



# Potential Economic Impact of Brexit on Ireland

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# Ireland and the UK

- Strong historical and cultural links
- Intense trade and investment links
- Similar legal system based on common law
- The only EU land border with the UK
- Common travel area since the 1920s
- Highly integrated labour markets
- Single electricity market since 2007 – particularly important for Northern Ireland

# Relevant Evidence

- **Barrett, A., A. Bergin, J. FitzGerald, D. Lambert, D. McCoy, E. Morgenroth, I. Siedschlag, Z. Studnicka (2015).** “Scoping the Possible Economic Implications of Brexit on Ireland”, ESRI Research Series No. 48.
- **Barrett, A., and E. Morgenroth (2016).** “Ireland and Brexit”, in C. Wyplosz, *What to Do with the UK? EU Perspectives on Brexit*, London: CEPR Press
- **Bergin, A., A. Garcia-Rodriguez, N. McInerney, E. Morgenroth, D. Smith (2016).** “Modelling the Medium to Long Term Potential Macroeconomic Impact of Brexit on Ireland”, ESRI Working Paper No. 548.
- **Davies, R. B., I. Siedschlag, Z. Studnicka (2016).** “Corporate Taxation and Foreign Direct Investment in EU Countries: Policy Implications for Ireland”, Special Article, *Quarterly Economic Commentary*, June.
- **Lawless, M., and E. Morgenroth (2016).** “The Product and Sector Level Impact of a Hard Brexit across the EU”, ESRI Working Paper No. 550.
- **Smith, D., M. Fahy, B. Corcoran, B. O’Connor (2016).** “UK EU Exit – An Exposure Analysis of Sectors of the Irish Economy”, Department of Finance.

## Key Messages

- Ireland is more exposed to Brexit than other EU countries particularly in the areas of trade, labour mobility, and energy
- Overall, the impact of Brexit on Ireland is likely to be negative
- Economic losses are likely to be concentrated in Irish-owned SMEs firms, labour-intensive industries, border regions
- Possible economic gains from additional foreign direct investment particularly from outside the EU and in services

# Economic Links with the UK

Country	Exports to the UK - % of exporter's GDP	Exports from the UK- % of UK GDP	FDI stock in the UK - % of investor's GDP	UK's FDI stock - % of UK GDP	EU27 citizens in the UK % of population	UK citizens in EU27 countries - % of UK population
<b>Ireland</b>	<b>14.1</b>	<b>1.5</b>	<b>8.8</b>	<b>1.9</b>	<b>10.7</b>	<b>0.4</b>
Luxembourg	10.1	0.0	200	5.9	0.4	0.0
Malta	9.1	0.0	9.7	--	7.6	0.0
Netherlands	7.6	1.6	32.9	6.5	0.4	0.1
Belgium	7.3	1.1	7.9	0.6	0.3	0.0
Slovak Rep.	5.2	0.0	0.0	0.0	1.2	0.0
Czech Rep.	4.5	0.2	0.0	0.1	0.4	0.0
Cyprus	4.3	0.0	26.5	0.0	9.7	0.1
Hungary	3.7	0.1	-0.0	0.1	0.6	0.0
Germany	3.5	2.8	2.1	1.3	0.4	0.2
Spain	2.4	0.8	5.4	0.9	0.2	0.5
France	2.1	1.6	4.4	2.1	0.2	0.3
Italy	1.6	0.8	0.3	0.5	0.3	0.1

*Source:* Based on data from Beetsma, Klaassen, and Teulings (2016)

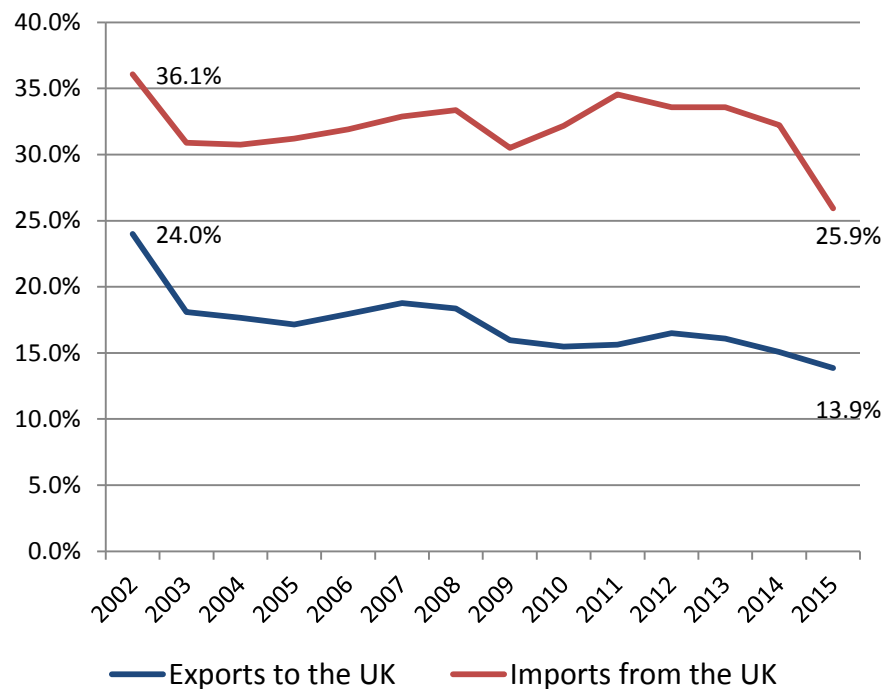
# Macroeconomic Impact

Impact of Brexit on Ireland after 10 years	EEA	FTA	WTO
<b>Percent deviation from baseline level , end of period</b>			
Gross value added at basic prices	-2.3	-2.7	-3.8
Gross value added at basic prices, traded sector	-2.6	-3.0	-4.3
Gross value added at basic prices, non-traded sector	-2.3	-2.7	-3.6
Exports of goods and services	-3.0	-3.5	-4.9
Personal consumption of goods and services	-2.2	-2.5	-3.4
Employed persons	-1.2	-1.4	-2.0
Average wage	-2.2	-2.5	-3.6
<b>Deviation from baseline , percentage points</b>			
Unemployment rate, %	1.2	1.4	1.9
<b>General government balance, % of GDP</b>	-0.6	-0.8	-1.0

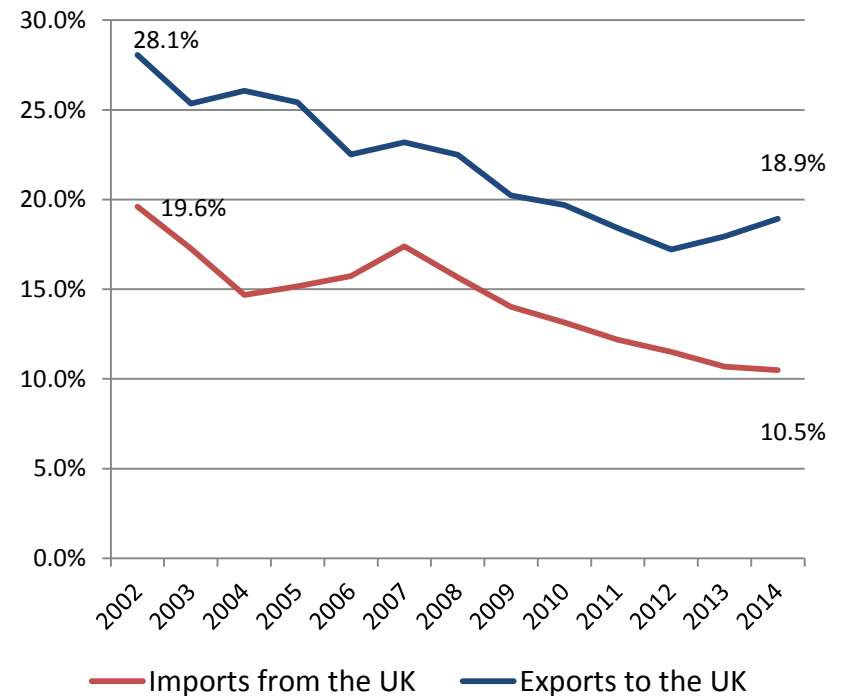
Source: Bergin et al. (2016).

# The UK's importance in Ireland's trade

## Merchandise trade

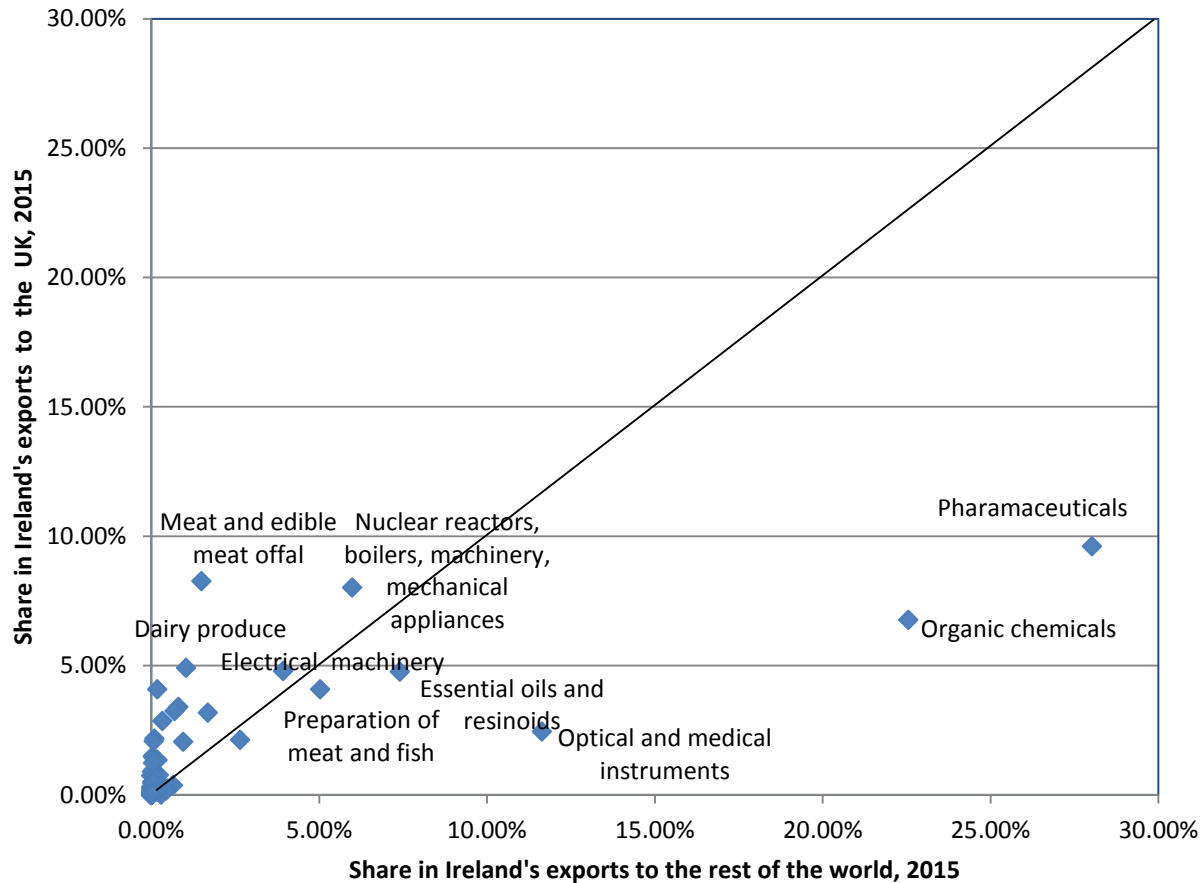


## Services trade



Source: Own calculations based on data from UNCTAD.

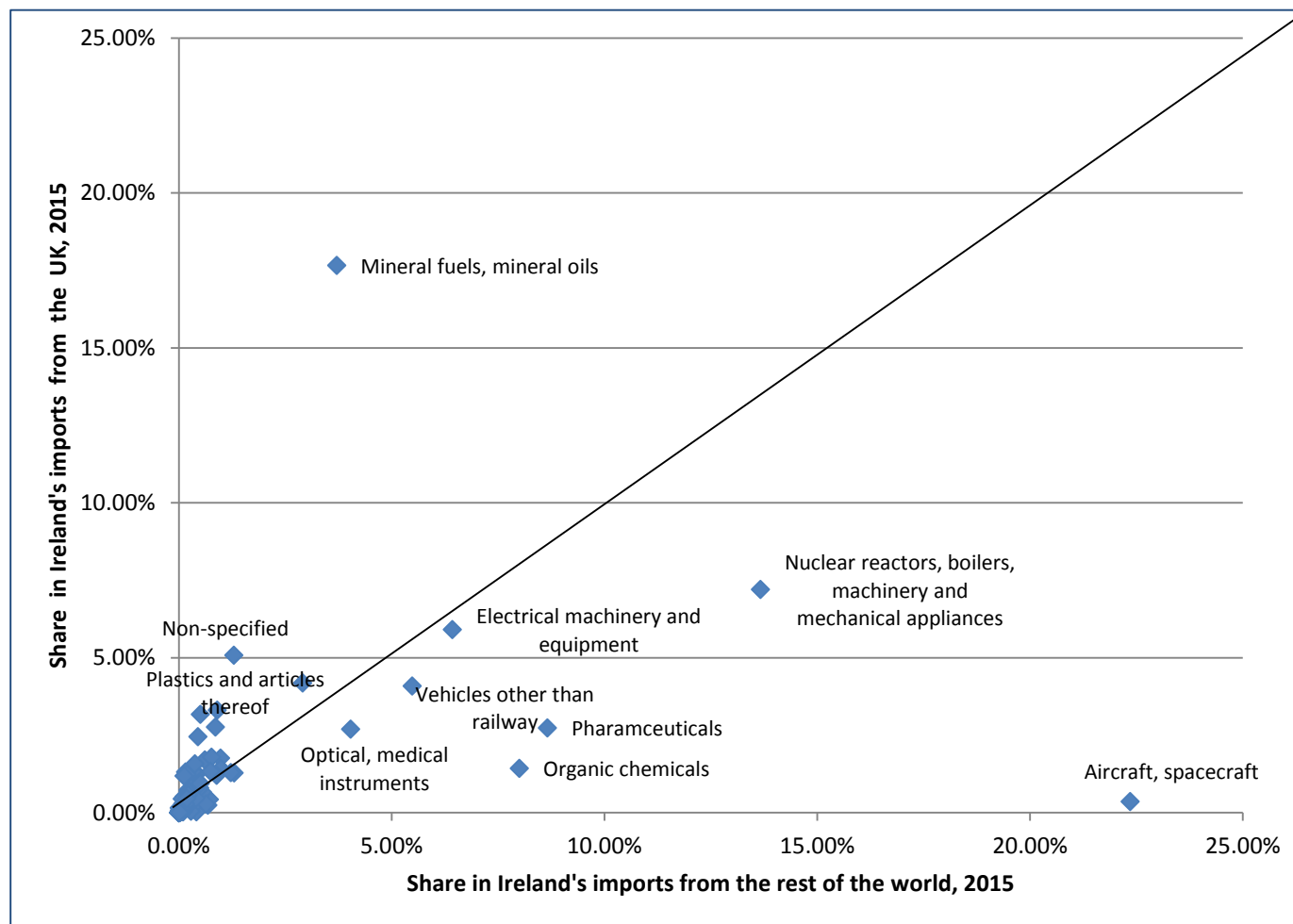
# Ireland's merchandise exports to the UK and rest of the world by product group



Source: Own calculations based on data from the UN COMTRADE database

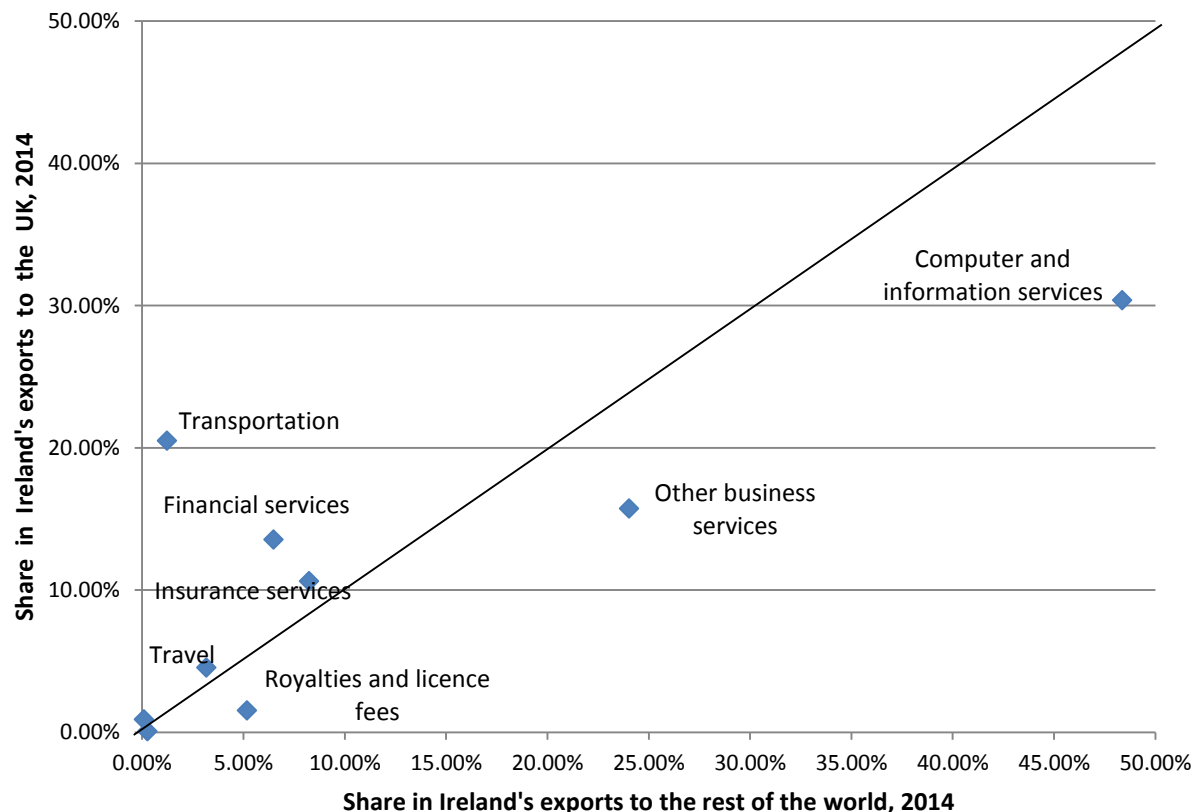


## Ireland's merchandise imports from the UK and rest of the world by product group



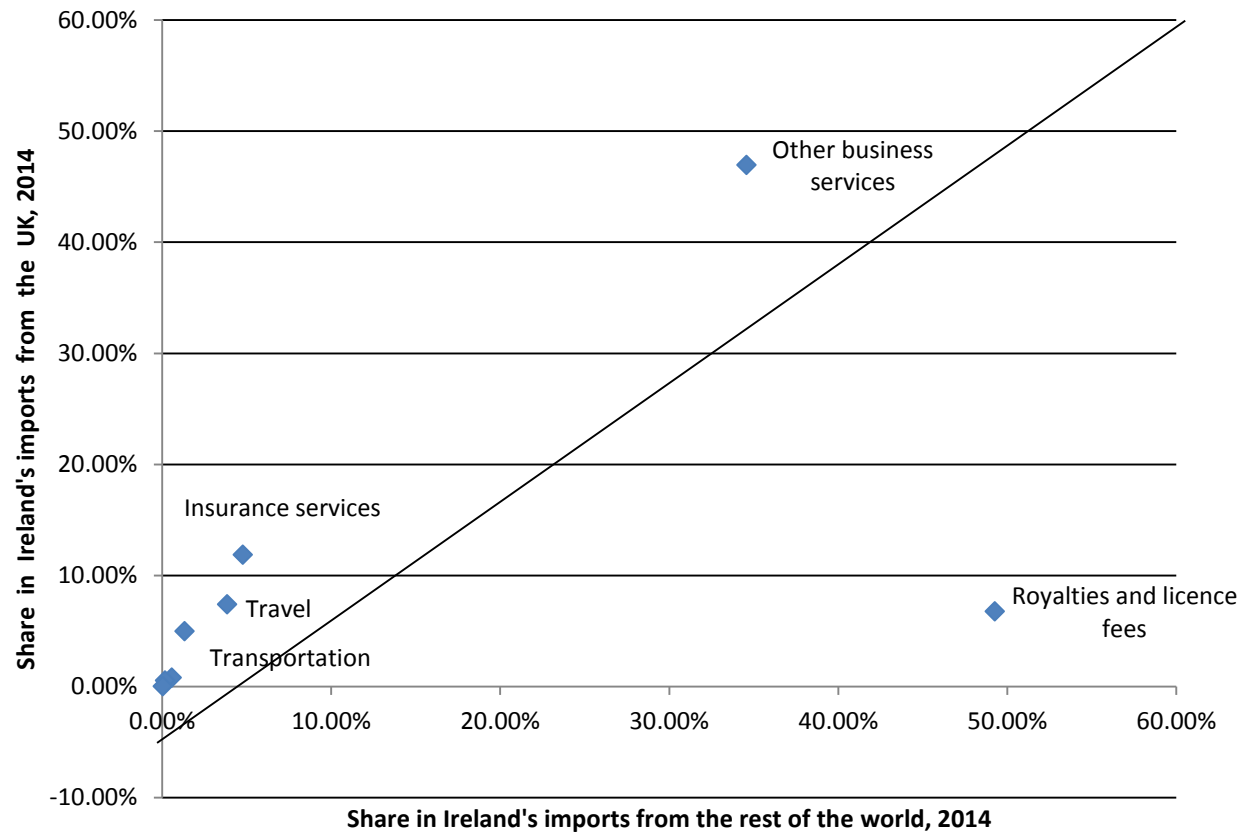
Source: Own calculations based on data from the UN COMTRADE database

