National Institute of Economic and Social Research

Nuffield Foundation

2019 UK GENERAL ELECTION

ANALYSIS

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The National Institute of Economic and Social Research (NIESR)

The National Institute of Economic and Social Research is an independent research institute, founded in 1938. The vision of our founders was to carry out research to improve understanding of the economic and social forces that affect people's lives, and the ways in which policy can bring about change. And this remains central to NIESR's ethos. We continue to apply our expertise in both quantitative and qualitative methods and our understanding of economic and social issues to current debates and to influence policy. The Institute is independent of all party political interests.

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FOREWORD

In this election campaign we are seeing the consequences of the Brexit impasse across a raft of policy areas. With infrastructure and investment expenditures continuing to be deferred, we are seeing a rash of spending promises to placate a disillusioned electorate. But what we continue to lack is a credible set of mutually re-enforcing policies that confront the challenge of Brexit. The underlying tensions that have led to a series of inconclusive elections and disputed referendum results this decade will not be solved by the parties' promises. This has been the decade of the doldrums and all the hot air expended in this election month will not blow us on our way to a more prosperous future.

Let me give a few examples. In education it turns out we are actually spending quite a lot by international standards but within that not enough on early years or on vocational further education. Infrastructure spending is unevenly distributed, as is public and private investment, with implications that while three-quarters of London's premises have access to ultra-fast broadband that falls to 1 in 3 in Wales. The success of minimum wages in generating more employment at higher wages may be undermined if both parties push for increases in the level and coverage in order to win votes. Migration does not seem to have supressed wages and also has generated net support to the Exchequer. While low productivity firms have remained on life support through low interest rates, firms with high productivity may have held back from further investment in high quality jobs because of the precarious global and domestic outlook, which is not so much about Brexit per se but as much about a persistent lack of international demand.

The thread running through these observations is that spending by itself will not help deal with national frustrations especially. It is the allocation to areas of particular need, in regions or sector. Successful institutions such as the Low Pay Commission and the Bank of England do need the mission creep of also being asked to achieve a wider range of policy objectives. In the former case, minimum wages, although they have helped, cannot solely solve the problems faced by low income households. In the latter case, the distributional consequences of monetary and financial policy are a question for Great George rather than Threadneedle Street. And say it quietly, the evidence points to the need for more rather than less immigration. And what firms seem to need is politically driven confidence in the future rather than the ongoing crisis of the past three and a half years.

These disparate phenomena cannot be dealt with by any simple populist call to arms. The Tory call to get Brexit done will not, at a stroke, lead to a huge increase in administrative spare capacity and resulting tortuous negotiations in Brexit purgatory would better placed in Dicken's Circumlocution Office. Neither will the Labour call to increase the size of the state with huge nationalisations help particularly, as this will saddle future generations with debt and also ask managerial questions that we have learnt that the state simply cannot answer. The Liberal Democrat call to revoke Article 50 treats a symptom and not a cause. Each of the main parties are guilty of proposing a big answer to the wrong question.

The right question is what is the particular policy challenge facing a country at the top of global income league but facing sharp relative decline in economic, political and soft power? And the answer is actually surprisingly dull as it involves detailed analysis and planning of each area of government, as well as reform of our tax system to meet those demands. Let's remove the need to announce new policies on the hoof but rather move forward gradually on ground of firm evidence. But that will matter for little unless we resurrect rule by cabinet, representing the needs of their department, rather

than a coterie surrounding our political leaders. The regeneration plans will need to be formulated and then systematically carried out over a number of years and Parliaments, with scrutiny by the relevant Committees.

The economic shock of Brexit is a good starting point. Given the consensus in the profession about the negative impact on the economy, with considerable regional variation flowing from intensity of EU relations, it would be far more constructive, rather than closing minds to the shock, for each department to explain how they will mitigate the impact and what extra resources will be required. In that sense government will at least start to work again. These Election Briefs, kindly funded by the Nuffield Foundation, not only help the electorate in this election but also act to guide the approach to policy over the next Parliament.

Jagjit S. Chadha
Director, NIESR
Westminster
December 2019

2019 UK GENERAL ELECTION BRIEFING:
THE ECONOMIC AND FISCAL IMPACT OF BREXIT

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OVERVIEW

Brexit dominates political debate and divides opinion. The main political parties have different positions on this issue, ranging from cancelling Brexit (Liberal Democrats) to seeking a 'clean-break' (Brexit Party). The Prime Minster wants to 'get Brexit done' on the terms of the deal negotiated with the EU. This briefing focuses on:

- The economic impact that the decision to leave the European Union (EU) in the 2016 referendum has had so far
- The economic impact of different types of Brexit in the short and long run
- The fiscal implications of Brexit

KEY TAKEAWAYS

- The decision to leave the European Union (EU) has already had a **material impact on UK economic activity**, with GDP now being around **2½ per cent smaller** than it would have been had the UK decided to stay in the EU. The **pound** is **15 per cent lower** than in the run-up to the EU referendum, pushing up the prices of imported goods and services and so also contributing to lower living standards than if the UK had stayed in the EU.

- We estimate that the latest deal agreed between the government and the EU would result in **GDP being 3-4 per cent lower** in the long run than it would have been with continued EU membership. The effect is negative because leaving the EU will involve bigger trade barriers between the UK and its largest trading partner, lower migration from the EU, and lower productivity. A clean-break Brexit would hit **GDP by 5-6 per cent**.

- **Brexit is likely to worsen the public finances**. Despite saving around £10 billion per year on contributions to the EU budget, a smaller economy would mean that there would be a revenue shortfall of around **£20-40 bn per year in the long run.** We estimate that the revenue shortfall would average around **£4-12 bn per year in the next five-year Parliament**.

