

# How could Brexit affect poverty in the UK?

This briefing assesses the ways that Brexit may affect families in poverty as well as the other forces that could help or hinder efforts to solve poverty across the country.

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#### What you need to know

- The Brexit vote reflected deep-seated anger about economic marginalisation, poverty and lack of opportunities. It is unacceptable that 14 million people are locked out and left behind by poverty as Britain prepares for Brexit. It is highly unlikely that leaving the European Union (EU) will solve these problems.
- Child poverty is set to increase across the country, and to affect poorer areas
  of the UK worst. This rise predates the Brexit vote and is driven by domestic
  decisions about housing, social security and the labour market. However,
  many of the worst-hit areas are also highly exposed to changes in trade with
  the EU and any loss of regional funding.
- As the UK-EU trading relationship becomes incrementally more distant, there are increasingly strong risks of price rises, falls in real wages, lower employment and lower tax revenues.
- Poverty rates are not predicted to be greatly affected by Brexit; but this
  depends on future governments protecting low-income families from the
  effects of rising inflation by uprating benefits and tax credits to cover rising
  costs.
- Two years on from the vote to leave the EU, it is only right we unlock opportunities so more families are not left behind. The UK Government must deliver more affordable housing, better jobs and an improved social security system to meet the expectations of those who voted to leave the EU.
   The time and energy being spent on Brexit must not reduce our capacity to deliver a country that works for everyone after Brexit.

#### Introduction

In June 2016 the Joseph Rowntree Foundation (JRF) published a briefing setting out the range of ways in which the outcome of the EU Referendum could affect poverty in the UK. This drew on the best available evidence and examined the range of possibilities, opportunities and risks arising from the UK voting to leave or remain in the European Union (EU). Then, as now, JRF did not take a view about how the British public should have voted.

We identified five main areas where the decision to leave or remain in the EU could have a significant impact on UK poverty:

- the size, shape and performance of the UK economy and the consequences of this for prices, jobs and pay
- the UK Government's budget. Factors affecting this included savings from not contributing to the EU Budget, the cost of funding activities currently paid for jointly by EU members, and the impact on government finances of higher or lower economic growth
- immigration, including the effect of any changes to immigration rules to reduce migration from the EU. The evidence suggested that this would have little impact on employment but could have a small effect on wages and could also affect the funding and staffing of the UK's public services
- regulation, including employment rights
- regional inequalities. The economic impacts of leaving the EU would be unlikely to be felt in the same way across the whole country. Regions vary in the extent to which their economies are connected to the EU through imports and exports. Some also receive funding related to poverty reduction through the European Social Fund, Youth Employment Initiative and European Regional Development Fund.

The eventual effect of leaving the EU on all these areas is still highly uncertain. It is impossible to gauge the impact fully until we know more about the shape of the eventual deal and how UK governments make use of any new powers.

This means that we cannot state with any certainty how leaving the EU will affect the future level and nature of poverty in the UK. However, we can use the best available evidence and tools to analyse a range of outcomes that might arise from trading arrangements emerging from current and future negotiations, including those set out in the latest White Paper.

This enables us to explore the risks or opportunities that Brexit presents to the mission of solving UK poverty. It also allows us to compare these potential impacts on poverty to the possible effects of acting on long-standing domestic drivers of UK poverty, such as housing, work and social security.

Before setting out the findings of our analysis of the possible impacts of Brexit on UK poverty, it is important to understand the current situation and how poverty is projected to change without the impact of new trading arrangements and other factors.

#### The poverty outlook

The last two decades saw significant falls in poverty among pensioners and children. However, in the last few years poverty rates among children and pensioners have shown a sustained rise for the first time in 20 years. Over 400,000 more children live in poverty than in 2011/12. Projections of changes to poverty rates over the next few years<sup>2</sup> suggest that child poverty will rise significantly, pushing more than a million more children into poverty by the end of the parliament. These rising poverty rates are driven by high housing costs, low-paid, insecure work and changes to social security, which reduce the support available to many low-income families. In particular, the freeze on most workingage benefits and tax credits, which was introduced in 2016 and is due to stay frozen until 2020, will result in 470,000 more people living in poverty in 2020/21.

