal rate for developed economies.
- **Korean rate of 0.28** is higher than average developed economy, but not surprising because of extent of sectoral reallocation compared to initial level, which is proportional to the FTA induced welfare gains.

# Social impacts: employment – sectoral examples /1

- EU automotive employment undergoes a small decrease of -0.22%. In Korea, automotive employment increases by 3.52%
- Employment in the agricultural and processed food sectors increases slightly in the EU due to the FTA (by 0.2 % /0.06 %), but decreases slightly in Korea (by -1.52 % /-0.39 %).

Sector	Countries	Initial Employment (1000 employees)	Change in sectoral employment (1000 employees)	Change in sectoral employment (%)
Automotive	EU28	4 227	-9.00	<b>-0.22</b>
	KOR	829	29.21	3.52
Agriculture	EU28	6 037	12	<b>0.20</b>
	KOR	618	-9	-1.52
Processed Food	EU28	5 794	3	<b>0.06</b>
	KOR	377	-1	-0.39

# Social impacts: employment – sectoral examples /2

Figure 106: Total employment in the agricultural sector in Korea, Japan, USA and EU28, index 2011 = 100, 2006-2016.

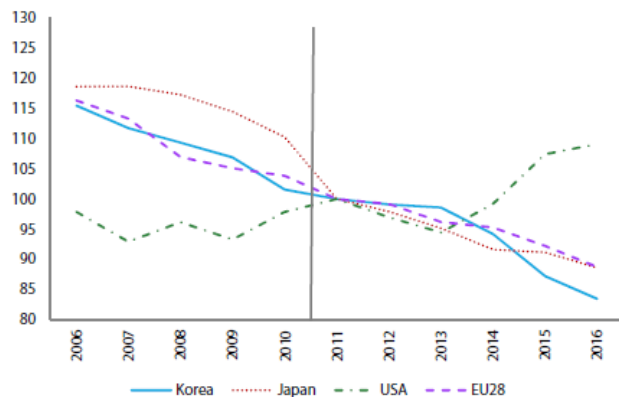
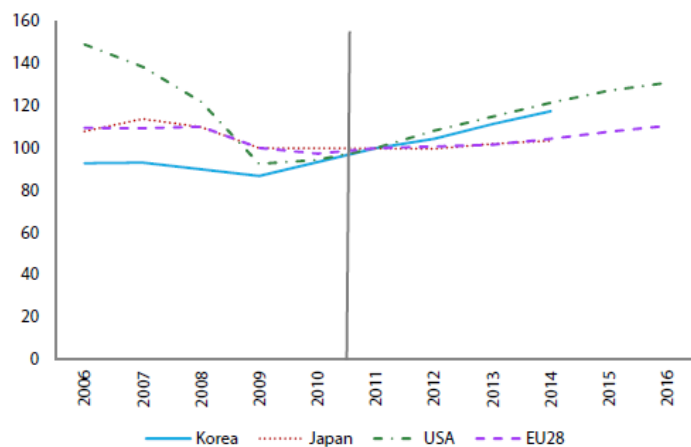


Figure 106: Total employment in the manufacture of automobiles in Korea, Japan, USA and EU28, index 2011 = 100, 2006-2016.



- Figures on previous slide refer to **counterfactual situation** in which there was no FTA in place – they refer to number of jobs **reallocated** in the economy across sectors under full employment, i.e. they do **not** indicate **actual job creation or loss**
- Results can be compared with **real-world employment data**: slight positive employment effect in the EU for agricultural sector indicated by CGE model means agricultural employment decreased slightly less in the EU than it would have without the FTA (vice versa in automotive sector)

# ***Discussion and Q&A***

- Any questions or comments regarding these interim results?
- Any data/evidence that would support or contradict our analysis, or could provide additional perspective?
- Are there areas in which effectiveness of the FTA could be improved? Stakeholder suggestions regarding TSD mechanisms include: More representative composition of DAGs/CSF; refinements to the setup of meetings; institutionalised monitoring of sustainable development impacts; and improved enforcement of FTA commitments. Any comments/views?

