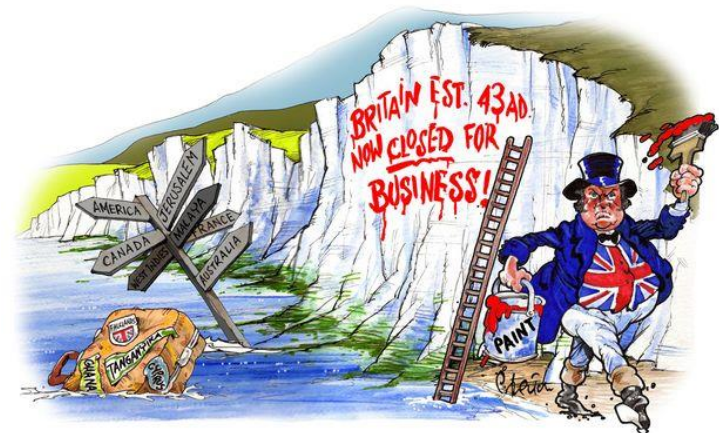


# “The Economics of Brexit”

AEDE/IS 4540  
International Commerce  
and the World Economy

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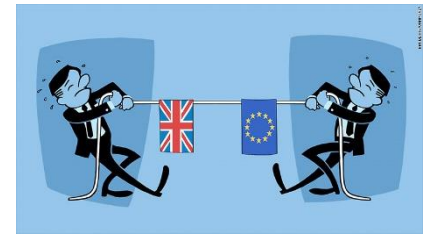


# Background



- **June 23, 2016, UK voted in favor of leaving EU**
- **After vote, political focus was on when to signal intention to leave via Article 50 of Lisbon Treaty**
- **March 29, 2017, UK formally notified EU of its intention to leave**
- **Article 50 allows for withdrawal negotiations to last for period of two years, i.e., up to March 29, 2019**
- **Initial issues: outstanding financial liabilities of UK, future status of EU citizens living in UK, and framework for future UK-EU relations**

# Background



- The “Leave” campaign provided no guidance as to what form Brexit should take
- Not surprisingly, there has been considerable economic uncertainty over future UK/EU trading relationship
- Essentially, there are three basic options:
  - UK remains part of EU’s Single Market by joining European Economic Area (EEA)
  - UK and EU could sign free trade agreement (FTA)
  - UK and EU trade under MFN terms of WTO



# Norway Option – “Soft-Brexit”

- **Joining EEA is closest to remaining in EU Single Market**
- **UK would have to commit to four freedoms: free movement of goods, services, capital, and labor**
- **EEA members must adopt all EU legislation pertaining to the Single Market, i.e., employment law, consumer protection, product standards, and competition policy**
- **EEA members also contribute to EU budget**
- **Trade barriers between EU and EEA are higher than within EU - countries not in customs union, i.e., set their own external tariffs and negotiate FTAs separate from EU**

# FTA Option



- FTAs differ greatly in depth, scope, and effects on trade
- EU's recent FTAs do less than Single Market to harmonize economic regulation and do not guarantee market access for services such as finance
- UK could form customs union with EU, but it would not cover services trade, and UK could not negotiate FTAs outside of EU
- Outside Single Market, UK not bound by EU regulation and courts, and free to restrict immigration from EU
- To achieve any greater level of economic integration, would have to make concessions, as did Switzerland

# WTO Option – “Hard-Brexit”



- WTO option favored by hardline “Brexit-eers”
- UK would completely extricate itself from EU, applying MFN tariffs to all trading partners
- UK could seek FTAs independently of EU, but would lose access to Single Market for goods and services
- No requirement to retain free movement
- UK’s imports from and exports to EU subject to tariff and non-tariff barriers
- Costs of trade would rise due to customs checks, and border controls



# Economic Background

- **Most UK trade is with EU: 47% of UK exports go to EU, and EU is source for over 50% of UK imports**
- **Varies by sector:**