Poverty rates vary greatly across the country, and projected increases in poverty are also expected to vary geographically. The northern regions of England, the Midlands, Wales and Northern Ireland are projected to see the greatest increases in child poverty. Some of these are also regions with particularly great exposure to the potential impacts of changes in the UK's trade with the EU and regional funding. The economies of the North East, Northern Ireland and the East Midlands are heavily concentrated in sectors that would be affected by increases in tariffs and non-tariff barriers to trade with the EU. Cornwall, Devon, Wales, Northern Ireland and parts of the North East, North West and Yorkshire receive significant funding from various EU schemes.

# Analysis of the potential impacts of Brexit on UK poverty

As discussed above, there are many ways in which Brexit may affect UK poverty. Here we focus on how potential new relationships with the EU could affect three key factors: changes to prices and the cost of living, wages and employment. There are many other factors that are not included in the modelling that underpins this analysis, including the impact of any changes in confidence on investment and business activity.

A range of organisations have used economic modelling to project impacts on the economy due to alternative trading arrangements with the EU and other trading partners. Most modelling efforts<sup>3</sup> have focused on estimating GDP impacts for the average household. None have focused specifically on potential impacts for people in low-income households through changes to the cost of living, jobs, pay and government spending. This analysis concentrates on this area.

Results from modelling potential Brexit economic impacts are subject to a high degree of uncertainty, reflecting the lack of historical precedence of such an event. Whilst there is readily available data on some of the important factors involved – such as the size of current and potential future tariffs – there's much less certainty over other important factors such as foreign direct investment, migration, and non-tariff barriers.

In addition to data limitations, different modelling approaches in existing studies have found a wide range of results for the potential impact of Brexit. The modelling approach that underpins this analysis finds more moderate impacts of Brexit on the economy compared to other similar studies. The approach is described in detail in the <u>analytical report</u> produced by Cambridge Econometrics, but two notable differences are described below.

First, the approach to estimating the impact of higher barriers to future trade with the EU has a significant bearing on the results. Cambridge Econometrics use trade relationships from historical data to estimate the impact of higher barriers on UK trade, whereas other analyses use a theoretical approach where trade impacts are determined by the size and distance of trading partners.

Second, the modelling in this study doesn't make assumptions about increased uncertainty or reduced business confidence driven by Brexit. The investment effects we included are based on quantitative analysis of Brexit scenarios in NIESR (2016), which reflect the impact of more limited access to EU markets.

#### Brexit is already having an impact

Whilst the UK has not yet left the EU, the effects of the withdrawal process are already being felt. Following the 2016 EU referendum, the pound fell in value by roughly 10%, resulting in consumer price inflation as the cost of imported consumer goods and services rose. Breinlich et al (2017) estimate that the reaction to the EU referendum result caused a 1.6 percentage point increase in the inflation rate facing households in the bottom quintile of income. This has effectively increased the cost of living for the average UK household by over £400 annually.

#### Modelling possible future Brexit impacts

JRF commissioned Cambridge Econometrics to model a range of post-Brexit trading arrangements, providing detailed results on the potential impacts on the cost of living, wages, and employment looking ahead to 2030. These scenarios are set out in Annex B. The results of this modelling then enabled us to estimate the potential impacts of these on the rate of poverty in the UK.

