

# Economics of Brexit

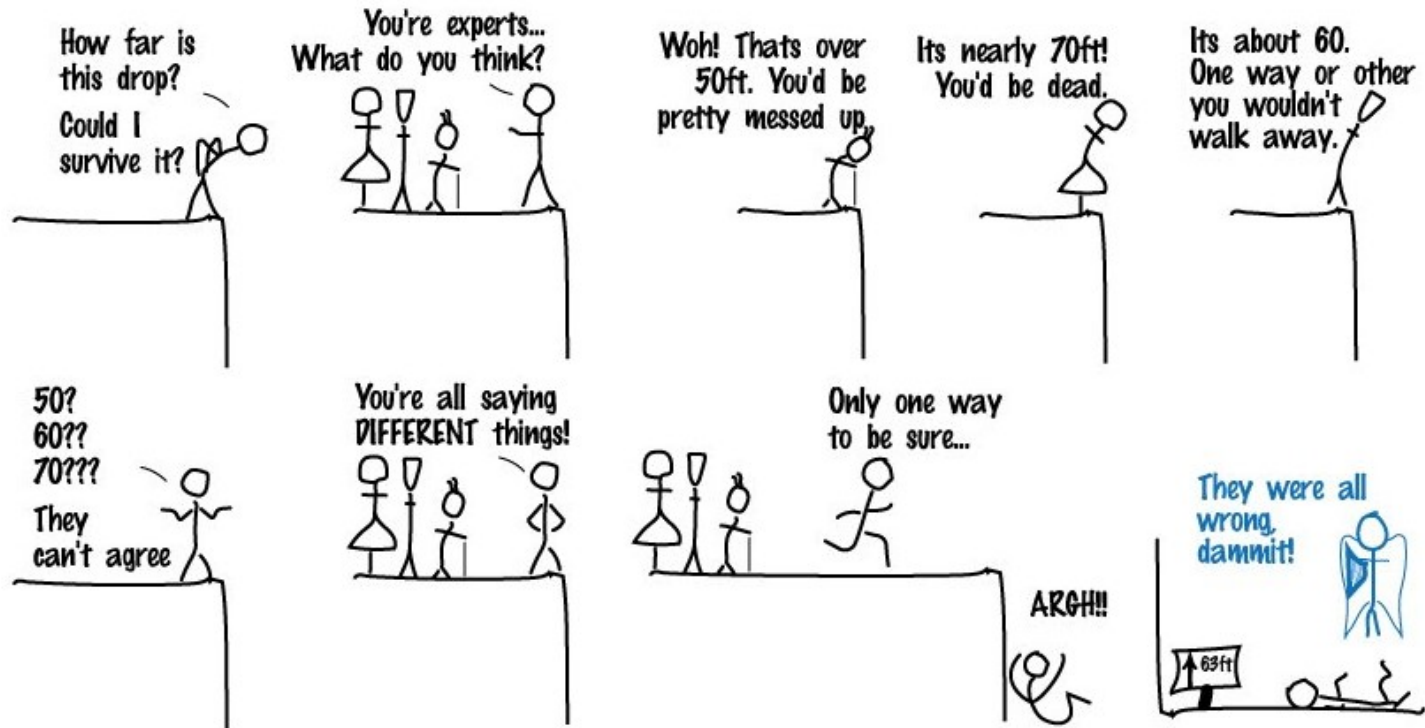
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**Builds on joint work with: Swati Dhingra, Gianmarco Ottaviano,  
Tom Sampson & Jonathan Wadsworth**

**Brookings Panel September 15<sup>th</sup> 2016**



# The Big Question?



Experts in the Bank of England, IMF, OECD, CBI, Institute for Fiscal Studies, World Bank, Oxford Economics, Centre for European Reform, Treasury, and The LSE Centre for Economic Performance, ALL forecast a HUGE HIT if we leave the EU.

They don't agree about HOW HUGE.

There's one way to find out!

# Secretary of State for Justice, Michael Gove



# Secretary of State for Justice, Michael Gove, compared us to Nazi scientists

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## Gove's Nazi jibe at pro-EU experts

Will Humphries | Kevin Rawlinson

June 22 2016, 12:01am, The Times



Michael Gove compared the Remain campaign's reliance on experts to Nazi denunciations of Albert Einstein

REUTERS

Michael Gove urged the UK not to rely on the opinions of experts warning against Brexit yesterday, comparing their interventions to how the Nazis forced scientists to denounce Albert Einstein in the 1930s.

