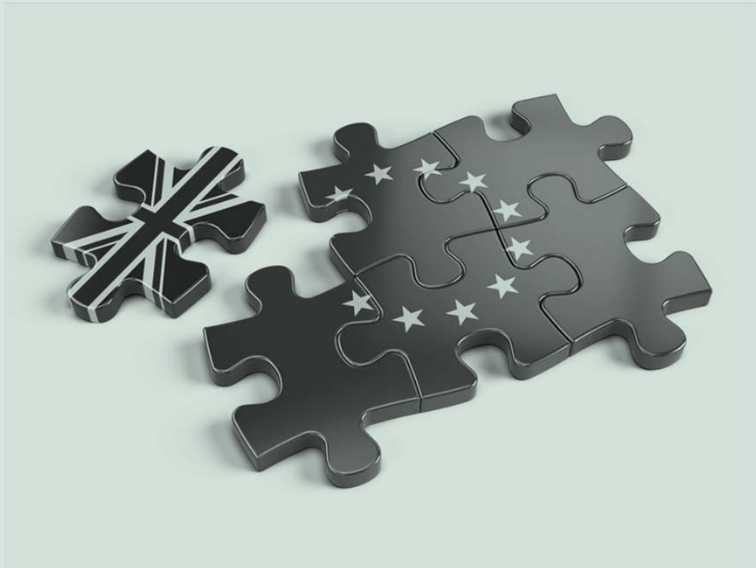
How did the Economics Profession Get it Wrong on Brexit?



Ken Coutts and Graham Gudgin
Centre For Business Research,
University of Cambridge

- The Brexit campaign and its aftermath have been a sad experience of misleading claims and downright lies

SOME DECEPTIONS ARE VERY WELL KNOWN

- The Brexit campaign and its aftermath have been a sad experience of misleading claims and downright lies
- The Leave campaign decided to ignore economic aspects of Brexit and tended to vilify academic bodies who produced economic impact reports (e.g. IFS)

- The Brexit campaign and its aftermath have been a sad experience of misleading claims and downright lies

- The Leave campaign decided to ignore economic aspects of Brexit and tended to vilify academic bodies who produced economic impact reports (e.g. IFS)

- The Remain campaign majored on predicted economic impacts and it is these we want to examine in this presentation

- This is not a pro-Brexit polemic but is instead an examination of the techniques and interpretations used on major official and academic reports which attempted to quantify the impact of Brexit.

- This is not a pro-Brexit polemic but is instead an examination of the techniques and interpretations used on major official and academic reports which attempted to quantify the impact of Brexit.

- Our conclusion is that almost all of these analyses were flawed and almost always in a pro-Remain direction.

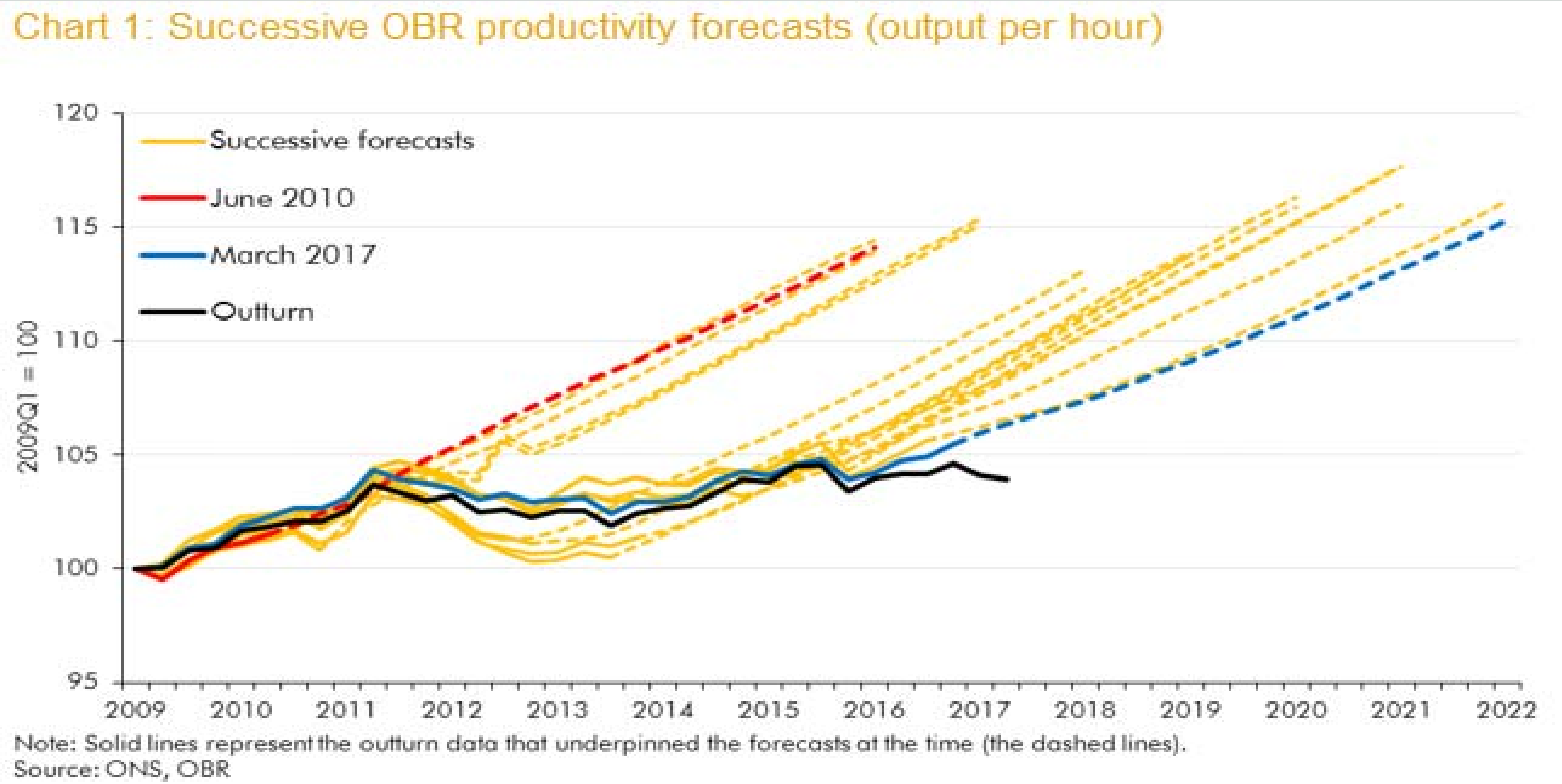
- This is not a pro-Brexit polemic but is instead an examination of the techniques and interpretations used on major official and academic reports which attempted to quantify the impact of Brexit.

- Our conclusion is the almost all of these analyses were flawed and always in a pro-Remain direction.

- After the multiple recent forecasting failures of UK economic forecasters, public confidence in the profession is low, and few appear to take much notice of economists' predictions on Brexit.

ONE WELL-KNOWN EXAMPLE OF A POOR FORECASTING RECORD

OBR FORECASTS OBR PRODUCTIVITY



- This is not a pro-Brexit polemic but is instead an examination of the techniques and interpretations used on major official and academic reports which attempted to quantify the impact of Brexit.

- Our conclusion is the almost all of these analyses were flawed and always in a pro-Remain direction.

- After the multiple recent forecasting failures of UK economic forecasters, public confidence in the profession is low, and few appear to take much notice of predictions on Brexit.

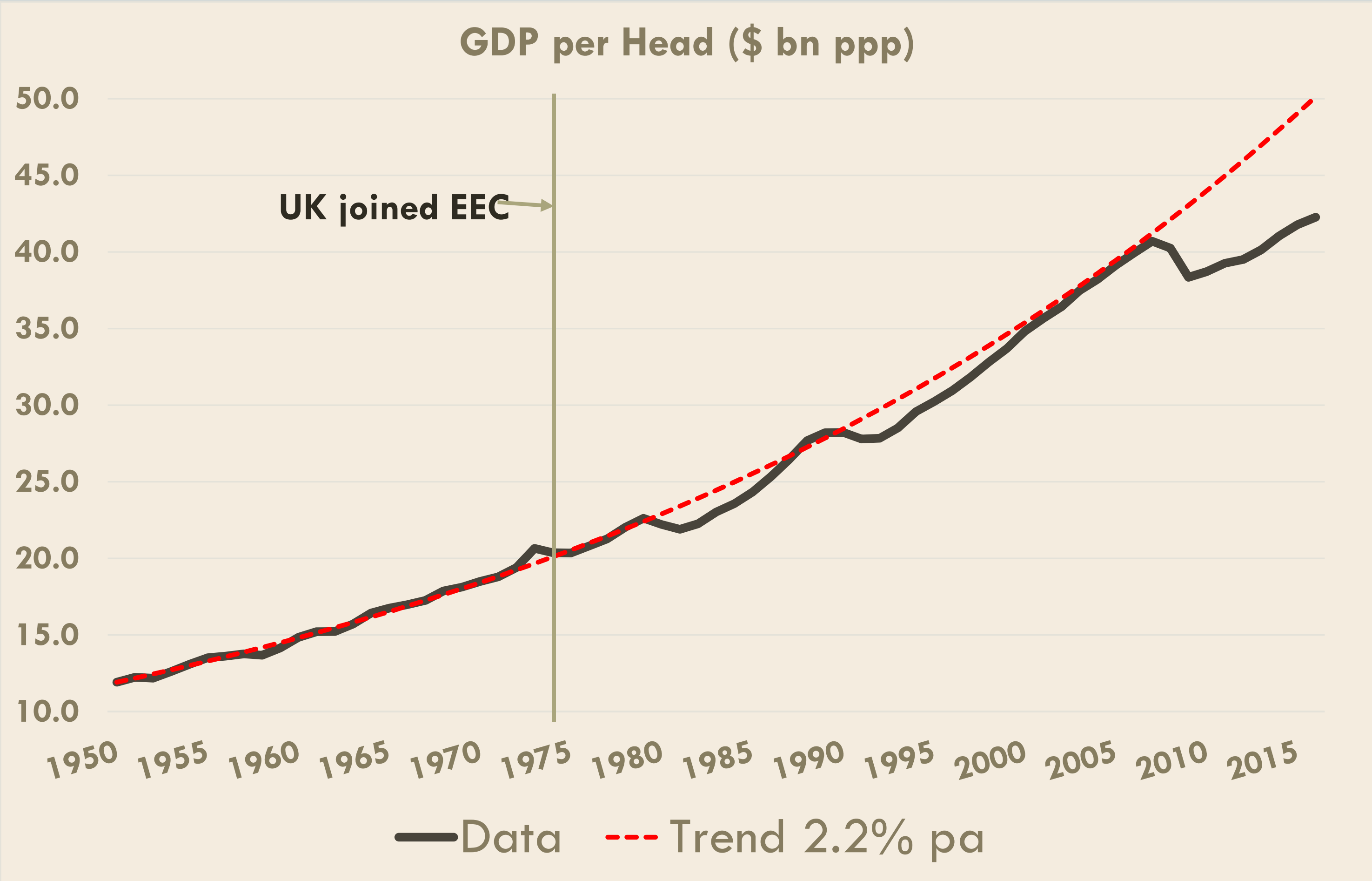
- How did the profession get itself into this situation and are the public correct to dismiss projections for Brexit?