The following are the main factors that vary within the different scenarios:

- **Non-tariff barriers** these reflect factors such as rules-of-origin checks, border controls and regulatory divergence. These are the greatest drivers of the economic impacts of Brexit. Any change in relationship with the EU is assumed to result in some degree of change to these.
- Tariffs only in the 'No deal' scenario do tariffs apply for goods and services exports to and imports from the EU, as the UK and EU revert to World Trade Organisation 'Most Favoured Nation' tariff levels. Empirical estimates are taken from Dhingra et al (2017).
- Immigration in scenarios where the UK is expected to leave the Single Market (all scenarios but 'Norway') Freedom of Movement is assumed to end, resulting in lower net migration. This has a small impact on wages. It does not change employment since the empirical evidence suggests that immigration does not affect the overall employment rate.<sup>4</sup>
- **Investment** estimates of changes in investment are moderate and reflect lower foreign direct investment in response to reduced access to EU markets, based on empirical findings (NIESR, 2016). No assumptions have been made about increased uncertainty or reduced business confidence. We have also tested the effect of assuming that investment is not affected at all by changes to the UK's trading relationships. Making this assumption has a negligible impact on the estimated overall poverty rate of less than 0.1%.

The modelling by Cambridge Econometrics finds that as the UK-EU trading relationship becomes incrementally more distant there are increasingly negative impacts on prices, real wages, employment, and government finances. Each of these are discussed below.

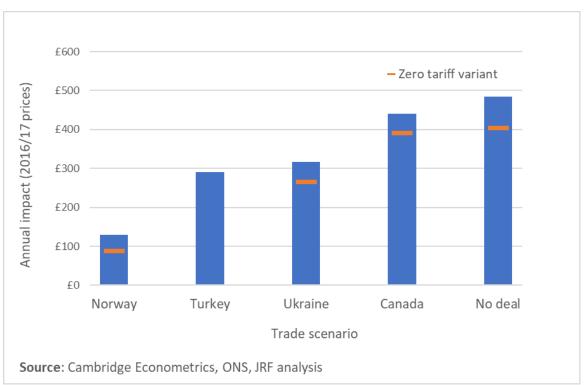
#### **Prices**

As trade barriers increase and the cost of trading rises, the final prices of consumer goods and services in the UK increase. The size of this increase is determined by several factors, details of which can be found in the accompanying analytical report. The cumulative impact on overall prices ranges from 0.5% in the 'Norway' scenario to 3.0% in the 'No deal' scenario. Our analysis focuses on the price rises that may be experienced by people in the poorest fifth of the population. This shows that the overall cost of living for them may rise by between £130 and £480 per year. This assumes a smooth exit from the EU, with no exchange rate shock at the time of leaving. In the event of an exchange rate shock and a further fall in value of the pound, the impact on living costs could be greater than estimated.

For each of the main scenarios, we have explored a 'zero import tariff' variant in which import tariffs are reduced to zero and the UK has agreed a comprehensive free trade deal with our largest non-EU trading partners: China and the US. These scenarios find a slightly lower estimate of price rises, as indicated on Chart 1 below.

See Annex A for full results, and Annex C for more details on the methods used to calculate this.

Chart 1 – Annual cost of living impacts for low-income households across the Brexit scenarios



#### Wages

For all scenarios in which the UK leaves the Single Market, we assume European Economic Area (EEA) net migration will follow the Office for National Statistics' (ONS) 'central' trajectory, leading to reduced net migration compared to the baseline. The empirical literature<sup>5</sup> finds small but detectable impacts on wages due to immigration, with the impacts varying for people in different occupations. Using this, we estimate that reduced migration leads to average wage rises of around 0.2%.

This estimate includes the potential effect of wage bargaining increasing wages in response to the price rises described above. This effect is much more significant in increasing nominal wages than lower migration.

However, across all scenarios, prices rise by more than wages, so there is a fall in real wages (i.e. wages after inflation is taken into account). We focus on real wages as they are more relevant for describing standards of living. In real terms, wages fall by between 0.2% and 1.0% across the different scenarios.

For example, under the 'No deal' scenario, if somebody working in a skilled trade occupation earned £12 per hour, we expect their nominal wage to rise to £12.30, and their *real* wage to fall to £11.90. Likewise, for somebody working in a caring occupation, if their initial wage is £8 per hour, following Brexit their wage rises to £8.10 and their real wage falls to £7.90.