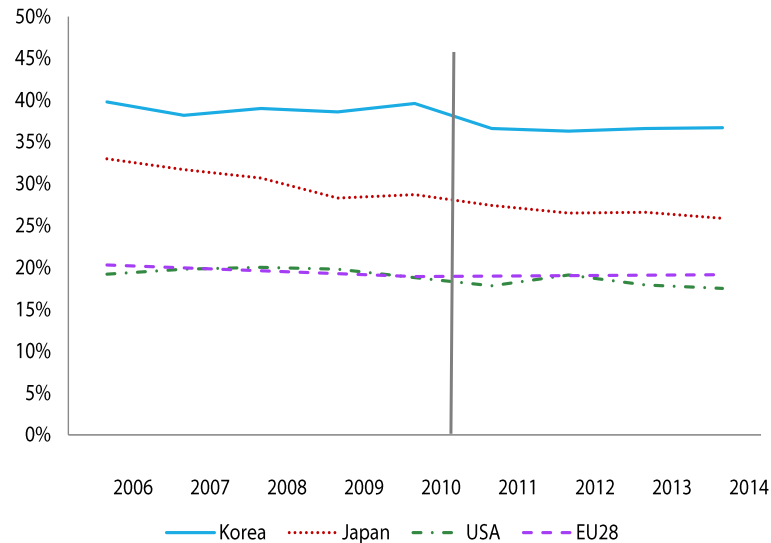
# Results of the human and fundamental labour rights analysis

# Scope, screening and approach

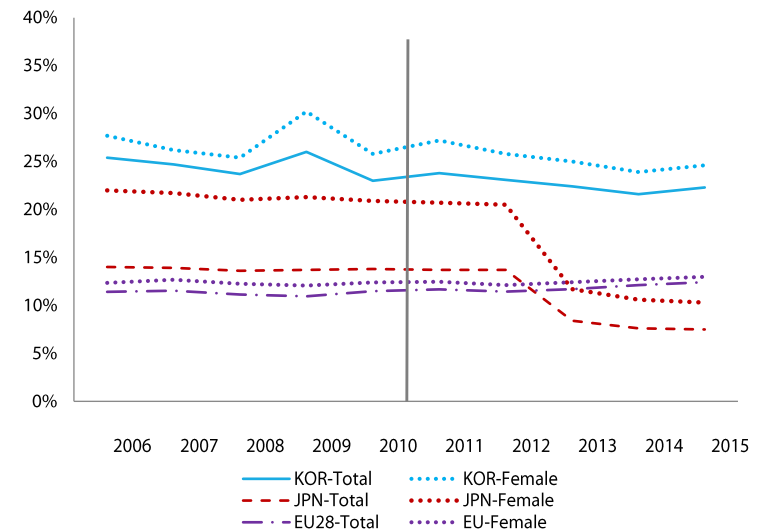
- Focus on human and fundamental labour (FL) rights in **Korea**
  - FTA had **larger economic impact** on Korea → more significant effects via changes in wages, consumption, employment, etc.
  - Literature and interviews indicated concerns regarding **labour rights violations** in Korea
- Screening process of human/FL rights based on 2 criteria: **direct versus indirect; major versus minor** → Selected rights for further analysis:
  - Freedom from Discrimination; Right to Peaceful Assembly and Association, and to Join Trade Unions; Right to Just and Favourable Conditions of Work, and to Rest and Leisure; Right to Adequate Living Standard (Right to Food)
- Approach: establish baseline, describe developments in indicators after application of FTA, then compare periods and consider extent to which changes could be attributed to FTA

# Right to freedom from discrimination – key gender indicators

*Gender wage gap in Korea, Japan, USA and EU*



*Share of non-regular employees among women and total employed in Korea, Japan and EU*

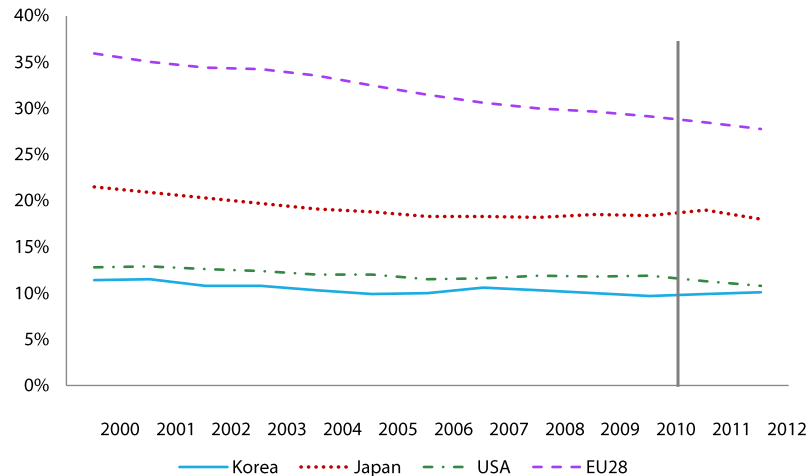


- Key indicators such as *gender wage gap* and *share of non-regular employees among women* have all remained **relatively unchanged** in Korea since the application of the FTA
- No significant changes with respect to discrimination in Korea were discerned through literature review or stakeholder interviews