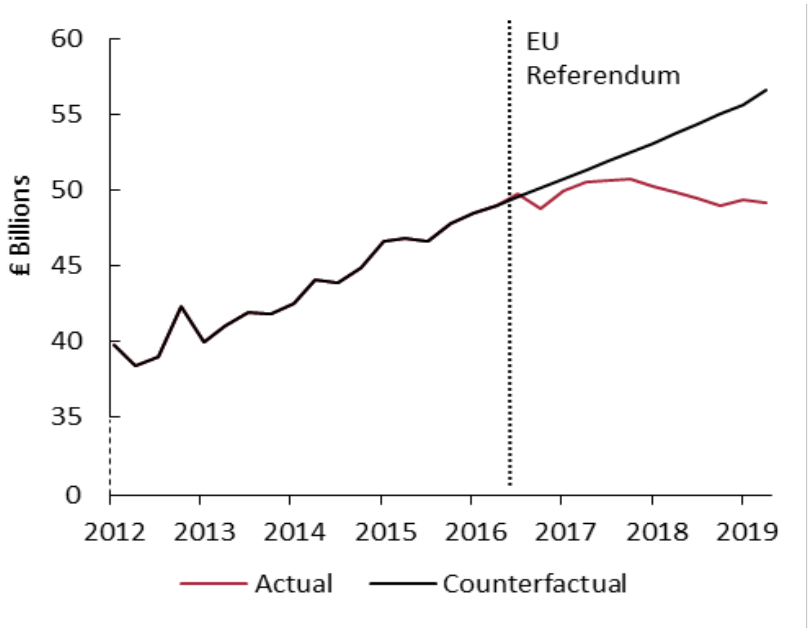
The impact of the decision to leave the EU on the economy so far

- **Business investment** is estimated to be **around 15 per cent lower** than it would have been had it not been for the 2016 Brexit vote (Figure 1). This is due to the uncertainty that the decision to leave the EU created. This uncertainty has led businesses to postpone investment until they know more about the new relationship with the EU.[1]

- Brexit has also contributed to the **prolonged weakness in UK productivity growth**. Demand has increasingly been met by employing more workers rather than investing in capital goods as investments cannot easily be reversed. In addition, management time has been diverted towards no deal planning.[2]

- The **level of GDP is estimated to be around 2½ per cent lower** than otherwise, reflecting lower investment and productivity (Figure 2). This is despite measured economic activity being somewhat boosted by Brexit-related contingency planning and stockpiling that had little positive effect on welfare.

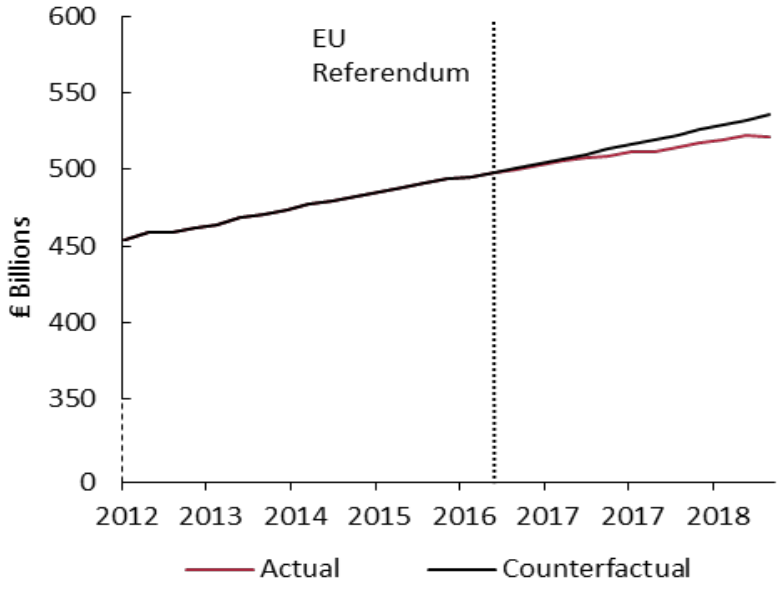
Figure 1. Quarterly business investment: actual and post-referendum counterfactual



Source: NIESR.

[1] See NIESR's Prospects for the UK Economy, November 2019.
[2] See also Bloom et al. (2019), The impact of Brexit on UK firms.

Figure 2. Quarterly GDP: actual and post-referendum counterfactual



Source: NIESR.

- The value of the **pound** has been sensitive to news about Brexit. The pound has depreciated by 15 per cent in effective terms since its pre-referendum peak in November 2015. The depreciation contributed to higher import prices and a rise the cost of living. Import prices have risen by 10.9 per cent in the thirty-nine months since the EU referendum, whereas they fell by 7 per cent in the thirty-nine months leading up to it.

The economic impact of Brexit in the short and long run

- The economic outlook depends critically on the **nature of the future trading relationship** between the UK and EU.

- **Various different forms of Brexit** are currently being discussed (Table 1), ranging from continued EU membership (as favoured by the Liberal Democrats) to no deal (as favoured by the Brexit Party). Other options include a UK-EU customs union and the deal agreed between the Prime Minister and the EU.

- Brexit-related **uncertainty is unlikely to lift any time soon**: a free trade agreement or customs union with the EU would be difficult to negotiate within a one-year transition period, revoking Article 50 in order to remain in the EU would likely involve discussions about the future position of the UK in the EU, while no deal would generate very high levels of uncertainty about future trade relations and migration.