# Ireland's exports of services to the UK and the world by sector



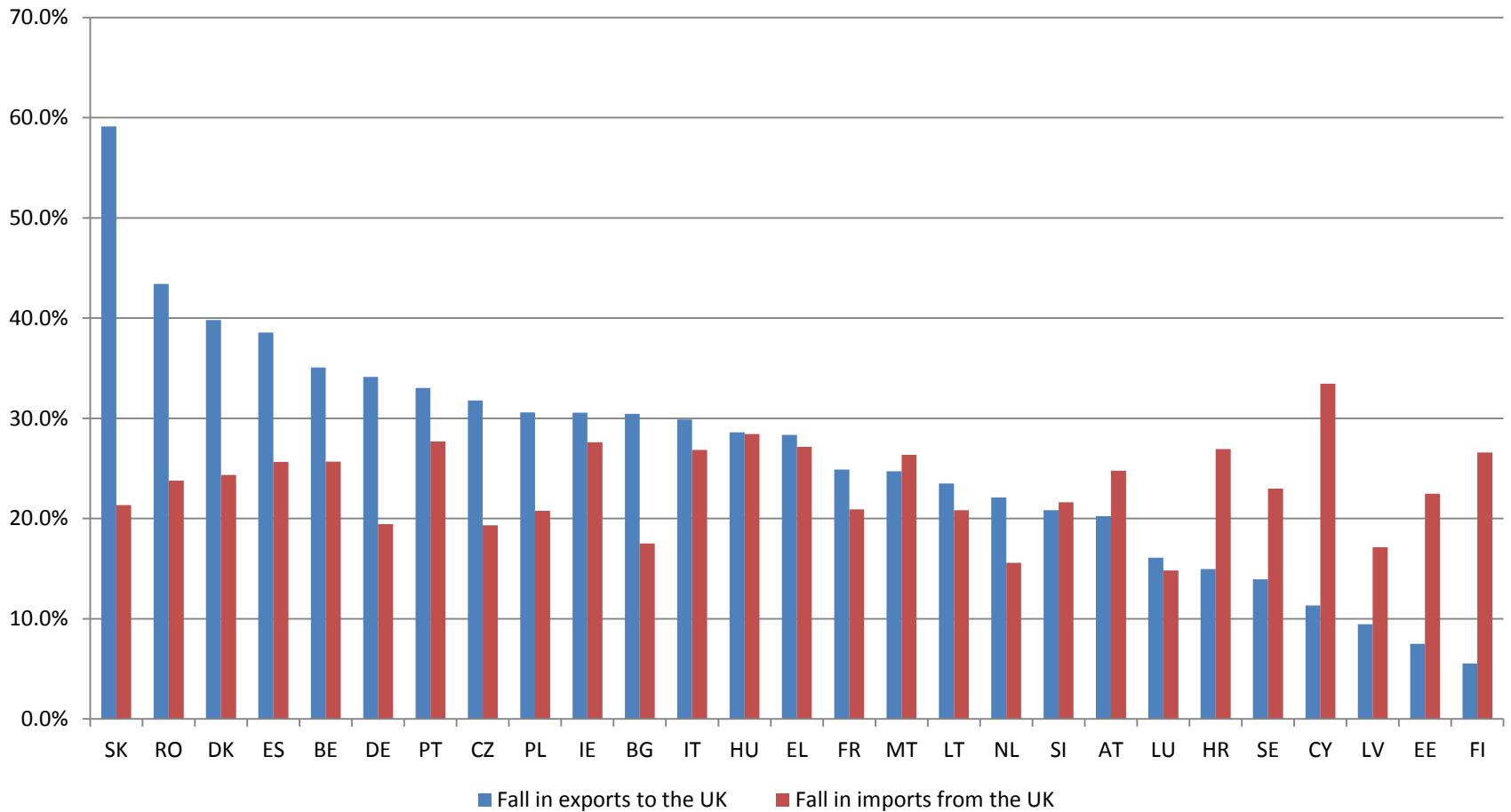
Source: Own calculations based on data from the UN COMTRADE database

# Ireland's imports of services to the UK and the rest of the world by sector



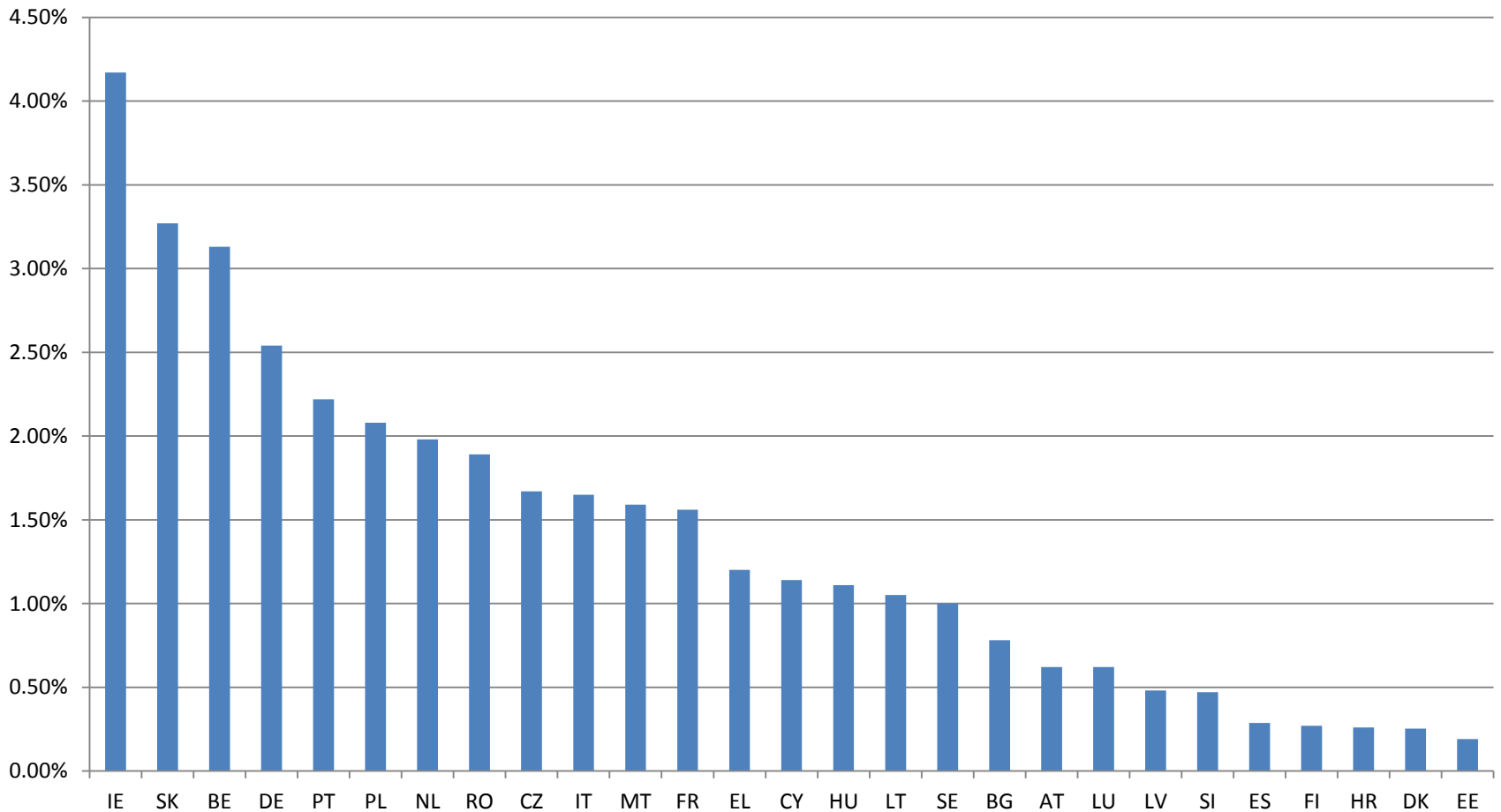
Source: Own calculations based on data from the UN COMTRADE database

# Brexit under the WTO scenario: Estimated reduction of bilateral merchandise trade between the UK and EU countries



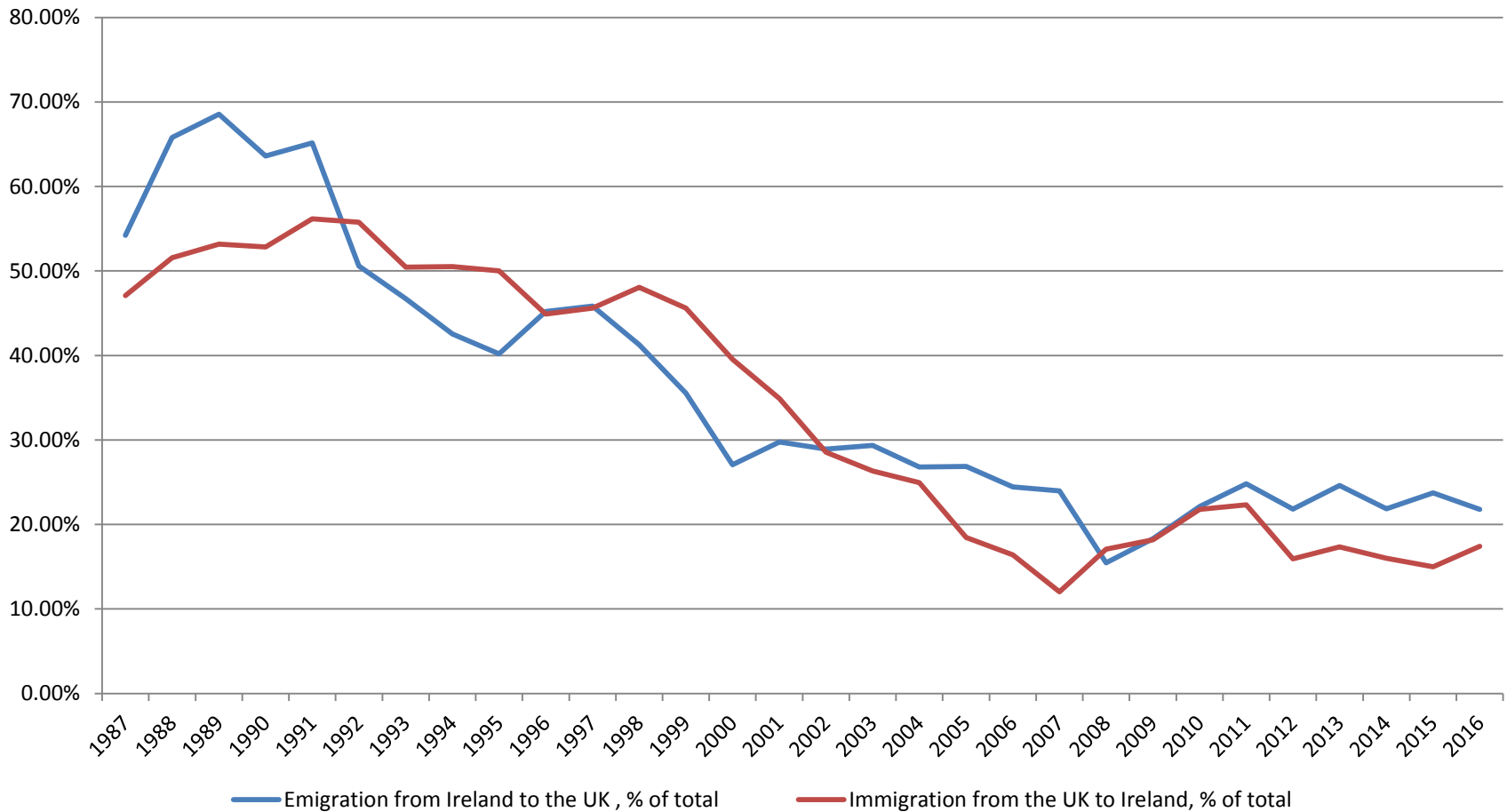
*Source: Lawless and Morgenroth (2016).*

# Brexit under the WTO scenario: Estimated reduction of merchandise trade between the UK and EU countries relative to the UK's share in their total trade



*Source: Lawless and Morgenroth (2016).*

# Migration between Ireland and the UK



*Source:* Own calculations based on data from Ireland's Central Statistics Office

# Potential FDI Opportunities and Challenges for Ireland

Davies, Siedschlag and Studnicka (2016)

- **Ireland and the UK are perceived to be similar as alternative locations for FDI**
  - in particular by investors from outside the EU and in services
- **A possible redirection of FDI from the UK to Ireland in the case of BREXIT would be more likely by investors**
  - **from outside the EU** – access to the EU Single Market is the key factor for location choice
  - **in the services sector** – having a common border and common language are key factors for location choice
- **A more competitive corporate taxation in the UK is likely to impact negatively on Ireland's attractiveness to FDI**

## Final Reflections

- Uncertainty on the nature of the UK's relationship with the EU – negotiations' outcome difficult to anticipate
- Potential economic impact of Brexit on Ireland is likely to be influenced by worldwide developments – a more protectionist US
- Potential political consequences are likely to interact with economic effects – need to consider the peace process in Northern Ireland



# Determinants of the Location Choice of New FDI

## Nested Logit Model Estimates, Davies et al. (2016)

	All FDI Projects	EU Investors	Non-EU Investors
<b>Corporate tax policy rate</b>	<b>-0.083** (0.039)</b>	<b>0.153*** (0.051)</b>	<b>-0.532*** (0.056)</b>
Market size (GDP)	0.345***(0.011)	0.362*** (0.013)	0.346*** (0.018)
<b>EU Market potential</b>	0.089*** (0.021)	-0.339*** (0.032)	<b>0.830*** (0.034)</b>
GDP per capita	<b>-0.524*** (0.021)</b>	<b>-0.633*** (0.027)</b>	-0.034 (0.053)
Trade cost -distance to home	-0.451*** (0.015)	-0.653*** (0.019)	0.212*** (0.043)
Common language	0.386*** (0.022)	0.299*** (0.032)	0.516*** (0.039)
Common border	<b>0.456*** (0.020)</b>	0.475*** (0.025)	0.653*** (0.039)
R&D expenditure intensity	-0.369*** (0.048)	-0.344*** (0.064)	-0.693*** (0.092)
R&D expend. intensity squared	0.103*** (0.012)	0.066*** (0.016)	0.224*** (0.022)
<b>Dissimilarity Parameters (<math>\lambda</math>)</b>			
UK-Ireland EU Group	<b>0.444*** (0.022)</b>	<b>0.564*** (0.034)</b>	<b>0.267*** (0.023)</b>
Core-Northern EU Group	0.637*** (0.012)	0.731*** (0.016)	0.465*** (0.017)
Central & Eastern EU Group	0.543*** (0.017)	0.653*** (0.020)	0.522*** (0.038)
Southern EU Group	0.406*** (0.013)	0.458*** (0.018)	0.443*** (0.022)
LR test for IIA ( $\lambda = 1$ )	$\chi^2 (4) = 917.53^{***}$	$\chi^2 (4) = 442.23^{***}$	$\chi^2 (4) = 530.38^{***}$

# Determinants of the Location Choice of New FDI

## Nested Logit Model Estimates , Davies et al. (2016)

	Manufacturing	Services
<b>Corporate tax policy rate</b>	<b>0.275** (0.129)</b>	<b>-0.216*** (0.046)</b>
Market size (GDP)	0.484*** (0.040)	0.340*** (0.012)
EU Market potential	0.120 (0.077)	0.161*** (0.023)
GDP per capita	<b>-0.969*** (0.072)</b>	-0.399*** (0.026)
Trade cost -distance to home	-0.444*** (0.051)	-0.430*** (0.018)
Common language	0.468*** (0.076)	0.322*** (0.024)
Common border	0.468*** (0.064)	<b>0.524*** (0.024)</b>
R&D expenditure intensity	-0.755*** (0.176)	-0.273*** (0.055)
R&D expend. intensity squared	0.234*** (0.043)	0.085*** (0.013)
<b>Dissimilarity Parameters (<math>\lambda</math>)</b>		
UK-Ireland EU Group	<b>0.755*** (0.111)</b>	<b>0.409*** (0.024)</b>
Core-Northern EU Group	0.613*** (0.039)	0.642*** (0.014)
Central & Eastern EU Group	0.769*** (0.056)	0.558*** (0.020)
Southern EU Group	0.387*** (0.040)	0.416*** (0.015)
LR test for IIA ( $\lambda = 1$ )	$\chi^2 (4) = 132.34^{***}$	$\chi^2 (4) = 704.78^{***}$