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# How will Brexit effect UK economy?

- Started work in 2013 after Cameron's "Bloomberg" speech. Team of CEP trade, IO & Labor economists to think about economic impacts of Brexit:
  - Develop appropriate framework(s)
  - Look at different post-Brexit scenario
- These are long-run effects after Brexit has occurred (i.e. post conclusion of Article 50). We abstracted from short-term costs of uncertainty, transition, etc.

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- **Elements of assessment:**
  - **Max Net fiscal saving** (~0.3% of GDP)
  - £350m per week is gross of "Thatcher" rebate & contributions to farmers, science, small business, regional aid, etc.



# How will Brexit effect economy?

- **Elements of assessment:**
  - Max Net fiscal saving (~0.3% of GDP)
  - **Trade**
  - Foreign Direct Investment
  - Immigration
  - Distribution
  - Regulation

# Static Trade Model Analysis

- Trade creates gains from specialization
- Build standard modern structural GE trade model (Costinot & Rodriguez-Clare, 2013)
  - 'Gravity' relation: Trade between countries increases in economic size & reduces in “distance” (trade costs from geography, tariff & non-tariff barriers)
  - Allow for product differentiation: e.g. German built car is **not** the same as Chinese built car
  - Computable General Equilibrium (CGE) model
- **WIOD Data**: Divide world into 35 regions & 31 sectors; full bilateral trade matrix (with intermediates)
- Forward looking – Consider different tariff & non-tariff barriers which vary depending on post-Brexit negotiations



# Static trade model Results (net of fiscal saving)

1. **“Optimistic” (EEA Norway): -1.3% welfare loss**
  - EFTA (Switzerland) similar (less access, but lower fiscal transfer)
2. **“Pessimistic” (WTO): -2.6% welfare loss**
3. **WTO & unilateral tariff liberalization: -2.3% welfare loss**  
**“Britain Alone”** (*Economists for Brexit, EfB* policy)
  - Other EU countries also lose, trade diversion gives (small) benefits to non-EU countries
  - “New trade deals” between UK & non-EU countries unlikely to offset

# Dynamic trade effects

- So far, our static approach ignores how trade has positive effects on productivity, innovation, management, etc.
- Since harder to incorporate in quantitative theoretical model we take a simpler “reduced form” approach
  1. Empirical effects of EU on trade relative to EFTA from Baier et al (2008)
  2. Empirical effects of lower trade costs on GDP (Feyrer, 2009)
- Together, imply Brexit negative effects much larger than just static losses: **6.3% to 9.5% fall in GDP**
- Others have used much more sophisticated versions of this (HMT, NIESR, PWC, etc.) & consistent with CEP find bigger effects than static

# Some other ways in which Brexit effects economy?

- **Foreign Direct Investment**

- Estimate new gravity model of FDI (implies a -22% fall due to Brexit)
- Use Alfaro et al (2004) to estimate impact: 3.4% GDP fall
- Structural model of car sector (gravity + FDI choice)

- **Immigration**

- Analysis at local area level 2008-2015 of effects of EU immigration on jobs & wages of UK born. No significant negative effects on jobs, wages or inequality

- **Distribution**

- Combine structural static model with spending pattern by household income & demographic groups
- Pain of Brexit evenly shared. Middle income groups do a bit worse than richest & poorest deciles