Table 1. Short- and long-run effects of Brexit

TYPE OF BREXIT	SHORT RUN (2019-2024 PARLIAMENT)	LONG RUN (10 YEARS OUT)
CONTINUED EU MEMBERSHIP (REVOKE ARTICLE 50)	Elevated uncertainty	No change to UK-EU trade barriers and migration
UK-EU CUSTOMS UNION	Elevated uncertainty, GDP impact*: -1.6% (£30 bn/year)	GDP impact*: -3% (£60 bn/year)
UK-EU FTA (PM JOHNSON'S DEAL)	Elevated uncertainty, GDP impact*: -1.8% (£40 bn/year)	GDP impact*: -3-4% (£70 bn/year)
NO DEAL (TRADE ON WTO TERMS)	Very high uncertainty, GDP impact*: -2.9% (£60 bn/year)	GDP impact*: -5-6% (£120 bn/year)

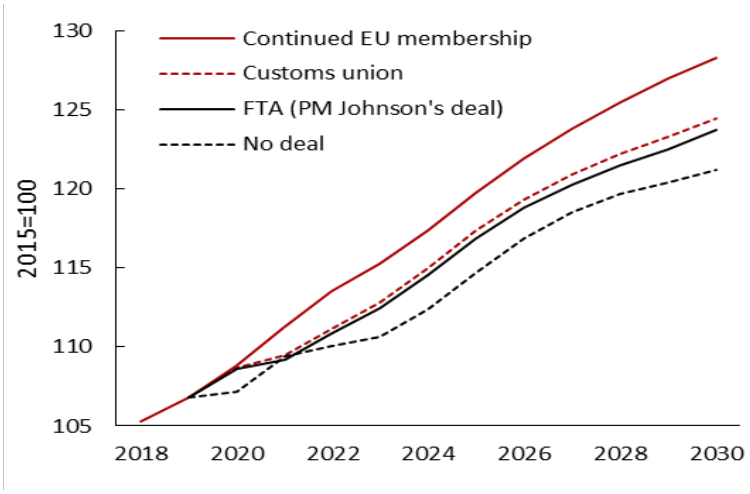
Source: NIESR, NiGEM simulation.
Notes: * relative to continued EU membership.

- While the level of economic output (GDP) is expected to grow in all scenarios, there will be differences **depending on future barriers to trade and migration** (table 1 and figure 3). So, for example, leaving the EU on the terms of the Prime Minister's deal would result in the economy being smaller by around 2 per cent on average over the next Parliament and by 3-4 per cent in the long run (by 2030). These estimates are uncertain in size but not direction.

- The **economic benefits of Brexit do not outweigh the economic costs**: The economic benefit of recovering EU financial contributions and of being able to negotiate free trade agreements with non-EU partners in the **FTA scenario** (PM Johnson's deal) are more than offset by the costs of trading frictions, reduced inward investment, less net migration and the impact of Brexit on productivity (Figure 4).

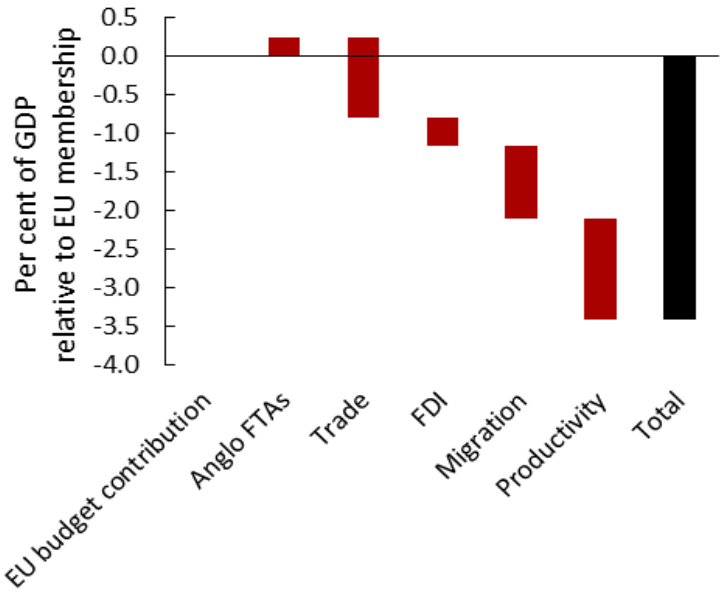
- **Services trade** would face similar frictions in a **UK-EU customs union** as in an FTA. This is because of regulatory barriers that would be put in place if the UK left the European single market. **Goods trade** would benefit from the absence of customs and rules of origin requirements in a customs union but still face regulatory barriers, like safety checks and quality requirements.

Figure 3. GDP impact of Brexit



Source: NIESR, NiGEM simulation.