**Table 1: UK Trade with the EU as a Percentage of Total Trade (2015)**

Industry	% of UK Total Exports to EU	% of UK Total Imports from EU
Food and Live Animals	69	65
Beverages	37	70
Mineral Fuels	62	5
Animal & Vegetable Oils	77	63
Chemical and Related Products	44	64
Manufactured Goods	47	51
Machinery and Transport	39	56
Misc Manufactured Goods	42	36

**Source:** UN COMTRADE. Data is at the SITC 1 Digit Level.



# Economic Background

- Prior to June 24, 2017 referendum, several studies forecast effects of BREXIT – e.g., UK Treasury, OECD, and LSE
- UK Treasury and OECD studies got significant public attention prior to vote – both summarily dismissed as “fearmongering” by “Leave” campaign
- Use similar methodologies to analyze potential UK/EU trading arrangements after BREXIT
- Both focus on potential short-term and long-term economic impacts of BREXIT
- Similar results being generated by more recent studies



# UK Treasury Study (May 2016)

- Study focused on near-term impact of UK leaving EU over two-year period after vote
- Evaluated combined effects of *transition* to new trading arrangement, *uncertainty* and feedback from changing *financial conditions*
- Uncertainty driven by 4 processes:
  - (i) terms of UK withdrawal under Article 50
  - (ii) new trading arrangement with EU
  - (iii) new trading arrangements with rest of world
  - (iv) changing UK regulatory/legislative framework



HM Treasury

# UK Treasury Study (May 2016)

- Two scenarios: “shock” assuming UK negotiates bilateral agreement with EU, and “severe shock”, assuming default to WTO membership
- UK monetary policy: central bank rate held constant
- UK fiscal policy: support for economy through “automatic stabilizers” – with implications for borrowing and public debt
- Global economic conditions: “severe shock” assumes financial contagion with EU – reducing EU GDP by 1%
- Ignores additional downside risks of financial crisis and/or “sudden stop” due to current account deficit



# UK Treasury Study (May 2016)

- **Conditioned on alternative assumptions about long-term effects of BREXIT in 15-year period after referendum – evaluated by UK Treasury (April, 2016)**
- **Gravity and CGE models used to forecast UK will be poorer due to permanent reduction in trade, FDI, and productivity (Tables 2, 3)**
- **Central estimates of long-term reduction in GDP used for “shock” and “severe shock” scenarios**
- **Use CGE model to estimate transition, uncertainty and financial conditions impact on demand, supply and asset prices (Table 4)**

# Long-Run Impact of Brexit:



**Table 2: BREXIT effect on UK trade/FDI/productivity after 15 years**

	EEA	Bilateral	WTO
Trade (%)	-9	<b>-19</b>	<b>-24</b>
FDI (%)	-10	<b>-20</b>	<b>-26</b>
Productivity (%)	-2.8	<b>-6.0</b>	<b>-7.7</b>

**Source: UK Treasury (April, 2016)**

# Long –Run Impact of Brexit:



**Table 3: Annual economic impact of Brexit on UK after 15 years\***

	EEA	Bilateral	WTO
GDP level (%) - central	-3.8	<b>-6.2</b>	<b>-7.5</b>
GDP level (%) - range	-3.4 to -4.3	-4.6 to -7.8	-5.4 to -9.5
Cost/capita (£)- central	-2,600	<b>-4,300</b>	<b>-5,200</b>

Source: UK Treasury (April, 2016) – UK average income £ 28,000

- Comparable estimates to 2030

	<u>OECD</u>	<u>Dhingra et al.</u>
GDP level (%)	-5.1	
GDP level (%)	-2.7 to -7.7	-6.3 to -9.5
Cost/capita (£)	-1,520 to -5,000	-4,200 to -6,400

Source: OECD (April, 2016), Dhingra et al. (2018)

# Short-Run Impact of Brexit:



Table 4: Immediate impact of Brexit on UK after 2 years\*

	"Shock"	Severe shock"
GDP	-3.6%	<b>-6.0%</b>
Inflation rate (% points)	+2.3	<b>+2.7</b>
Unemployment rate (% points)	+1.6	<b>+2.4</b>
Sterling exchange rate index	-12%	<b>-15%</b>