# Summary

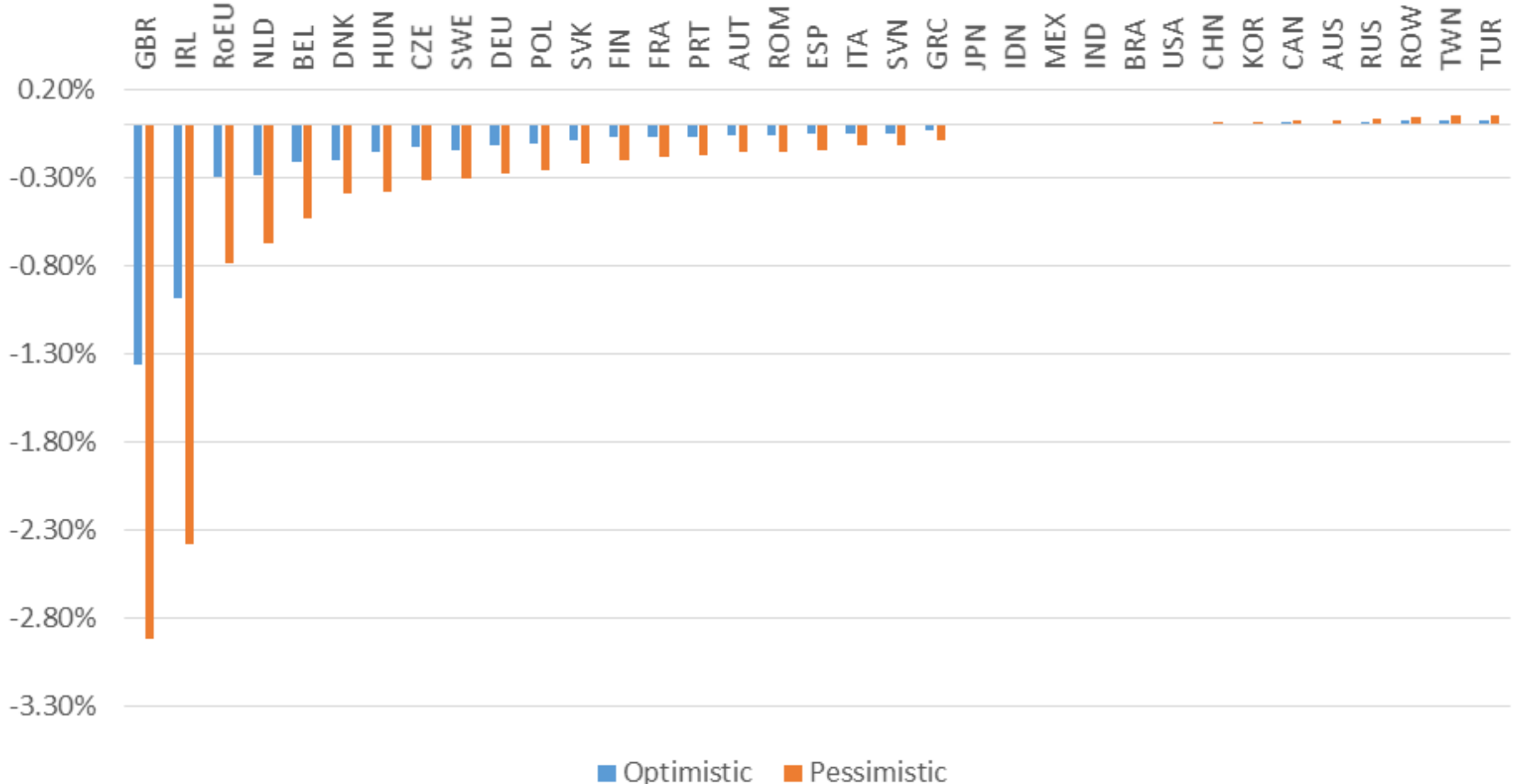
- Brexit bad news for UK (& EU) economy
- Political impact on rest of EU & world
- Why did people vote against their economic interests?
  - **Immigration**
  - Information/media (cf. US election)
  - “Sovereignty”

**Back Up**

# Some Further reading

- **CEP BREXIT webpages:** <http://cep.lse.ac.uk/brexit/>
- **Reports**
  - **Trade** <http://cep.lse.ac.uk/pubs/download/brexit02.pdf>
  - **FDI** <http://cep.lse.ac.uk/pubs/download/brexit03.pdf>
  - **Immigration**  
<http://cep.lse.ac.uk/pubs/download/brexit05.pdf>
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  - **Blogs** <http://cep.lse.ac.uk/BREXIT/blogs.asp>
  - **Why UK left** <http://blogs.lse.ac.uk/politicsandpolicy/the-aftermath-of-the-brexit-vote-a-verdict-from-those-of-those-experts-were-not-supposed-to-listen-to/>

