Brexit: Some Implications for Ireland

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Outline

- Macroeconomic effects of Brexit
- Trade Impacts
- Household Expenditure
- Conclusions

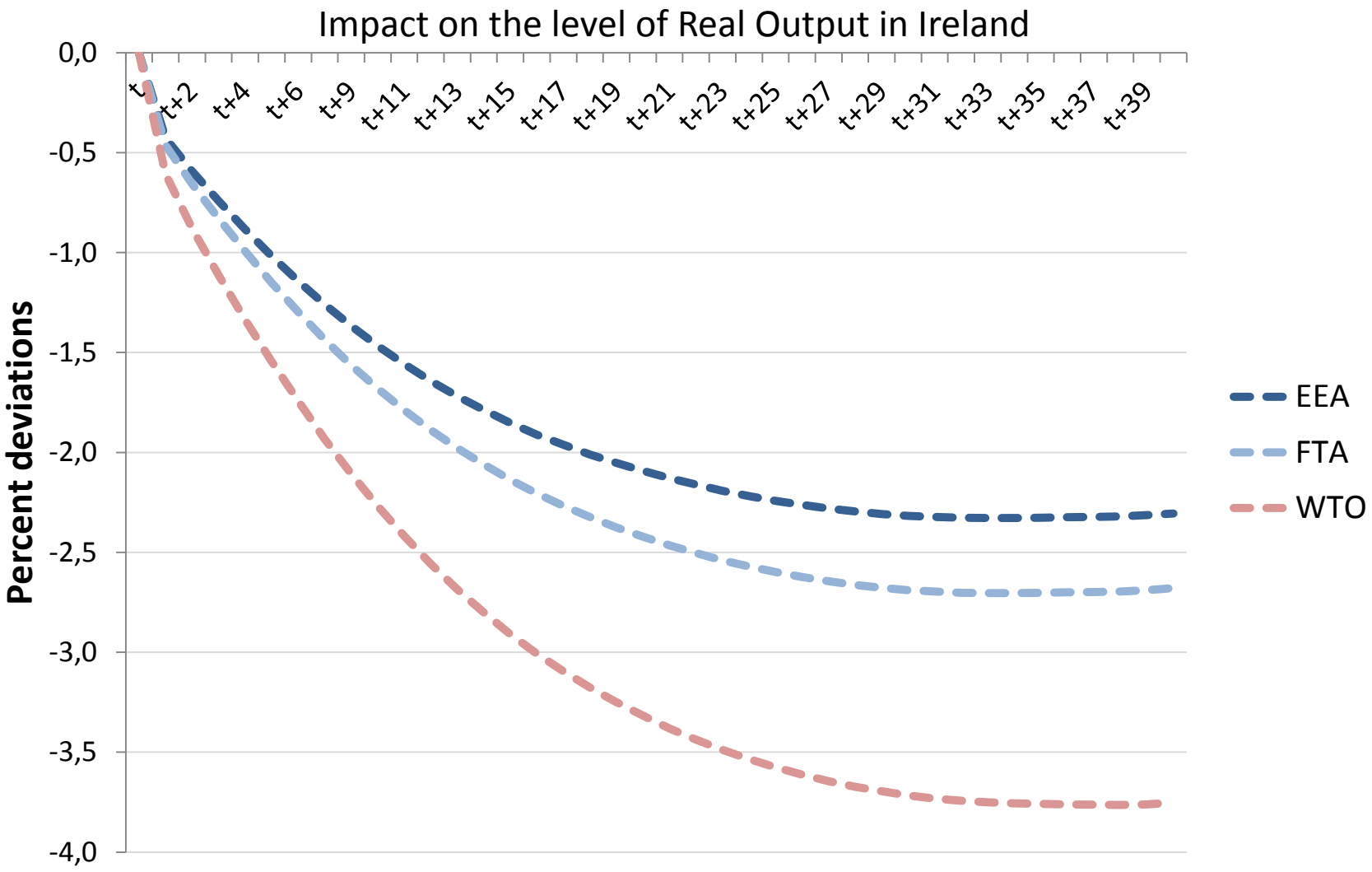
I. Macroeconomic effects of Brexit

- The scale of the UK economy and its strong inter-linkages with Ireland and EU suggest the impact of Brexit could be substantial
- This impact can be direct but also through effects on other trading partners
- Assessing the macroeconomic impact needs to account for these diverse channels as well as indirect effects.
- ESRI research used the macro-model, COSMO, in conjunction with simulation results from the UK NIESR world model to quantify the macroeconomic impact of Brexit on Ireland under alternative scenarios (Bergin, Garcia-Rodriguez, McInerney, Morgenroth & Smith, 2016)

I. Macroeconomic effects of Brexit

- COSMO uses projections of key external variables from the NIESR NiGEM world model.
- The scenarios considered are an EEA style agreement, a Switzerland/EU style of agreement (EFTA) and a WTO scenario.
- Each of these scenarios combines a range of assumptions on trade, FDI and lower contributions to the EU budget to generate alternative paths for the UK economy and also for the wider international economy