#### **Employment**

The empirical evidence shows that migration levels do not tend to affect the overall employment rate among the existing population.<sup>4</sup> Therefore, in our analysis, where scenarios include lower migration, this does not lead to a higher employment rate. However, there are impacts on the employment rate across the scenarios because the estimated increases in trade costs lead to reduced business activity and economic output. These impacts are relatively small, however – the largest (under the 'No Deal' scenario) being a reduction in the employment rate of 0.5 percentage points.

#### How might economic changes affect UK poverty?

There are many ways in which poverty could be affected by the nature and size of the UK's economy after Brexit, as discussed above. We have used the modelling results described above along with the IPPR Tax-Benefit model to estimate how changes to prices, wages and employment arising from our most likely trading arrangements after the UK leaves the EU might affect poverty. For more information on the IPPR Tax-Benefit model, see Annex B.

The impact of Brexit on poverty depends on how people on the lowest incomes are affected relative to those who are better off. Overall, the effects of Brexit on prices, wages and employment are expected to be felt across the whole income distribution, rather than impacting disproportionately on those at the bottom.

Therefore, our modelling finds that the effects of Brexit on poverty are small for most scenarios. In the 'No Deal' scenario, which leads to the greatest impacts on prices, how this affects the lives on those on low incomes will be largely driven by whether the government of the day chooses to protect them by uprating benefits and tax credits to keep up with inflation. If the government does uprate benefits and tax credits with inflation to protect low-income households from Brexit impacts, poverty may fall slightly, since those at the bottom will be somewhat protected while those who are on higher incomes are not.

However, if the government allows benefits and tax credits to fall behind inflation, low-income households will be left exposed and disproportionately affected, meaning they would fall further behind the rest of society and poverty would increase. For example, our modelling finds that the price inflation caused by a 'No deal' scenario would cause an additional 200,000 people to be in poverty if the government updated benefits and tax credits only by 2% rather than by the higher rate of inflation caused by Brexit. If the government updated benefits and tax credits by less than 2%, the rise in poverty would be much larger. It is therefore imperative that government protects low-income households from the rising cost of living as a result of Brexit. This will be made more challenging if government revenues fall, as the modelling suggests, by between 0.2% and 2.3%. See the table in Annex A for the full results.

# Comparing the impact of Brexit with action on housing, work and social security

As discussed earlier, UK poverty rates are mainly driven by domestic factors, in particular employment, wages, housing costs and support through social security and other public services. To put the potential effects of Brexit into context, we have examined the effects on poverty of illustrative scenarios of a number of domestic policy changes.

#### Beyond Brexit: the impact of domestic policy on UK poverty

The main drivers of poverty in the UK are domestic. Decisions taken by governments, employers, businesses and others create the systems that lock people into poverty. Changing these systems can both prevent people being swept into poverty and enable them to move out. This is the case no matter what post-Brexit economic relationships the UK establishes with the EU and its other trading partners. The three biggest drivers of UK poverty are work, housing costs and the social security system. By way of comparison, if we could make significant progress on each of these issues, we might have more impact on poverty than any of the most likely scenarios for our post-Brexit trading arrangements. We have used the IPPR Tax-Benefit model to simulate broad changes in these outcomes, to compare the effect these would have on poverty.

#### Work

Over the last 20 years, working-age poverty in the UK has become increasingly dominated by poverty among working families. Rising employment has been very welcome, but low pay and insecure work lock many working families into poverty. Supporting more people into work and improving pay, security and progression are central to solving UK poverty. One example is the low employment rate among disabled people, despite many being very keen to work. Disabled people are much less likely to be in work, and much more likely to live in poverty than those who are not disabled. The Government has committed to increasing the number of disabled people in work by one million by 2027. In an illustrative scenario in which 500,000 additional low-income disabled adults are in work, our modelling shows there would be around 200,000 fewer people living in poverty.

