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ECONOMIC POLICY DIGEST

Education and deprivation explain the Brexit vote better than immigration

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Demography and education are a much better explanation of the 'Leave' vote in the June 2016 Brexit referendum than the decline in public services or recent immigration. These are the conclusions of *Sascha O. Becker, Thiemo Fetzer and Dennis Novy* in their paper **Who Voted for Brexit? A Comprehensive District-Level Analysis.**

The findings are based on an analysis of the referendum voting results across 380 local authority areas. The authors related the vote to fundamental socioeconomic features of these areas. Though the findings are correlations, not causation, they show which local factors were related to a high Leave vote.

Demography and education – the age and qualification profiles of the population in each area – can explain just under 80% of the Leave vote share. Surprisingly, and contrary to much of the political debate in the run-up to the referendum, exposure to the EU in the form of migration, trade and EU transfers to UK regions has relatively little predictive power. All factors relating to EU exposure together explain under 50% of the variation in the Leave vote share. The local authorities experiencing more fiscal cuts were more likely to vote in favour of leaving the EU, though the areas that faced the deepest cuts under austerity were already the most deprived.

The analysis suggests that the Brexit voting outcome was driven by long-standing conditions rather than short-term changes. A population that is less educated, older and has below-average public services finds it harder to deal with the challenges of economic and social change.

FOUR GROUPS OF VARIABLES

Four groups of influences are often offered for the surprise Leave vote. As figure 1 shows, the analysis suggests that they are not equally convincing.

Economic structure Variables in this group include the employment share of manufacturing, unemployment and wages. This group of variables explains just under 70% of the votes to Leave.

Public services and fiscal consolidation Using variables that measure the state of public services and fiscal consolidation explains just over half of the Leave vote. In the wake of the global financial crisis, the UK coalition government brought in wide-ranging measures to reduce government spending and the fiscal deficit. At the level of local authorities, spending per person fell by 23.4% in real terms, on average, between 2009/10 and 2014/15. Fiscal cuts varied dramatically across local authorities, ranging from

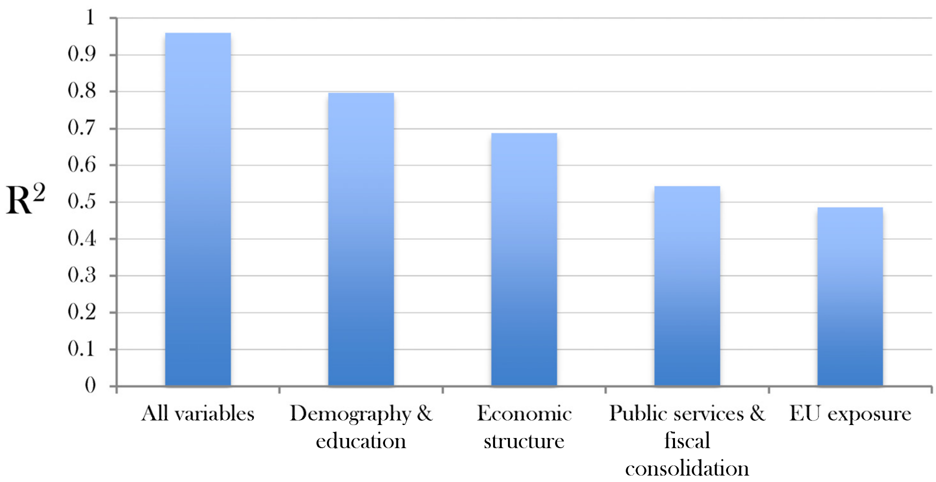

Figure 1. The four groups of influential variables for the Leave vote
Explanatory power for the Leave vote shares across the UK in the 2016 Brexit referendum, using different groups of variables.

Demography and education Using variables that measure the age and qualification of the population in each voting area explains just under 80% of the Leave vote share.

46.3% to 6.2%, but were mainly implemented as proportionate reductions in grants across all local authorities. Reliance on central government grants is ultimately a measure of deprivation, with the poorest local authorities being more likely hit by the cuts.

EU exposure Even including immigration, using variables related to EU exposure alone has the least explanatory power. The authors found some evidence that the growth rate of immigration from the 12 countries that joined the EU in 2004 and 2007 is linked to the 'Leave' vote share. Immigration from other countries, either inside or outside Europe, did not explain the Leave vote.

Overall, a complex picture arises about the challenges of adapting to social and economic change – challenges that differ across local authority areas.

A hard Brexit will cost British households £1,773 a year

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Whatever happens in the UK's general election campaign and the Article 50 negotiations that follow, a hard Brexit — in which the UK leaves the Single Market, withdraws from the Customs Union, and likely trades with the EU under World Trade Organization rules — means a reduction in income of 2.7% for every British citizen, according to a new paper **The Costs and Benefits of Leaving the EU: Trade Effects**. This will cost the average British household £1,773 per year. When factoring in the effect on investment and efficiency, the cost could be more than three times as much.