I. Macroeconomic effects of Brexit



I. Macroeconomic of Brexit

	EEA	EFTA	WTO
Percent deviation from Baseline Level:			
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
Deviation from Baseline:			
Personal Consumption Deflator, %	-0.2	-0.2	-0.3
GDP Deflator, %	-0.2	-0.2	-0.3
Personal savings rate, %	-0.3	-0.3	-0.5
Unemployment rate, %	1.2	1.4	1.9
General Government Balance, % GDP	-0.6	-0.8	-1.0

From Bergin et al. "Modelling the Medium- to Long-Term Potential Macroeconomic Impact of Brexit on Ireland". *The Economic and Social Review*, Vol 48, No 3, Autumn (2017)

- Ireland is very exposed to Brexit due to close economic relation with the UK
- Uncertainty surrounding the process invites to consider different scenarios
- Estimates in line with other forecasts
- Shock to foreign demand hurts traded sector and exports
- Lower employment and wages affect the non-traded sector
- Lower tax collection worsens Government balance

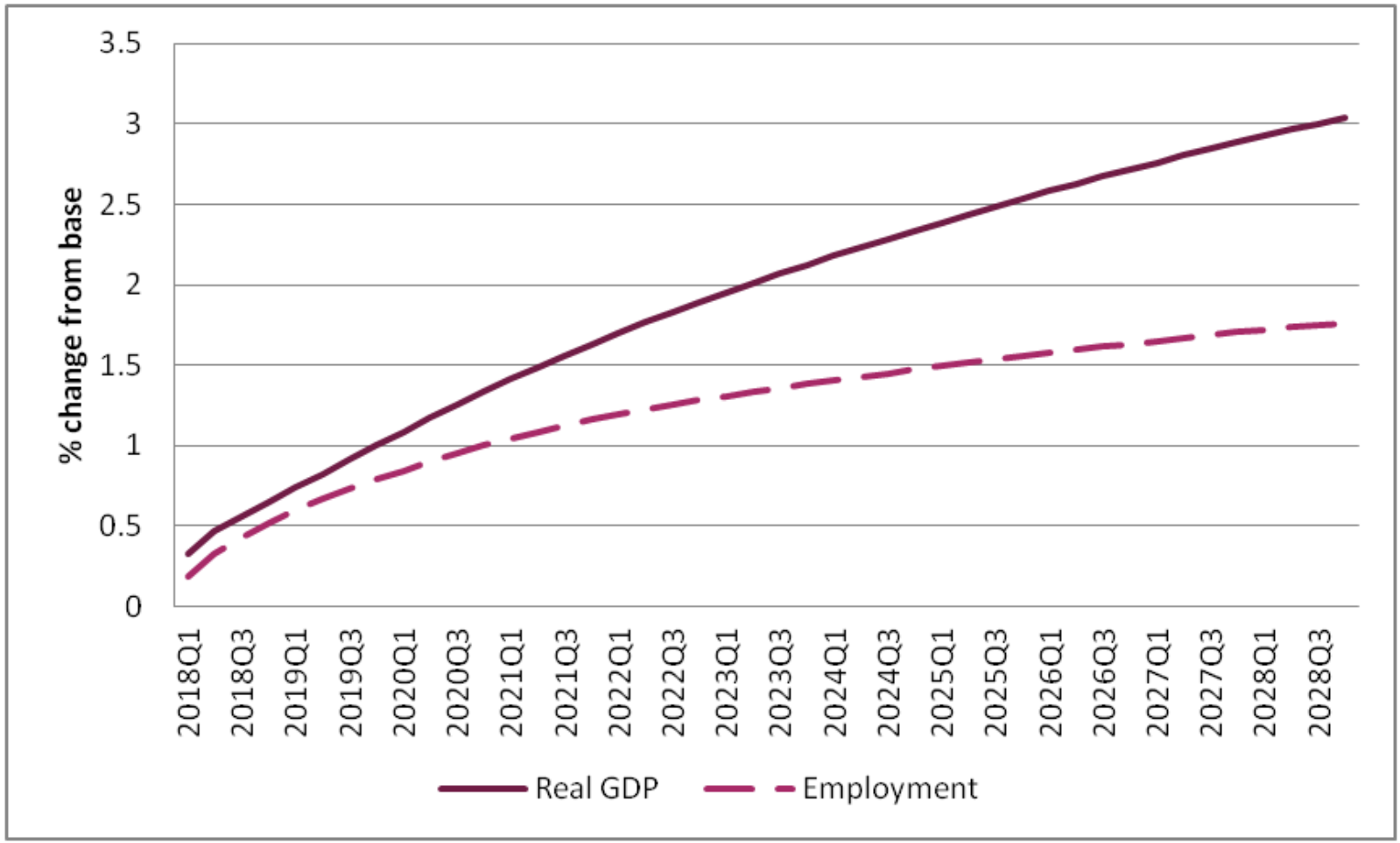
I. Macroeconomic effects of Brexit

Potential Positive for FDI

- Potential opportunity for Ireland to attract additional FDI that might otherwise have been destined to the UK or by attracting some of the FDI currently in the UK but relocating to remain within the EU.
- Existing literature (Hufbauer and Schott, 2009) suggests that EU membership increases FDI from outside the EU by 27 per cent.
- Lawless and Morgenroth (2016) assume leaving the EU has the opposite effect on the UK and Ireland attracts a share of this FDI in keeping with it's current share of non-EU FDI (Economic Outlook, 2016).
- Feed this increase in investment into the COSMO macro-model to get an overall effect on the economy