Let's Turn First to the Question of Whether the UK's 43 year membership of the EEC/EU has boosted the UK Economy

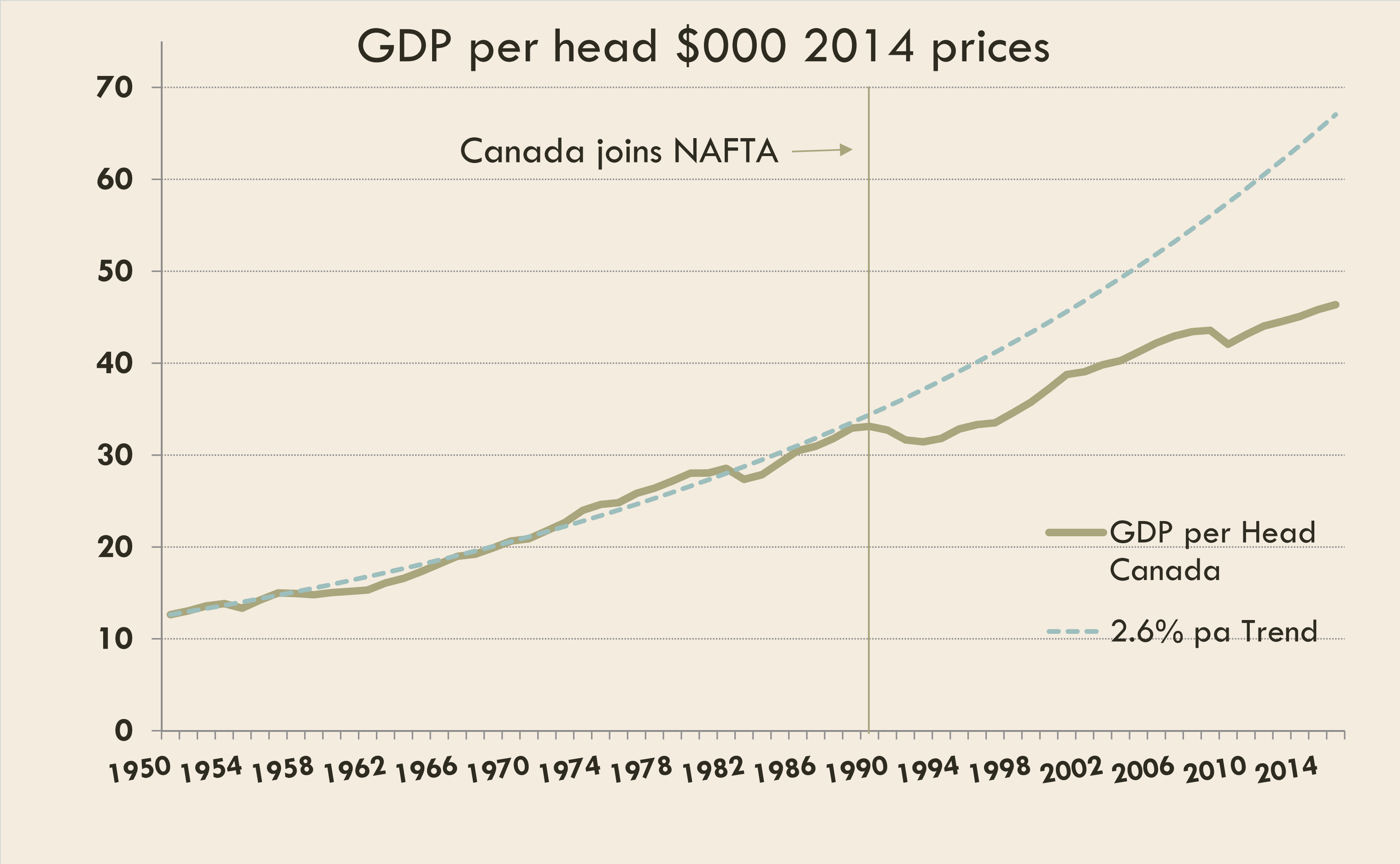
There is a widespread belief that Membership has raised Per Capita GDP

- Prof Nick Crafts puts the gain at around 10%. ("*If the UK had stayed outside the EU, it seems very likely that growth of real GDP per person would have continued to lag behind French and German rates*". *(Crafts N, April 2016,* The Growth Effects of EU Membership for the UK.)
- The FT continually assert that EU membership has been beneficial and did so regularly during the EU Referendum Campaign
- **But is it True?**

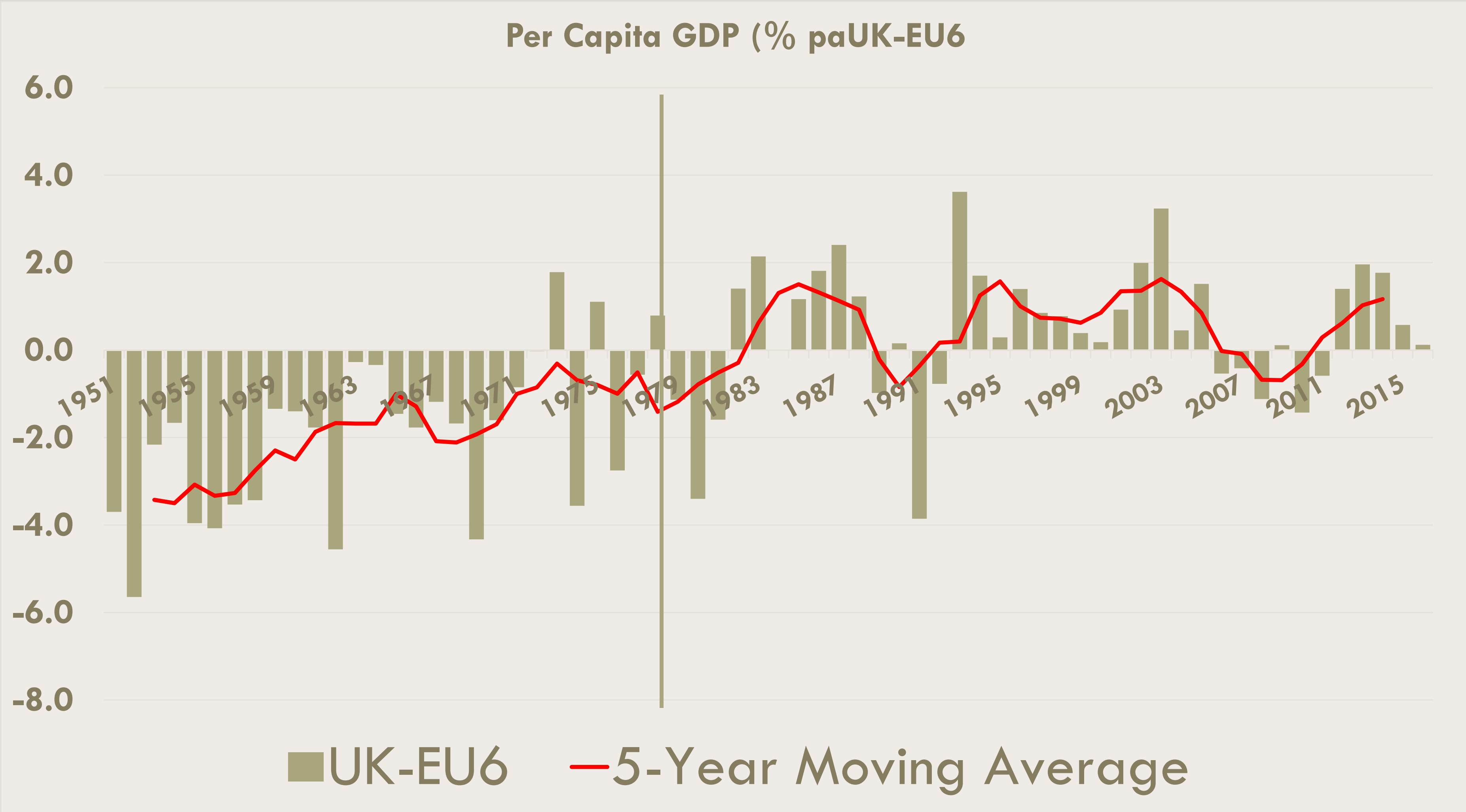
UK ECONOMY SHOWS NO SIGN OF ACCELERATION POST-1973