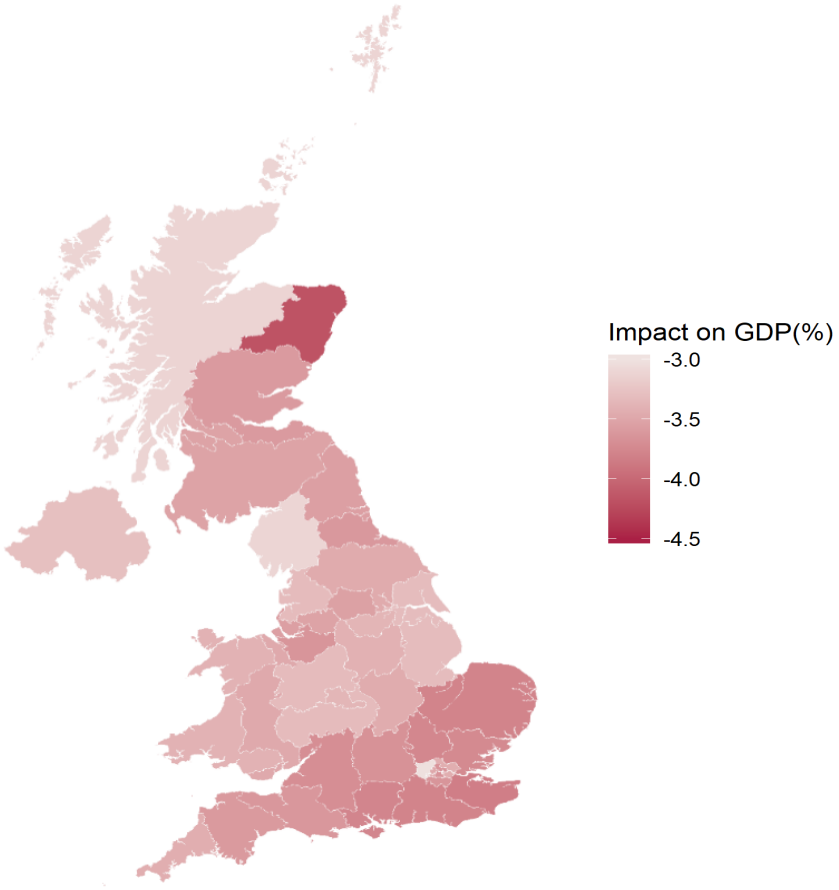
Figure 4. Impact of an FTA by channel



Source: NIESR, NiGEM simulation

- **All regions of the UK are set to be less prosperous under Brexit**, compared to continued EU membership (Figure 5). The regional impact depends on the intensity of EU trade, the local industry mix, linkages with the rest of the country through value chains and commuting workers, and the reliance on public funding.

Figure 5. Regional impact of a UK-EU Free Trade Agreement



Sources: NIESR, NiGEM simulation.

The fiscal implications of Brexit

- The short-term fiscal implications of Brexit are relatively small and overshadowed by the spending and taxation promises of the major political parties.
- Any form of Brexit will leave the economy smaller than it would have been had the UK remained in the EU. This means that **tax revenue will be smaller** than it would otherwise have been. In the short term, i.e. the next Parliament, revenue losses relative to the counterfactual of continued EU membership **materialise slowly** as barriers to trade will only bind after the end of a transition period and build up over time as regulation in the UK and the EU diverges. Initial revenue shortfalls are also partly offset by higher inflation which flatters the tax intake.
- Estimates of the effect of different forms of Brexit on tax revenue are shown in the first column of table 2. So, for example, leaving on the terms of the Prime Minister's deal will result in tax revenue being lower by about £10 billion per year in the next Parliament and by about £30 billion in the long term (by 2030).
- In the other direction, funds will be released by no longer having to contribute to the EU budget and these can be **recycled into domestic government spending**. But the amount that can be recycled is relatively small in the short term because, under the terms of the 'divorce bill', the UK is due to continue to make payments for its outstanding commitments to the EU. If the UK leaves under the terms of the Prime Minister's deal the amount available to be recycled averages £6 billion per year in the next Parliament and £11 billion per year in the long run (middle column of table 2).
- The net revenue shortfall of leaving the EU on the terms of the Prime Minister's deal is estimated at £4 billion per year in the next Parliament and just under £20 billion per year in the long term. To put this in context, the 2017-18 annual budget of the Department for Transport was £20 bn. Any net revenue shortfall will have to be met through **higher borrowing**, **higher tax rates** or a **combination of both**.
- **Lower net migration** and a smaller population compared to staying in the EU would imply **somewhat smaller public expenditure needs**, but these are not accounted for in table 2.

Table 2. 2020-24 impact of Brexit on government revenue (£ billion, 2016 prices per annum)

	TOTAL REVENUE SHORTFALL	REALLOCATED EU BUDGET CONTRIBUTIONS§	NET REVENUE SHORTFALL
UK-EU CUSTOMS UNION	-7.5 (-26.2)	2.4 (5.5)	-5.1 (-20.7)
UK-EU FTA (PM JOHNSON'S DEAL)	-9.9 (-28.7)	6.0 (11.0)	-4.0 (-17.7)
NO DEAL (TRADE ON WTO TERMS)	-18.4 (-47.7)	6.0 (11.0)	-12.5 (-36.7)

Source: NIESR, NiGEM simulation.

Note: annual average, relative to EU membership, £ billion, 2016 prices, impact ten years out in brackets.

§ Net saving on EU contributions after taking account of 'divorce' bill. In the UK-EU customs union case, it is assumed that the UK continues to make some contribution to EU programmes such as Horizon 2020.

2019 UK GENERAL ELECTION BRIEFING:
THE FUTURE PATH OF THE MINIMUM WAGE

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OVERVIEW

Labour and the Conservatives both plan historically high increases to the UK minimum wage, aiming to use the minimum wage as an important tool in raising living standards. This briefing focuses on:

- The current minimum wage structure and how the rates are determined;
- The future path of the National Living Wage and the future structure of the National Minimum Wage youth rates, including an assessment of the proposals of both main parties.

KEY TAKEAWAYS

- The minimum wage rates are set by government every year in April, following advice by an independent Low Pay Commission (LPC). The rationale behind a minimum wage is fairly simple: introducing a wage floor **improves fairness and prevents exploitation of workers**. However, if you set the minimum wage too high, it **could damage job growth and increase unemployment**, as employers may cut back on hiring due to high wage costs.

- During the past 20 years, and especially since 2016, the increases to the UK minimum wage have **boosted people's earnings, with little impact on jobs.** A recent independent review for the government concluded there is **still scope to explore a more ambitious minimum wage**.