I. Macroeconomic effects of Brexit

Simulated Impact on Real GDP and Employment



I. Macroeconomic effects of Brexit

Potential Limitations of FDI estimates

- The analysis on FDI uses total FDI flows and does not look in any detail at the sectoral level.
- The probability of FDI leaving or being diverted away from the UK is likely to differ by sector.
- Likewise Ireland's ability to attract some of this FDI will differ across sectors.
- Therefore, a more detailed sectoral analysis is likely to yield a more accurate picture of the potential to attract FDI away from the UK
- Capacity to absorb additional investment may be an issue.

Overview of Research on Trade Impacts

- Research programme funded by Department of Business, Enterprise and Innovation and Enterprise Ireland
- Two topics investigated:
    1. Intermediate goods inputs and the UK content of Irish goods exports
        - Analysis of firm use of imported intermediates using detailed firm-product level data
    2. Irish-UK Services Trade and Brexit
        - Aggregate assessment of contribution of EU membership to Services trade flows

II. UK and intermediate goods inputs

- In 2017, UK accounts for 25.7% of total Irish imports compared to 13.8% of exports
- Many imported products used as intermediate inputs for further processing within Ireland
  - Changes in availability or prices could therefore impact Irish competitiveness and exporting
- Report uses CSO customs level data to examine:
  - How much firms import
  - Types of products involved
  - Extent of reliance on UK as source
  - Extent to which imported goods inputs contribute to firm-level exporting activity
- Break down results by ownership and firm size.

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Estimated tariff rates by firm size and ownership			
	Small	Medium	Large
Irish firms			
Average import tariff	4.3%	6.3%	11.3%
Median import tariff	2.6%	2.8%	3.5%
Average export tariff	5.6%	10.5%	25.2%
Median export tariff	2.5%	3.0%	16.9%
Foreign firms			
Average import tariff	3.3%	3.6%	2.7%
Median import tariff	1.7%	2.3%	2.1%
Average export tariff	4.0%	5.1%	1.3%
Median export tariff	1.7%	1.8%	0.1%

- Potential negative impact of tariffs on imports from the UK is lower than the potential impact on exports from Ireland to the UK.
- The import tariff exposure of Irish-owned firms is considerably larger than that of foreign-owned firms due to different patterns of imported products.

Hypothetical Effective Import Tariff for Exporting Firms			
	Small	Medium	Large
Irish-owned			
Mean	3.4%	5.4%	6.9%
Median	2.0%	2.0%	3.5%
Foreign-owned			
Mean	2.4%	2.2%	1.7%
Median	0.9%	1.2%	1.0%

- Where Inward-Processing exemptions apply, some imports that will be used for processing into exports for non-EU markets may not incur a tariff liability.
- This table assumes hypothetical exemption for a firm's UK imports according to its EU/non-EU+UK share of exports.
- However, costs from non-tariff barriers could still impact two-way traders.

Policy Implications (1)

- Considerable variation in exposure to Brexit across firms and sectors from an importing (supply chain) perspective.
- Food products particularly exposed with a relatively high dependence on the UK market as import source and high tariffs and potential rates of non-tariff barriers on certain products.
- Mineral fuels and energy highly reliant on UK
- Overall, tariffs on imported intermediates are relatively low, especially compared to tariffs on food products.
- Uncertainty and learning challenge of dealing with regulatory divergence and new non-tariff barriers likely to be bigger issue for many firms.

Policy Implications (2)

- Assessment of exposure by firms should be a first step in planning on how best to take action to mitigate negative effects of Brexit.
- Identification of alternative supply sources and assessment of switching costs needed as more certainty develops about how the trade environment will be affected.
- Policy role in provision of information to support firms in Brexit preparedness assessment.
- Particular effort likely to be needed in providing information on dealing with customs procedures and non-tariff barriers.

Research on Household Expenditure

- While many Brexit studies have considered effects on Irish exports, Lawless (2018) in '**Brexit and Irish Consumers**' addresses how imports could be impacted.
- Imports from UK are highly integrated wholesale and retail
- Implies consumers could face price increases if tariffs and other non-tariff barrier costs introduced.
- Key question: How large might these be?

IV. Brexit and Irish Consumers

- How can these costs be estimated?