# Brexit: A Whirlwind Tour

Monique Ebell and James Warren  
NIESR

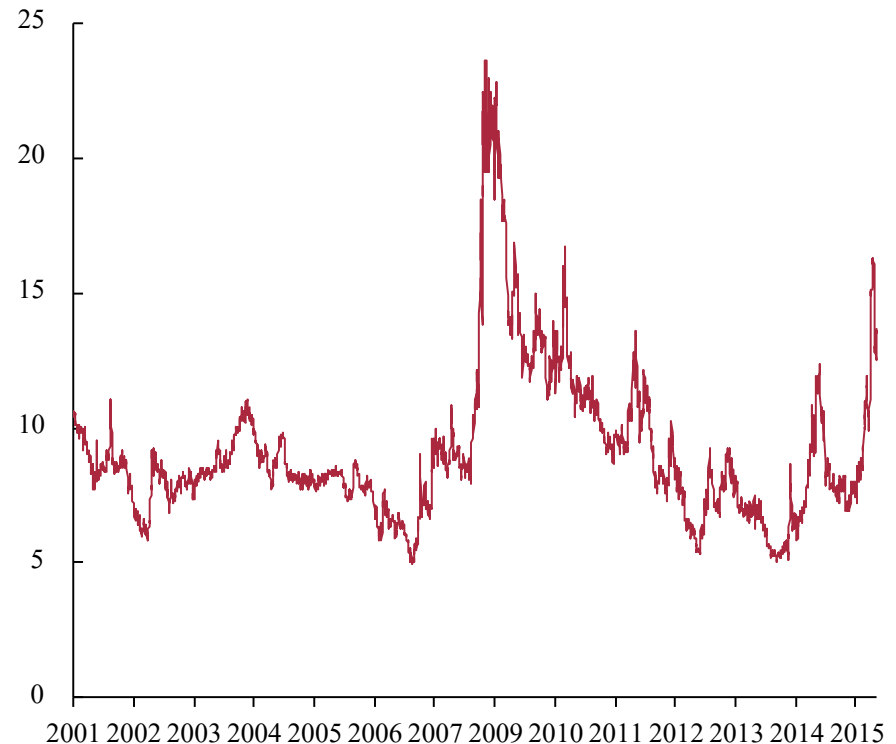
8 February 2017



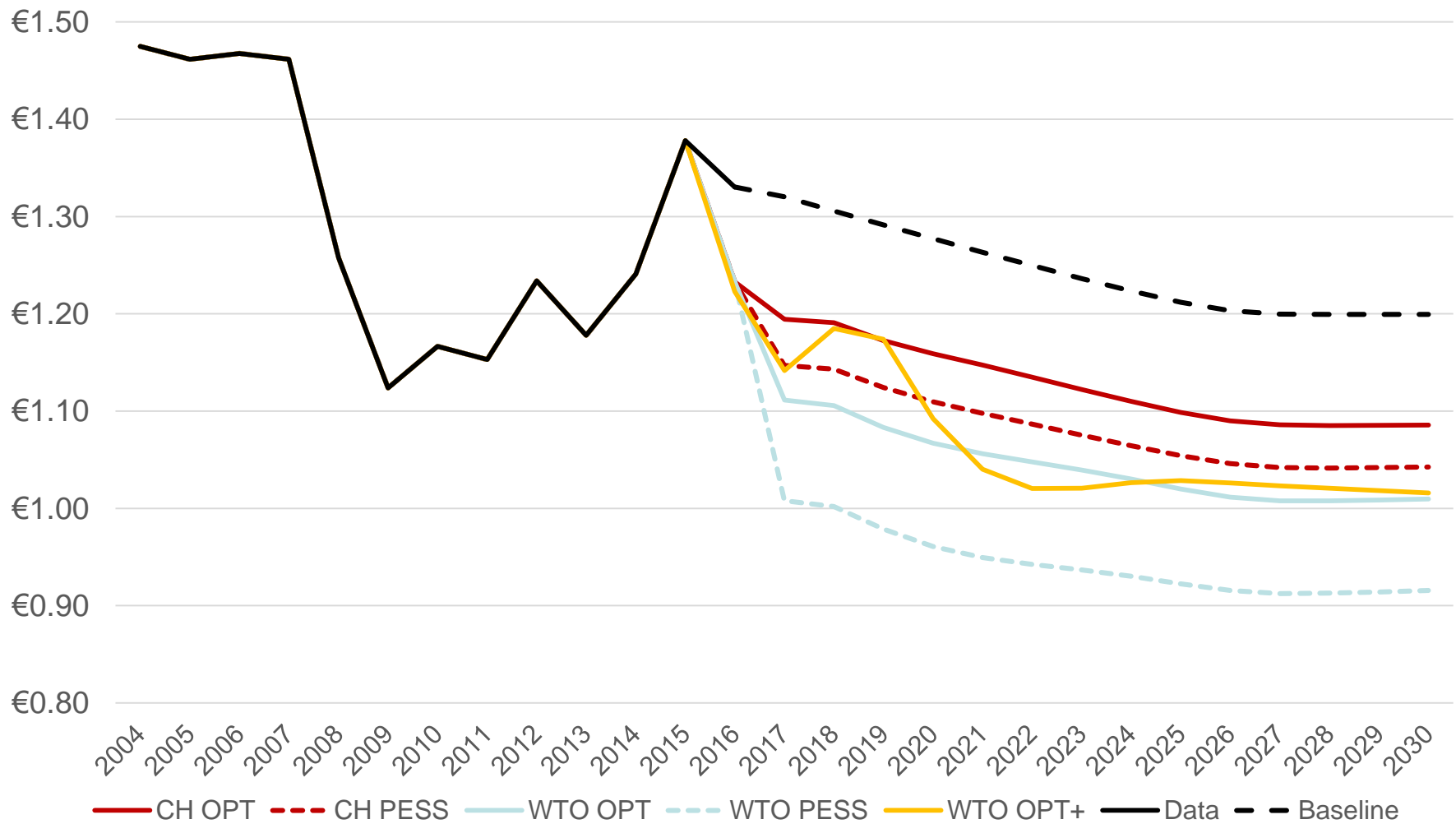
# Short-term Impact of Brexit

- Heightened uncertainty
- Depreciation in Sterling
- Trigger Article 50 in Q1 2017
- Phase out uncertainty, phase in reductions in trade, FDI

Option-implied 3-month sterling volatility

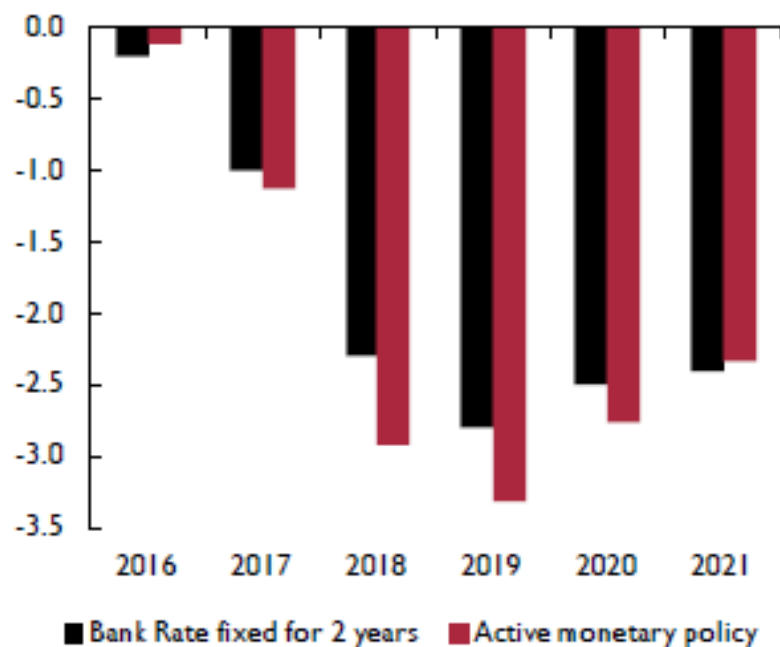


# Euro-£ Exchange Rate



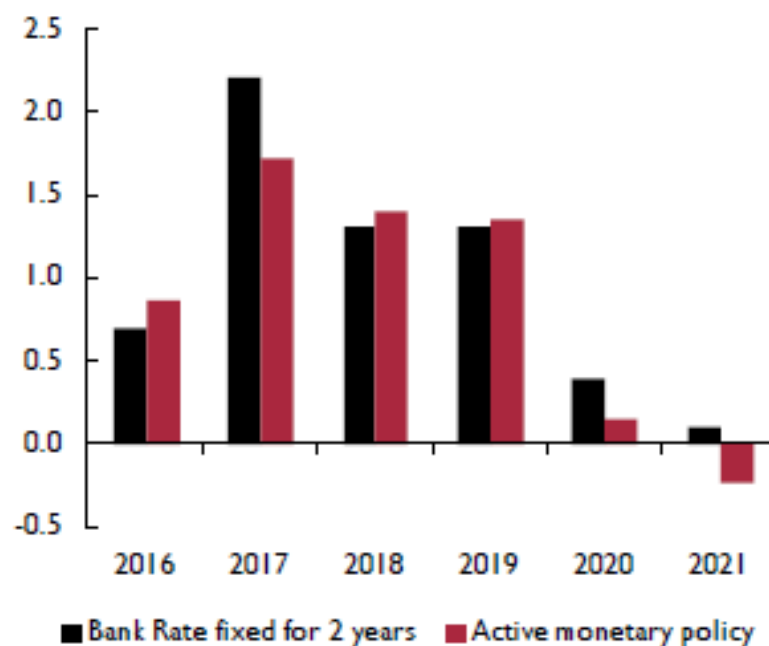
# A vote to leave: GDP negatively affected by the shock of a vote to leave; inflation spikes (relative to counterfactual)

GDP level (per cent difference from baseline)



Source: NiGEM simulations.

Inflation rate (percentage points difference from baseline)



Source: NiGEM simulations.

# Long-term Economic Impact of Brexit

- Reductions in Trade with the EU
  - Based on gravity estimates
  - Switzerland/FTA, 31% to 42% decline
  - WTO, 50% to 72% decline
- Reductions in total inward FDI
  - Based on regressions of openness on FDI
  - Switzerland/FTA, 17% decline
  - WTO, 24% decline
- Repatriate projected UK net contribution to the EU of 0.4% of GDP

# Methodology in a Nutshell

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## 1. Econometric estimates of:

- Decreases in trade from leaving the single market
- Decreases in inward FDI from leaving the single market
- + Increases in trade from new FTAs

## 2. Feed changes in export market shares into NiGEM, our macroeconomic forecasting model to project:

- Impact on GDP, consumption, real wages
- Impact on exchange rate and other prices





# Gravity: Data

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- 2014 data on bilateral exports from 42 countries, covering 87% of the UK's trade:
  - All 34 OECD countries, including 23 of EU-28
  - BRIICS: Brazil, Russia, India, Indonesia, China, South Africa plus Malaysia and Hong Kong
- Goods and services treated separately
- Why only 2014 data?
  - Data quality: relatively little mirroring necessary
  - Panel estimates give the average impact of single market membership over 80s, 90s, 00s and 10s.
  - Single market has deepened over time, esp for services.



# Gravity Estimation

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- Regression equation:

$$X_{ij} = \exp(\beta_0 + \beta_1 dist_{ij} + \beta_2 bord_{ij} + \beta_3 lang_{ij} + \beta_4 colony_{ij})$$



# Trade Impacts

## Reductions in UK trade with other EU members from leaving the single market

	Goods	Services	Total
Single market → WTO with EU	58%	61%	59%
Single market → FTA with EU	35%	61%	45%

## Increases in UK trade with BRIICS or Anglo-Americans from new FTAs

	Goods	Services	Total
WTO → FTA with BRIICS	26%	0%	19%
WTO → FTA with Anglos	26%	0%	12%

- EEA single market is deep and comprehensive trade agreement, aimed at reducing non-tariff barriers (NTBs)  
→ strong impact on trade of both goods and services
- Most other FTAs do little to address NTBs  
→ no increases in services trade  
→ modest increases in goods trade



# Trade Impacts

## Changes in total UK trade from trade policy changes

	Goods	Services	Total
Single market → WTO with EU	–32%	–26%	–30%
Single market → EU FTA	–20%	–26%	–22%
WTO → BRIICS FTAs	3.2%	0%	2.2%
WTO → Anglos FTAs	3.0%	0%	2.6%

- Impact on total trade depends on how much we currently trade with each partner – nearly half of trade with EU
- Gains from FTAs based on FTAs currently in existence
- In order for future FTAs – with EU or with others – to be effective, seems to be important to address NTBs

# Long-term Headline Macroeconomic Results: View from May 2016

% decrease	Switzerland	WTO	WTO+
GDP	2.3%	3.2%	7.8%
Real wages	3.8%	5.5%	7.0%
Consumption	3.5%	4.7%	9.2%

- All results are % declines compared to the 2030 baseline of remaining in the EU
- WTO+ adds a 5% productivity drop to WTO-optimistic
- **Downside risks:** pass-through to exports, Scotland

# Trading with the World?

	<b>GDP</b>	<b>Cons</b>	<b>Exch. rate</b>
EU → WTO	-2.3%	-3.5%	-15.0%
EU → WTO + FTA Anglos	-2.3%	-3.5%	-14.9%
EU → WTO + FTA BRIICS	-2.2%	-3.4%	-13.8%

- Trade impacts only – no productivity, FDI or fiscal
- FTAs with Anglos have no perceptible impact
- FTAs with BRIICs reduce the GDP and consumption declines by 0.1 of a percentage point.



# Will new trade deals soften the blow of Brexit?

- If past effectiveness of FTAs is any guide, then new FTAs are unlikely to make up for lost trade from leaving the single market.
- ***Unless*** new FTAs replicate the important trade-generating features of the single market, addressing not just tariffs, but also non-tariff barriers
- What are those important features of trade agreements?
- Political appetite for deep economic integration?

# EXTRA SLIDES

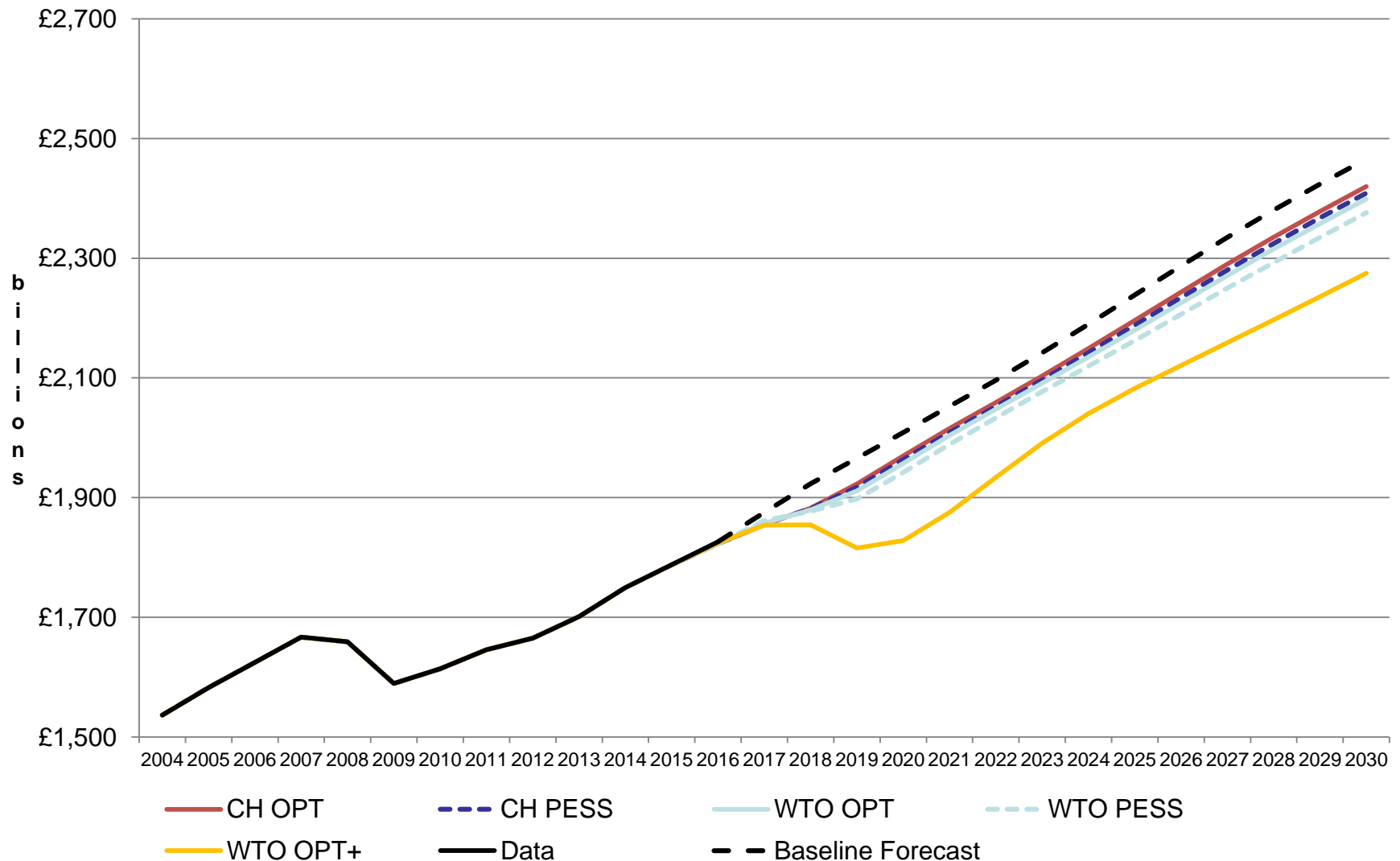




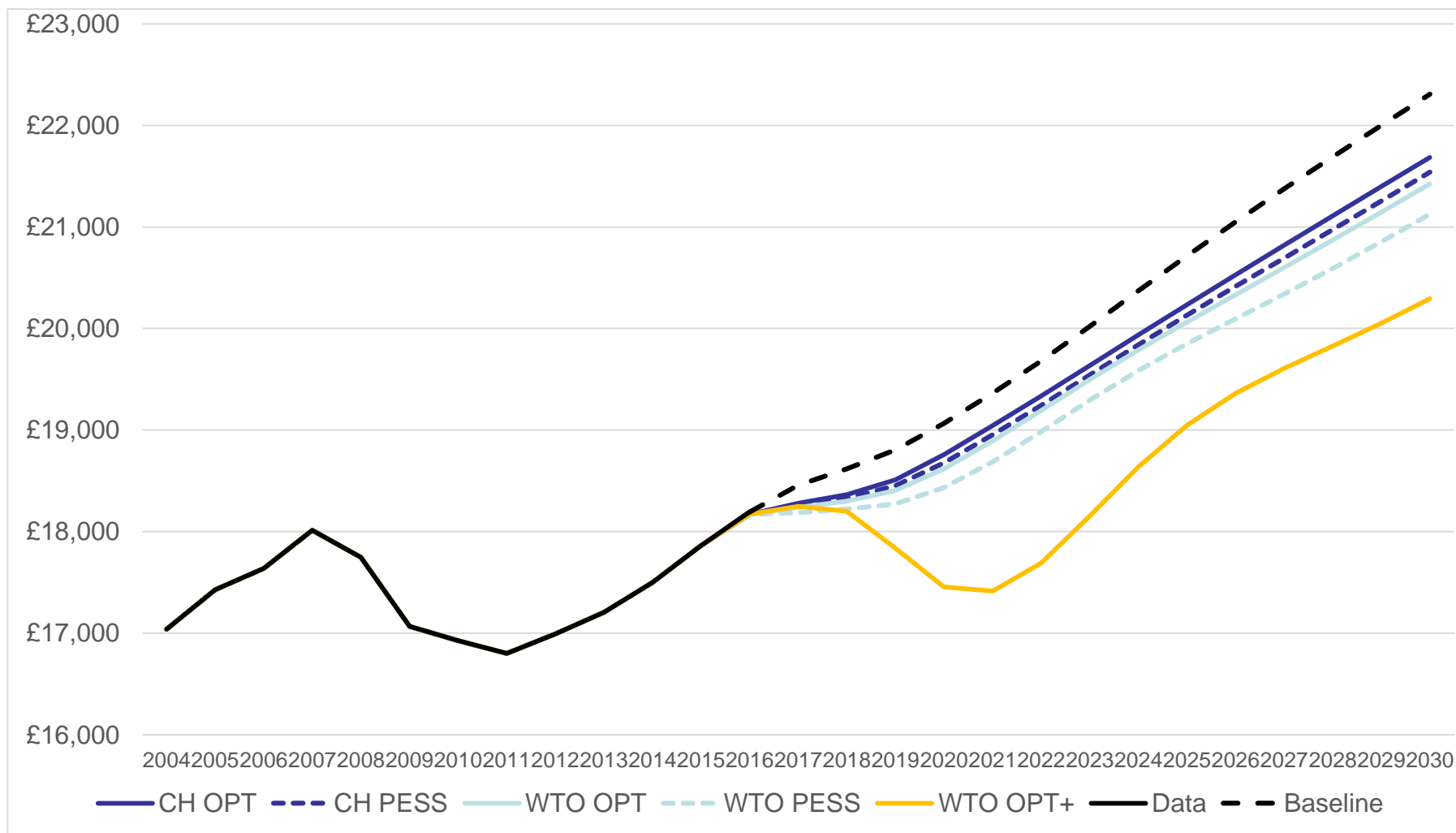
# Comparison of NiGEM Analyses

	OECD	HM Treasury		NIESR		
	WTO/FTA	FTA	WTO	FTA	WTO	WTO +
Brexit Modelling						
Reduction in total trade	-10 to -20%	-14 to -19%	-17 to -24%	-13 to -18%	-21 to -29%	-22%
Reduction in FDI	-10 to -45%	-15 to -20%	-18 to -26%	-17%	-24%	-24%
EU budget savings, % of GDP	0.3 to 0.4%	0.4%	0.4%	0.3%	0.3%	0.30%
Results						
GDP, % decrease						
Central estimate	-5.10%	-6.2%	-7.5%	-2.1%	-3.2%	-7.8%
Range	-2.7% to -7.7%	-4.6 to 7.8%	-5.4 to -9.5%	-1.9 to -2.3%	-2.7 to -3.7%	-7.8%
Wages, % decrease						
Central estimate	n.a.	n.a.	n.a.	-3.4%	-5.5%	-7.0%
Range	n.a.	n.a.	n.a.	-3.1 to -3.8%	-4.6 to -6.3%	-7.0%
Ratio of GDP to trade declines	0.27 - 0.39	0.33 - 0.41	0.32 - 0.40	0.14	0.13	0.35