- Both Labour and the Conservatives have promised increases to the minimum wage. Labour has proposed to **introduce rapidly a £10-an-hour 'Real Living Wage' for all workers over 16**. The Conservatives have proposed to **increase the National Living Wage to two-thirds of the median wage by 2024 and lower the age eligibility to 21 instead of 25.** However, if future increases in the minimum wage are done too rapidly resulting in negative employment effects, for instance for part-time workers, younger workers or in specific industries or regions, this could **risk undermining the strong consensus around the minimum wage that has been built up during the past two decades.** It is therefore vital that the LPC has a clear mandate to determine the precise size and pace of minimum wage increases.

- The minimum wage is **not a panacea whereby low wage work can simply be legislated away by the imposition of ever higher minimum wage rates**. It needs other supporting policies including on tax and benefits, employment, education, skills, and social care and childcare.

What is the National Living Wage and the National Minimum Wage?

- First introduced in 1999, the National Minimum Wage sets the **minimum pay per hour** that workers in the UK are entitled to. Today, the UK has five minimum wage rates. Workers **aged 25 years and older must be paid at least the National Living Wage (£8.21)** while **lower National Minimum Wage 'Youth Rates'** can be paid to **those aged 21-24 (£7.70), 18-20 (£6.15), 16-17 (£4.35) and apprentices (£3.90).**

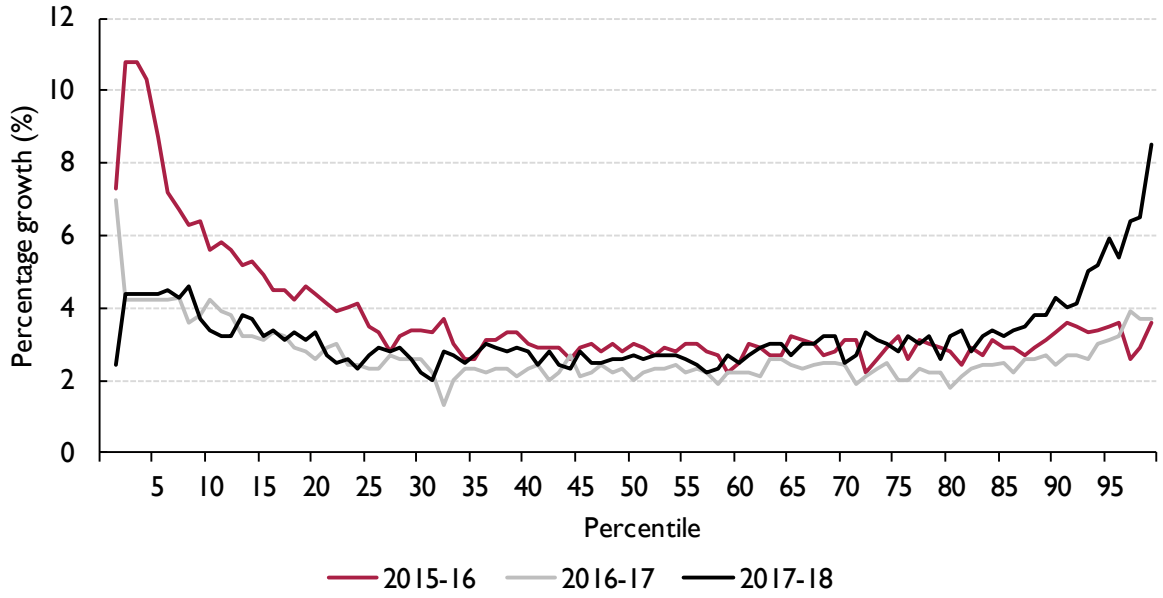
Table 1. Minimum wages by age group

Year	25 and over	21-24	18-20	16-17	Apprentice
April 2019	£8.21	£7.70	£6.15	£4.35	£3.90

- Since the introduction of the National Living Wage in 2016, recent years have seen large increases in the minimum wage. **It has risen 14% in real terms since 2015, significantly higher than real growth in average wages of about 4% over this period.**

- The **purpose of minimum wage rates is to raise the pay of low-income workers**. Figure 1 shows how the growth in hourly pay has varied over the pay distribution following the last three increases of the minimum wage in 2016, 2017 and 2018. Although many factors affect the growth in wages, Figure 1 shows that **those who are paid the least has gained the most in wages** (those towards the left of the graph). The wage growth among low earners is most pronounced following the introduction of the National Living Wage in 2016, where the minimum wage rate grew by 10.8% from April 2015 to April 2016. As a result, between 2015 and 2018, real average weekly earnings among employees in the bottom tenth of hourly wages grew by 11%, compared with 3% across all employees.

Figure 1: Percentage growth in the hourly wage distribution for workers aged 25 and over, 2015-2018