- Three elements combine to determine how large the effect on consumer prices might be:
    1. Scale of tariffs and price effects of non-tariff barriers for different products. *Assumption of full pass-through to prices made for this analysis*.
    2. Importance of UK as source of the product
    3. Share of the product in overall consumption basket

IV. Brexit and Irish Consumers

Consumer Products with high UK shares

	UK share of EU trade	Value (€'000s)	UK share of Irish imports
Toilet paper in rolls	6.0%	83,400	91%
Newspapers, journals and periodicals (excl. those appearing at least four times a week)	13.5%	49,500	98%
Newspapers, journals and periodicals appearing at least four times a week	34.2%	35,000	100%
Soap and paper coated or covered with soap or detergent, for toilet use, incl. medicated products	15.8%	24,400	95%
Shavers, electric	1.3%	11,600	92%
Wrist-watches of precious metal or of metal clad with precious metal	10.0%	8,629	91%
Maps and hydrographic or similar charts of all kinds	7.6%	7,543	99%
Babies' garments and clothing accessories of textile materials, knitted or crocheted (excl. of cotton or synthetic fibres, and hats)	18.1%	7,384	94%
Hearing aids (excl. parts and accessories)	19.0%	7,181	92%
Trailers and semi-trailers of the caravan type, for housing or camping	13.4%	6,260	98%

IV. Brexit and Irish Consumers

Food Products with high UK shares

	UK share of EU trade	Value (€'000s)	UK share of Irish imports
Milk & cream with fat >1% but ≤6%	6%	163,000	99%
Raw beet sugar	63%	25,800	99%
Carcases of bovine animals, fresh or chilled	2%	18,100	96%
Prepared or preserved meat of bovine animals	4%	15,700	90%
Fresh or chilled lamb carcases	46%	13,300	100%
Black fermented tea	23%	11,400	94%
Milk and cream with fat ≤1%	3%	11,000	94%
Frozen, boneless meat of bovine animals	5%	10,700	91%
Soya bean flour and meal	2%	9,303	91%
Low erucic acid rape or colza oil	4%	8,458	100%

IV. Brexit and Irish Consumers

- Combines trade, tariffs and non-tariff barriers costs to estimate the potential impact of Brexit on Irish imports.
- Share of household expenditure on food key determinant of impact.
- Price increases from 2% in the NTB scenario to 3.1% for both NTBS and tariffs when all products are considered.
  - €892 to €1,360 increase in average annual spend.
  - But assumes full pass-through of increases and no change in consumer spending patterns.
- Grocery sector drives aggregate effects: increases of 6% in tariff scenario and 18% when other costs also added.

For further details..

Bergin, A. et al., (2017). "**Modelling the Medium- to Long-Term Potential Macroeconomic Impact of Brexit on Ireland**". *The Economic and Social Review*, Vol 48(3), pp 305-316

Lawless, M., 2018. "**Intermediate goods inputs and the UK content of Irish goods exports**", Economic and Social Research Institute (ESRI)

Lawless, M., 2018. "**Irish-UK Services Trade and Brexit**", Working Paper No. WP595, Economic and Social Research Institute (ESRI)

Lawless, M., and E., Morgenroth, 2018. "**Brexit and Irish Consumers**", Quarterly Economic Commentary: Special Articles, Economic and Social Research Institute (ESRI)

II. UK and intermediate goods inputs

- Use firm-level import and export information to examine common movements in importing and export performance.
  - Controlling for firm ownership (as foreign firms more export-intensive) and size (larger firms more likely to export than smaller ones).
  - Lag import variables to mitigate endogeneity issues
- Why would imports affect export performance?
  - Access to wider range of inputs
  - Potential technology transfer
  - Build contacts/familiarity in foreign markets.

II. UK and intermediate goods inputs

Imports significantly linked to export performance:

- 10% more imports are associated with 4.6% more exports.
- UK-sourced imports play a larger role for Irish than for foreign firms – accounts for half of total effect for Irish firms but one-fifth for foreign firms.
- Majority of the positive effect of imports on exporting comes from role of intermediate inputs.
- However, number of inputs sourced from UK have lower impact on export scope than non-UK inputs suggesting benefits to diversification of import sources as well.

II. UK and intermediate goods inputs

Product and Sector Reliance on UK Imports

- Calculates import reliance on the UK by dividing products into five categories according to the share of the UK in total imports of that product.
- 48% of total imports have a medium reliance on the UK.
- 7% of import value is in products that are imported only from the UK and a further 6% is in products where over 90% of imports come from the UK.

II. UK and intermediate goods inputs

- Scenario of WTO schedule tariff rates used as default outcome in absence of trade deal
- Previous work (e.g. Lawless and Morgenroth, 2017) combined tariffs with aggregate trade data to examine how exports might be affected across Europe.
- This work combines CSO firm-level import data with WTO tariff schedules to break effect down into more detailed tariff exposure by firm type.
- Extent to which firms would incur tariffs on their imports is strongly driven by the type of goods and, in particular, the share of food products.