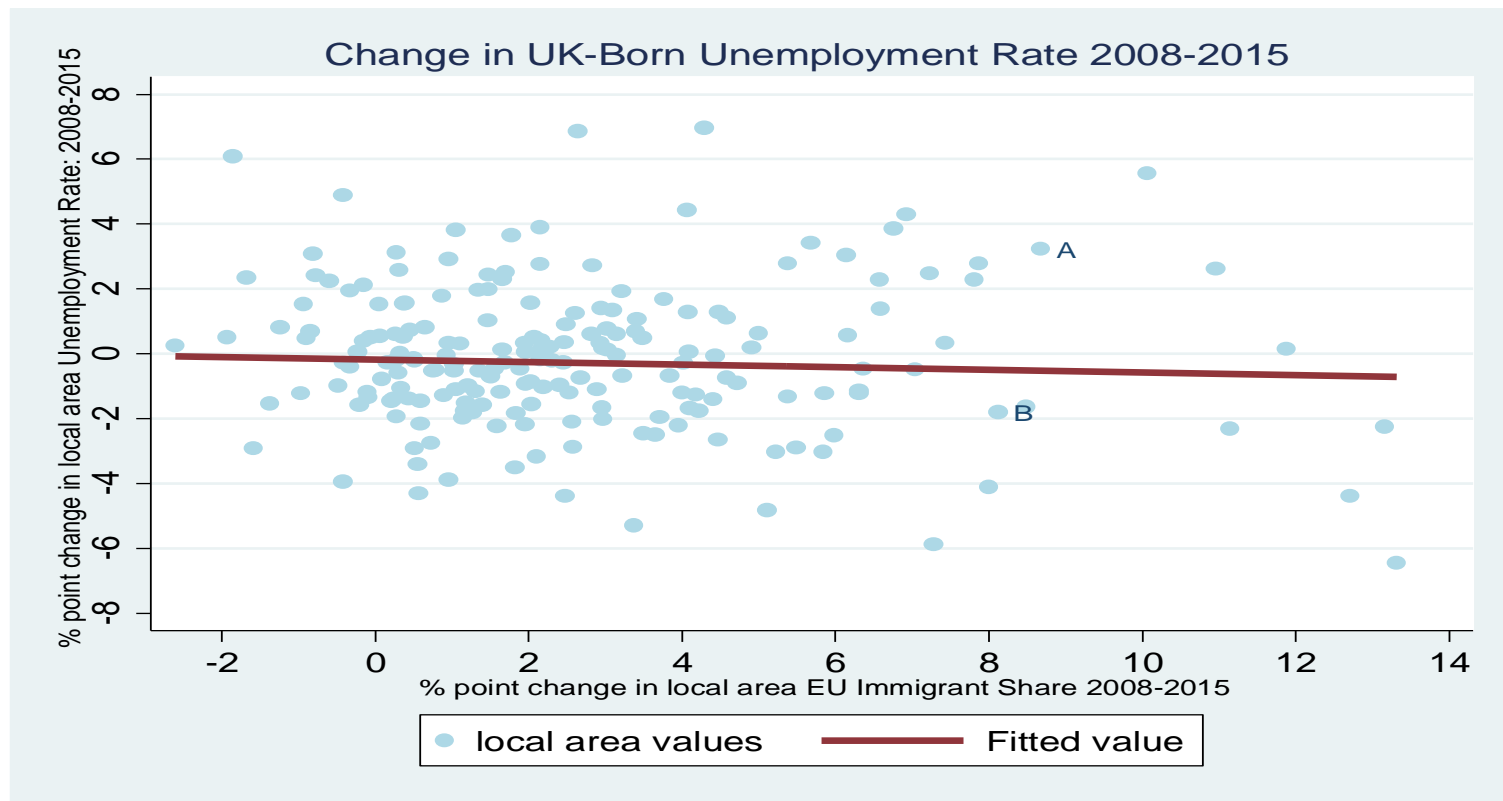
# Welfare effects on other countries



**Note:** Fiscal contributions not included as we do not know how the fiscal costs of Brexit would be distributed across EU member states.