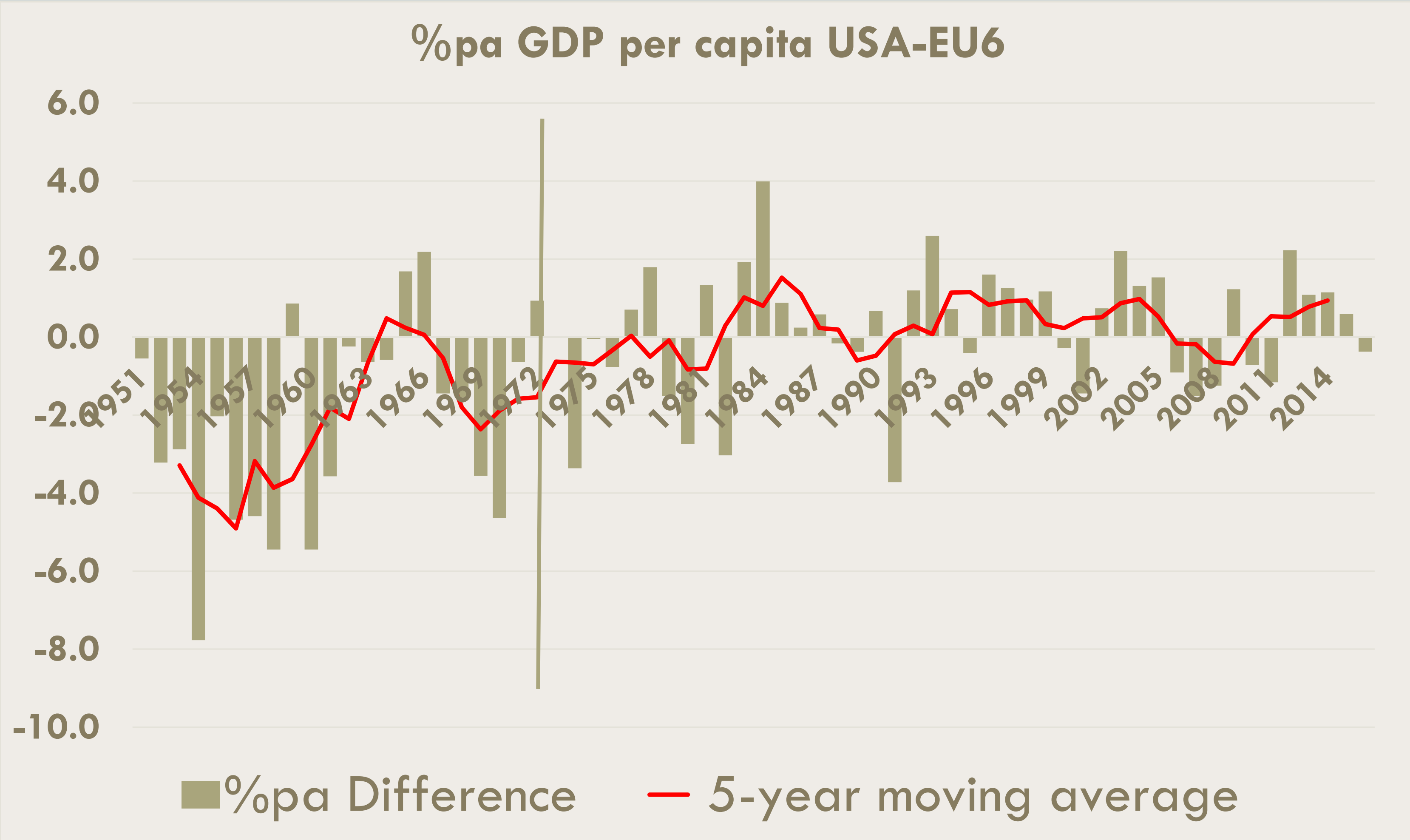
NAFTA ALSO DID NOT HELP CANADA



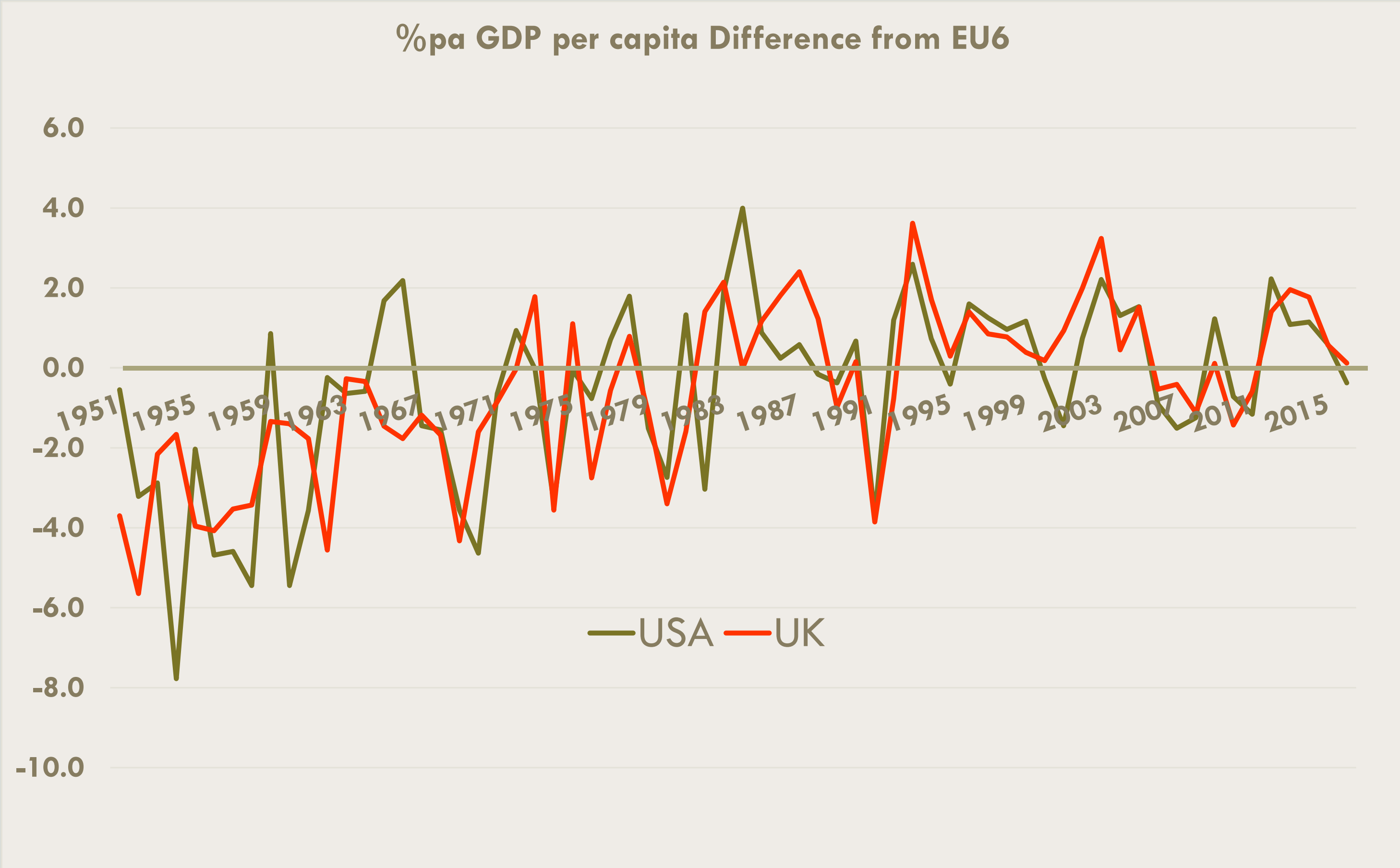
UK IMPROVES RELATIVE TO EU6



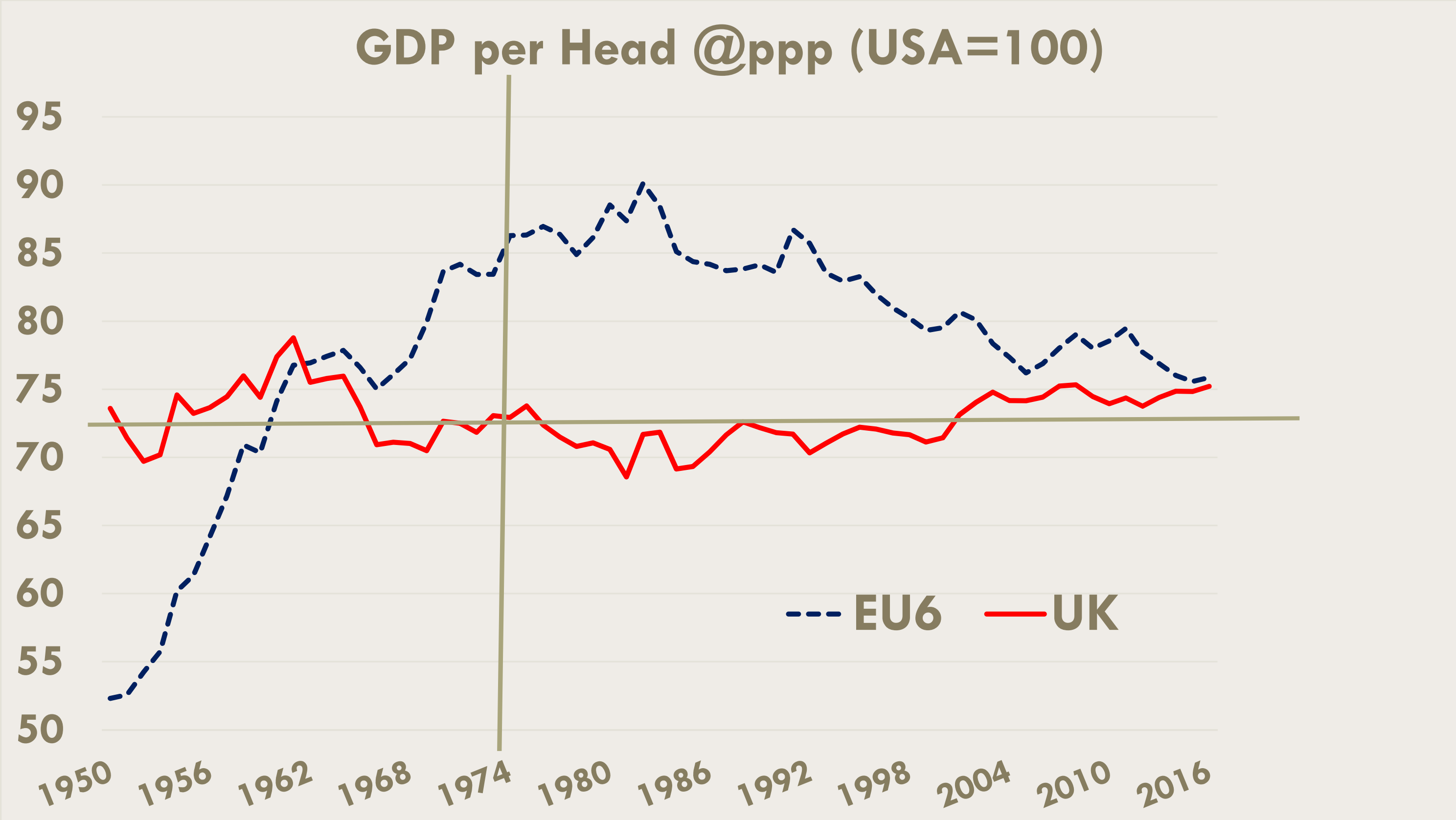
BUT SO DOES THE USA, WHICH DID NOT JOIN THE EU



UK ECONOMIC GROWTH IS MUCH CLOSER TO USA THAN EU



USING THE USA AS A BENCHMARK, UK SHOWS NO SIGN OF AN EU BOOST

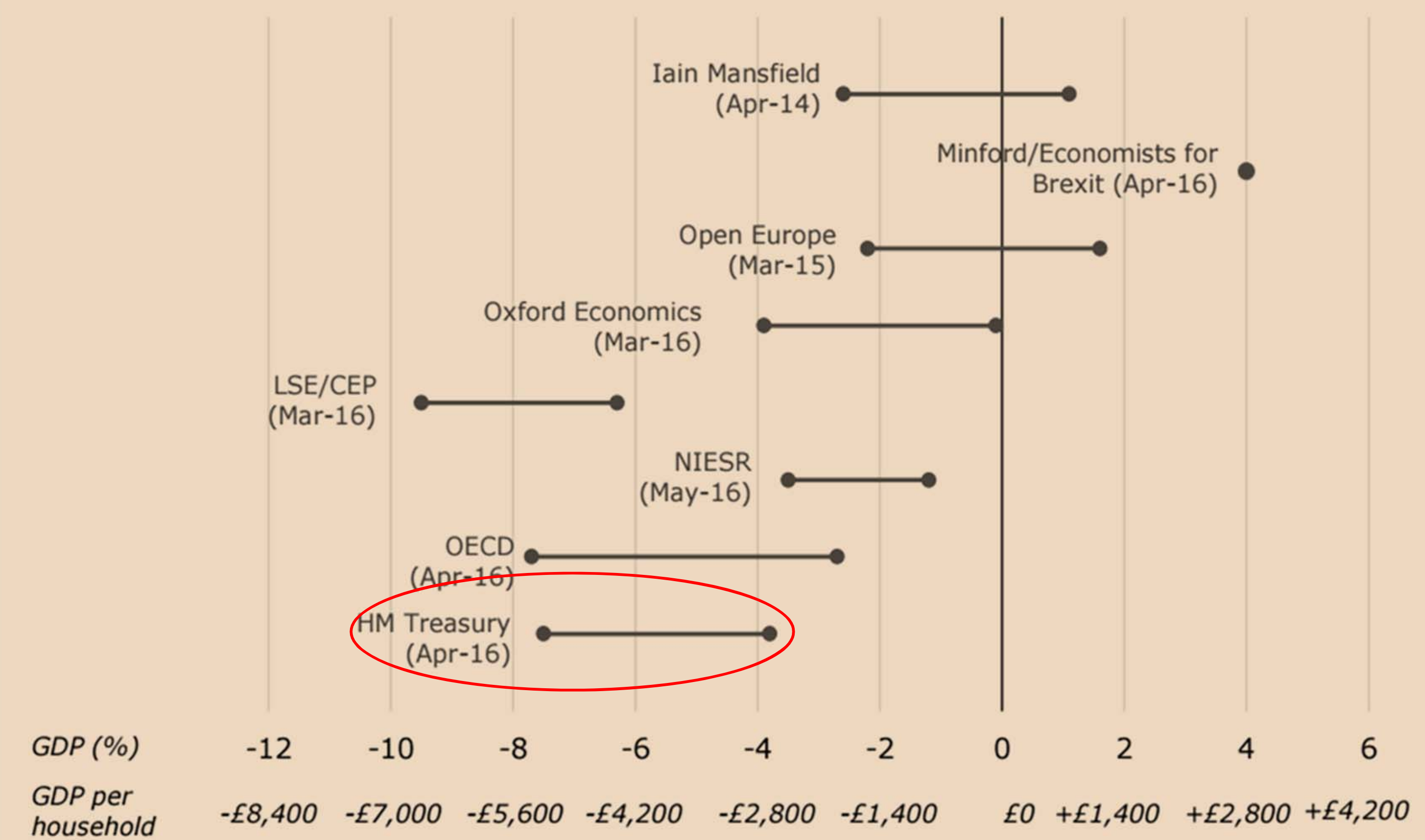


MAIN SOURCES OF ESTIMATES ON THE ECONOMIC IMPACT OF BREXIT

- H M Treasury
- OECD