#### Housing

High housing costs have become a very significant driver of poverty. Falling homeownership and declining access to social housing has driven more and more families into the private rented sector, where costs are higher, homes are insecure and quality is lower. Weakening protection from Housing Benefit has left many low-income households paying unaffordable high rents and having to use non-Housing Benefit income to meet these costs, leaving less to cover other essentials.

Housing policy can play a role in better protecting low-income households from unaffordable rents, through multiple channels. We have simulated a scenario

where no low-income working household needs to spend more than 30% of their income on paying the rent (after Housing Benefits are accounted for), and non-working low-income households don't need to use non-Housing Benefit income to pay for rent. Our modelling shows that this would mean 100,000 fewer people would live in poverty.

#### Social security

Since April 2016, most working-age benefits and tax credits have been frozen, whilst prices have continued to rise. This has meant that a large part of many people's incomes has been reducing in comparison to the cost of living. It has weakened the anchor social security provides, and caused standards of living to fall. Universal Credit has also been weakened by reducing the amount that low-income working families can keep of their earnings before tax credits are reduced (the 'Work Allowance'). Restoring the Work Allowance to its original level would lift 340,000 people out of poverty<sup>7</sup>.

#### **Conclusion**

This analysis has set out the possible impacts on poverty of various changes to the UK's trading arrangements after Brexit, and compared these impacts with possible domestic changes to reduce poverty.

The process of leaving the EU and the agreements the UK makes with the EU and other countries are, of course, vital to the future performance and shape of our economy and society. It is therefore, rightly, a high political priority and requires attention, time and energy from politicians, civil servants, business and other organisations. However, this is leading to an absence of action on major domestic issues that affect the day-to-day lives of the UK's population. This is particularly worrying in relation to poverty.

Fourteen million people are trapped in poverty, and child poverty has risen over several years and is projected to keep increasing for the rest of this parliament. Our research shows that completing Brexit will not solve UK poverty; and remaining in the EU would not undo policies that will lead to higher poverty over the next few years. Rising poverty is primarily a result of domestic policy decisions and of the systems and markets that we have designed. The housing market, the labour market and our social security system lock people into low incomes, creating daily struggles to get by.

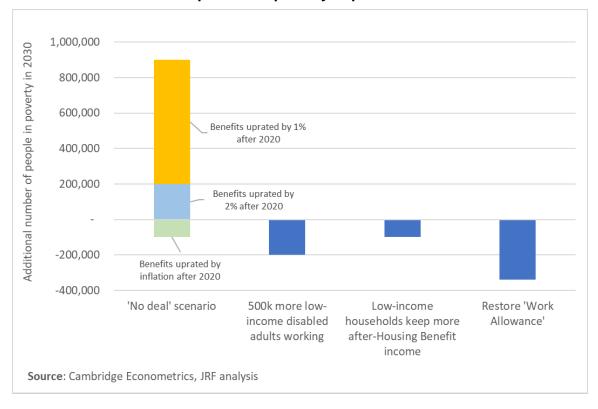
The vote to leave the EU represented widespread anger and dissatisfaction across a number of issues, including low living standards and a lack of opportunities in some parts of the country. Delivering any brand of Brexit is highly unlikely to solve these problems. Our analysis suggests that poverty would be effectively addressed by increasing access to low-cost housing, increasing employment and earnings, and reforming Universal Credit.

Chart 2 compares the possible impacts of three domestic policy scenarios on poverty to the possible impact of Brexit, using the 'No Deal' scenario as this has the greatest effect. It demonstrates starkly that it is vital to maintain a focus on domestic policy, alongside negotiating Brexit and agreeing a framework for our post-Brexit economy. This includes delivering the Shared Prosperity Fund promised to left-behind towns and cities, to improve employment rates and lower-quartile earnings with repatriated EU funding.