II. UK and intermediate goods inputs

- Non-tariff barriers comprise any obstacles to trade that are not direct tariffs
  - E.g. quotas, regulatory or technical requirements such as licensing, labelling, standards and rules designed to protect health and food safety.
  - Customs inspections and documentation also part of non-tariff barriers.
- Much more difficult to measure.
- Impact linked to regulatory requirements/divergence.
- May be more onerous initially if learning and adaptation costs required.
- Estimates from World Bank suggest NTBs can be as large as tariffs and tend to fall on similar products/sectors.

TARIFF EXPOSURE BY TYPE OF GOOD			
	Tariff Rate	Share of trade	Share of total tariff revenues
Food	18%	24%	70%
Consumer goods	4%	22%	13%
Intermediate goods	2%	42%	12%
Capital goods	3%	12%	5%
Totals	6%	100%	100%

III. Irish-UK Services Trade and Brexit

- Several studies estimating the potential effects of Brexit mainly focusing on macroeconomic effects or goods trade.
- Option of reverting to EU's WTO tariff schedule gives a clear benchmark to anchor scenarios on goods trade.
- Services trade has no clear fall-back position so setting parameters of how large trade impacts could be is more difficult and has gotten less attention.
- This paper estimate the contribution that EU membership has made to services trade.
- Not a forecast of Brexit on services but shows range and variation in exposures across sectors.

III. Irish-UK Services Trade and Brexit

Data and Approach

- International balance of payments data from Eurostat on total services and component subsectors.
- Estimate drivers of services.
- Estimate of EU membership premium to services trade then used to construct a counterfactual impact of Brexit by removing this premium from Irish-UK services trade flows.
- Approach rests on the critical assumption that the size of the loss of membership would be symmetric with the gains

III. Irish-UK Services Trade and Brexit

Irish Services Trade, 2014				
€millions	UK	EU28	RoW	Total
Imports	11,361	46,566	62,810	109,376
Exports	20,176	58,282	43,470	101,752
Share	UK	EU28	RoW	Total
Imports	10%	43%	57%	100%
Exports	20%	57%	43%	100%

- Overall, Ireland imports more services than it exports.
- The UK accounts for twice as big a share of Irish services exports as of imports.
- Imports of R&D licences dominate Irish services imports but very little of this originates in the UK.

III. Irish-UK Services Trade and Brexit

Brexit Effect on Irish-UK Services Trade

- Estimated reduction in imports from UK of 33%
  - Equal to reduction in total services imports of 3.5%
- Estimated reduction in exports to UK of 45%
  - Equal to reduction in total services exports of 9%

- Largely driven by effects on insurance and operational leasing
- Effect on computer services also important on export side.
- Estimate is based on no policy change or mitigating actions such as market diversification.

Policy Implications

- Risk assessment and contingency planning should take into account the wide range of sector-specific exposures.
- Provision to avoid disruption of currently existing services contracts should be a priority.
- Information provision for firms on areas that may be most exposed will be important,
- A focus on counteracting any negative impact of Brexit through diversification.

IV. Brexit and Irish Consumers

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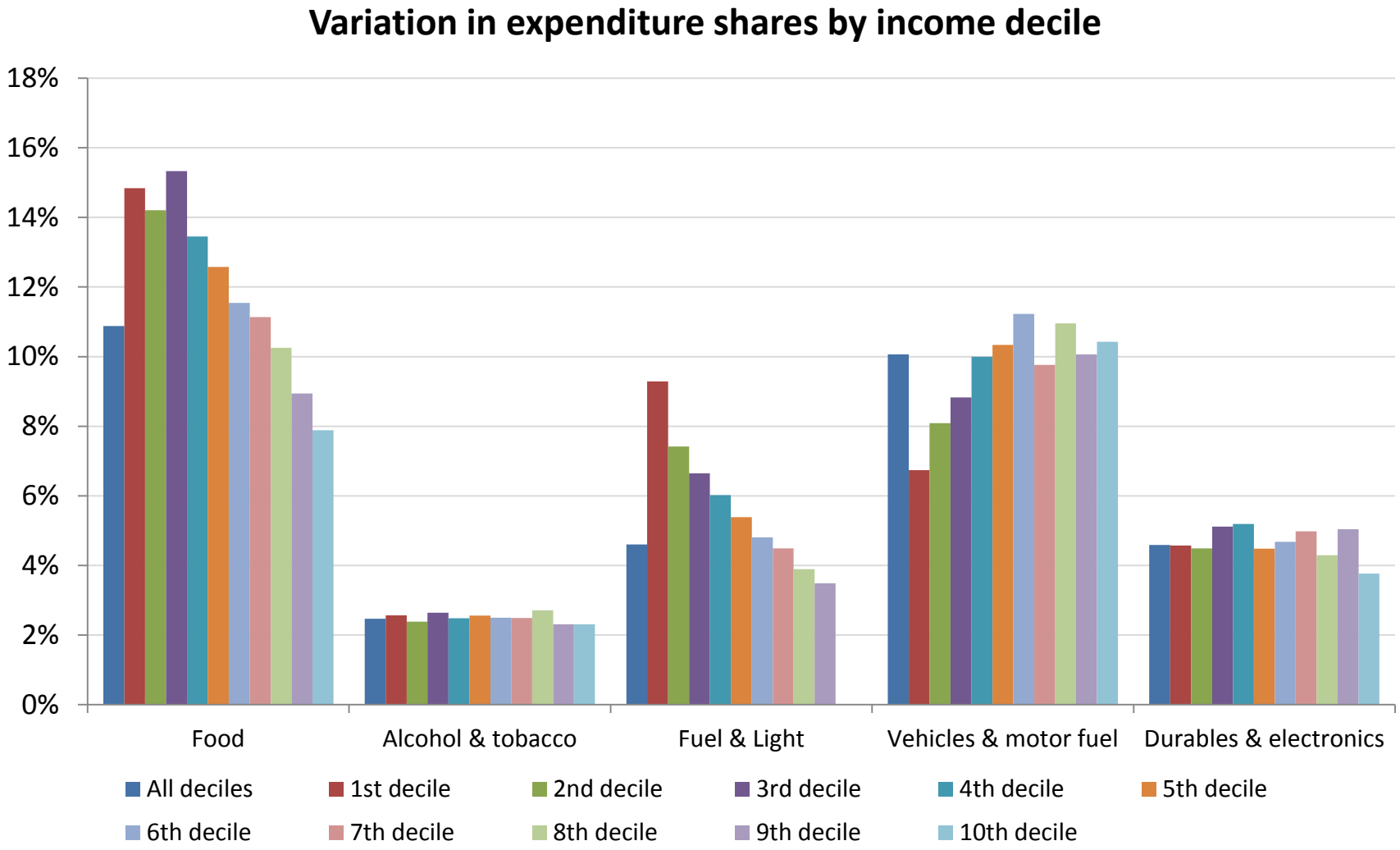