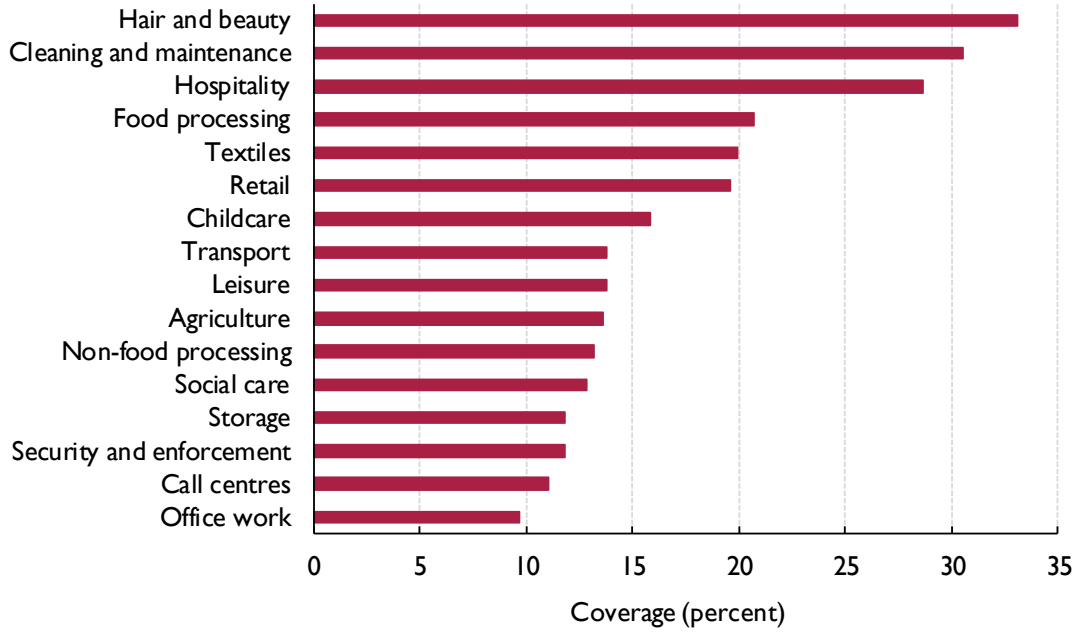


Source: Low Pay Commission Report 2018.

- In total, **about 1.6m workers** in the UK aged 25 or older are paid at or below the National Living Wage of £8.21 (around 6.5% of all jobs). About 1.9m workers aged 21 and over (8%) are paid at or below the minimum wage.

- Figure 2 shows **current coverage of the minimum wage for workers aged 25 and over in several low-paying occupations.** Over 25% of workers in hair and beauty, cleaning and maintenance, and hospitality occupations are paid the minimum wage.

Figure 2: Coverage of the minimum wage for workers aged 25 and over, by occupation, 2018



Source: Low Pay Commission Report 2018.

How is the level of the minimum wage determined?

- The rationale behind a minimum wage is fairly simple: introducing a minimum wage **improves fairness and prevents exploitation of workers.** The basic motivation behind a minimum wage reflects concerns about what is a fair renumeration for an hour or a day's work. However, a main concern is that a high minimum wage could lead employers to cut back on hiring **which would increase unemployment**. If you set the minimum wage too high, employers may not want to fill a vacancy due to high wage costs which would **destroy low-skilled jobs and lower the employment** for the very people the minimum wage was intended to help. Employers could also respond in other ways, for example by cutting back on non-wage benefits, or changing contractual arrangements, for instance by trying to shift workers to zero-hour contracts.

- Minimum wage rates are **set by government every year in April**, following review and advice by the Low Pay Commission (LPC), an independent body comprising academics as well as employer and worker representatives. The LPC do many things to inform their advice to government, including carrying out research and analysing data, as well as consulting with employers, workers and their representatives. Their focus is to evaluate **the likely impact on earnings compared to the potentially negative impact on people's employment and working hours.**

- Ultimately, the decision on the appropriate level of the minimum wage is a political one. The current remit of the LPC, set by the government, is to set minimum wage rates that **"help as many low-paid workers as possible without damaging their employment prospects."** LPC therefore try **to set the minimum wage at a level that does not reduce jobs**, but which boosts earnings for low-paid workers as much as possible. In 2019, the government suggested that LPC's future remit should include **"the objective of ending low pay in the UK"** which would include **more ambitious increases in the minimum wage**.

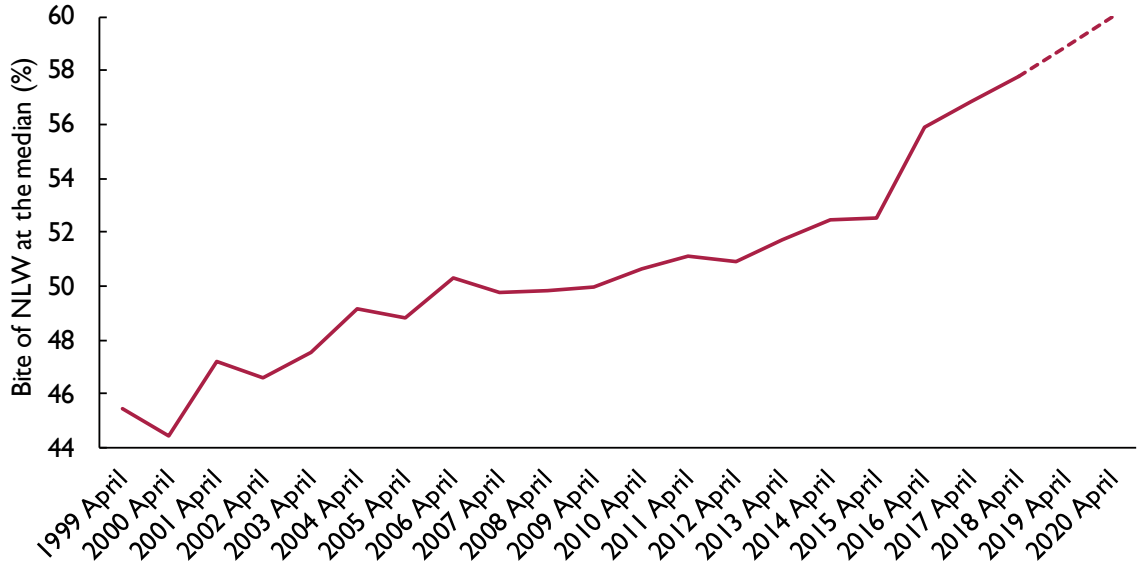
- In technical terms, the LPC's current remit is to set the National Living Wage, so it **reaches a so-called 'bite' target of 60% by October 2020**. This has already led to higher increases in the minimum wage.