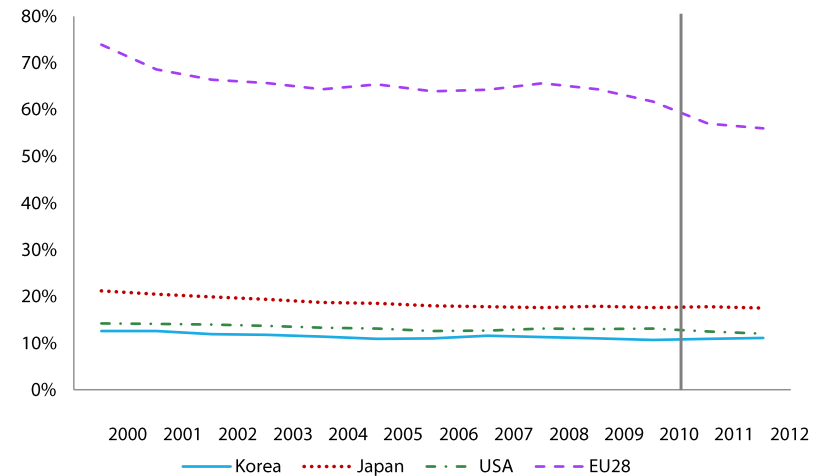
# Right to peaceful assembly & association

*Trade union density rate in Korea, Japan, USA and EU*



Source: Own compilation, based on ILO data.

*Collective bargaining coverage rate in Korea, Japan, USA and EU*

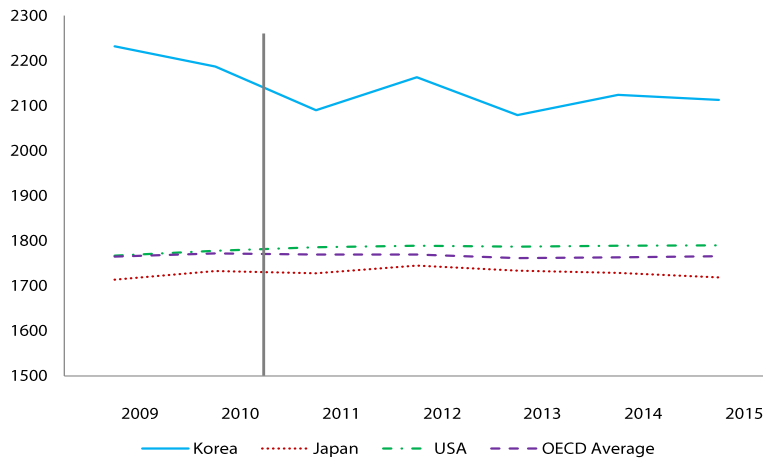


Source: Own compilation, based on ILO data.

- Key indicators suggest that the situation regarding the right to peaceful assembly and association/right to join unions has **not improved in Korea** since the application of the FTA
- Several interviewees perceived the situation to have **deteriorated** over the last few years. However, it is not possible to distinguish the impact of the FTA from the pre-existing political context of the country

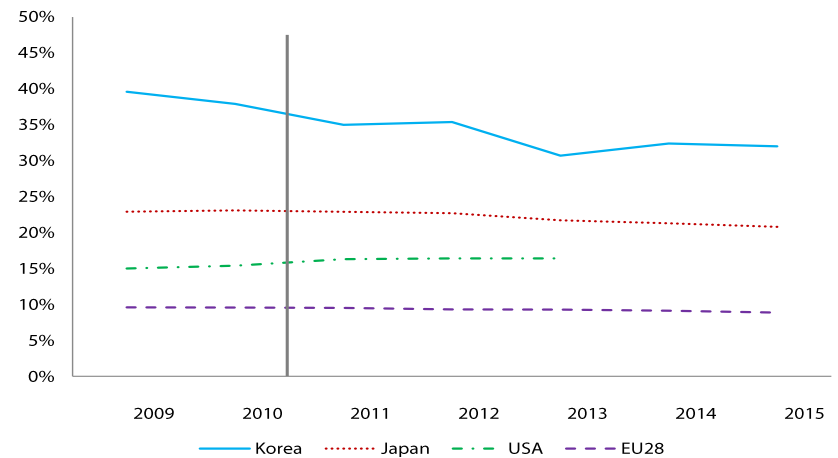
# Right to just & favourable conditions of work