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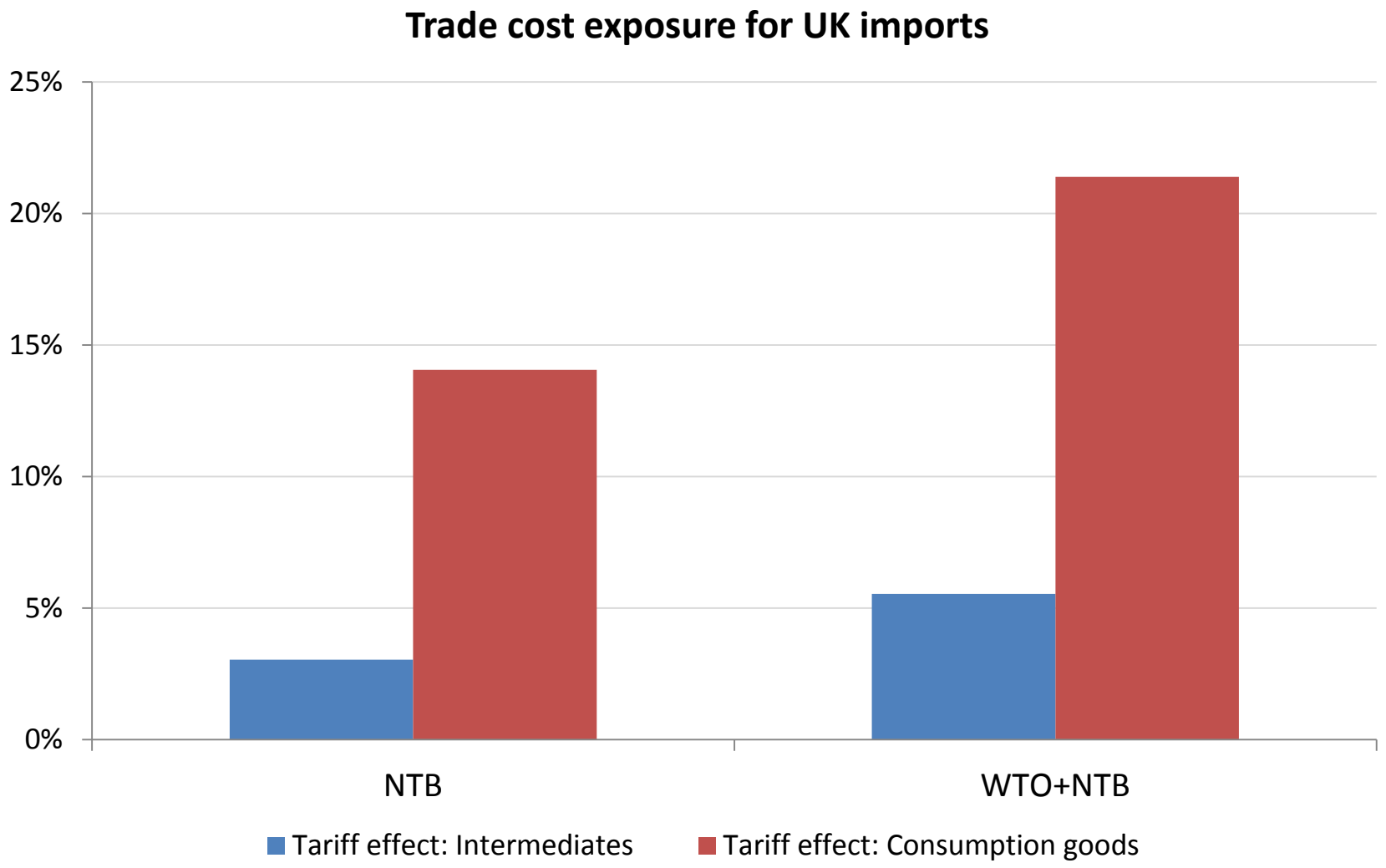