Source: UK Treasury (May, 2016)

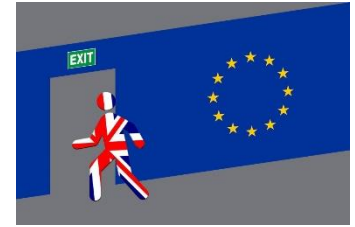
\* OECD comparable estimate to 2020

GDP -3.3%

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Source: OECD (April, 2016)

# Trade Impact of Brexit:

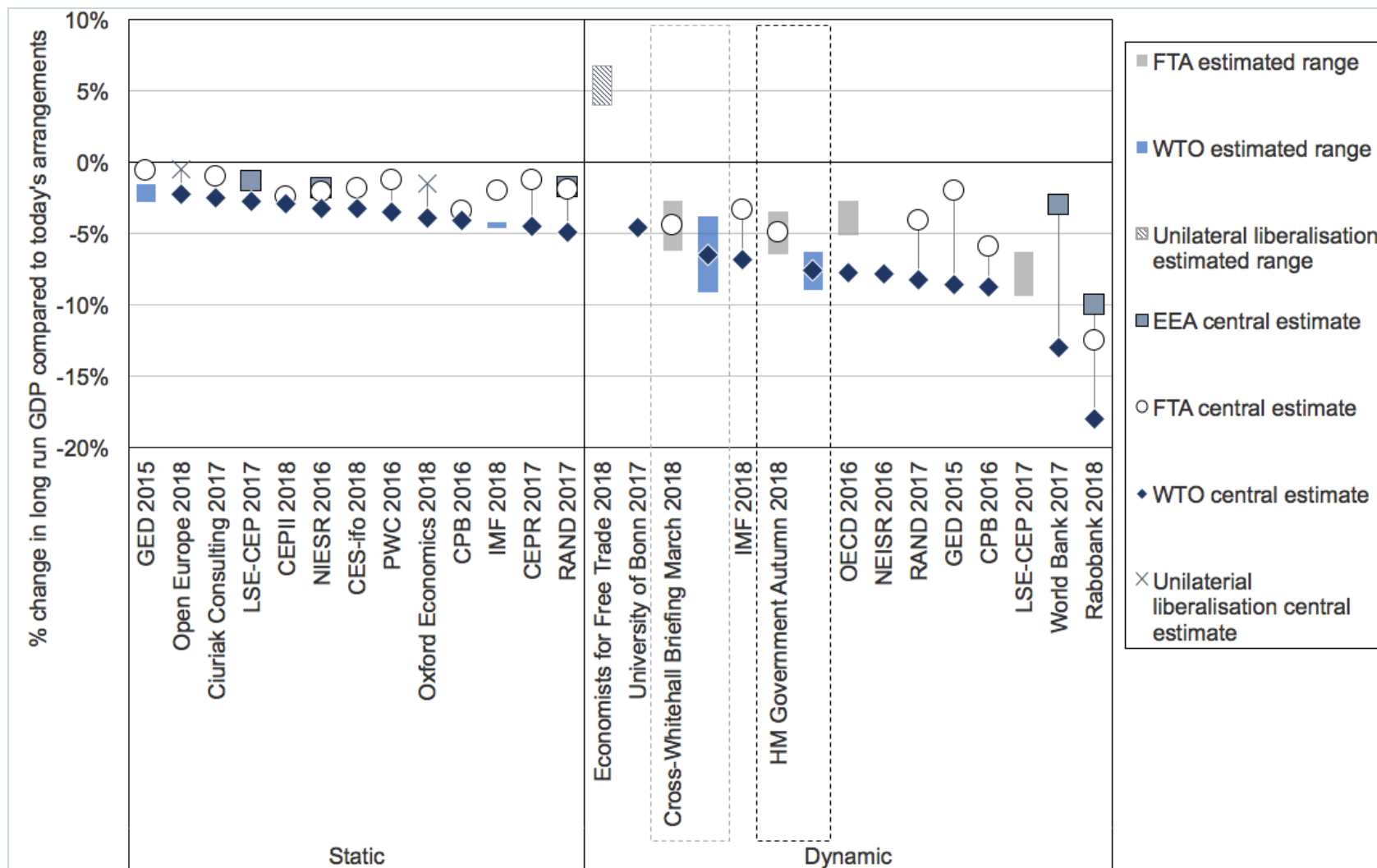


**Table 5: Long-Run Change in UK Trade Flows after Brexit (%)**

	Total Exports	Exports to EU	Total Imports	Imports from EU
‘Soft’ Brexit	-9	-25	-8	-22
‘Hard’ Brexit	-16	-43	-16	-38

**Source: Dhingra et al. (2018)**

# Other Studies of Brexit.....



Source: UK Treasury (2018)



# Why Did People Vote for Brexit?



- If the consensus is that Brexit will hurt UK economically – why did people vote for it?
- Most discussion has focused on wage effects of EU immigration –but little evidence that it has affected either average employment or wages
- Two plausible hypotheses (Sampson, 2017):
  - EU membership erodes British sovereignty
  - Scapegoating of EU by those who feel left behind
- If the first, Brexit will be judged a success, but if the second, Brexit does nothing to mitigate voter discontent