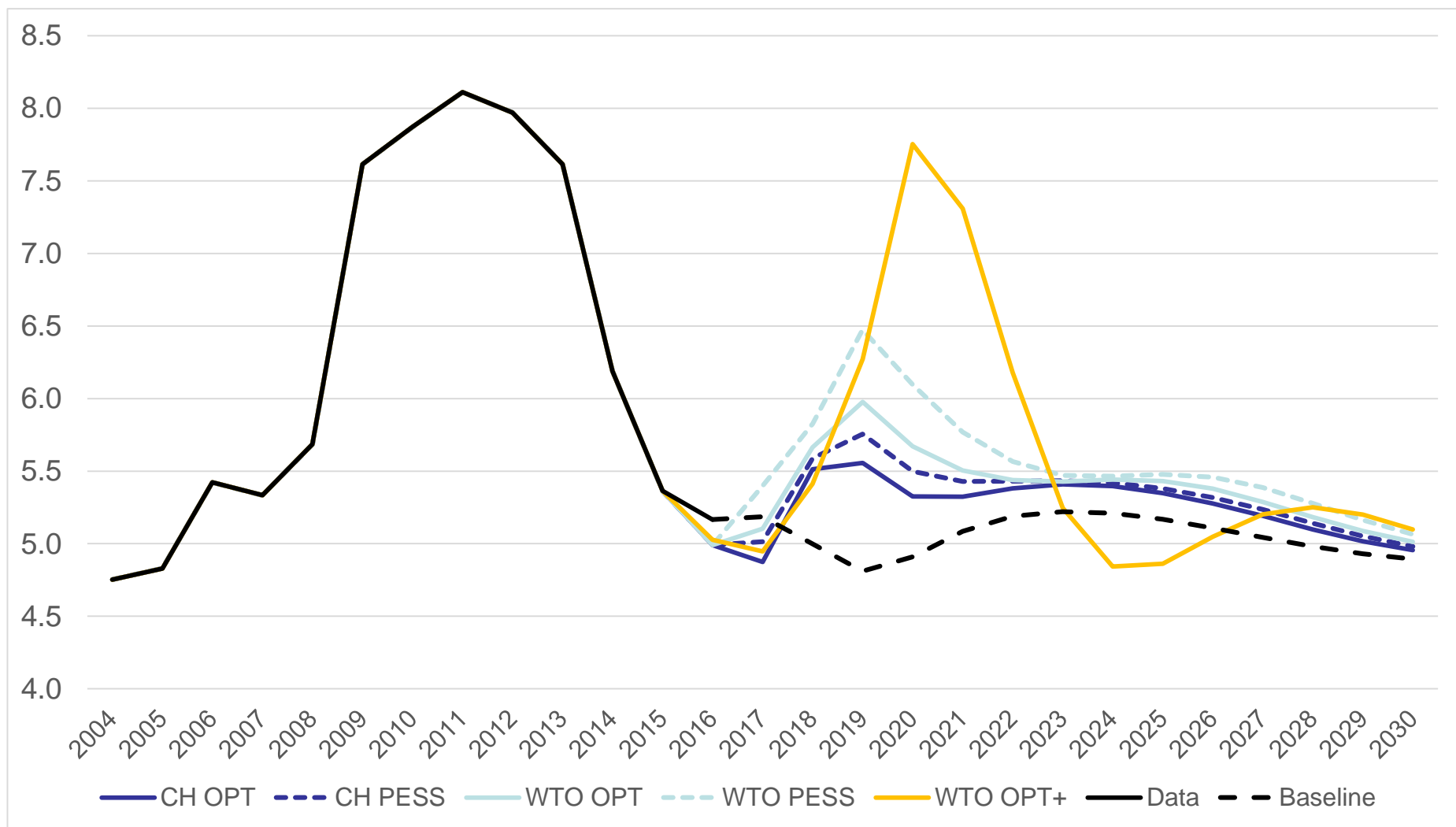
# GDP, compared to the baseline forecast



# Consumption per capita, constant prices



# Unemployment rate, %



# Key Trade Mechanism

## Reduced access for the UK to EU markets

- Demand for UK exports falls
- Prices of UK exports fall
- Sterling depreciates
- Import prices rise
- Deterioration in the terms of trade
- UK poorer, no longer gaining as much from trade
- Consumption, GDP and real wages all fall

## Long-term Headline Results

% decrease	Switzerland	WTO	WTO+
GDP	1.9 – 2.3%	2.7 - 3.7%	7.8%
Real wages	3.1 – 3.8%	4.6 – 6.3%	7.0%
Consumption	2.8 – 3.5%	4.0 – 5.4%	9.2%

- All results are % declines compared to the 2030 baseline of remaining in the EU
- Switzerland and WTO focus on trade and FDI effects
- WTO+ adds a 5% productivity drop to WTO-optimistic

# Gravity: Methodology II

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- Use latest methods
  - Poisson Pseudo-Maximum Likelihood (PPML) estimation to deal with observations of zero trade, particularly important for services trade.
  - Instrumental Variables (IV) approach to deal with endogeneity, i.e. that might be more likely to form trade agreements with countries we already trade a lot with.
  - Use measures of political stability from Polity IV project as instruments to predict EEA membership: Instrument is strongly correlated with EEA membership, but not correlated with *bilateral* trade.





CPB Netherlands Bureau for Economic  
Policy Analysis

# The importance of trade: Brexit and the Netherlands

Gerdien Meijerink  
Netherlands Bureau of  
Economic Policy Analysis

7 February 2017  
ENEPRI-CEPS

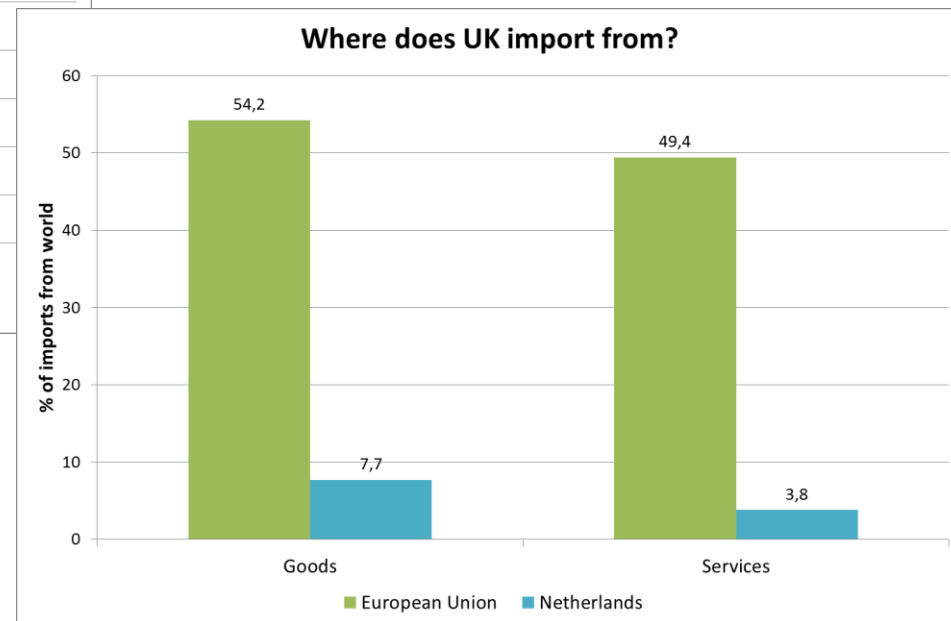
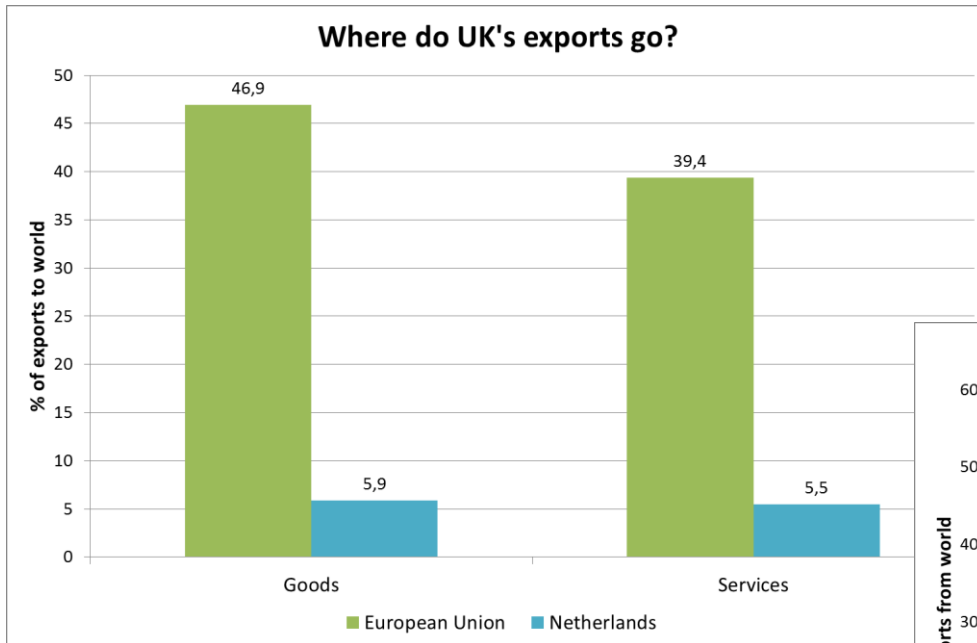