- IMF
- LSE Centre for Economic Performance (CEP)
- NIESR
- Open Europe
- Oxford Economics

THE ECONOMICS PROFESSION HAS BEEN CLOSE TO UNIFORMLY PESSIMISTIC ON THE ECONOMIC IMPACT OF BREXIT

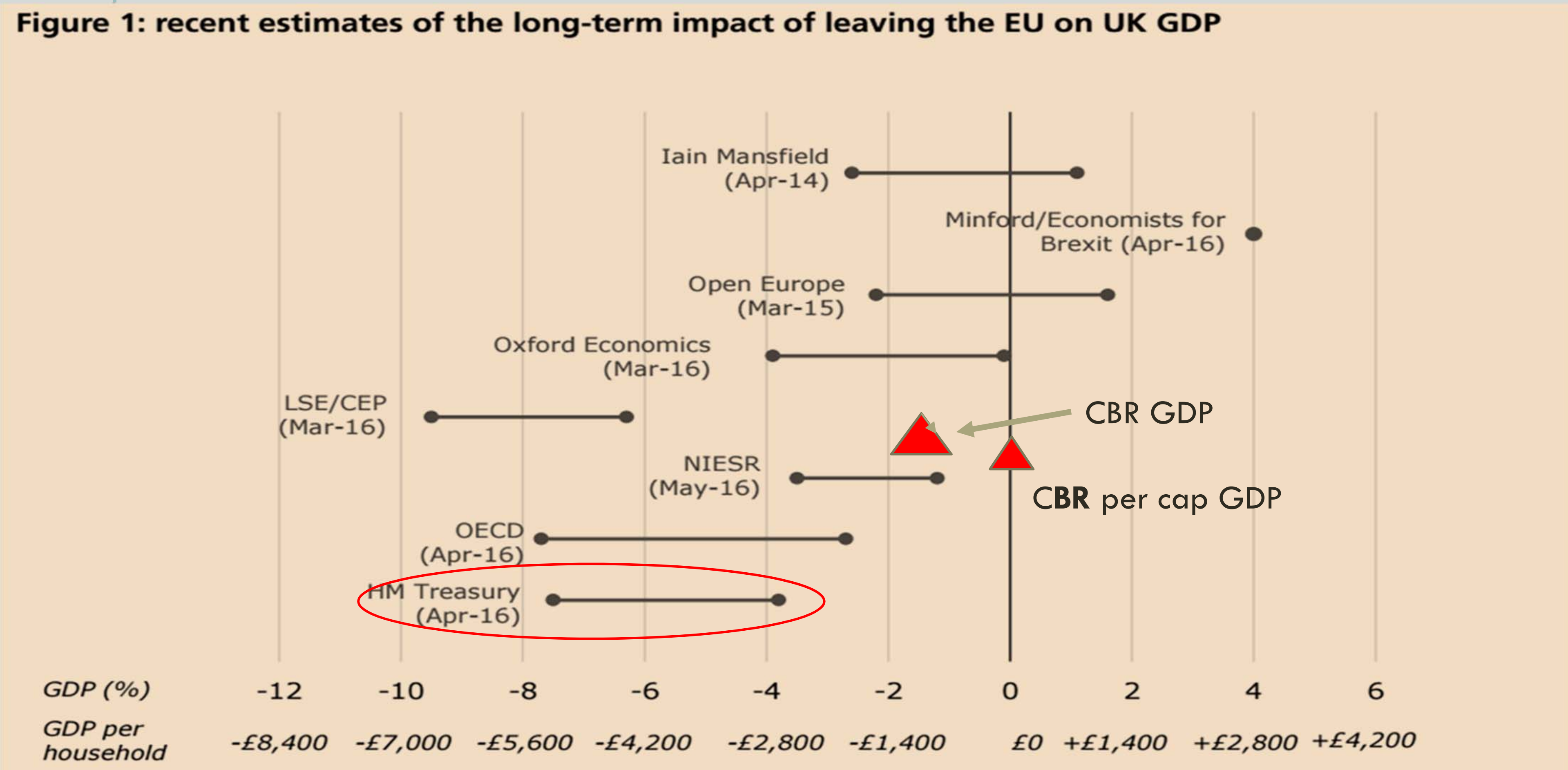
Figure 1: recent estimates of the long-term impact of leaving the EU on UK GDP



Source: Treasury Committee (2016), "The economic and financial costs and benefits of the UK's EU membership", NIESR 2016 as in Jagjit Chadha VoxEU, 16 Jun 2016.