*Average annual working hours in Korea, Japan, USA and the OECD*



Source: Own compilation, based on OECD data.

*Proportion of workers working on average 49 or more hours per week in Korea, Japan, USA and EU*

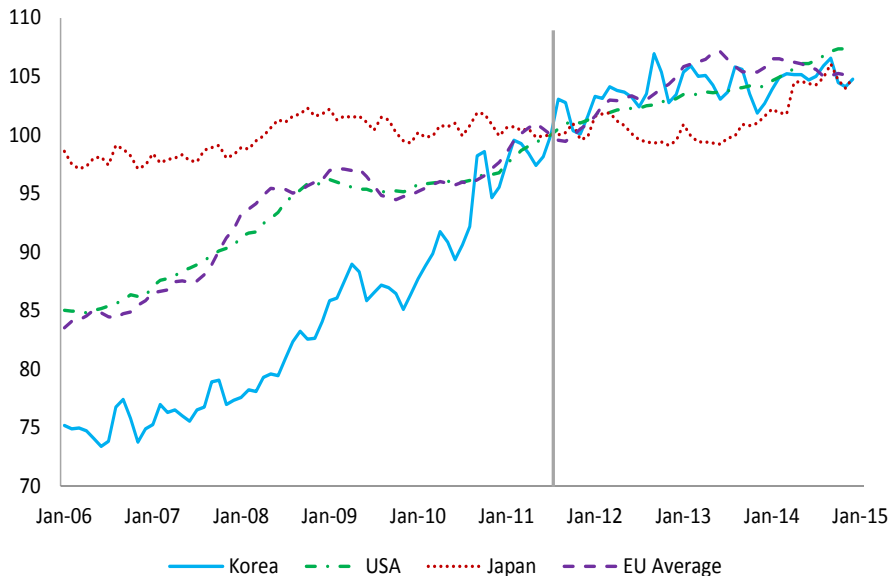


Source: Own compilation, based on ILO data.

- Share of non-regular employees as a share of total employees in Korea slightly **decreased** since the application of the FTA, but is still high at 22.3 %
- **Weekly working hours declined** in Korea 2011, reflecting longer-term trend corresponding to phasing-in of 40 hour work week between 2004 and 2011. As this legislation became fully applicable in July 2011, it is not possible to isolate this effect from the effect of the FTA

# Right to food

## Monthly indexed food price inflation in Korea, Japan, USA and 20 EU Member States



Source: Own compilation, based on data from The Economist Intelligence Unit/UN Food and Agriculture Organisation, 2016.

- Food security not a serious problem in Korea
- FTA likely had **positive, but minor impact on right to food in Korea** via increase in quantity of imported agri-food products and reduction in prices of agricultural products (-0.21%) and processed food (-0.70%)
- FTA put some pressure on Korean producers of processed food by reducing their value-added

# Conclusions human rights analysis

- Overall, the **FTA is assessed to have had a broadly neutral impact on the human/FL rights situation in Korea**, in that little change over the 2011 status quo and/or longer term trends can be observed regarding the rights subject to this analysis
  - The only right for which a (minor) impact of the FTA can be determined is the right to food
  - For all other rights, the FTA's impact appears to be neutral, based on the available evidence. This is also the case for rights in which the Parties had made explicit commitments within the framework of the FTA to improve their performance, notably with respect to the right to association and the right to join trade unions

# ***Discussion and Q&A***

- Any questions or comments regarding these interim results?
- Any data/evidence that would support or contradict our analysis, or could provide additional perspective? Sectoral data on human rights impacts?
- Are there areas in which effectiveness of the FTA could be improved? Needs that are not addressed?