CPB Netherlands Bureau for Economic  
Policy Analysis



# The importance of trade: UK perspective

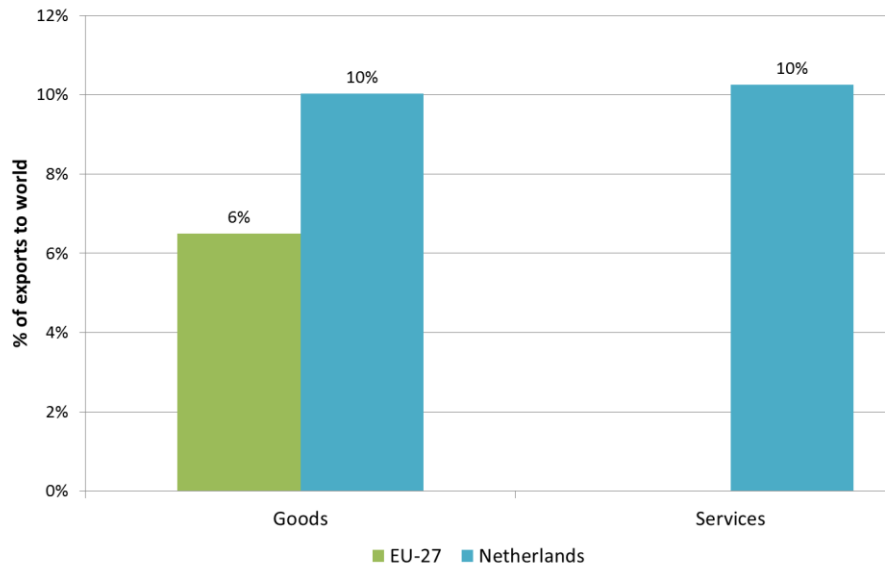


Source: ONS Pink Book, 2016

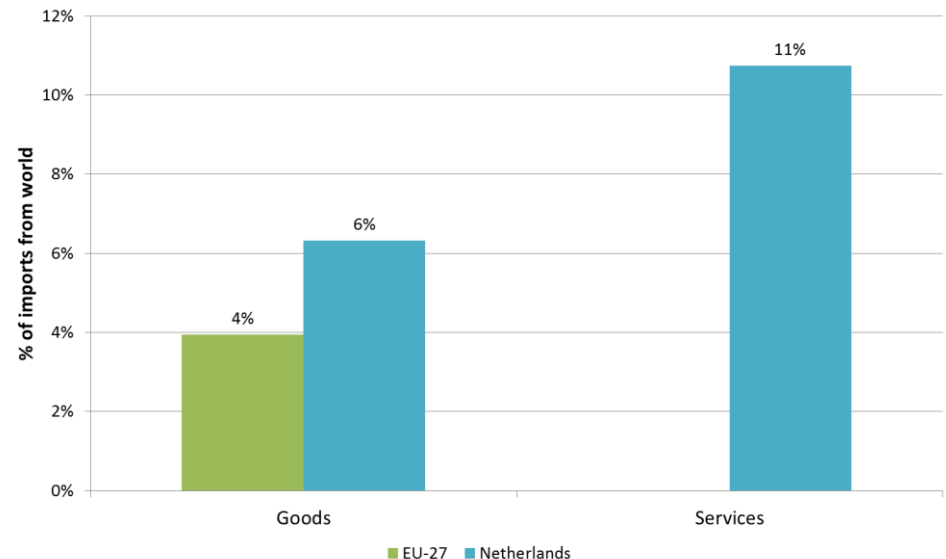


# The importance of trade: Dutch (& EU) perspective

Importance of UK for exports

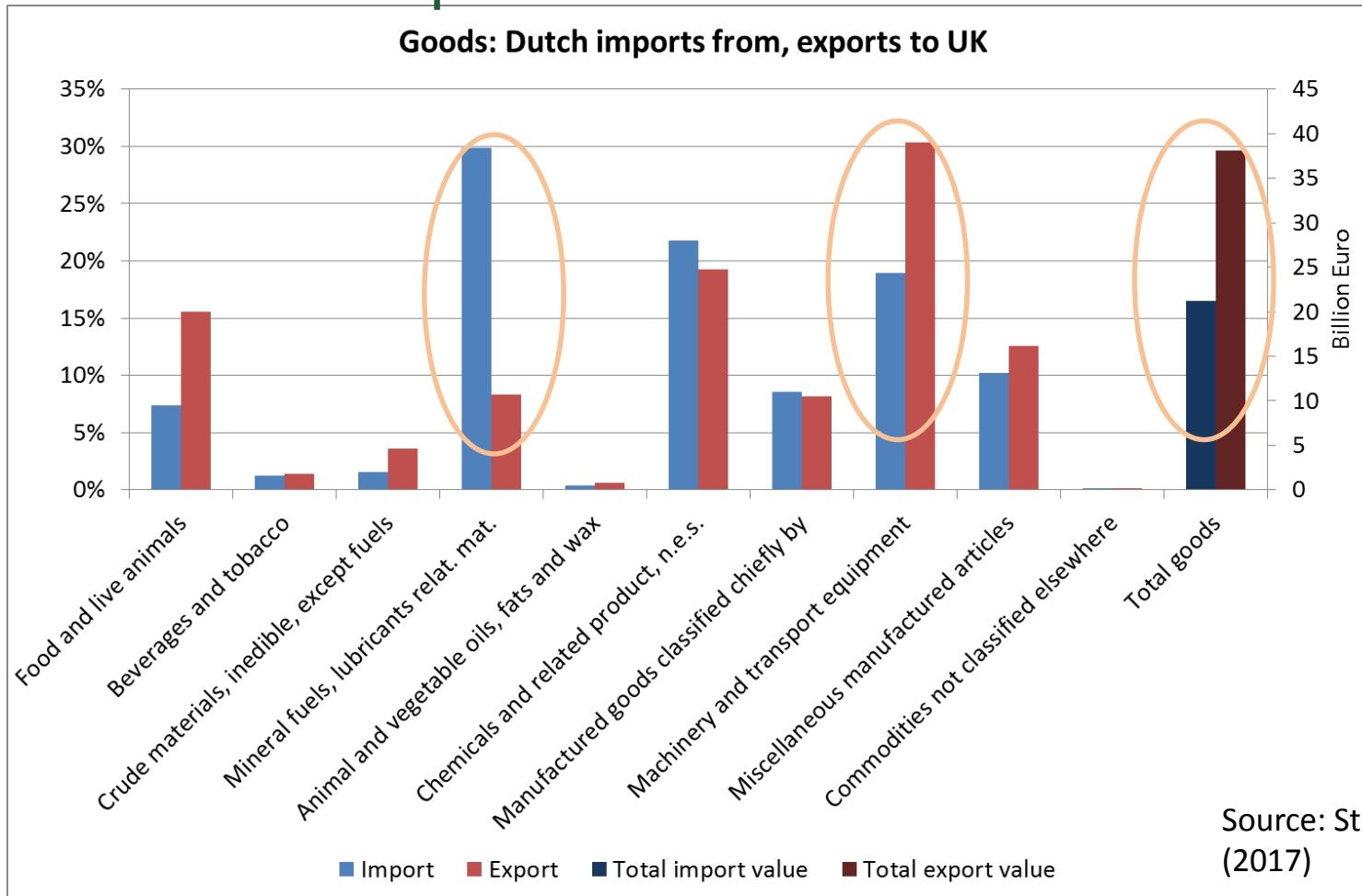


Importance of UK for imports





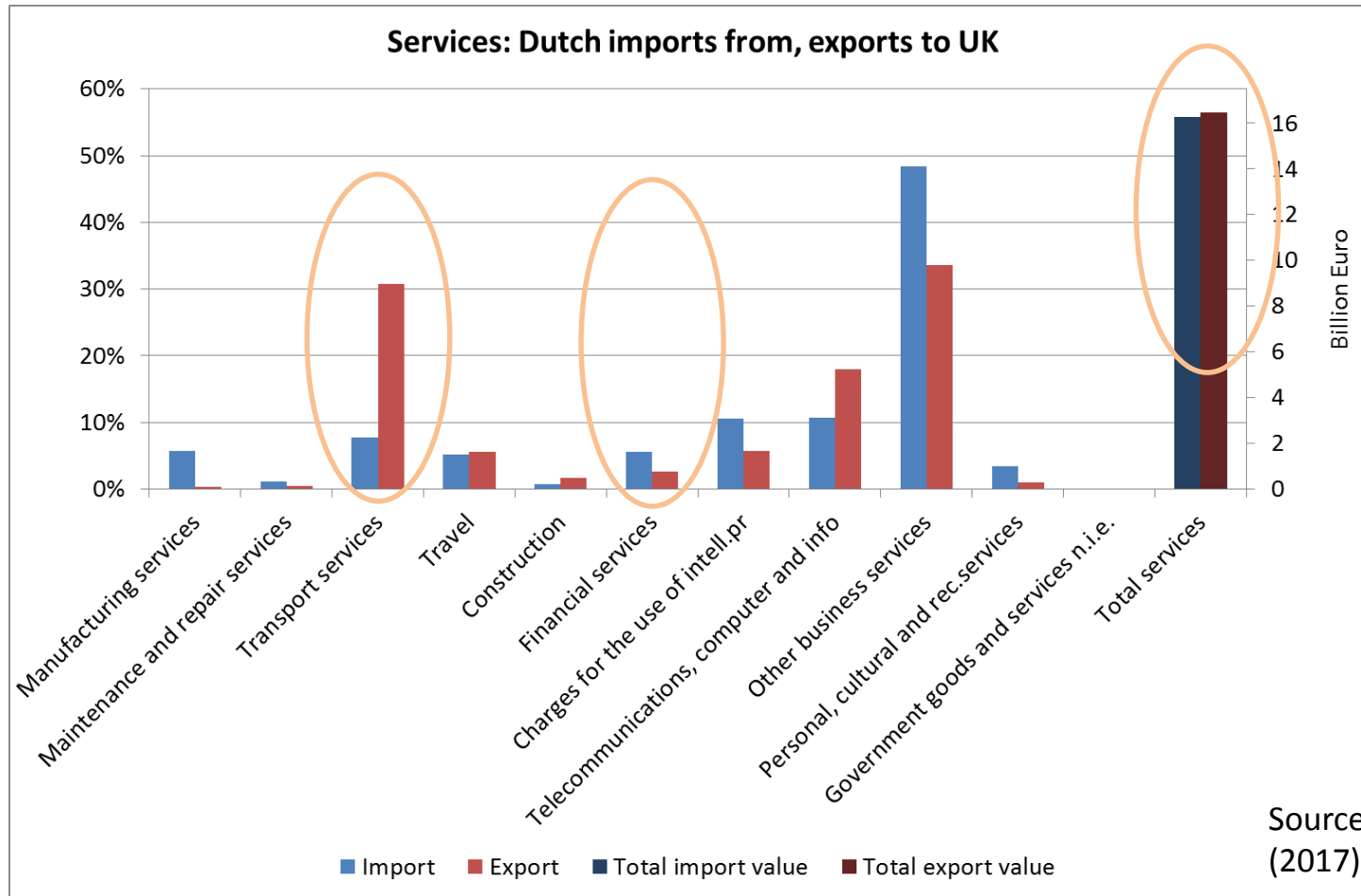
# Goods trade per sector



Source: Statistics Netherlands (2017)



# Services trade per sector



Source: Statistics Netherlands (2017)



## Asymmetric interests

- Trade is most important channel of Brexit effects
- The Netherlands is the third ranked EU country in terms of trade in goods, but the UK is more important to the Netherlands than vice versa
- Financial services: The Netherlands imports 6% (902 million Euro) (as % of total services to UK), while it exports 3% (443 million euro)
- However, different sectors have different tariff structures and non-tariff trade barriers



# Analysing effects of Brexit with WorldScan

1. General equilibrium model, focused on trade
2. Uses GTAP database
3. Interactions: markets, countries and sectors
4. High and low skilled workers
5. Econometric basis



## 2 Scenario's: FTA and WTO

- Assumptions;
  - UK leaves EU in 2019 (Article 50 invoked beginning of 2017)
  - No transition period
- WTO
  - external EU tariffs: 3% across the board (comparable with EU tariffs for other countries)
  - trade tariffs reduce the amount of trade between the UK and the EU.
  - UK does not comply with EU standards and regulations, leading to non-tariff trade barriers: 13% increase in the trade costs for goods and services
- FTA
  - No tariffs
  - UK deviates from EU regulations creating certain trade barriers: increase of trade costs for goods and services on average by 6%



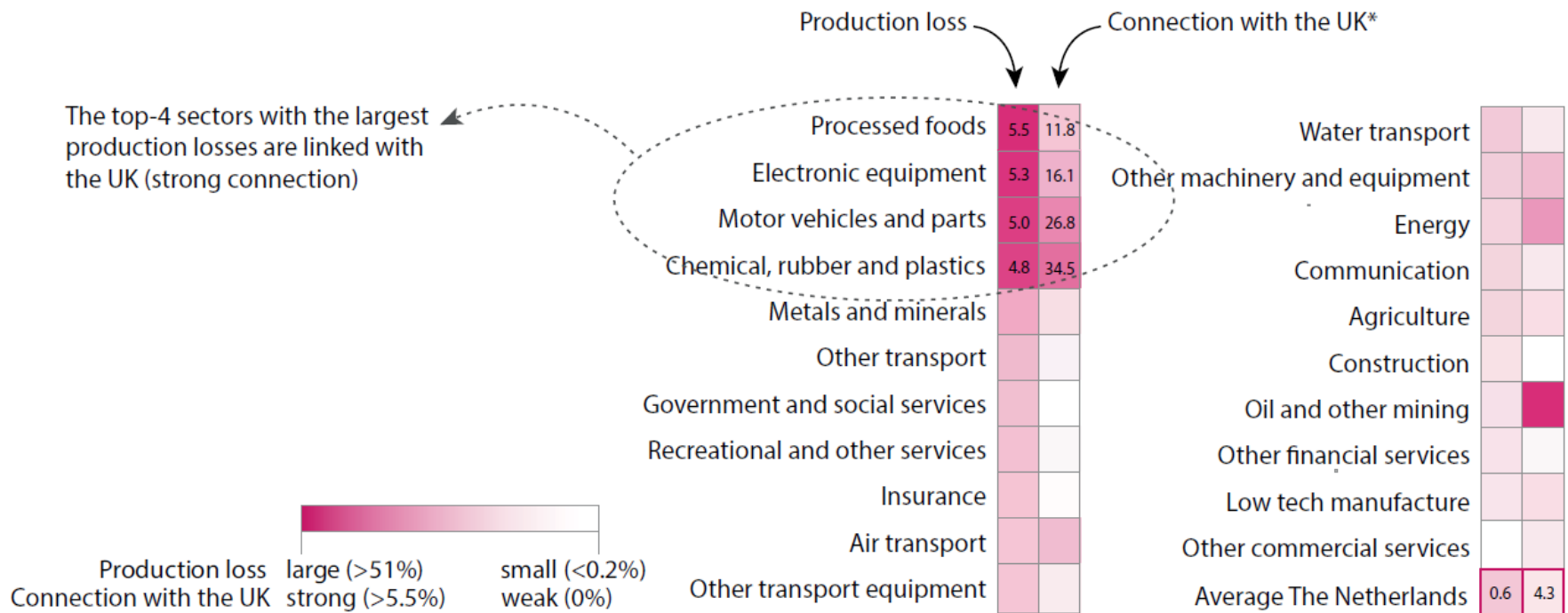


## Trade costs in 2030

- WTO
  - 1,2% lower GDP (translates into 10 billion euros or 575 euros per person)
  - If we assume trade-induced innovation, the cost increase to 2%
- FTA
  - 0,9% lower GDP (translates to 8 billion euro or 450 euro per person)
  - If we assume trade-induced innovation, the costs increase to 1,5%



# Impact of WTO on sectors



Note: connection = (sectoral import into, export from and export to the UK) / 2 \* (GDP in that sector)<sup>13</sup>.



## Tariffs vs non-tariff barriers (ntb's)

- Tariffs in the WTO are already low, but vary
  - Extraction of gas, oil: 0%
  - Processed foods: 7,8% (but vary between products)
- NTB's will likely impose larger costs than tariffs
  - Non-tariff barriers occur when policies and regulations (environmental regulation, animal welfare, product safety) start diverging.
  - Extraction of gas, oil: very low NTB's
  - Food, retail, construction: high NTB's

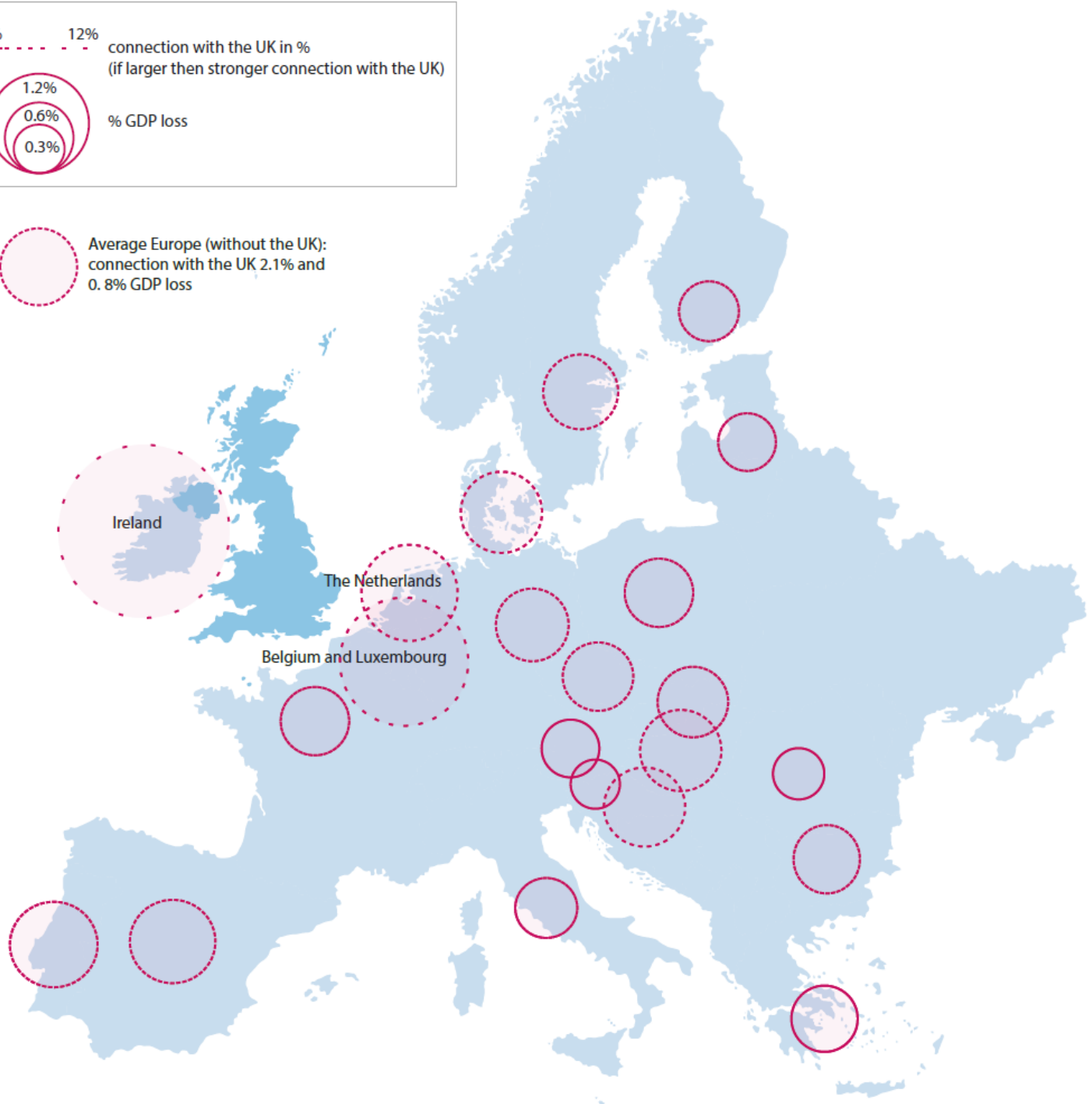


# Dutch policymaking process

- Ministry-wide Task Force
  - Identification of areas that will be affected by Brexit and division of tasks (between ministries)
  - “the giant excel sheet”
- Ministry of Economic Affairs:
  - Identification of sectors that are:
    - › of economic importance
    - › vulnerable to high tariffs/NTB's



Average Europe (without the UK):  
connection with the UK 2.1% and  
0. 8% GDP loss





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Vienna

# Brexit and possible consequences for Austria

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Group “Macroeconomics & Public Finance“

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# Outline

- How is Brexit perceived in Austria?
- Trade between Austria and UK
- Possible impacts on the Austrian economy
- Conclusions



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# How is Brexit perceived in Austria?

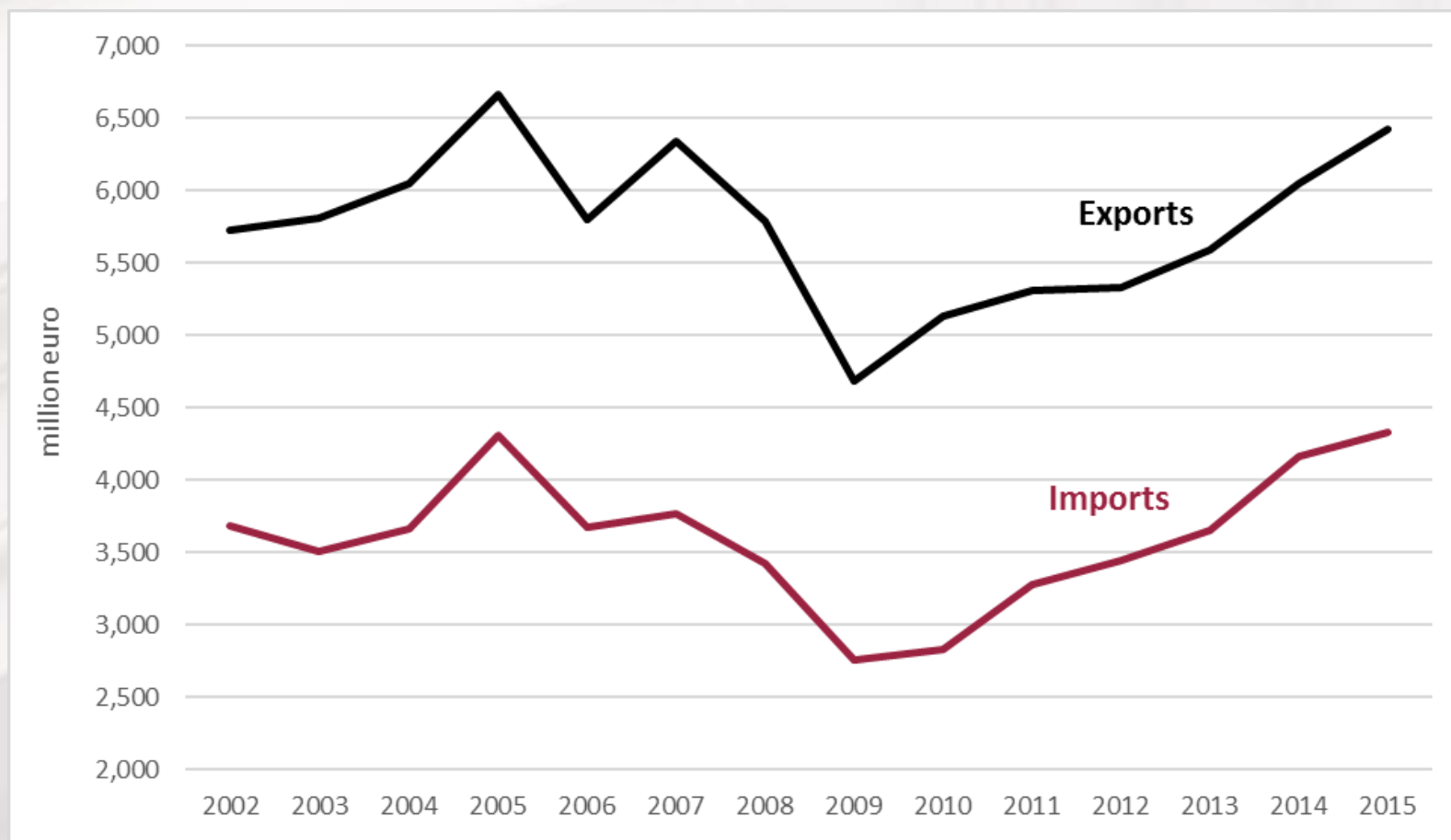


- Business confederations regret Brexit and fear negative, albeit limited, economic consequences for Austria
- After the Brexit vote, desire to leave the EU has declined in Austria (23% in July 2016, down from 31% in April 2016; January 2017: slight increase to 25%);  
Stay: 60% in April 2016, 61% in July 2016, 67% in January 2017  
*Österreichische Gesellschaft für Europapolitik: ÖGfE-Survey: After the Brexit-vote – Desire to leave the EU is decreasing in Austria*
- All relevant political parties are in favour of staying in EU, but claim reforms