OUR OWN ESTIMATES ARE LESS PESSIMISTIC

IMPACT OF BREXIT IN 2030 (%)



Source: Treasury Committee (2016), "The economic and financial costs and benefits of the UK's EU membership", NIESR 2016 as in Jagjit Chadha VoxEU, 16 Jun 2016.

FORECASTS OF THE SHORT-TERM IMPACT OF BREXIT

- ***H M Treasury The Immediate Economic Impact of Leaving the EU (May 2016)***

  - Analysis of relationship between **Uncertainty** and spending by people and firms
  - An **assumption** that uncertainty would be 50% of 2009 level
  - Predicted 4 quarters of decline in GDP

- **Bank of England August 2016 Inflation Report**

  - Forecast for GDP growth in 2017 reduced from 2.3% to 0.8% - (outturn 1.7%)
  - Unemployment rate forecast raised from 4.9% to 5.4% -(outturn 4.4%)
  - BoE would have done better to make no adjustment to its pre-Referendum forecas

H M TREASURY REPORTS ON BREXIT

The Long-Term Impact of EU membership and the Alternatives (April 2016)

- ‘*Gravity model*’ used to estimate impact of EU membership on trade and Foreign Direct Investment (FDI)
- Assumption that most gains from membership will be lost
- A large part of Treasury impact is additional productivity reductions due to trade losses

TREASURY ESTIMATES OF LONG-TERM IMPACT OF FTA BREXIT

Trade

- 50% gain in total trade with EU due to membership of EU assumed to be fully reversible, giving a loss of trade with EU of 33%.
- No trade diversion i.e. no gain of trade with 3rd parties after leaving the EU
- Giving **a total loss of trade (to EU and non-EU destinations) of 18%**

FDI

- **Loss of 17.5% of FDI** (measured in money & hence dominated by acquisitions)

Productivity

- Productivity (per capita GDP) impact due to loss of trade at 25% of trade loss.
- Extra small productivity loss of 4% of FDI loss.

GDP

- **Overall loss of GDP is 6.2% after 15 years** for reversion to WTO rules.

GRAVITY MODELS AT THE HEART OF OFFICIAL ESTIMATES OF IMPACT OF BREXIT

The basic gravity model equation is:

$$\textbf{Trade} = (\textbf{GDP}_{\textbf{source}} \times \textbf{GDP}_{\textbf{market}}) \,/\, \textbf{Distance}$$

Where:

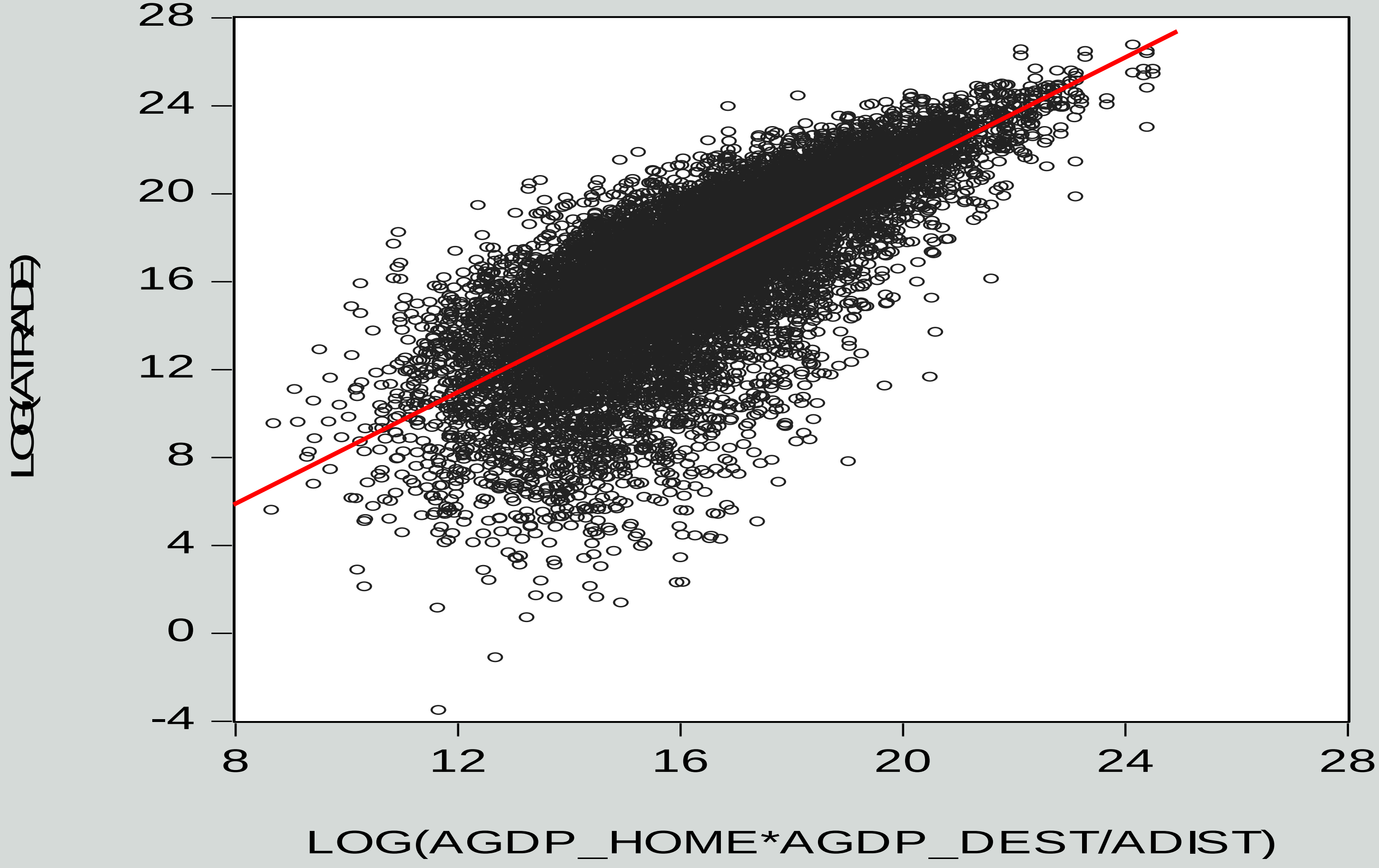
Trade is the volume of trade in current prices between a pair of countries
GDP is the product of the GDPs of the two countries adjusted for inflation
DISTANCE is the distance between the two countries

Other influences on trade flows can be added:

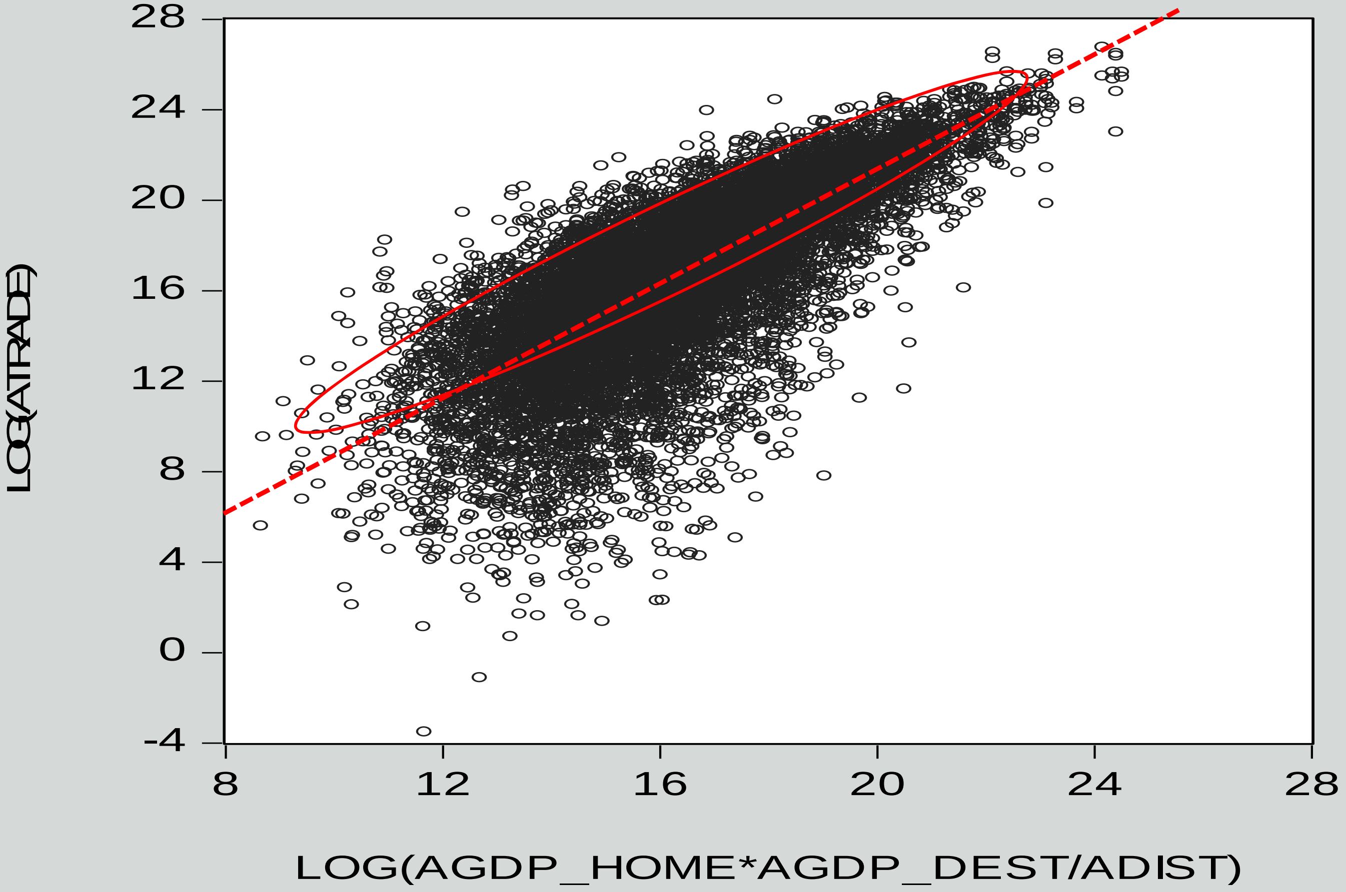
- Affluence (per capita GDP)
- Common language or history
- Contiguous borders
- Membership of FTA or Monetary Union

