# How important is deep integration?

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# How important is single market for trade?

Quantify the increase in trade associated with

- the EEA single market
- 'ordinary' free trade agreements (FTAs)

Key point:

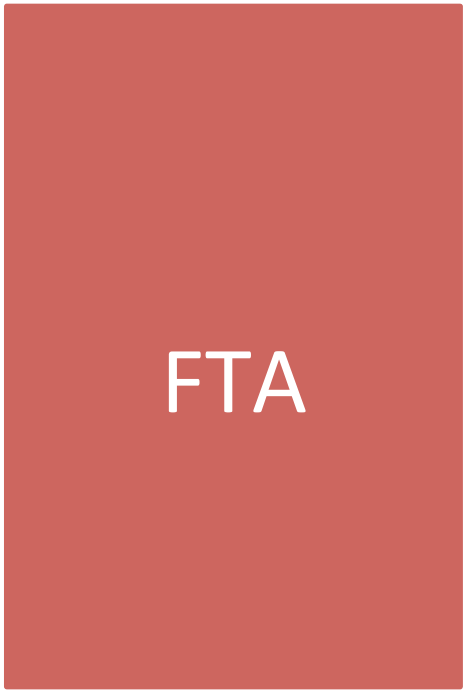
- EEA single market involves deep integration - harmonisation of regulation, free movement of labour, capital, and more
- Ordinary FTAs generally less comprehensive

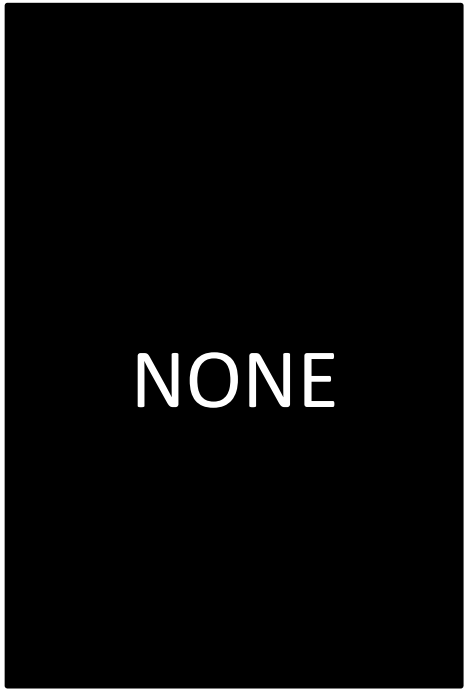
# Gravity: Data

- 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.

# EEA vs FTA vs None

Assign each country-pair to one of three bins:

# Gravity Regression

- Regression equation:

$$X\downarrow ij = exp(\beta\downarrow 0 + \beta\downarrow 1\ dist\downarrow ij + \beta\downarrow 2\ bord\downarrow ij + \beta\downarrow 3\ lang\downarrow ij + \beta\downarrow 4\ colony\downarrow ij + \beta\downarrow 5\ samecont\downarrow ij + \delta\downarrow 1\ EEA\downarrow ij + \delta\downarrow 2\ FTA\downarrow ij + \alpha\downarrow i + \gamma\downarrow j\ )$$

where:

- $X_{ij}$ are exports of i to j
- $EEA_{ij}$ = 1 if *both i* and *j* are EEA members
- $FTA_{ij}$ = 1 if i and j have an FTA, but ≥ 1 is not EEA member
- $\alpha_i$ is the exporter fixed effect (multi-lateral resistance)
- $\gamma_j$ is the importer fixed effect

# Gravity Results

- Estimating the impact of EEA and FTA membership on trade

| | Bilateral Goods Exports | Bilateral Service Exports |
|---|---|---|
| Prob(EEA) | 0.915*** | 0.951*** |
| FTA | 0.228*** | 0.001 |
| Distance | -0.576*** | -0.613*** |
| Bord | 0.698*** | 0.401*** |
| Lang-official | 0.183 | 0.545*** |
| Colony | 0.189* | 0.253** |
| Samecont | 0.604*** | 0.207 |
| Autoc | -0.041 | -0.249 |
| Polcomp | 0.082* | 0.218 |
| Constant | 15.133*** | 9.269*** |
| Test for Exclusion Restriction | | |
| Durable | $\chi^2(1)=1.32$, p = 0.2506 | $\chi^2(1)=0.16$, p = 0.6858 |