# Why Did People Vote for Brexit?

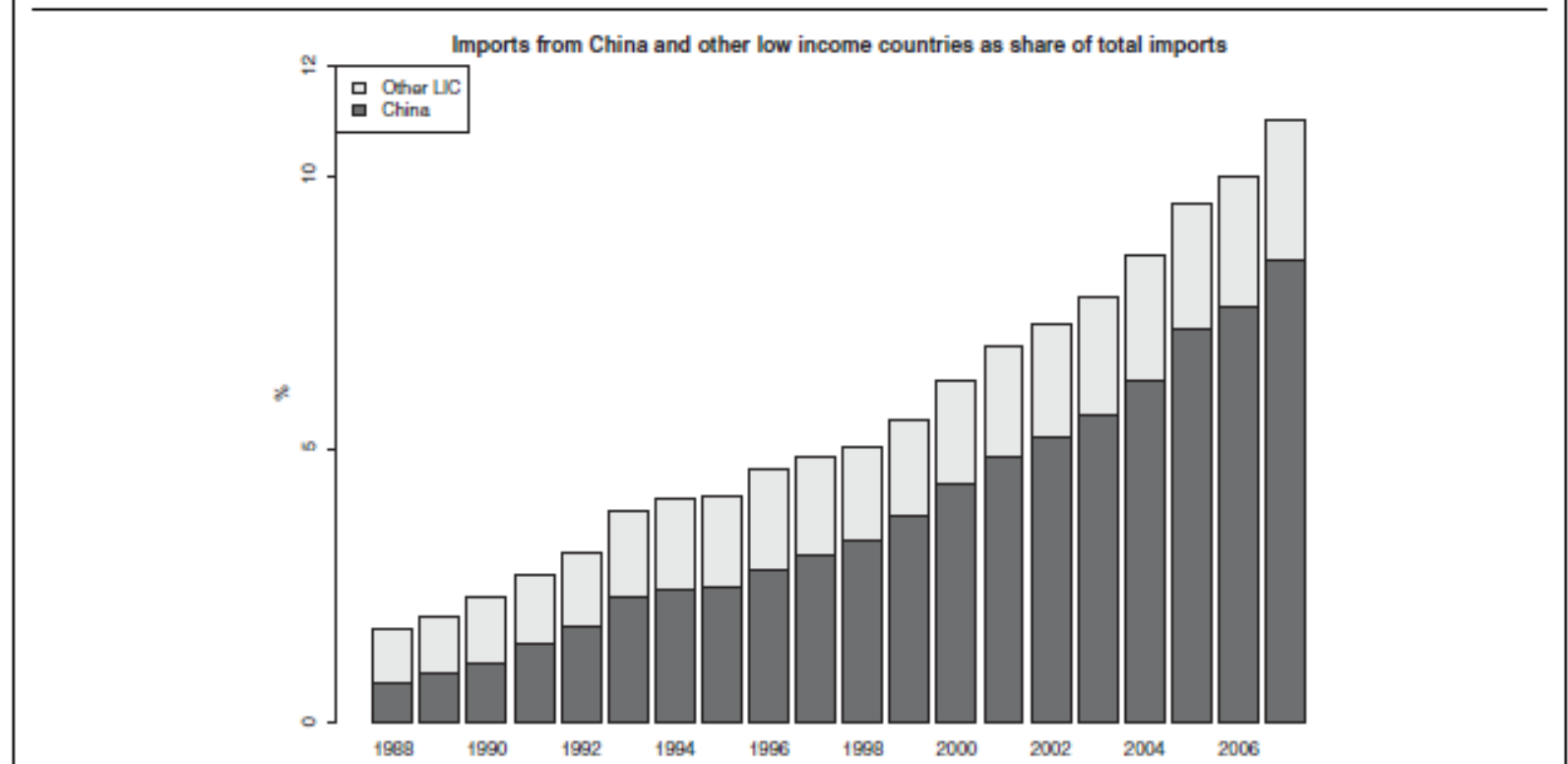


- Recent study carefully examines underlying causes of vote (Colantone and Stanig, 2018)
- Main result of study found that “Leave” share of referendum vote was systematically higher in regions more exposed to Chinese import shock
- No clear evidence that higher immigration was associated with support for “Leave”, except for arrival of immigrants from recent accession countries (Poland and Romania)
- Attitudes towards immigration reflected economic distress due to import competition

# UK and Chinese Import Shock



**FIGURE 1. Evolution of the Relative Importance of Imports from China and other Low Income Countries in the United Kingdom.**

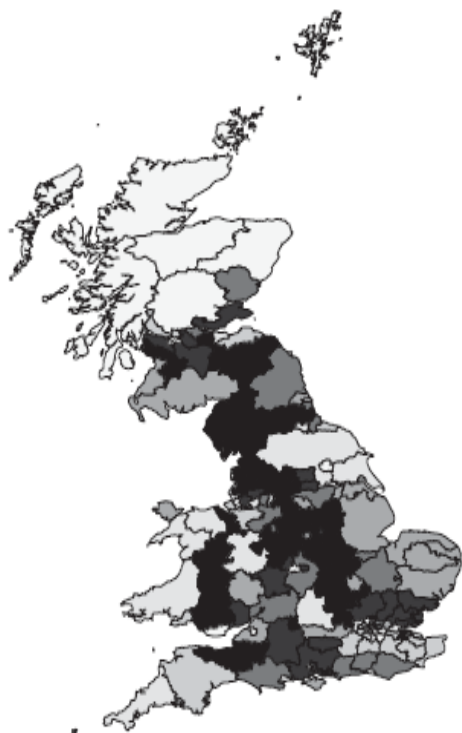


Source: Colantone and Stanig (2018)

# Brexit Voting Patterns



FIGURE 2. Strength of the Import Shock Across NUTS-3 Regions



Note: Darker shades correspond to stronger import shock.

FIGURE 3. Vote Share of the Leave Option Across NUTS-3 Regions.



Note: Darker shades correspond to stronger support for the Leave option.

Source: Colantone and Stanig (2018)



# Current Status of Brexit

- UK government has negotiated withdrawal agreement with EU, covering transition to end of 2020
- Covers: (i) assets and liabilities; (ii) UK/EU citizens' rights; (iii) border/customs arrangements; and (iv) law/dispute resolution
- During transition, UK remains member of EEA, single market and customs union, EU law applies, and UK continues to pay into EU budget
- Irish border – “backstop” comes into force if no new trade agreement, i.e., UK remains in customs union
- Agreement rejected three times by House of Commons