The equation is '*estimated*' from data on trade between 120 countries over a 65 year period.

TRADE AND 'GRAVITY' IN 2015



EU INTRA-TRADE IS ABOVE THE PREDICTED AVERAGE



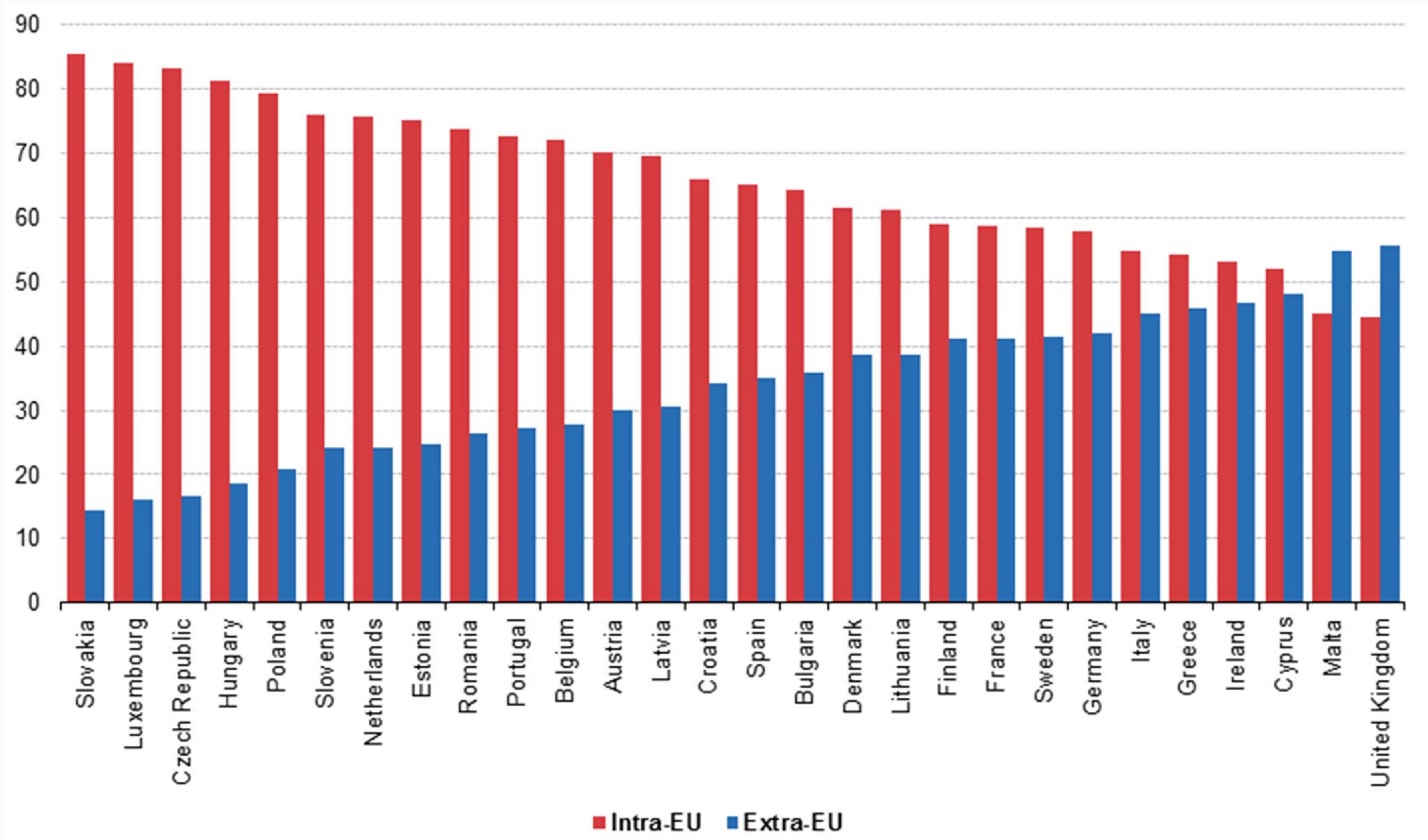
HMT FAIL TO ALLOW FOR DIFFERENT TRADE PATTERN OF UK

- We have replicated the HMT gravity analysis but calculate a trade effect specifically for the UK rather than an average across the entire EU 28.

- This reduces the estimated loss of exports from 24% to 10% for a WTO scenario and from 18% to 3% for an FTA scenario.

- We also calculate smaller losses of FDI and no 'knock-on' impact of productivity

Intra & Extra-EU Exports of Goods(%) 2015

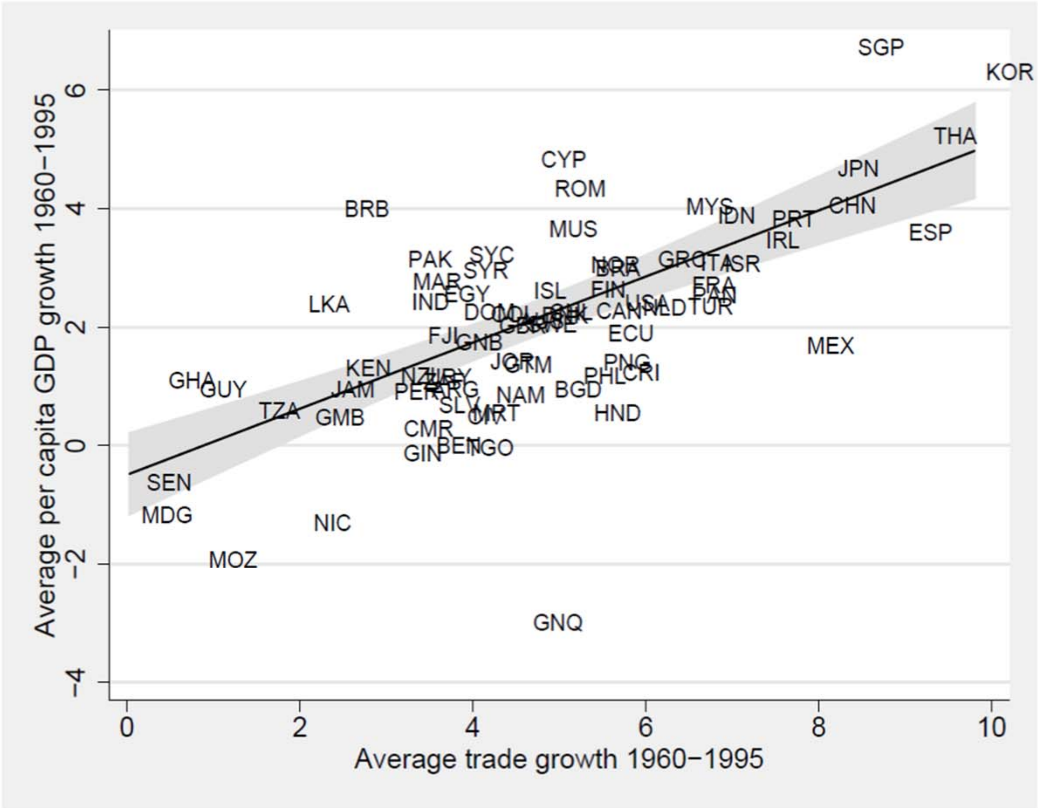


PRODUCTIVITY LOSSES DUE TO LOWER TRADE

- HMT and most other forecasters assume there will be a ‘knock-on impact from trade to productivity
- i.e. any loss of trade due to leaving the Single Mkt and Customs Union will result in lower productivity with an elasticity of 0.25-0.5
- This accounts for at least half of the overall impact in HMT and other analyses