Analysis of voting in the 2017 General Election showed that voters on low incomes continued to be very concerned by living standards, alongside 'identity' issues related to immigration and Brexit. Research showed that the top concerns of people on low incomes were money and debt, health, caring, housing and work, alongside immigration. During the campaign the Conservative party talked about 'ordinary working people' and appealed to voters' support for Brexit and immigration controls. The Labour party concentrated on appealing to voters' economic concerns about living standards and the effects of austerity. This led to a stalemate. The Conservative and Labour parties both increased their support among low-income voters by eight percentage points but neither made a

conclusive breakthrough. Our analysis suggests that the dissatisfaction that resulted in the Brexit vote reflected anger about economic marginalisation, poverty and lack of opportunities, as well as discomfort with immigration and the EU itself. This is the context in which the effects of Brexit will eventually be judged. This means making sure that everyone in our country has a decent standard of living.

Chart 2 - Illustrative comparison of poverty impacts



## Annex A - scenario model results

Impact type	Norway	Turkey	Ukraine	Canada	No deal
Prices	+ 0.7%	+ 1.9%	+ 2.0%	+ 2.7%	+ 3.0%
Annual cost of living for					
low-income households					
Central	+£130	+ £290	+£320	+ £440	+ £480
Trade liberalisation	+£90	N/A	+£270	+ £390	+ £410
Real wages	- 0.2%	- 0.7%	- 0.7%	- 0.9%	- 1.0%
Employment rate	-0.1 pp	- 0.4 pp	- 0.4 pp	- 0.5 pp	- 0.5 pp
Change in number of					
households in poverty					
Benefits uprated		*	_	_	_
by inflation after	*	*	100,000	100,000	100,000
2020			100,000	100,000	100,000
Benefits uprated	100,000	200,000	100,000	200,000	200,000
by 2% after 2020	100,000	200,000	100,000	200,000	200,000
Benefits uprated	800,000	900,000	800,000	900,000	900,000
by 1% after 2020		300,000		300,000	

NB-our modelling assumes that Consumer Price Inflation is 2%, in line with OBR's inflation projections.

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<sup>\*</sup> Figures below 50,000 are not reported

# Annex B - Scenario assumptions

Scenario	Tariff assumptions (Central scenario)	Tariff assumptions (Sensitivity)	Non-tariff barriers (NTB) apply for trade with the EU	Agricultural subsidy	Migration	Investment
1-Baseline	No change	-	No change	CAP	Net annual migration: 245,000	Baseline
2-Norway	No tariffs for trade with EU (except food and agriculture)	0% import tariffs for trade with EU and rest of world (RoW); free trade agreements (FTAs) with US and China	1/4 of US-EU non-tariff barriers	Subsidy maintained in nominal terms to 2025; 5% reduction over period to 2030	Net annual migration: 245,000	1.5% reduction in investment by 2030 relative to baseline
3-Turkey	No tariffs for trade with EU (inside customs union)	-	1/2 of US-EU non-tariff barriers	Subsidy maintained in nominal terms to 2025; 5% reduction over period to 2030	Net annual migration: 165,000	2.6% reduction in investment by 2030 relative to baseline
4-Ukraine	No tariffs for trade with EU (except food and agriculture)	0% import tariffs for trade with EU and RoW; FTAs with US and China	1/2 of US-EU non-tariff barriers	Subsidy maintained in nominal terms to 2025; 5% reduction over period to 2030	Net annual migration: 165,000	2.6% reduction in investment by 2030 relative to baseline
5-Canada	No tariffs for trade with EU (except food and agriculture)	0% import tariffs for trade with EU and RoW; FTAs with US and China	3/4 of US-EU non-tariff barriers	Subsidy maintained in nominal terms to 2025; 5% reduction over period to 2030	Net annual migration: 165,000	3.5% reduction in investment by 2030 relative to baseline
6- No deal	Most Favoured Nation tariffs for trade with EU	0% import tariffs for trade with EU and RoW; FTAs with US and China	3/4 of US-EU non-tariff barriers	Subsidy maintained in nominal terms to 2025; 5% reduction over period to 2030	Net annual migration: 165,000	3.5% reduction in investment by 2030 relative to baseline

### Annex C – Methodology

#### Poverty definition

The poverty definition used throughout this report is when someone lives in a household whose income is less than 60% of median income, adjusted for their household size and type. This is the most commonly used measure both in the UK and internationally.