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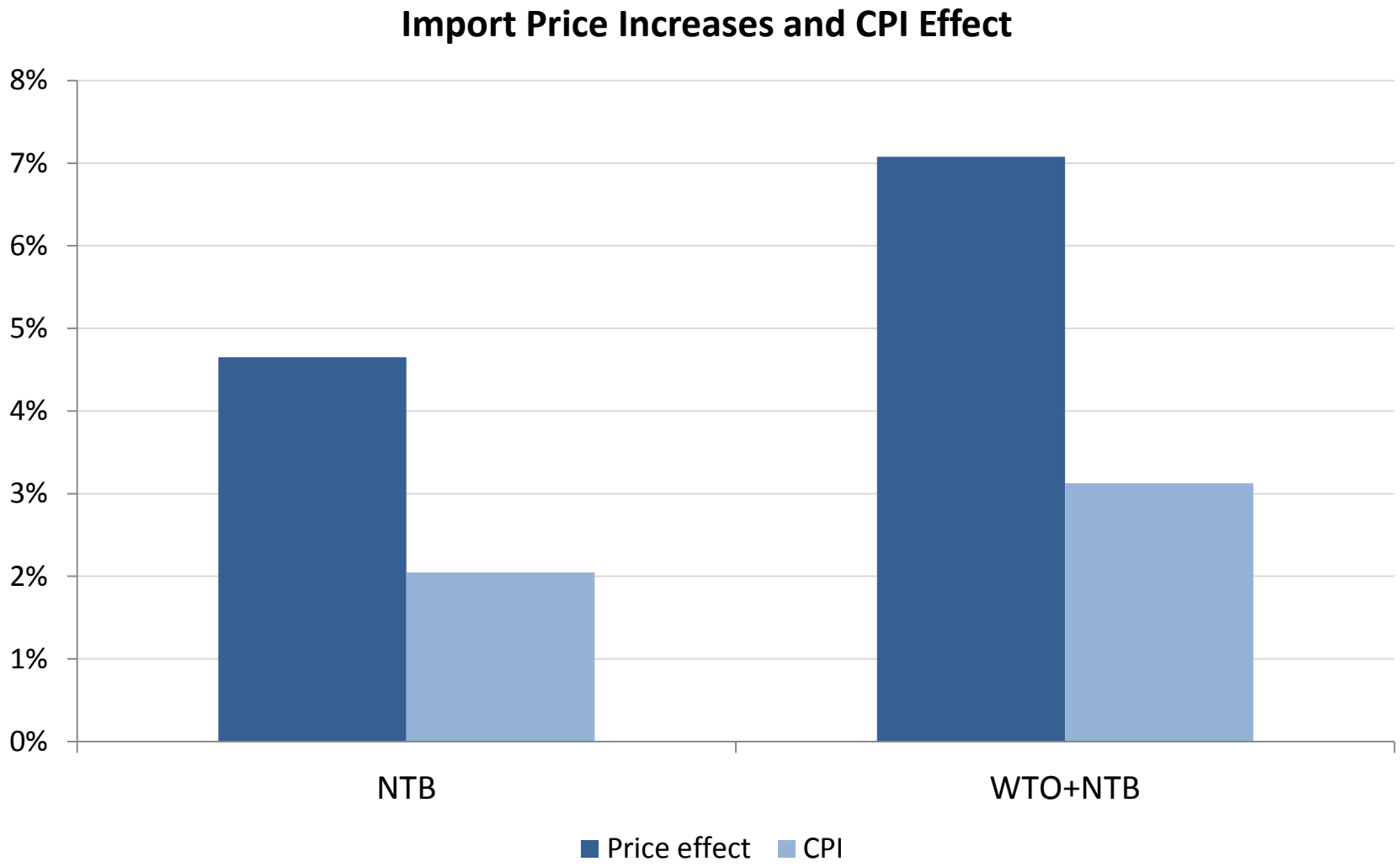