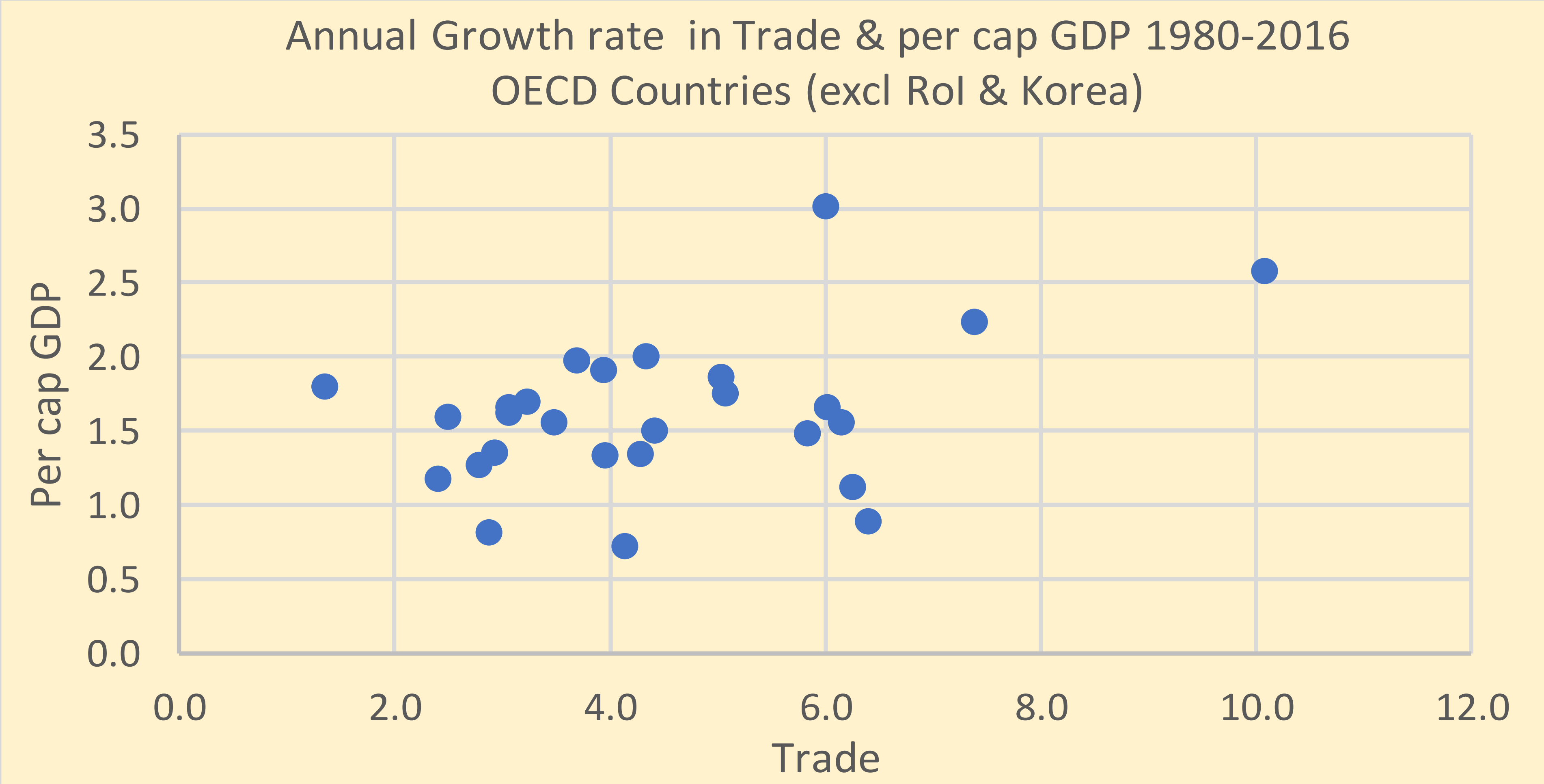
PRODUCTIVITY ESTIMATES BASED ON OUTDATED DATA WITH MOST OF DATA COMING FROM EMERGING ECONS

Figure 5: Average Per Capita GDP Growth versus Trade Growth 1960-1995

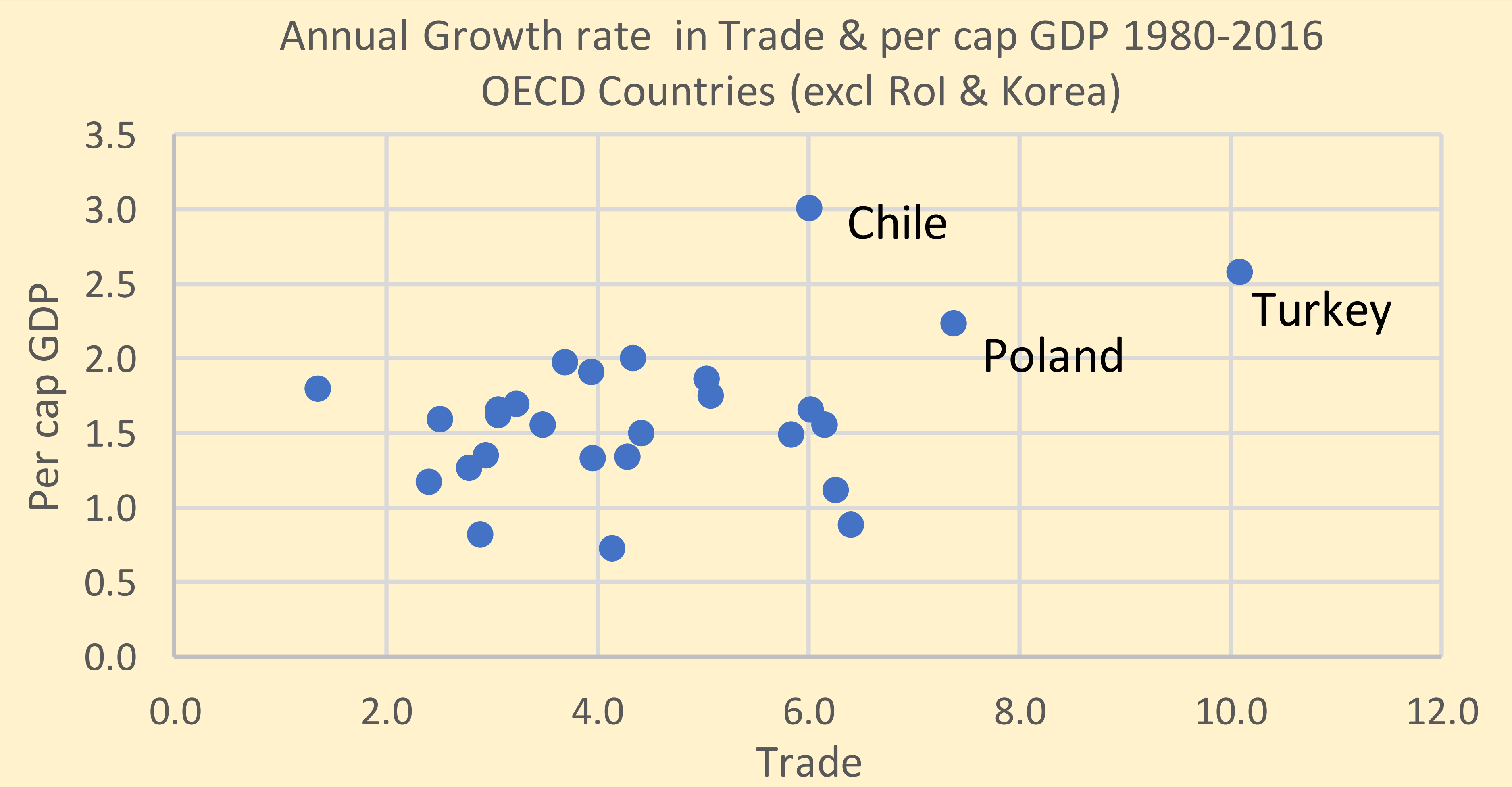


urce: Penn World Tables 6.2, IMF Direction of Trade database.