#### Cost of living

To estimate the impact of inflation on the cost of living, we have used the latest data available (2016/17) from ONS's Living Costs and Food Survey. This provides a detailed breakdown of the consumer spending categories, and expenditure by household income decile. To estimate cost-of-living impacts on households in the bottom income quintile we have averaged spending across the bottom two income deciles. This has been combined with Cambridge Econometrics' modelled inflation impacts to estimate the additional annual cost of living across different scenarios.

Consumption data shows that low-income households spend more of their income on essentials such as food, energy, and housing. We may therefore expect a disproportionate impact on low-income households where food prices are affected more than other areas of consumption, as is the case in our modelling. Our results find that the difference in the overall price inflation felt by low-income households is negligible, at less than 0.1%.

#### IPPR Tax-Benefit model

The IPPR Tax-Benefit model is a microsimulation model that uses data from the Family Resources Survey to simulate net incomes for individuals and families under various assumptions about the tax-benefit system in place. The model is used to calculate tax liabilities and benefit and tax credit entitlements, given a set of parameters for the tax-benefit system in place at a given time (for example, the April 2010 tax-benefit system, or the April 2014 tax-benefit system). The most recent version of the model runs on 2016/17 FRS data. The scenarios described in the sections 'How might economic changes affect UK poverty?' and 'Comparing the impact of Brexit with action on housing, work and social security' have used the IPPR Tax-Benefit model to simulate changes to the attributes of the population in the Family Resources Survey.