- The **'bite' is the ratio of the National Living Wage to the 'median wage'**. The 'median wage' is the wage of the middle person in the UK pay distribution. One half of the UK population earns more, the other half earns less than this person. The middle person in the UK currently earns around £13.90 per hour. This means that **someone on the National Living Wage of £8.21 currently earns around 59% of the middle person**, which means the 'bite' is 59%.

- The Low Pay Commission says **the UK are on target to achieve the 60% 'bite' target** by October 2020. This is substantially higher than in the past. For instance, the first UK minimum wage in 1999 had a 'bite' of 45.6% (see Figure 3).

- An independent review for the government, looking at the impact of higher minimum wages on jobs, concluded in November 2019 that there is **room to explore a more ambitious remit for the UK bite**, in the range of 60% to two-thirds, or 66.7%, of median hourly earnings.

Figure 3. 'Bite' of the National Living Wage for workers aged 25 and over, UK, 1999-2020



Source: Low Pay Commission Report 2018.

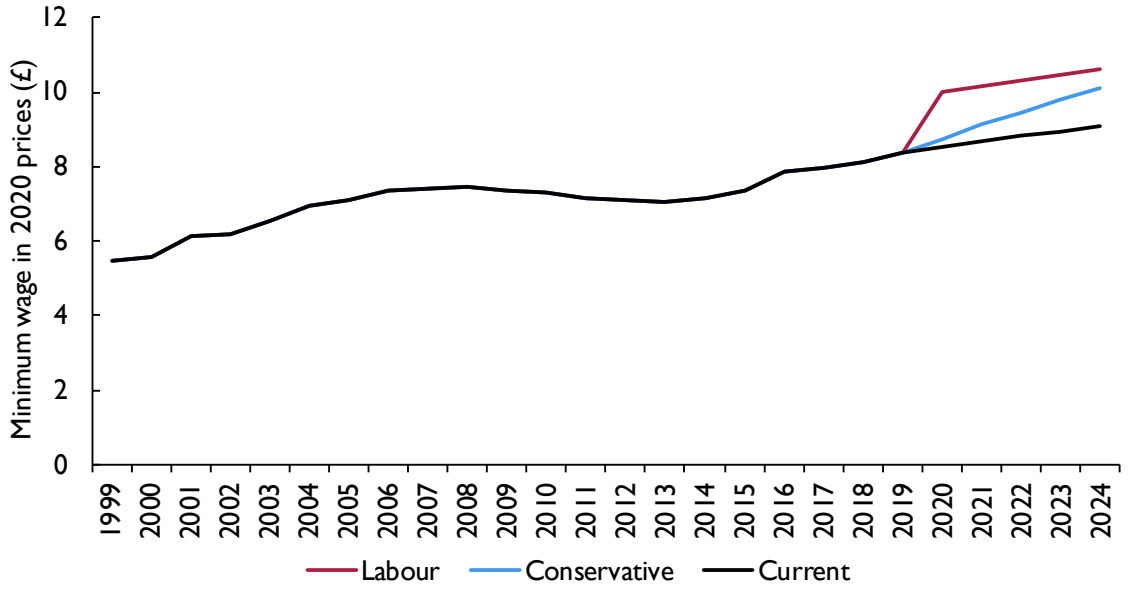
The National Living Wage will be changing…

- Both the Conservatives and Labour have **pledged fundamental changes to the UK minimum wages**, both in its level and age structure. The Conservatives have pledged to raise **the National Living Wage to 66.7% of the median hourly wage** (a common definition of low pay) **by 2024**, and **gradually lower the age of eligibility to 21 instead of 25**. This would represent a substantial increase relative to current policy. Two-thirds of median wages for those aged 21 and over is currently £8.85 per hour, equivalent to around 64% of median wages for those aged 25 and over.

- Labour has pledged to **introduce rapidly a £10 per hour 'Real Living Wage' for all workers aged 16 and over,** excluding those covered by the apprentice rate. This is equivalent to around 73% of median wages for those aged 21 and over, or 70% of median wages for those aged 25 and over.

- Figure 4 shows the **expected future path of the minimum wage until 2024**, under three scenarios: if current policy is maintained as well as the Conservatives and Labour's proposals. Labour has not said how the path of minimum wages will evolve after increasing it to £10 in 2020, and therefore the estimates shown assume that the minimum wage will continue to be increased by the growth in average wages, but this is not Labour Party policy.

Figure 4. Estimated minimum wage, workers aged 25 and over (2020 prices)



Source: Authors' calculations using Low Pay Commission statistics, ONS (series D7BT), NIESR's Economic Forecasts October 2019 and the Annual Survey of Hours and Earnings 2018.