# No relationship between EU immigration & unemployment of the UK born

**Figure 8: Unemployment rates of UK-born & EU immigration**

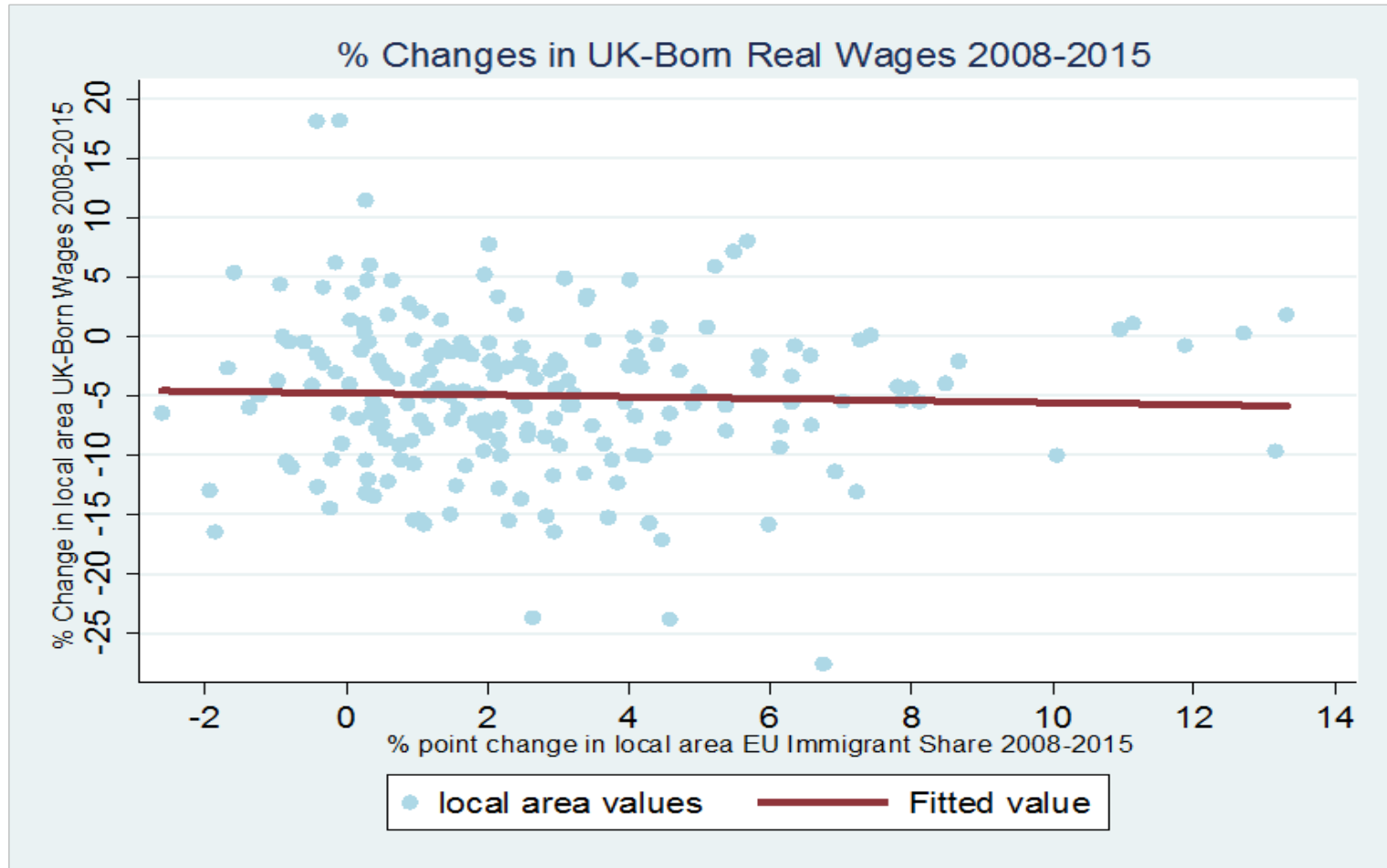


**Source:** CEP analysis of Labour Force Survey.

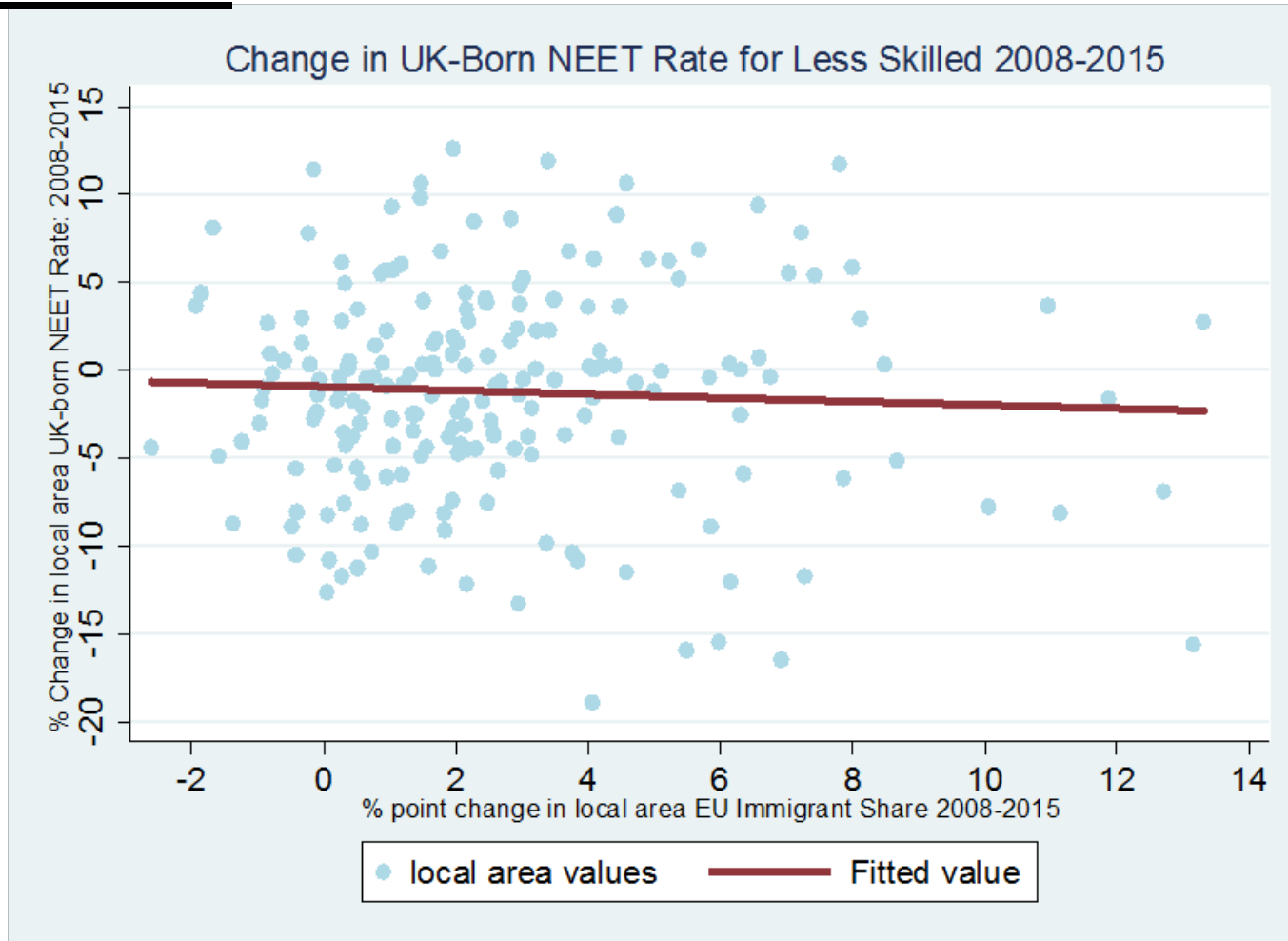
**Notes:** Each dot represents a UK local authority. The solid line is the predicted 'best fit' from a regression of changes in unemployment on the change in share of EU immigrants in each UK local authority. These are weighted by the sample population in each area. Slope of this line is  $-0.04$  with standard error of  $0.05$ , statistically insignificantly different from zero.



# No relationship between EU immigration & wages of those born in the UK



# No relationship between EU immigration & NEET rate of less educated



# No relationship between EU immigration & wages of less educated