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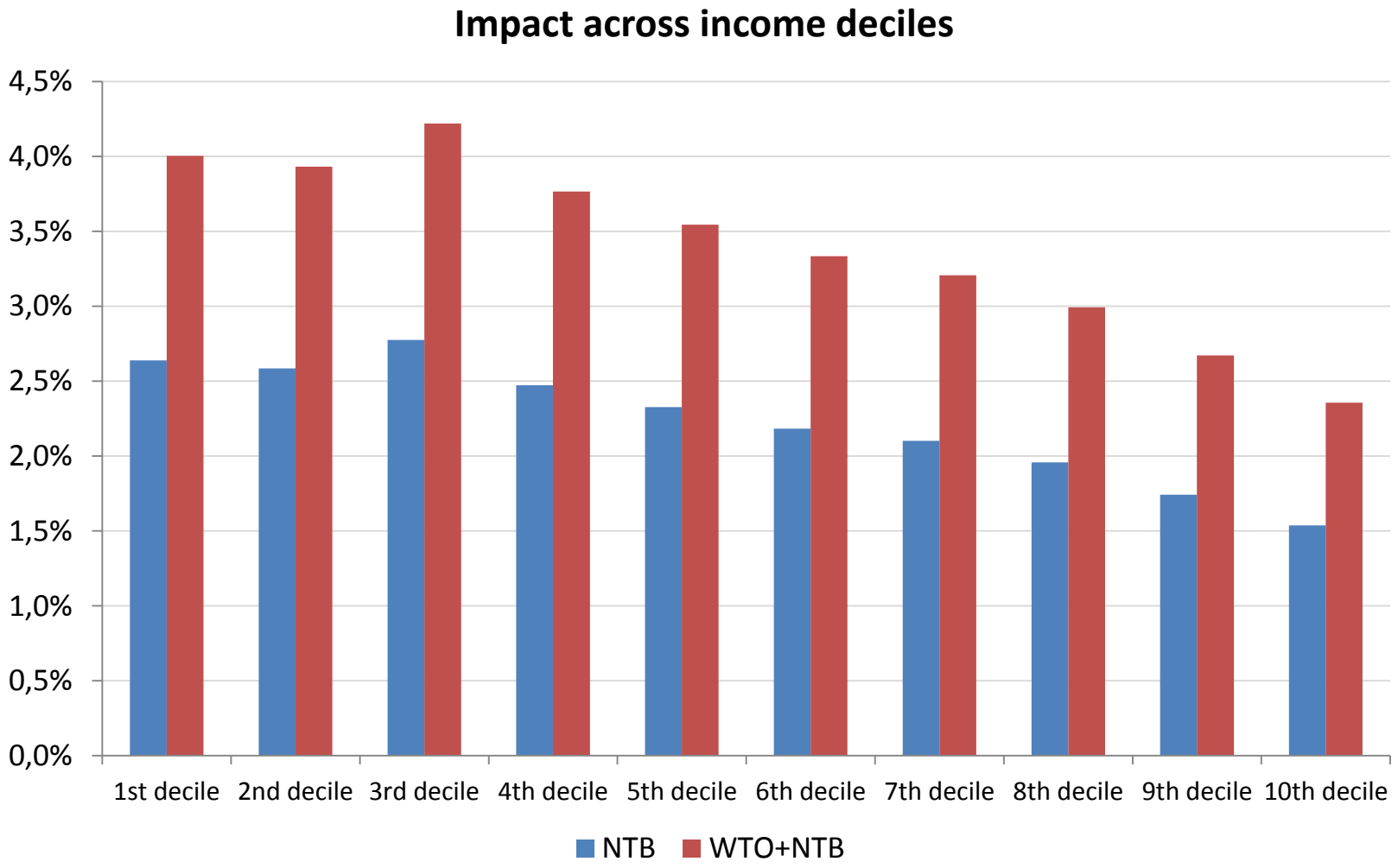

IV. Brexit and Irish Consumers

Expenditure basket effects

	Non-tariff barriers	Tariffs + NTB
1st decile	€419	€634
2nd decile	€531	€809
3rd decile	€727	€1,104
4th decile	€780	€1,191
5th decile	€849	€1,294
6th decile	€933	€1,425
7th decile	€1,013	€1,549
8th decile	€1,130	€1,724
9th decile	€1,181	€1,812
10th decile	€1,361	€2,086

IV. Brexit and Irish Consumers

	Share of grocery spend	WTO effect	WTO+NTB effect
Bread and cereals	11%	9.2%	30.3%
Meat	18%	9.0%	23.8%
Fish and seafood	3%	5.9%	17.2%
Milk, cheese and eggs	9%	16.2%	46.4%
Oils and fats	2%	6.4%	18.9%
Fruit	6%	1.2%	4.6%
Vegetables	8%	1.3%	5.1%
Sugar, jam, confectionery etc	7%	9.4%	27.3%
Other food products	6%	3.3%	15.0%
Coffee, tea and cocoa	2%	4.0%	19.8%
Soft drinks, water & juices	4%	7.3%	22.7%
Spirits	3%	2.0%	4.3%
Wine	7%	0.2%	0.6%
Beer	7%	0.0%	0.5%
Tobacco	6%	1.0%	2.4%

Effects on grocery sector

N.B. WTO & WTO+NTB effects include weights for importance of the UK as a source of the product

Sum of grocery effects:
Direct tariffs add 6% to prices
Indirect NTB costs add another 12%