#### References

- Breinlich et al (2017) The Consequences of the Brexit Vote for UK Inflation and Living Standards: First Evidence, November 2017, accessed at <a href="http://personal.lse.ac.uk/sampsont/VoteInflation\_TP.pdf">http://personal.lse.ac.uk/sampsont/VoteInflation\_TP.pdf</a>
- Dhingra et al (2017) The costs and benefits of leaving the EU: Trade effects, July 2017, accessed at <a href="http://eprints.lse.ac.uk/83612/">http://eprints.lse.ac.uk/83612/</a>
- GLA (2018) Preparing for Brexit', January 2018, accessed at <a href="https://www.london.gov.uk/sites/default/files/preparing">https://www.london.gov.uk/sites/default/files/preparing</a> for brexit final report.pdf
- HMT (2016) HM Treasury analysis: the long-term economic impact of EU membership and the alternatives, April 2016, accessed at <a href="https://www.gov.uk/government/publications/hm-treasury-analysis-the-long-term-economic-impact-of-eu-membership-and-the-alternatives">https://www.gov.uk/government/publications/hm-treasury-analysis-the-long-term-economic-impact-of-eu-membership-and-the-alternatives</a>
- IFS (2017) The cost of housing for low-income renters, October 2017, accessed at <a href="https://www.ifs.org.uk/publications/9986">https://www.ifs.org.uk/publications/9986</a>
- JRF (2016) The impacts of international migration on poverty in the UK, July 2016, accessed at <a href="https://www.jrf.org.uk/report/impacts-international-migration-poverty-uk">https://www.jrf.org.uk/report/impacts-international-migration-poverty-uk</a>
- JRF (2017) UK Poverty 2017, December 2017, accessed at <a href="https://www.jrf.org.uk/report/uk-poverty-2017">https://www.jrf.org.uk/report/uk-poverty-2017</a>
- LSE (2015) Immigration and the UK Labour Market, February 2015, accessed at <a href="http://cep.lse.ac.uk/pubs/download/EA019.pdf">http://cep.lse.ac.uk/pubs/download/EA019.pdf</a>
- Minford et al (2018) Alternative Brexit Economic Analysis, February 2018, accessed at <a href="https://www.economistsforfreetrade.com/wp-content/uploads/2018/03/Alternative-Brexit-Economic-Analysis-Final-2-Mar-18.pdf">https://www.economistsforfreetrade.com/wp-content/uploads/2018/03/Alternative-Brexit-Economic-Analysis-Final-2-Mar-18.pdf</a>
- Nickell and Saleheen (2015) The impact of immigration on occupational wages: evidence from Britain, December 2015, accessed at <a href="https://www.bankofengland.co.uk/working-paper/2015/the-impact-of-immigration-on-occupational-wages-evidence-from-britain">https://www.bankofengland.co.uk/working-paper/2015/the-impact-of-immigration-on-occupational-wages-evidence-from-britain</a>
- NIESR (2012) Examining the Relationship Between Immigration and Unemployment Using National Insurance Number Registration Data, January 2012, accessed at <a href="https://www.niesr.ac.uk/sites/default/files/publications/090112">https://www.niesr.ac.uk/sites/default/files/publications/090112</a> 163827.pdf
- NIESR (2016) Modelling the Long-Run Economic Impact of Leaving The European Union, June 2016, accessed at <a href="https://www.niesr.ac.uk/sites/default/files/publications/dp462.pdf">https://www.niesr.ac.uk/sites/default/files/publications/dp462.pdf</a>
- OECD (2016) The Economic Consequences of Brexit: A Taxing Decision, April 2016, accessed at <a href="http://www.oecd.org/eco/the-economic-consequences-of-brexit-a-taxing-decision.htm">http://www.oecd.org/eco/the-economic-consequences-of-brexit-a-taxing-decision.htm</a>
- Open Europe (2015) What if...? The consequences, challenges and opportunities facing Britain outside the EU, March 2015, accessed at <a href="https://openeurope.org.uk/intelligence/britain-and-the-eu/what-if-there-were-a-brexit/">https://openeurope.org.uk/intelligence/britain-and-the-eu/what-if-there-were-a-brexit/</a>
- PwC (2016) Leaving the EU: Implications for the UK Economy, March 2016, accessed at <a href="https://www.pwc.co.uk/economic-services/assets/leaving-the-eu-implications-for-the-uk-economy.pdf">https://www.pwc.co.uk/economic-services/assets/leaving-the-eu-implications-for-the-uk-economy.pdf</a>
- Ries et al (2017) Alternate forms of Brexit and their implications for the United Kingdom, the European Union and the United States, 2017, accessed at <a href="https://www.rand.org/pubs/research\_reports/RR2200.html">https://www.rand.org/pubs/research\_reports/RR2200.html</a>

#### **End notes**

- <sup>1</sup> The EU referendum and UK Poverty (2016) London: Joseph Rowntree Foundation
- <sup>1</sup> Hood, A. and Waters, T. Living Standards, poverty and inequality in the UK: 2017-18 to 2021-22 (2017) London: Institute for Fiscal Studies
- <sup>1</sup> For example, see Dhingra et al. (2016), GLA (2018), HMT (2016), NIESR (2016), Minford et al. (2018), PwC (2016), Ries et al. (2017)
- <sup>1</sup> See LSE (2015), NIESR (2012), JRF (2016)
- <sup>1</sup> See Nickell & Saleheen (2015)
- <sup>1</sup> JRF (2017), UK Poverty 2017, December 2017
- <sup>1</sup> See 'Budget briefing: Recommendations for better living standards' <a href="https://www.jrf.org.uk/report/budget-briefing-recommendations-better-living-standards">https://www.jrf.org.uk/report/budget-briefing-recommendations-better-living-standards</a>

### **About the Joseph Rowntree Foundation**

The Joseph Rowntree Foundation is an independent social change organisation working with governments, businesses, communities, charities and individuals to solve UK poverty.

The majority of the ideas outlined above were drawn from our <u>strategy to solve UK poverty</u>, which contains analysis and recommendations aimed at the four UK governments.

All research published by JRF, including publications in the references, is available to download from <a href="https://www.irf.org.uk">www.irf.org.uk</a>

If you would like to arrange a meeting with one of our experts to discuss the points raised please contact:

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