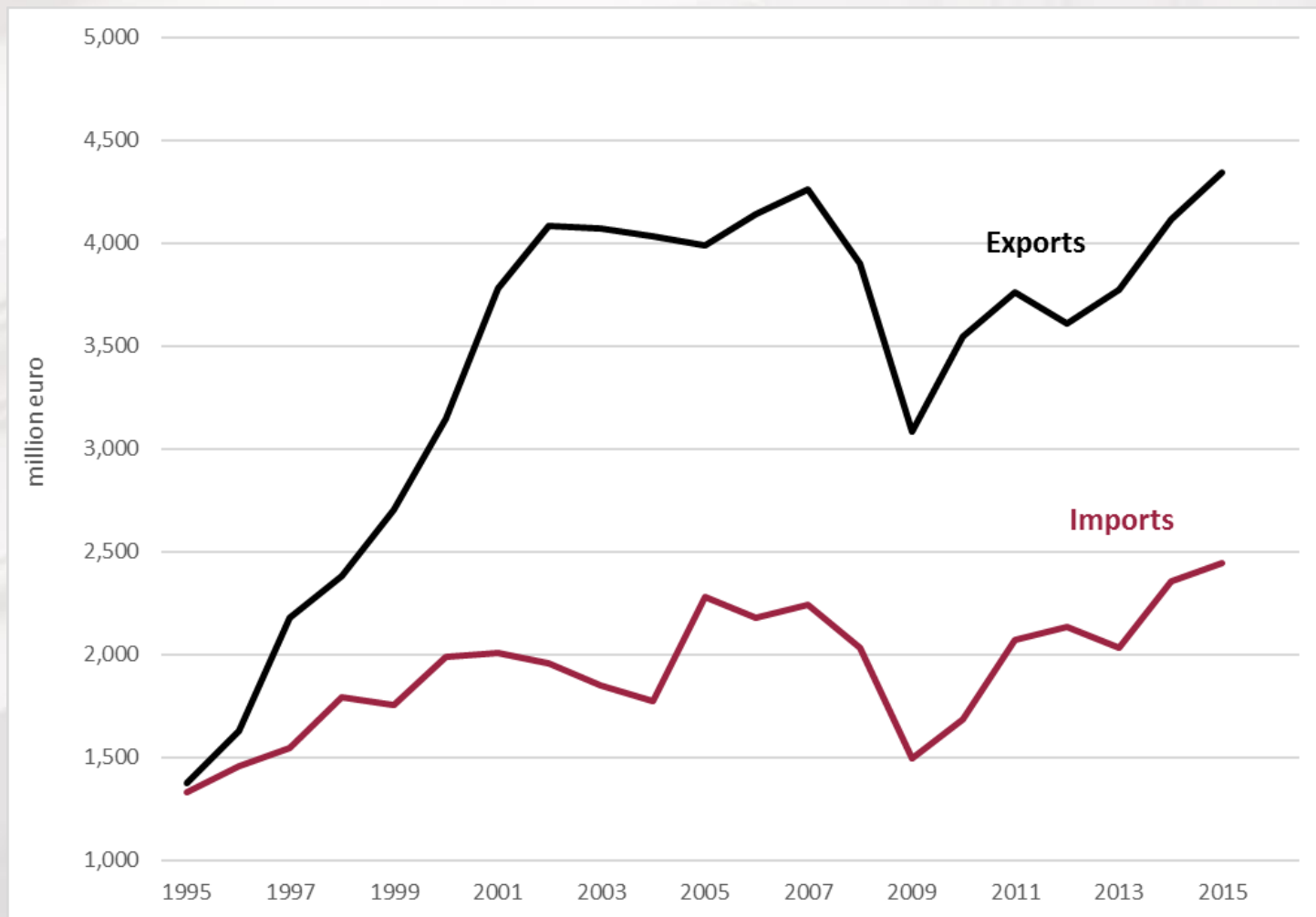


# Trade between Austria and UK

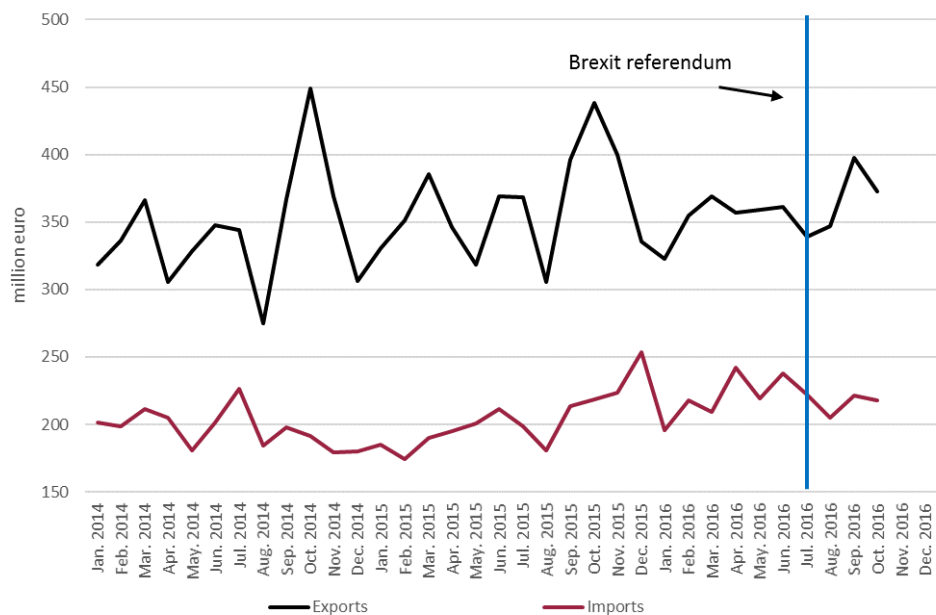
# Austrian trade (goods + services) with UK



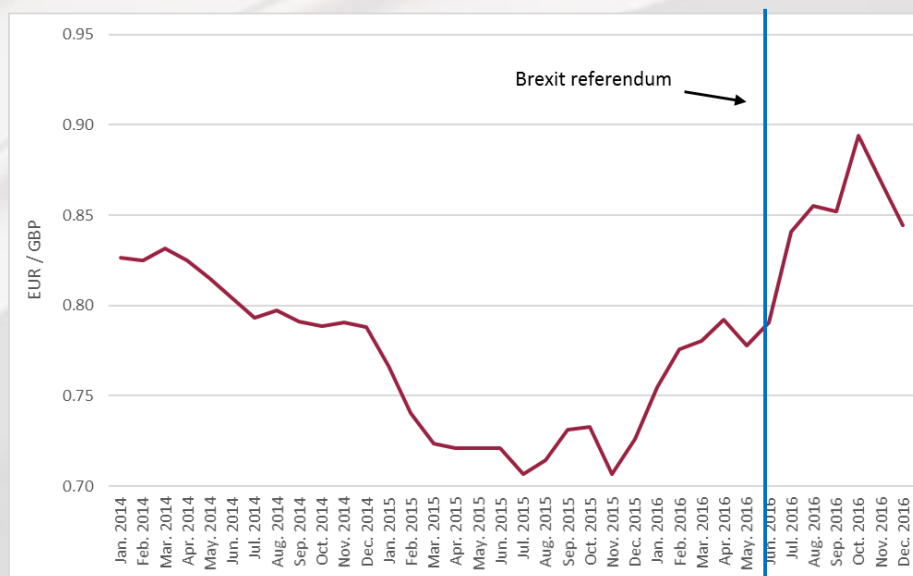
# Development of Austrian trade in goods with UK



Source: Eurostat; own calculations and illustration



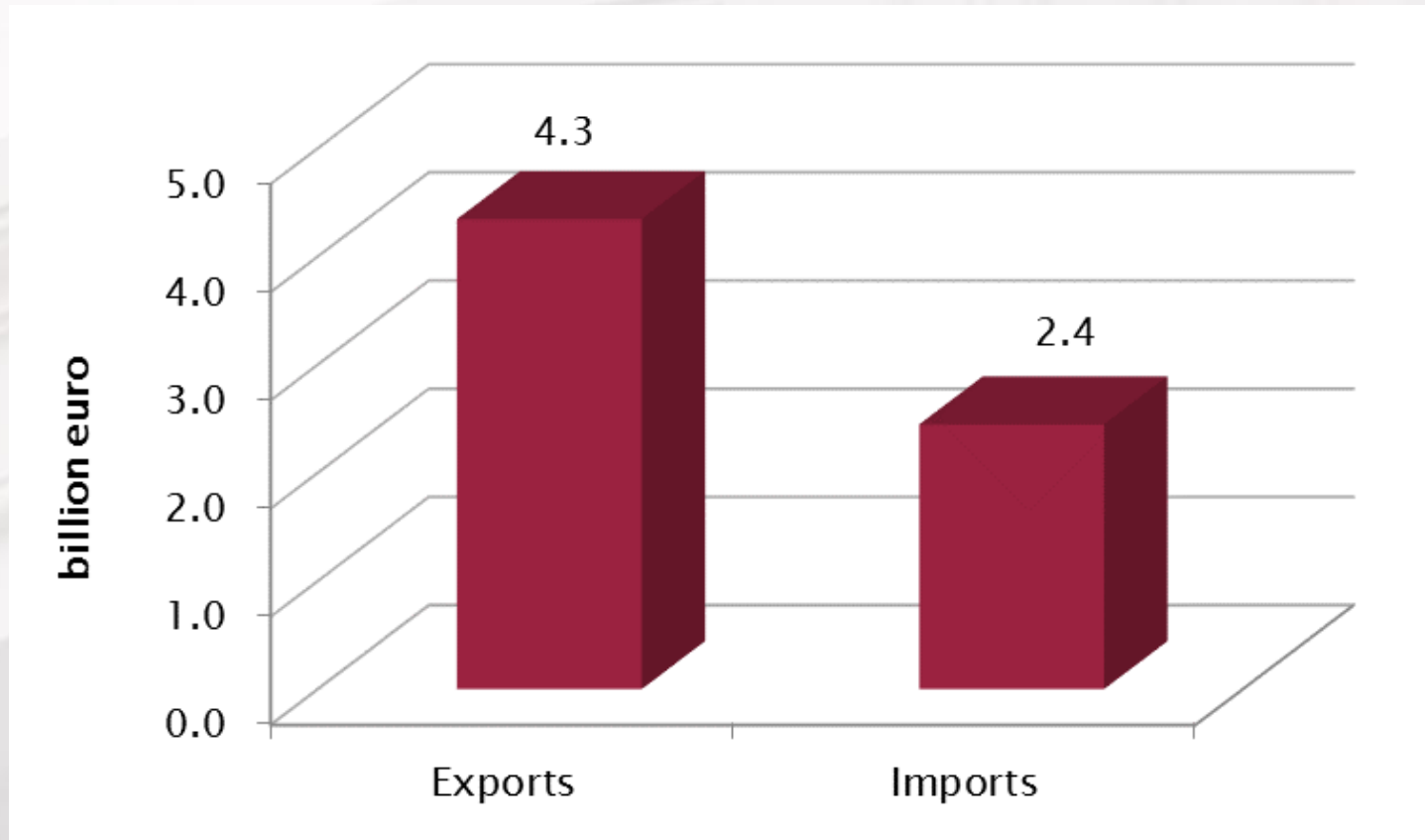
Monthly trade in goods between Austria and UK since 2014



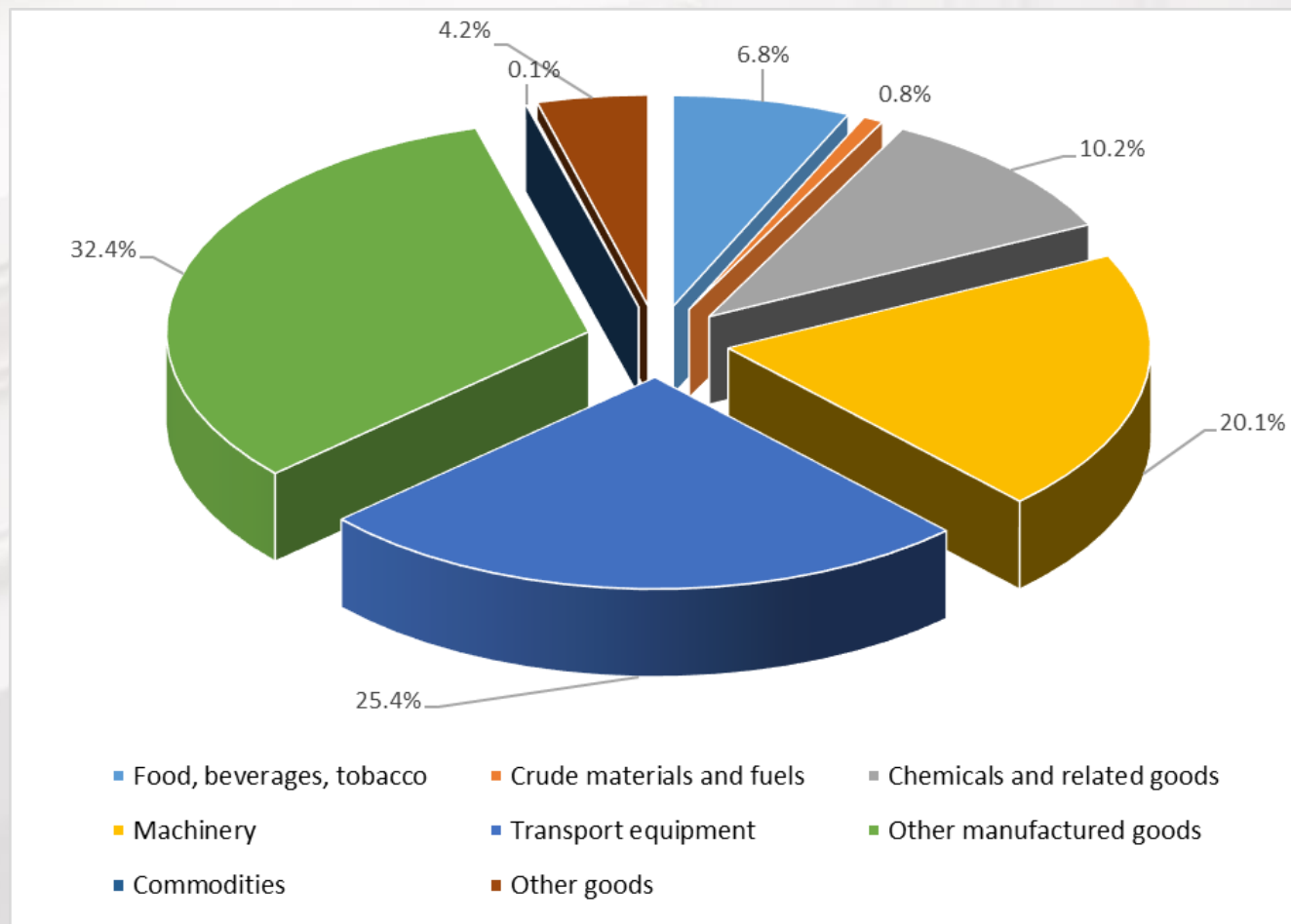
Euro / Pound Sterling exchange rate

Source: Eurostat; own calculations and illustration

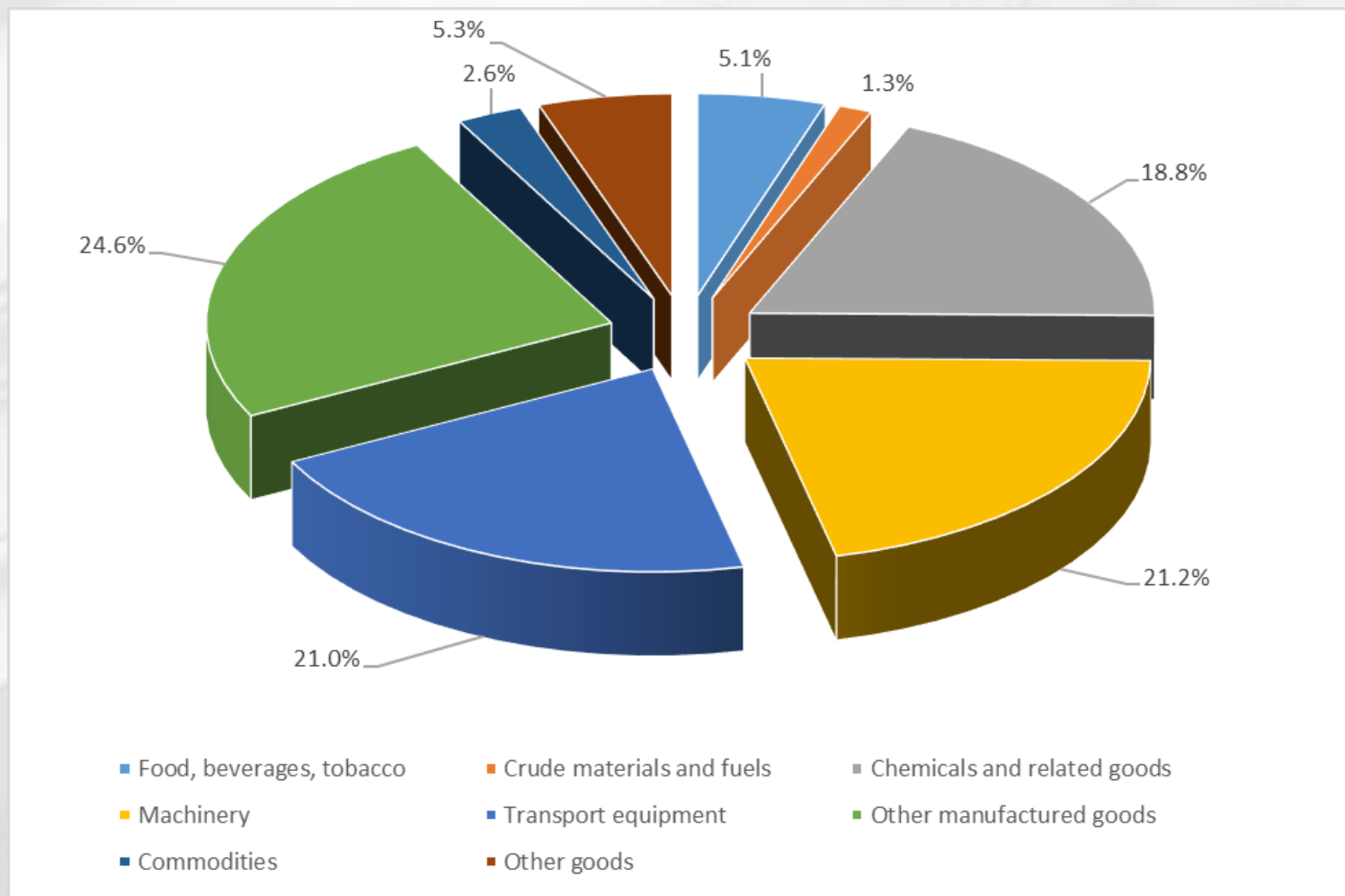
# Austrian trade in goods with UK in 2015



# Austrian exports to UK by product group (2015)



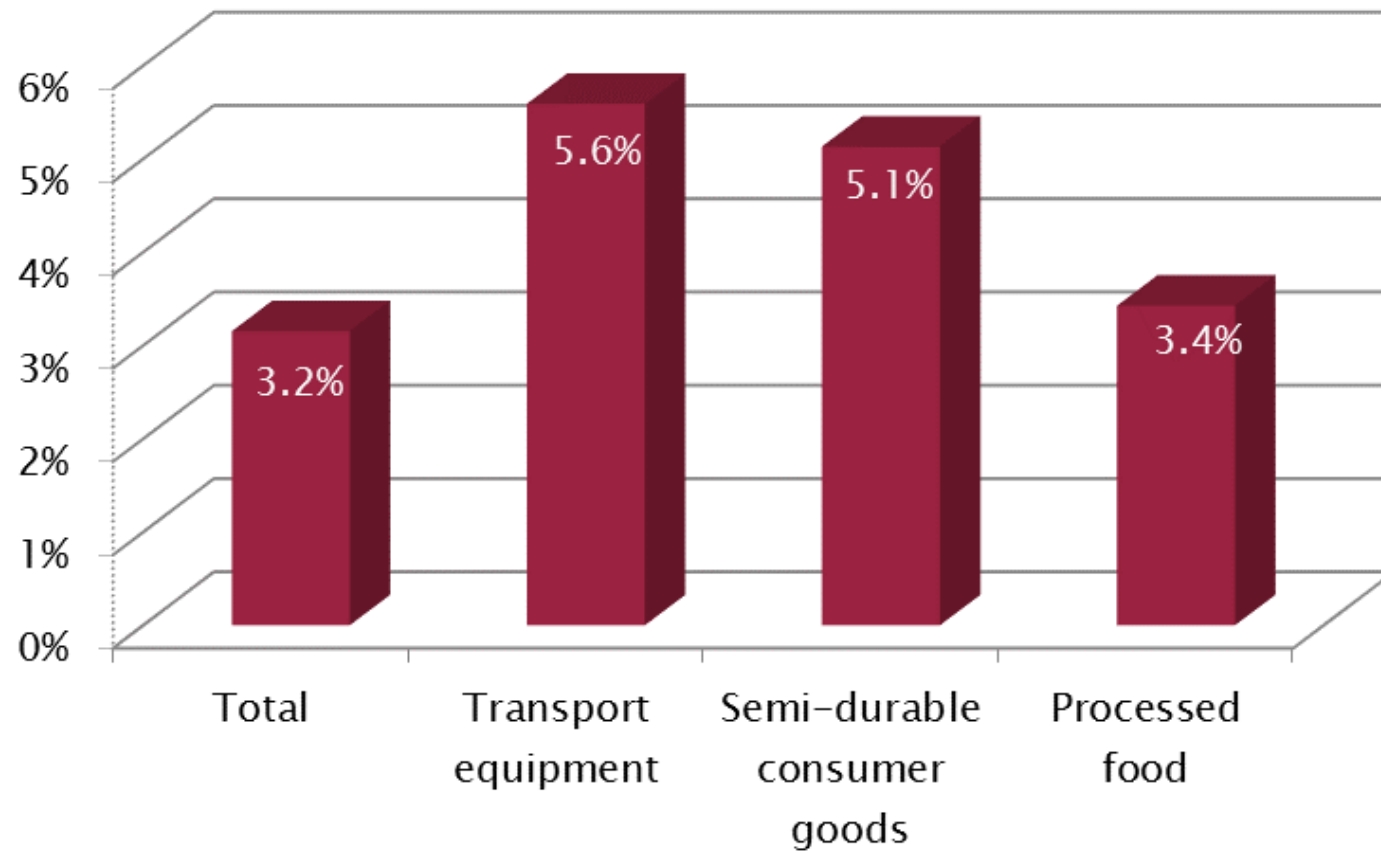
# Austrian imports from UK by product group (2015)