It might be assumed that the 48% of people who voted to remain in the EU last June, and many of the 52% who voted to Leave, would prefer a 'soft Brexit' instead. In this case the UK would follow the example of a country like Norway, which is outside the EU but inside the Single Market. If they got their wish, this would halve the fall in income to about 1.3%. But whether Brexit is hard or soft, Britain will be worse off.

The authors of the paper — *Swati Dhingra, Hanwei Huang, Gianmarco Ottaviano, João Paulo Pessoa, Thomas Sampson, and John Van Reenen* — from the Centre of Economic Performance at the London School of Economics, and MIT, found that for both extreme versions of Brexit, as well as many in-between cases that they costed, reductions in budget payments to Brussels will be easily outweighed by the costs of reduced trade with the EU, which accounts for about half of all British trade. The research uses a conventional trade model that focuses on static gains from specialisation of trade, and subtracts the saving from sending less money to Brussels. In the Brexit scenarios, trade costs increase due to higher tariffs and non-tariff barriers.

NOT JUST THE UK, NOT JUST THE RICH

The UK's former partners in Europe will lose too, whatever happens. Figure 1 shows that other EU countries also lose from Brexit, especially those like Ireland who trade a lot with the UK. The rest of the world will gain though, as citizens of countries such as Russia and China will benefit from trade diversion.

This is unfavourable, but the outcome looks much worse when the dynamic effects of trade on productivity and innovation are factored in. The Brexit losses

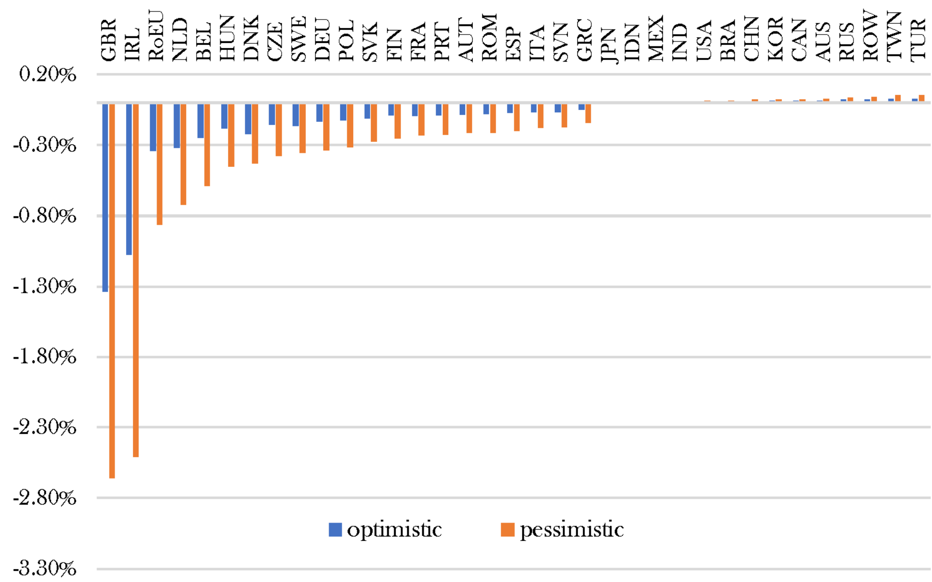

Figure 1. The Impact of Brexit on the welfare of different countries around the world
The figure plots the welfare loss by country for the optimistic 'soft Brexit' and pessimistic 'hard Brexit' scenario. The modelling follows Dhingra et al. (2017). The figure assumes that the other EU countries fill the budget hole left by the UK proportionally to their GDP. ROW is 'Rest of world' and RofEU is 'EU countries not explicitly mentioned in the figure'.

triple to between 6.3% and 9.4%. A good chunk of this is a result of lower foreign direct investment (FDI). The UK attracts more FDI than any other European country, partly because it offers a flexible labour market with easy access to the rest of the EU. For example, American banks can locate in the City of London and then do business throughout the EU by taking advantage of the Single Market. Brexit will threaten these rights.

The main estimates relate to the average person, but Brexiteers have argued that Brexit will be good for those on median or low wages. They would be helped by a hard Brexit that slashes EU immigration, they argue. Hence they reject the soft Brexit option of staying in the Single Market, with continued free movement of labour.

The paper shows that this, too, is wrong. European immigration has not harmed the job or pay prospects of the UK-born. Those local areas in Britain that experienced the greatest inflow of EU migrants have not had faster increases in unemployment or inequality than others. Since EU immigrants are on average better educated, more likely to work, and less likely to claim benefits than the British-born, they have effectively subsidised public services. The problem has been that the UK government chose not to use these fiscal benefits to relieve pressure on public services. This led supporters of Brexit to blame the EU for problems that had domestic origins.

The analysis of the impact of Brexit across the income distribution shows that the pain is very democratically shared. Poor and middle-income citizens lose about as much as the rich.

By pursuing a hard Brexit, the government will harm the working class voters who helped swing the vote for Leave. For them, parting will bring sorrow – but no financial sweetness.

The two papers in this edition of the *Economic Policy Digest* were presented at the 65th panel meeting held in Valletta on 21-22 April 2017.
Both are scheduled to appear in the October 2017/no. 92 issue of the journal.
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