# Results of the environmental analysis

# GE analysis of CO<sub>2</sub> emissions

- Environmental effects of an FTA are **ex-ante unclear**
  - Trade often attributed to have negative environmental impact as trade in goods goes along **with increasing transportation sector**; also argued that **environmental standards may be lowered** as a consequence of international location competition.
  - On the other hand, trade may lead to **more efficient and resource saving production**
- Measuring causal effects of FTA on environmental variables is complicated due to the fact that the **counterfactual environmental outcomes are unobservable**. One area where causal analysis is possible is greenhouse gas emissions; applying the CGE model, we can simulate additional CO<sub>2</sub> emissions that are directly induced by the FTA

# Local CO<sub>2</sub> emission changes in the EU

- Assessing local emissions is complicated by the EU ETS. The ETS fixes the quantity of emissions and thus, no additional emissions can occur because of the FTA. However, not all sectors are included in the ETS, which covers 45% of emissions of participating countries
- How would emissions have changed after the implementation of the FTA **if there was no restriction as in the ETS?**

*Change in emissions from domestic production (%)*



- Changes in 23 out of 28 EU countries range between **0-0.2% increases in CO<sub>2</sub>**
- The two highest values for Malta (1.6 %) and Cyprus (0.6 %), could be driven by the relative importance of CO<sub>2</sub>-intensive transportation sectors

Source: Ifo Trade Model (2017).



# Local CO<sub>2</sub> emission changes in Korea

- The Korean CO<sub>2</sub> level is expected to **increase with the EU-Korea FTA by 0.19%** compared to the counterfactual situation
- ETS did not exist in Korea in 2011, but Korea implemented and ETS similar to that of the EU in 2015
  - By 2020, objective of Korean ETS is to lower emissions by 30% compared to a business as usual scenario. Phase-in with free allocation of emission allowances takes 3 years
  - Similar to the EU, quantitative limitations of emissions imply that the **future effects of the FTA cannot have any effects on the level of emissions, but only on the price of emission permits**

# Global CO<sub>2</sub> emission changes /1

- Greenhouse gas emissions have world-wide consequences no matter where the pollution has occurred. Hence, one has to assess the global CO<sub>2</sub> emission differences in order to take the effect of the EU-Korea FTA fully into account
- The GE analysis conducted for this study yields a **net reduction of global CO<sub>2</sub> emissions by 0.02%** (equivalent to **4.1 million tonnes CO<sub>2</sub>**)
  - To provide a measure of comparison, global CO<sub>2</sub> emissions yield approximately 20 billion tonnes. The reduction in global emissions of 4.1 million tonnes of CO<sub>2</sub> is approximately equivalent to the greenhouse gas emissions that are produced by 866 000 passenger vehicles driven for one year (US average)

# Global CO<sub>2</sub> emission changes /2

- Global CO<sub>2</sub> reduction can almost be fully ascribed to two countries that suffer from trade diversion effects, namely China and the United States

Region	CO <sub>2</sub> level without FTA (million tonnes)	CO <sub>2</sub> level with FTA (million tonnes)	Difference in CO <sub>2</sub> level (million tonnes)	Change in %
Korea	129.6	129.8	0.24	0.19
EU28	1 467	1 469	1.7	0.12
Canada	354.2	354.0	-0.2	-0.1
USA	3 884	3 883	-1.35	-0.03
China	6 220	6 217	-2.81	-0.05
Japan	333.24	332.98	-0.26	-0.08
Turkey	88.21	88.20	-0.02	-0.02
ASEAN	643.46	643.21	-0.25	-0.04
Least Developed Countries	11.92	11.92	-0.001	-0.01
Other developing Countries	2 127.0	2 126.6	-0.5	-0.02
Rest of World	4 961.3	4 960.3	-1.0	-0.02
<i>World total</i>	<i>19 488</i>	<i>19 484</i>	<i>-4.1</i>	<i>-0.02</i>

# Other environmental impacts /1

- **Air pollution:** no major change in exposure to fine particulates from 2011 on in EU, though Korea faces worsening pollution
- **Water resources/quality:** EU water productivity (total GDP over total freshwater withdrawal) significantly increased between 2007-2012; Korea slightly increased
- **Biodiversity:** data unavailable pre-FTA, but Korea performs better than OECD average and sample of EU countries with respect to threatened species as a percentage of known species