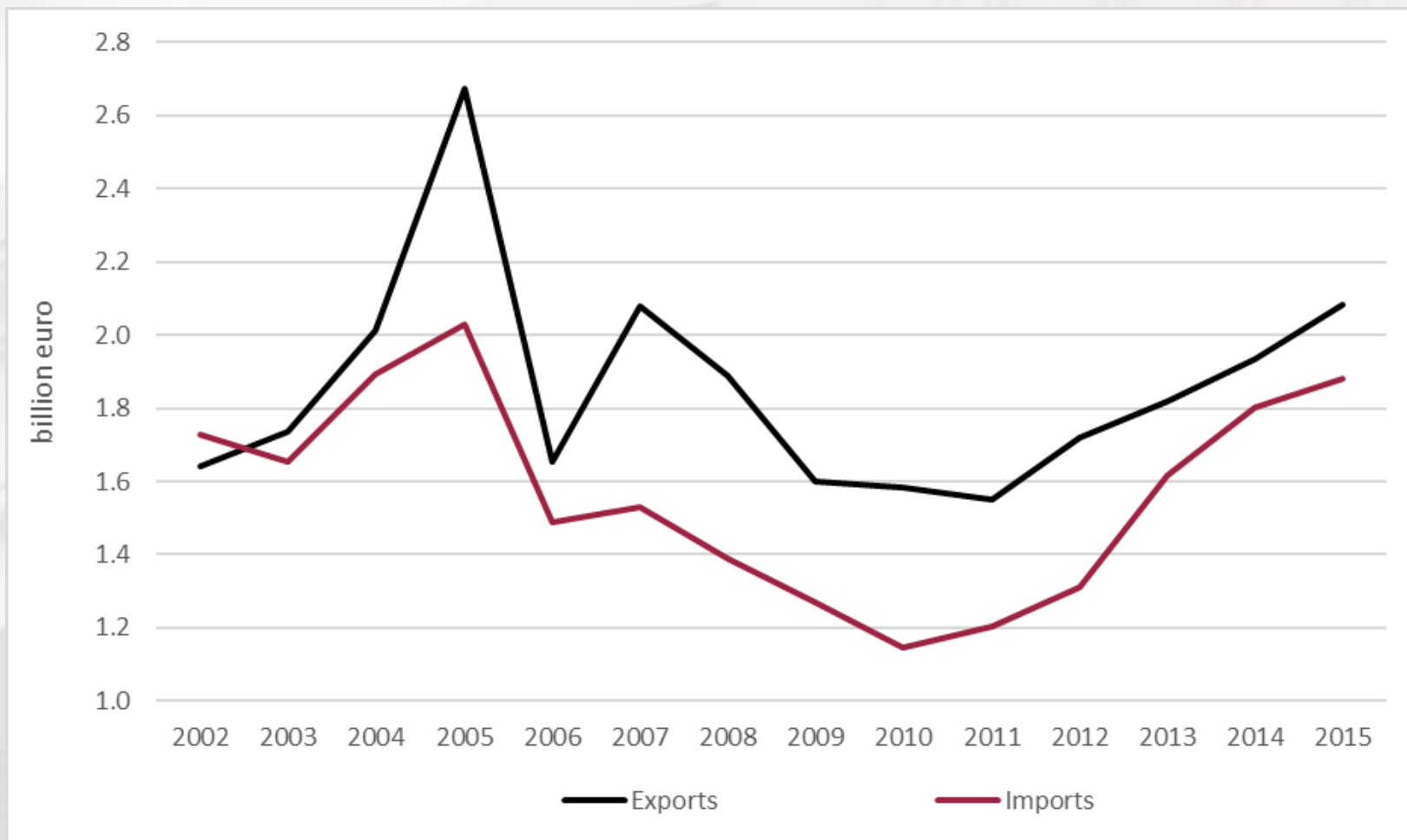
Source: Eurostat; own calculations and illustration



# Share of UK in total Austrian goods exports (2015)

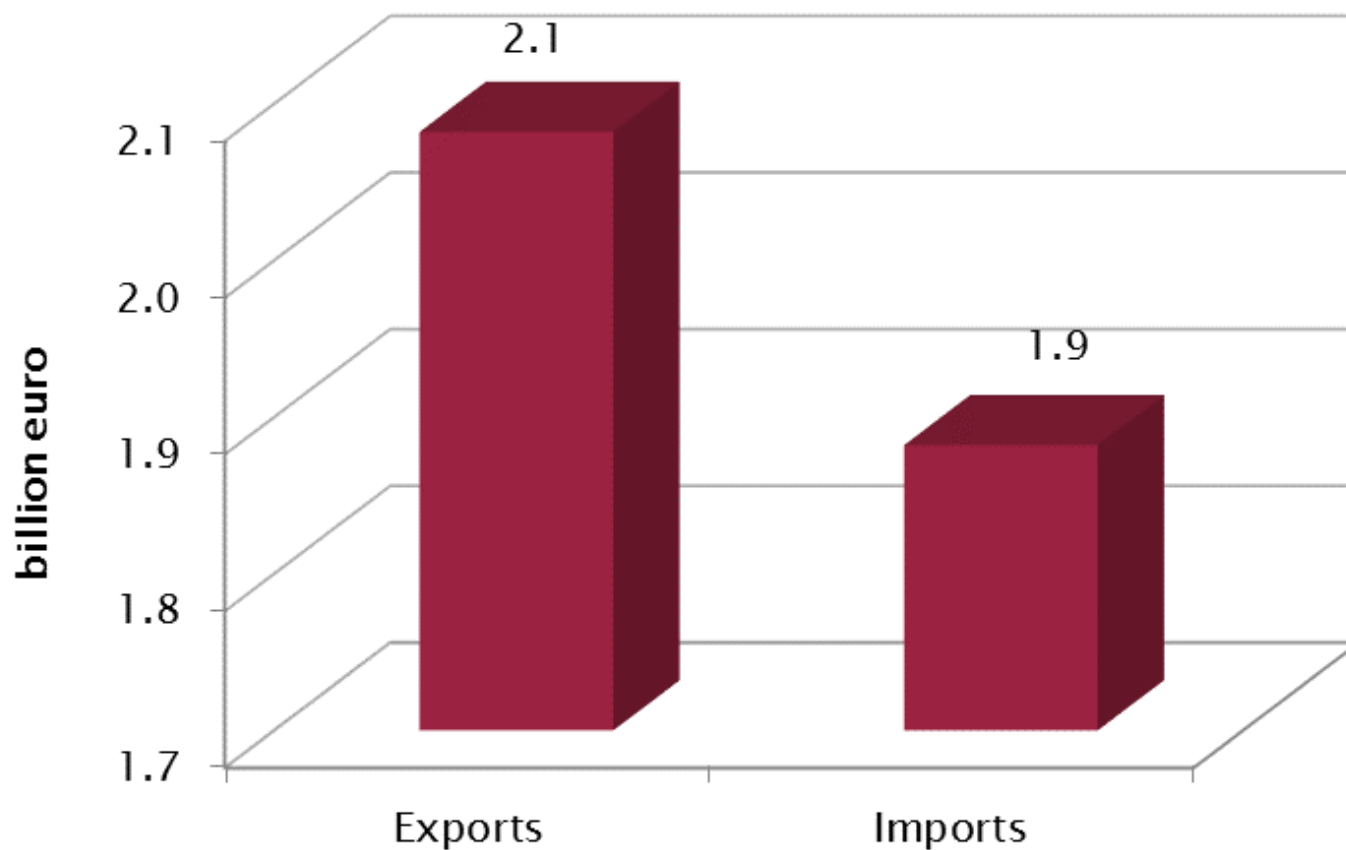


# Trade in services Austria – UK over time

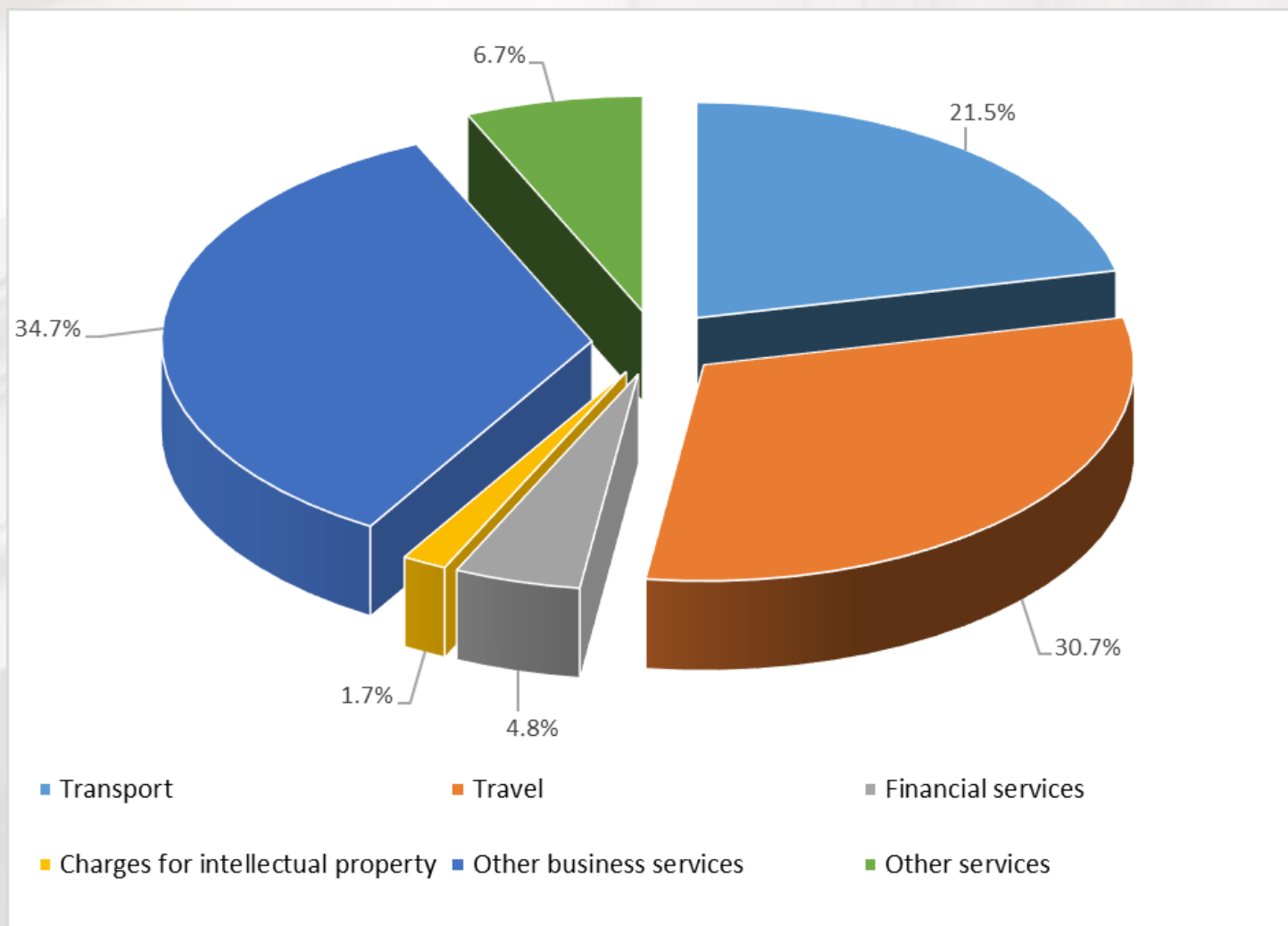


Source: Eurostat; own calculations and illustration

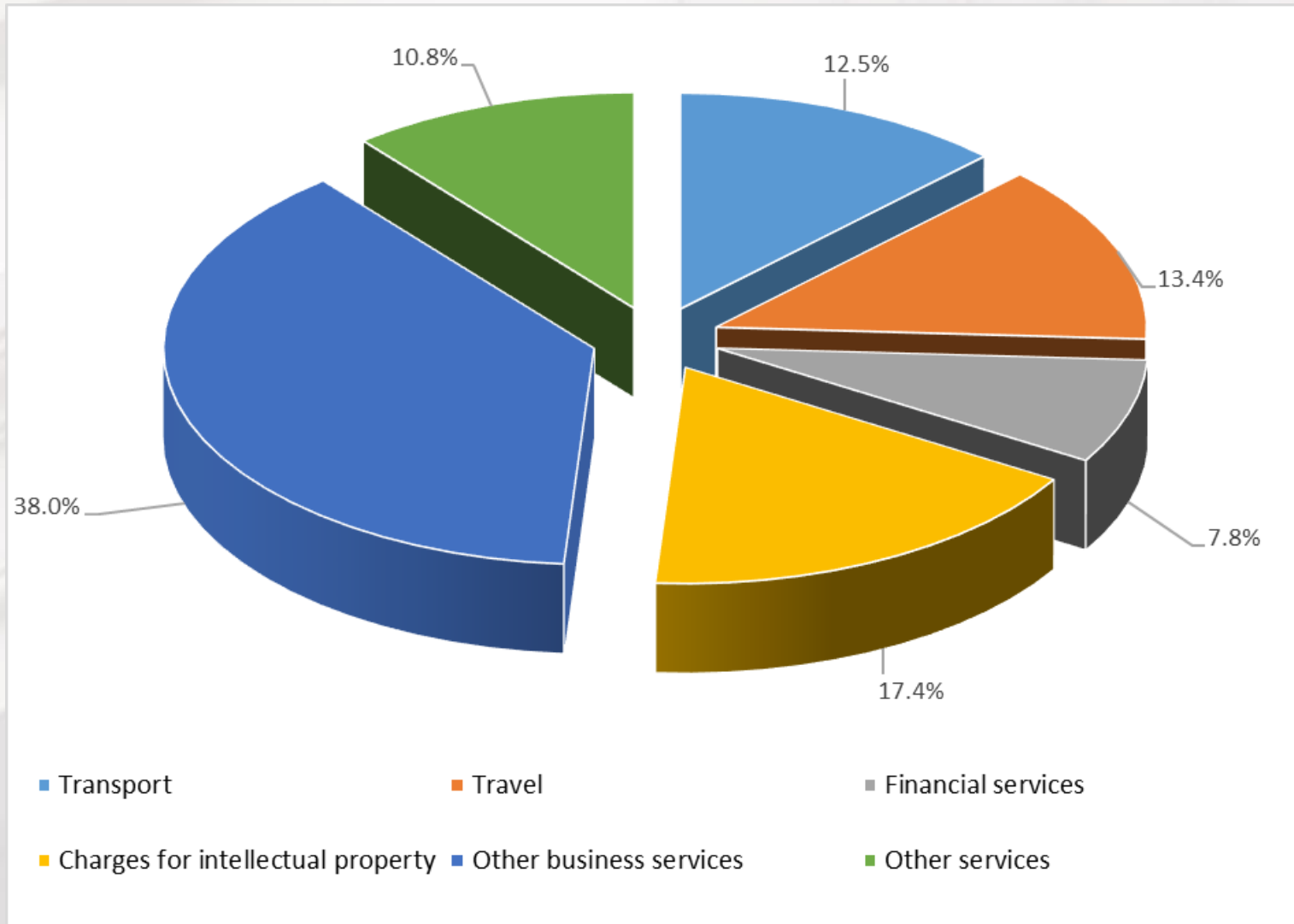
## Services trade Austria – UK (2015)



# Breakdown of Austria's services exports to UK (2015)



# Breakdown of Austria's services imports from UK (2015)



Source: Eurostat; own calculations and illustration



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# Possible impacts on the Austrian economy

# Possible impacts on the Austrian economy /1

## **Possible channels through which Austria might be affected:**

- Trade (direct / indirect via value chains)
- Uncertainty, impairing business confidence
- Contributions to and receipts from EU budget: UK is net contributor; hence possibly higher contributions by Austria or less receipts (CAP, EU Research funds)

## Possible impacts on the Austrian economy /2

- Any effects at present impossible to quantify exactly
- Dependent on new trade relations and future UK migration regulation
- Trade effects might be limited since other countries may replace parts of declining UK demand



## Possible impacts on the Austrian economy /3

- During exit negotiations: elevated uncertainty which possibly impairs investment (but also other sources of uncertainty, e.g. future US policy (protectionism), global terrorism, political turmoil in the Middle East,...)
- Negative trade effects probably contained, but might be substantial in certain industries (particularly transport equipment via value chains with German car manufacturers)
- On the other hand, trade is additionally affected by Euro appreciation vis-à-vis Pound Sterling

## Possible impacts on the Austrian economy /4

- Possibly more migration to Austria (from UK and diversion effects)
- Vienna intends to apply for European Banking Authority (EBA) and European Medicines Agency (EMA), both currently located in London
- London banks will probably lose “EU passport” and hence have to move to EU; here also Vienna may be attractive
- Austria might also get headquarters of insurance and other companies
- Possible side effect: additional property price increases in certain segments

## Possible impacts on the Austrian economy /5

- *ifo Institute of Economic Research:*  
Austrian net contributions to EU budget + 2777 million euro
- Any ex-ante (model-based) quantifications suffer from very limited information
- Simulations have to be based on more or less plausible scenarios regarding future relations between UK and EU (access or not to Internal Market,....)