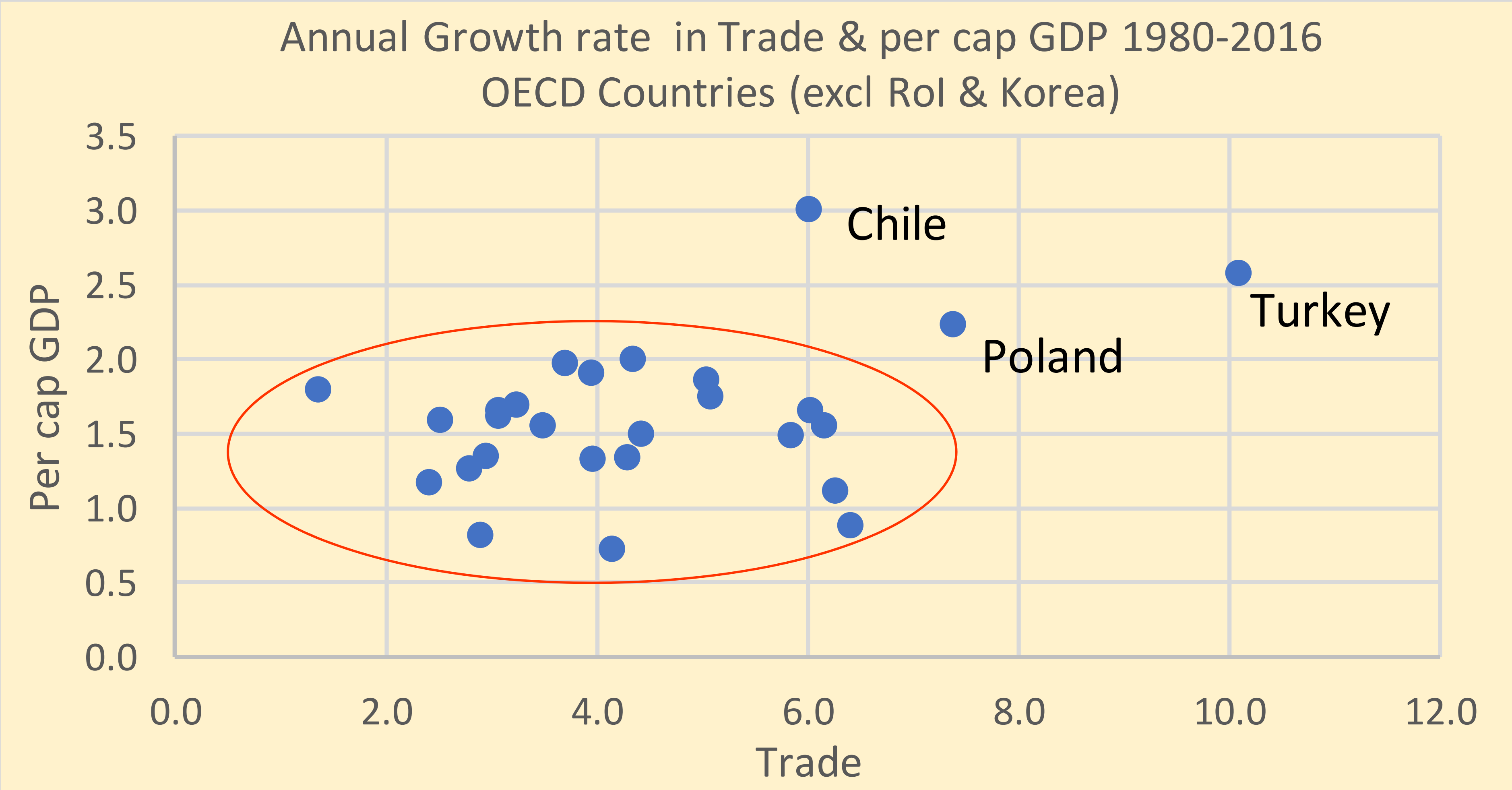
MORE RECENT DATA FOR OECD COUNTRIES SHOWS A WEAK RELATIONSHIP BETWEEN TRADE AND PRODUCTIVITY



MORE RECENT DATA FOR OECD COUNTRIES SHOWS A WEAK RELATIONSHIP BETWEEN TRADE AND PRODUCTIVITY



NO RELATION BETWEEN TRADE AND PRODUCTIVITY FOR RICH COUNTRIES



HOW DID HMT GET IT WRONG?

- HMT used a trade-gain estimates for all EU members not just the UK despite knowing that UK trade gains from EU membership were much smaller than for continental EU members – from an unpublished HMT paper of 2005
- HMT used estimates for losses of FDI based on an analysis dominated by mergers & acquisitions rather than physical investment
- HMT assumed a relationship between trade and productivity which appears to exist only for poorer and emerging economies
- As a result the HMT estimate for GDP may be over-estimated by 3 or 4 times
- HMT takes no account of migration changes and greatly over-estimate the loss of per capita GDP

CEP FORECASTS OF BREXIT IMPACT

- Most other forecasts rely on a similar gravity model approach and suffer from the same shortcoming e.g. OECD and LSE-CEP

- CEP also conducted a **static** exercise using a 'general equilibrium' model. This generates a tiny impact for higher tariffs and a small impact for existing non-tariff barriers. The overall impact is 'beefed up' with an assumption that there will be substantial future gains from reductions in trade costs within the EU

- Their long-term dynamic estimate relies on gravity-model estimates for trade and the usual link between trade and productivity. This gives a large estimate of lower per capita GDP of 6-8% even in a scenario in which the UK joins EFTA

DIRECT ESTIMATES OF TRADE LOSSES FROM BREXIT

- Several studies have made direct estimates of the potential loss of trade in the event of Brexit with a return to WTO rules.

- These examine the increase in prices due to 6,000 individual tariffs and apply sectoral elasticities to calculate loss of exports.

- ERSI in Dublin calculated a 22% loss of UK exports, but a second study suggested losses only a quarter as large, or even a gain if currency changes were included.

- World bank/UNCTAD calculated a small loss of 2%

RECENT ESTIMATES OF ECONOMIC IMPACT OF BREXIT

- Brexit impact estimates have been discredited and the UK Government has refrained from further estimates but in Jan 2018 two devolved authorities issued new reports.

- CE did a report for the **Mayor of London**. Their (sensible) global econometric model generated small negative impacts for GDP and minimal losses (or gains) for per capita GDP. *The latter got no publicity*.

- **Scottish Government** published a report with estimates from an adjusted NIESR NiGEM general equilibrium model. The assumptions put into this model encompassed all of the flaws on the Treasury analysis and reported similarly exaggerated estimates for the impact of Brexit.

CBR FORECASTS: KEY ASSUMPTIONS

- **Small 0.25% 'uncertainty' reduction** in business investment and household consumption for 2017, diminishing through 2018-19

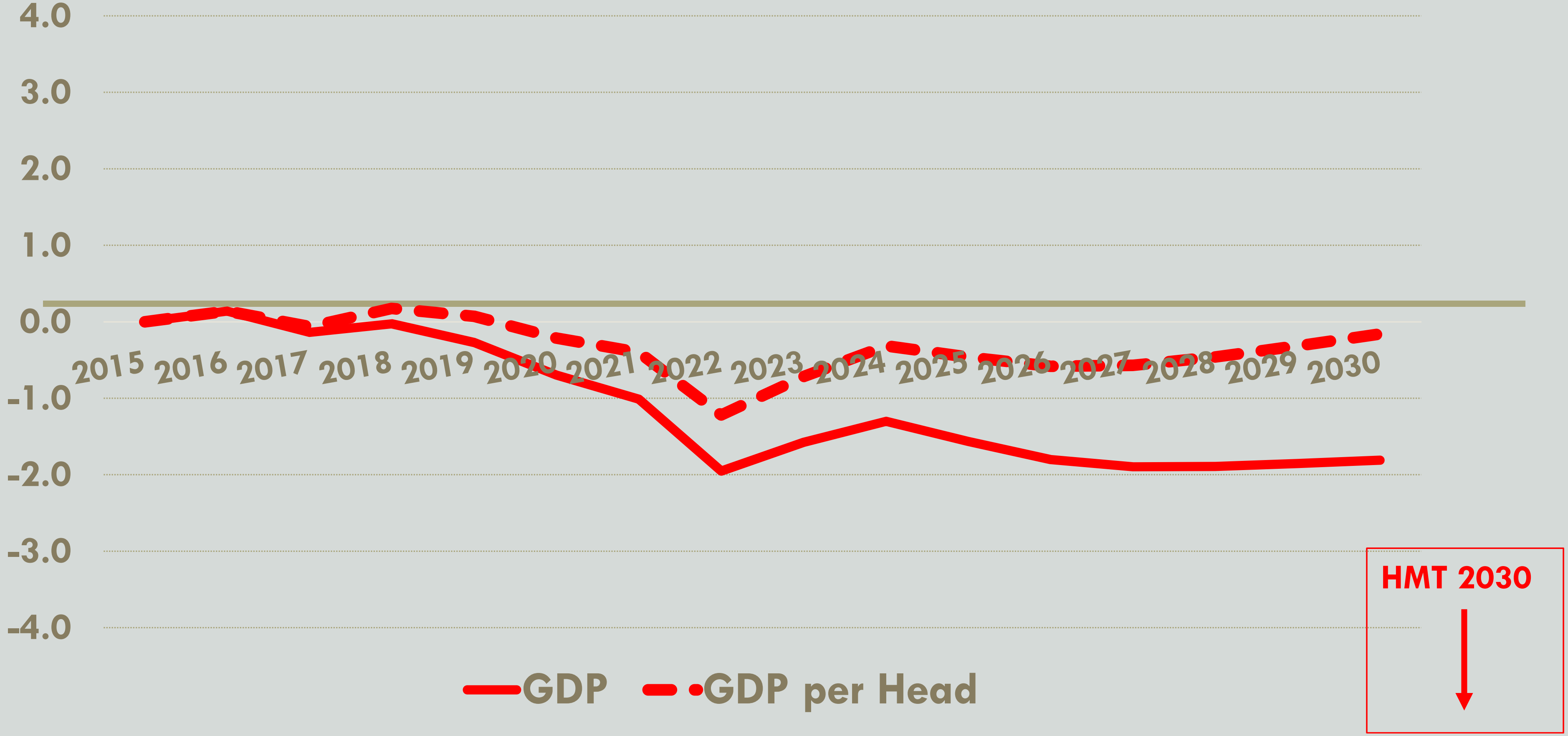
- Assume **2 year transition & free trade agreement** in 2021.

- **Loss of 10% of EU trade from 2021 with slow replacement in non-EU markets (ie 5% loss in total exports).** Retaliatory UK tariffs lead to reduction in imports from EU but half are replaced by non-EU imports

- **Interest rates remain very low** and public spending a little higher

- **Brexit effect on net migration is a falls of 35K,** but sterling depreciation add s further declines (initially 55K)

CBR FORECASTS (% DIFFERENCE FROM BASELINE)



CONCLUSIONS

- Most estimates of economic impact of Brexit are based on inappropriate applications of gravity models and on a productivity impact which probably does not exist.
- In each case the effect is to exaggerate the negative economic impact
- This is likely to be a result of a mix of unconscious bias and political expectation and perhaps a degree of group-think
- HMT should not have been asked to conduct what is essentially an academic exercise. Their refusal to discuss their work is unacceptable
- Our prediction is that the outcome will involve minimal loss of per capita GDP