## Other environmental impacts /2

- **Waste management:** decreasing tendency of municipal waste (kg per capita) in the EU and Korea
- **(De-)forestation:** for the EU, no major changes in forest use intensity (ratio of timber harvest to annual forest capacity) following application of FTA; for Korea, forest use intensity declined from 26% to 23% from 2011-2014
- **Use of renewable energy:** positive trend in use of renewable energy (as a share of primary source of energy) for the EU; slight increase for Korea; unclear if attributable to the FTA

# ***Discussion and Q&A***

- Any questions or comments regarding these interim results?
- Any data/evidence that would support or contradict our analysis, or could provide additional perspective regarding environmental impacts?
- Are there areas in which effectiveness of the FTA could be improved? Needs that are not addressed?

# Wrap-up

# Next steps

- Draft final report including overall conclusions regarding EQs and recommendations
- Publication of final report

Contact: ***eukorea-eval@civic-consulting.de***

*Please provide any additional written feedback/evidence until 15 July*



# **Annex: additional slides on case studies**

# Sectoral case studies

- Sectoral case studies focus on automotive sector (passenger cars), agriculture, electronic goods, environmental goods/services, postal services
- **Average tariffs** reduced and **EU exports increased** (e.g. by 400% from 2006-2015 in automotive sector)
- **EU imports** from Korea also mostly increased (but e.g. in automotive sector, so far only compensation of reduced demand due to financial crisis; electronic goods stabilised at lower level)
- **Remaining NTBs** a concern for stakeholders in most sectors. Case studies confirm that technical barriers related to standardisation, conformity assessment and labelling are considered to be among the most relevant NTBs in Korea

# Automotive (passenger cars)

- **EU exports increased by 400%** from 2006 to 2015
- EU share of Korean imports increased by 18 %age points after application of the FTA
- **Highly concentrated trade:** 65% of EU exports and 50% of EU imports concentrated in 3 products
- **Remaining NTBs** were a key issue mentioned by stakeholders
  - Insufficient harmonisation of Korean regs with UNECE regs
  - Exclusion of petrol cars from Annex 2-C
  - Requirements concerning vehicles (e.g. ground clearance)
  - Certification requirements, e.g. car parts certification scheme

# Agriculture

- Average tariffs imposed by Korea on EU agrifood products decreased from **49% to 27 %** from 2010 to 2014
- and EU imports from Korea more than doubled from 2006-2015, but **EU still exports far more than it imports**
  - **Top exports:** boneless swine meat, swine bellies, scotch whisky
  - EU market share of Korean imports has stayed constant at 12%
- Key issues mentioned by stakeholders
  - **Korean TRQs for butter and skimmed milk powder:** not transparent, importers must pay auction fee close to MFN duty
  - **Procedure for registering production establishments:** not transparent, no fast-track for registering second establishment
  - **Veterinary certificates:** EU not viewed as single entity by Korea

# Consumer electronic goods

- EU exports to Korea increased between 2011-2015
- EU imports from Korea fell sharply after 2010 and remained stable at EUR 9 billion/year
- EU market share of Korean imports remained constant from 2006-2015; Japan/US lost market share
- **Remaining NTBs** were a key issue mentioned by stakeholders
  - **Local testing and certification procedures:** test reports prepared in EU must be in line with Korean standards, EU labs not always familiar with
  - **KOSHA regulations:** costly 3<sup>rd</sup> party certification required for electronic products

# Environmental goods/services

- Both EU exports to and imports from Korea in this sector increased from 2006-2015 (trade volume went from EUR 1.9 billion to EUR 3.8 billion)
- **Trade highly concentrated:** 3 products account for 50% of EU exports and 40% of EU imports
  - **Parts of combustion piston engines** were the top export and import good
- EU market share of Korean imports increased after 2011, but dropped after 2014
- Key issue mentioned by stakeholders: Korean regulations **not fully harmonised with international standards** (e.g. IEC)

# Postal services

- Art 7.26 of the FTA stated that the Trade Committee was to set out **principles of regulatory framework** for postal services no later than 3 years after entry into force of the FTA
  - These principles have not yet been delivered
- **EU exports to Korea increased** from 2010 onwards, though this could be related to increase in business relations
- EU share of Korean imports remained constant from 2006-2015
- Key issue mentioned by stakeholders: establishment of **Common Express Terminal** in 2016 at Incheon airport for shipment inspections (Korea Post/local freight forwarders exempted from use)