## Possible impacts on the Austrian economy /6

- *Ifo Institute of Economic Research & Bertelsmann Stiftung (PolicyBrief 2015/05):*  
Austrian real GDP per capita in 2030 lower  
by 0.05% (“soft Brexit”) to 0.18% (“UK isolation”)  
for comparison: Germany: -0.08% / -0.33%, UK: -0.67% / -2.98%
- OECD: real GDP in EU27 could be 1% lower in 2020 (UK: -3%)  
*Kierzenkowski, R., Pain, N., Rusticelli, E., Zwart, S. (2016), The Economic Consequences of Brexit: A Taxing Decision, OECD Economic Policy Paper 16, April 2016*
- Based on this OECD estimation, real GDP loss in Austria might reach 0.5% by 2020



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# Summary and conclusions

- (At least direct) impacts on Austrian economy probably limited, acting via trade channel and elevated uncertainty, impairing investment
- Not yet clear how missing UK (net) contributions to EU budget will be compensated
- Political economy: with UK, a strong opponent of too much regulation and interventionism will be missing, raising the weight of countries more inclined to government interventions
- Quantification of economic impacts surrounded with high uncertainty



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Thank you for your attention

# Reinforcing the crisis: Brexit and Finland

Markku Lehmus

The Research Institute of the Finnish Economy  
(ETLA)

Brussels 7.2.2017



# This presentation

- **Summarizes the Economic Relationship between Finland and the UK**
- **Uses the NiGEM global econometric macro model to analyze the effect of Brexit on**
  - **Finnish economy**
  - **Other Scandinavia (briefly)**
- The analysis is based on work by Ebell and Warren (2016)
  - the following is an extension to this concentrating on the impacts on Finland

# Economic Relationship between Finland and the UK

- **5 %** of total Finnish goods exports are goods exported to the UK
- In imports, the UK contributes to **3 %** of total Finnish goods imports
  - In both exports and imports, the UK share has declined over the last 15 years
- The UK share of Finnish service exports accounts for **6,2%** (in 2014).
- Whereas the UK share of Finnish service imports accounts for **7,3%** (in 2014).
- **Overall trade relations between Finland and the UK**
  - **The balance of trade in goods is positive (negative) but that of services negative (positive) for Finland (for the UK)**

# Simulation using the NiGEM: the effect of Brexit on the Finnish economy

- Uses the assumptions made in Ebell and Warren (2016)
- They analyzed the effects of Brexit on the UK, using the NiGEM global econometric macromodel
- We use the NiGEM with the assumptions by Ebell and Warren (2016) and produce the model response with respect to the Finnish economy
  - Also the impact on the Swedish and Danish economies are briefly covered

# The Model

- The analysis is performed using the National Institute Global econometric model NiGEM (developed and sustained by NIESR)
- NiGEM constitutes of more than 60 different country models, and also has a Finnish model as a satellite

# The assumptions in the Brexit simulation

- **Short-term assumptions in the Brexit simulation:**
  - An increase in the risk premia reflecting rising uncertainty, affecting investment demand for firms
  - An increase in the long-term government bond rates
  - An increase in the borrowing costs for firms and households (via borrowing spreads)
  - Devaluation of the Pound (15 per cent effectively in the long run, via exchange risk premia)
- The magnitudes of shocks are calibrated on the basis of academic literature and historical data

# The assumptions in the Brexit simulation

- **Long-term assumptions in the Brexit simulation:**
  - Reductions in trade with EU countries and a modest increase in tariffs
  - A reduction in foreign direct investments to the UK (FDI), particularly affecting services FDI
  - A reduction in the UK's net fiscal contribution to the EU
- Analyzes three different scenarios for the future UK trade relations:
  - 1) WTO
  - 2) FTA
  - 3) EEA

# The assumptions in the Brexit simulation

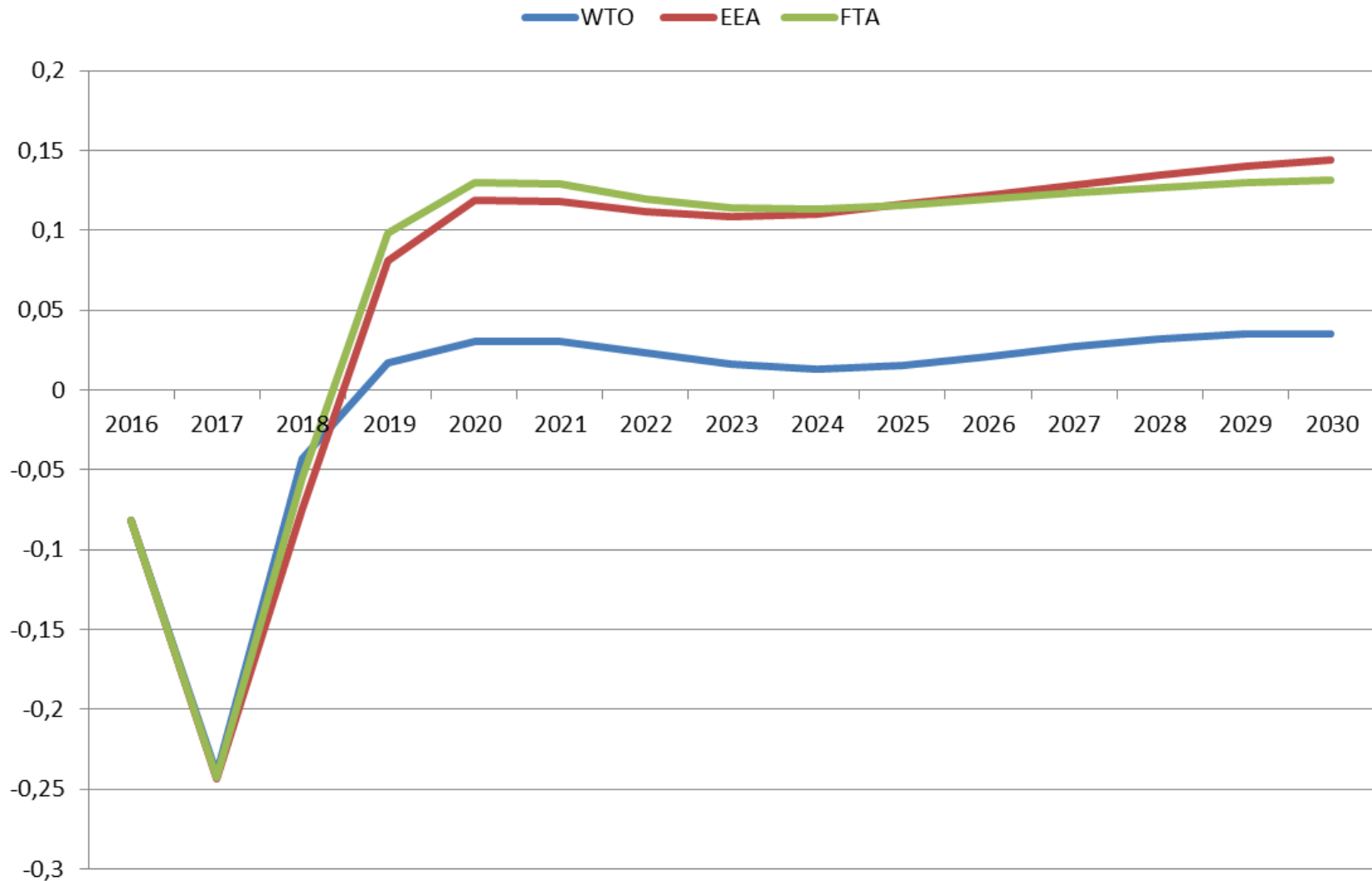
- In the WTO scenario, **all the long run assumptions are binding**
- In the FTA scenario, free trade in goods but **no free trade in services and no access to EEA financial services markets via passporting**
- In the EEA scenario, **only non-tariff barriers to trade, ie. rules of origin in goods trade**, which modestly reduces trade and FDI

# The economic impact of Brexit on the UK...and Finland

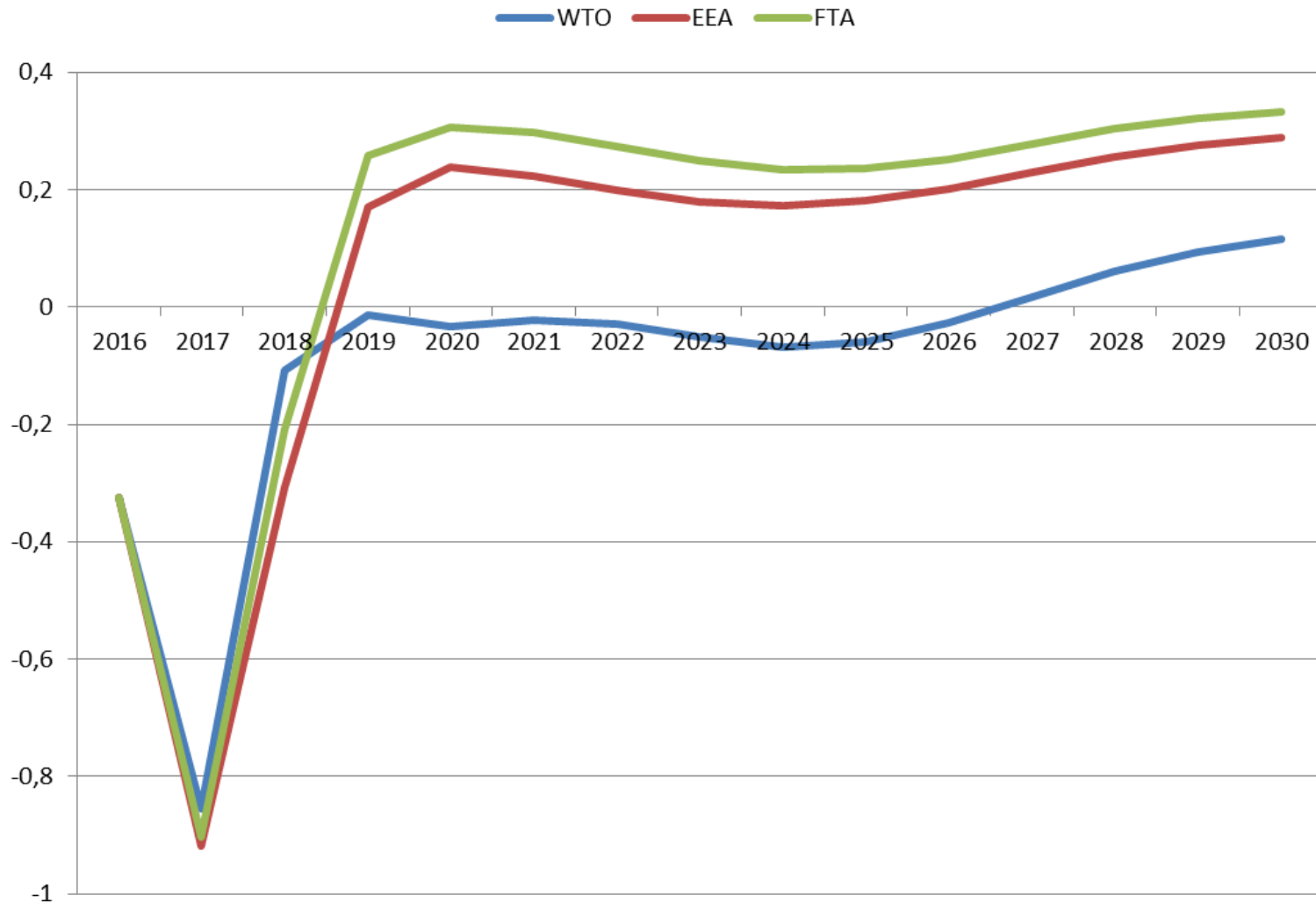
- Ebell and Warren (2016) estimate that **by 2030**, the **British GDP** is between **1,5 and 3,7 lower** than in the baseline forecast in which the UK remains in the EU
- ... What about the impacts on the Finnish economy using the same modeling assumptions ?



# The impact of Brexit on the Finnish GDP, %



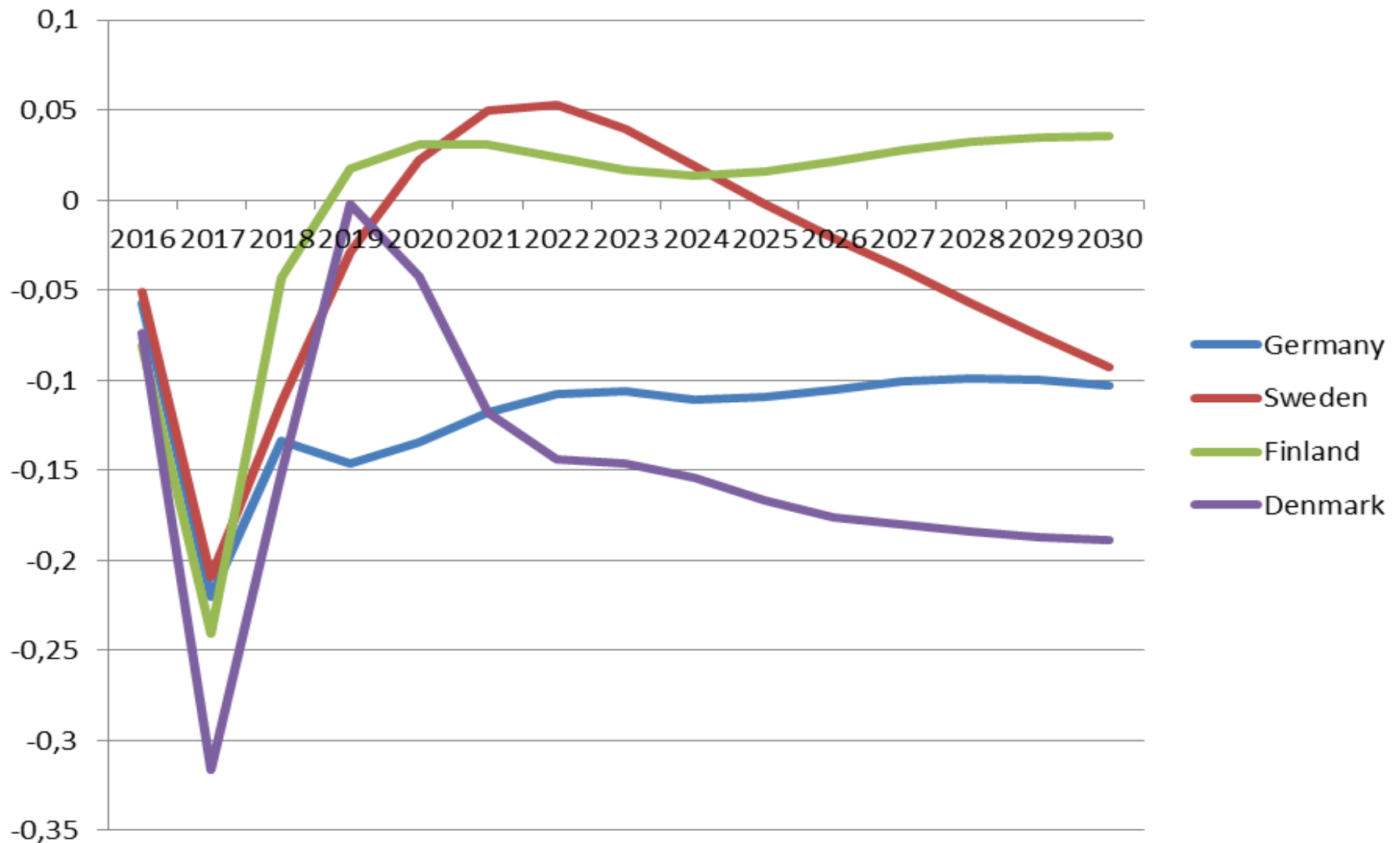
# The impact of Brexit on the Finnish exports, %



# Brexit and the Finnish economy

- Brexit affects the Finnish economy via the weakening British economy along with its global impacts.
- The short-run effects on the Finnish GDP are negative
- The long-term effects, however, seem more positive than expected
- The better development is due to the improved price competitiveness born by adjustments in the effective exchange rates and, also, a favorable combination of relevant trade partners, comprising for instance Russia and China that are relatively immune to the negative effects of Brexit.

# The impact of Brexit on the GDP of selected Scandinavian countries (+ Germany), %



# Brexit and the Finnish economy

- The effects on the Finnish economy seem to be to some extent more positive than what is observed in analyzed countries – at least in the long run
- For the selected countries, Denmark seems to be taking the greatest hit from Brexit
- The effect on the Swedish economy resembles that for Finland (there is only some difference in the long run)

# To conclude

- This simulation result concerning the long-run development looks very optimistic for Finland.
  - It does not take into account the possible negative effects of Brexit on the EU integration process that may disrupt the single market.
- For these reasons, there is a substantial probability for more negative effects on the Finnish economy as well.
- Nevertheless, the simulated short-run effects on the Finnish economy seem quite plausible



# Small Country Far Away

Brexit and Estonia





# Estonia: Far Away But Not Indifferent





# Estonia: Far Away But Not Indifferent



01

UK accounts for approx. 3% of Estonia's export/import and 2% of FDI. There are around 10,000-15,000 people from Estonia working in UK. So any direct effect on economy or labour market will likely remain insignificant.

# Estonia: Far Away But Not Indifferent



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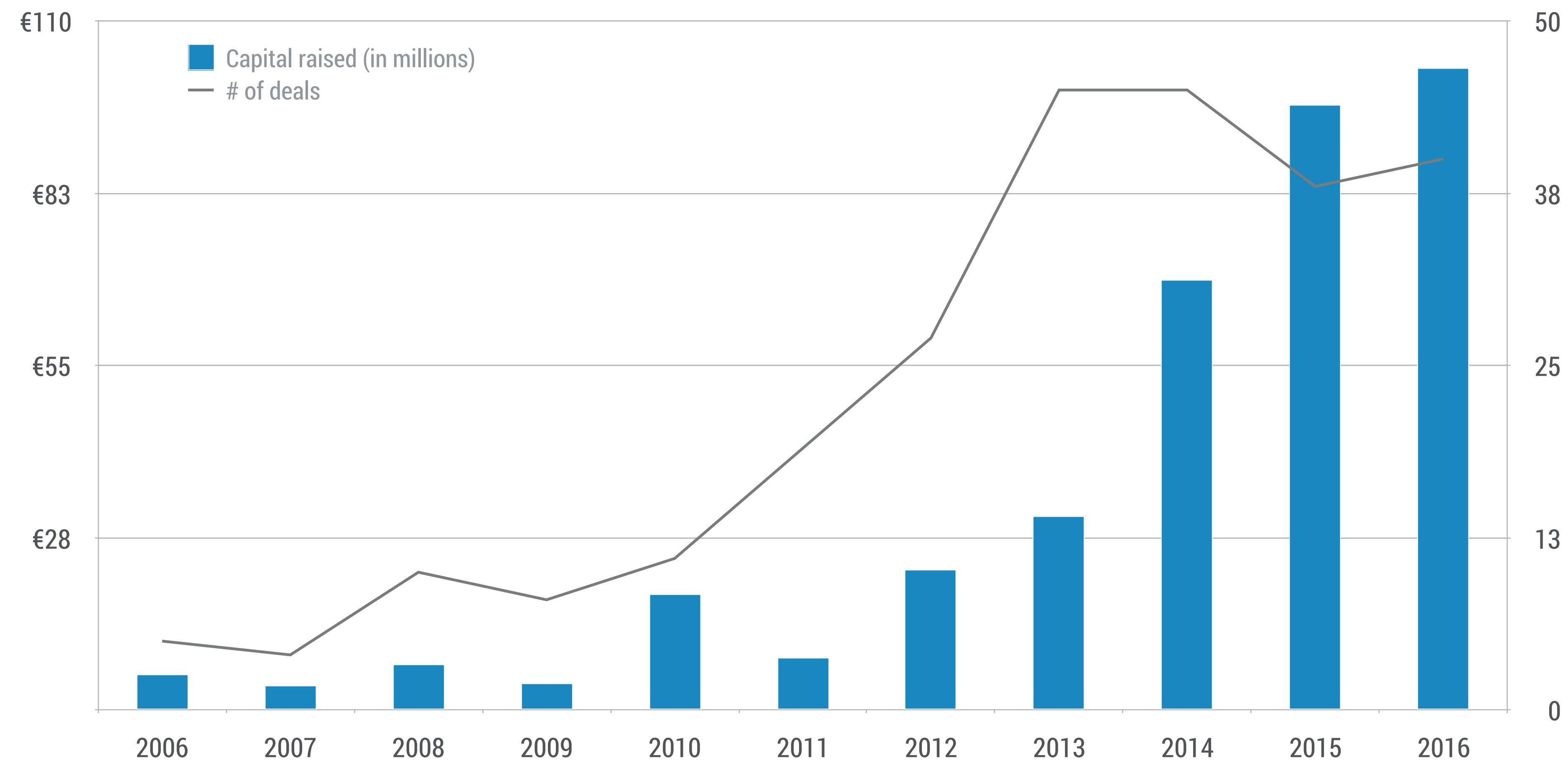
03

Apart from the economy there will be significant geopolitical implications: Brexit has definitely emboldened different secessionist forces elsewhere in EU, and is a big potential risk going forward.

04

In terms of EU politics, UK's positions (concerning reforms, economic and defence policy, etc) have in general been rather well aligned with Estonian ones, so with Brexit Estonia will need to look for new allies and regional partnerships.

# Investment in Estonian Startups: 2006-16



Thank you