# ‘Hard’ Brexit, hard landing?

Estimated reductions in ***UK trade with other EEA members*** from leaving the EEA single market:

| | Goods | Services |
|---|---|---|
| Single market --> WTO rules with EU | 58% - 65% | 61% - 65% |
| Single market --> FTA with EU | 35% - 44% | 61% - 65% |

Estimated reductions in ***total UK trade****:*

| | Goods | Services |
|---|---|---|
| Single market --> WTO rules with EU | 32% - 36% | 24% - 26% |
| Single market --> FTA with EU | 20% - 25% | 24% - 26% |

# Main Findings

UK will find it difficult to replace the lost trade from leaving the EEA single market:

1) Leaving the EEA single market is associated with substantial decreases in trade, both for goods and for services.
2) Trading with the world? Ordinary FTAs are associated with:
   - No increase in services trade
   - Comparatively small increases in goods trade

# A deep and comprehensive FTA with the EU?

- Clearly, the deep integration of the single market has been associated with (much) higher levels of trade, particularly for services.

- Post-Brexit process of divergence
  - Which parts of the single market are particularly valuable for trade?
  - Which parts of the single market are not so important?

# Setting priorities

- Need for regulatory approval, recognition of professional qualifications
  - Financial services, including Fintech
  - Accountancy, legal services
  - Architecture
- Opposite end of the spectrum: Silent trade
  - R&D embodied in goods
  - Value from UK R&D may be 'exported' to production sites in Asia, rest of Europe

# Research agenda

1. Importance of trade agreements industry by industry

2. Which specific aspects of the single market are most important for generating trade overall, and industry by industry

3. Better measurement of goods and services trade, 'hidden trade'

# Trading with the World?

Estimated increases in *bilateral trade with 3rd countries* from forming a new FTA:

| | Goods | Services |
|---|---|---|
| **WTO rules → FTA with 3rd country** | 26% | 0% |

Estimated increase in *total trade* from forming new FTAs*:*

| | Goods | Services |
|---|---|---|
| **WTO rules → FTA with BRIICS** | 3.2% | 0% |
| **WTO rules → FTA Anglo-America** | 3.0% | 0% |

BRIICS = Brazil, Russia, India, Indonesia, China, South Africa

Anglo-America = USA, Canada, Australia, New Zealand

# Can new FTAs compensate loss of single market?

Table A1. 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% |

Table A2. 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% |

Table A3. 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% |

- Trade increases from FTAs with all the BRIICS or all the Anglo-American countries about 1/10 the size of the losses from leaving single market
- Gains from FTAs based on average FTA currently in existence

# Predicting FTA Membership

First-stage probit regression results

| | FTA goods | FTA services |
|---|---|---|
| Distance | -0.876*** | 0.733 |
| Bord | -0.123 | 0.093 |
| Lang-official | 0.056 | 0.766** |
| Colony | -0.139 | -0.919* |
| Durable | -0.0002 | 0.0024 |
| PolComp | 0.321*** | 0.299** |
| Constant | 5. 102*** | -5.417** |
| Pseudo-$R^2$ | 0.470 | 0.575 |
| **Tests for (Joint) Significance** | | |
| Polcomp | p = 0.0029 | p=0.0496 |
| Durable | p = 0.9922 | p=0.3358 |
| Polcomp and Durable | p = 0.0089 | p=0.0562 |

# Predicting EEA Membership

First-stage probit regression results

| | EEA |
|---|---|
| Distance | -4.415*** |
| Bord | -0.994*** |
| Lang-official | -1.422*** |
| Colony | -1.167*** |
| Durable | -0.016*** |
| PolComp | -0.449*** |
| Constant | 15.548*** |
| Pseudo-$R^2$ | 0.688 |
| **Tests for (Joint) Significance** | |
| Polcomp | $\chi^2(1)=48.00$, p = 0.0000 |
| Durable | $\chi^2(1)=70.05$, p = 0.0000 |
| Polcomp and Durable | $\chi^2(2)=97.60$, p = 0.0000 |

# Gravity: Instrumental Variables

- Similar durability predicts joint EEA membership

- Similar durability does not predict *bilateral* trade, over and above the impact of EEA membership

→ We don't care about similar durability of political institutions when choosing a trading partner, but we do care when we are choosing a deep integration partner.