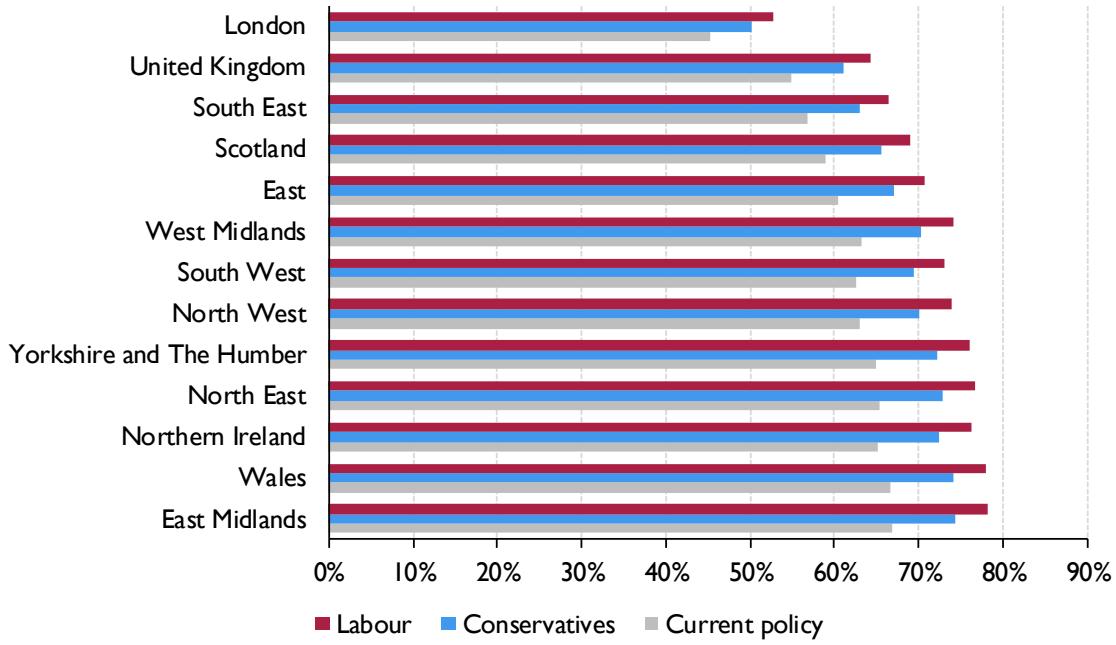
Note: The figure shows 22+ rate from April 1999 to October 2009, 21+ rate from October 2010 to October 2015 and NLW (25+) from April 2016 to April 2019. Adjusted for inflation using CPI, from Q2 (April) or Q4 (October) in the year/month of introduction to 2020 Q2. Current policy (maintaining 60% median wage target) and Conservative party plans (reaching 66.7% target) for 2024 are based on the median wage increasing in line with forecast average hourly wages. Labour has not said how the path of minimum wages will evolve after increasing it to £10 in 2020, and therefore the estimates assume that the minimum wage will continue to be increased by the growth in average wages, but this is not Labour Party policy.

- These proposals would place the UK minimum wage as one of the highest among similar countries. But **how high is too high?** The world-leading expert in minimum wages Professor Arin Dube who recently undertook an independent review for the government says that eventually **there is a point at which increases in the minimum wage will start to have a negative effect** on employment, but we **do not know exactly where this point is.**

- The overall body of evidence from research into the effects of minimum wages suggests that **increases in the minimum wage boost pay by much more than it has negative effects on jobs.** For instance, the increase in the National Living Wage in April 2016 represented a 7.5% increase in the minimum wage, significantly larger than previous increases, but our NIESR analysis for the LPC still **found no negative impact on overall employment.** However, it found some negative effects for women working part-time, consistent with previous NIESR research. All future increases in the minimum wage need to pay careful attention to demographic subgroups, such as women working part time, who are likely to be more vulnerable to losing their job or having their hours cut.

- Increases in the minimum wage, such as those suggested by Conservatives and Labour, **represent a much bigger step up in wages in some regions of the UK**, because the level of wages varies across the country. This means there is **significant variation in the 'bite' of the minimum wage regionally**, i.e. the proposed minimum wages would be closer to the median (middle) wage in some regions. Figure 5 illustrates that the bite of the minimum wage could be significantly higher in some parts of the country. For instance, workers in the Northeast, Northern Ireland, Wales and East Midlands would be more likely to receive pay increases, but could potentially also be at more risk of losing their job.

Figure 5: Estimated regional 'bite' of minimum wage for employees aged 25 and over, 2024, by region



Source: Authors' calculations using LPC statistics, NIESR's Economic Forecasts October 2019 and ASHE 2018.

Note: The figure shows estimates of the bite (minimum wage as a proportion of the median wage) for employees aged 25 and over, in cash terms for 2024. Same assumptions as Figure 2 for projected paths under the three scenarios.

- It is difficult to use past evidence to predict the likely effects of more ambitious policies such as those proposed by Labour and the Conservatives. But the body of evidence suggests that **there is scope for exploring a more ambitious minimum wage in the UK**. However, the evidence on high minimum wages is still incomplete and early. Therefore, the **precise size and pace of minimum wage increases should best be delegated to the LPC, which should have a clear mandate to pause and reconsider** the path of increases if evidence emerges of substantial job losses for those affected by the policy.

The politics of the National Living Wage

- The National Minimum Wage is considered to be one of the biggest policy successes over the past 20 years. It has **reversed historic trends where the lowest-paid people in the UK saw the weakest growth in earnings**, and it has done so **with little negative impact on jobs**.

- When Labour introduced the National Minimum Wage in 1999, it was opposed by the Conservative Party, and it even followed a long period of internal debate in the Labour Party and within the labour movement. Since then, a **strong consensus has emerged on the minimum wage**, including gaining support from all political parties and the business community. The consensus is built on academic evidence of the positive impacts on wages and limited negative impacts on employment, and arguably, it has also been built through the social partnership model which underpins the LPC, in which workers and employers come together, and make unanimous recommendations on minimum wage increases.

- Ultimately, the decision on the appropriate level of the minimum wage is a political one. While the LPC has largely been responsible for the path of the minimum wage since 1999, the minimum wage was effectively **politicised by introducing the National Living Wage in 2016**, with new ambitious targets and a new remit for LPC upratings. The politicisation continues during the 2019 General Election as both major parties engage in a **bidding war of who can offer the highest minimum wage.** The proposed changes by the Conservatives and Labour are large, with ambitious timescales, which would **take the UK into uncharted waters**.

- Both the LPC and the recent independent review for the government has **warned political parties to tread carefully**, ensuring that the employment prospects of low-paid workers are monitored carefully so any negative impacts on employment can be detected in time, and if necessary be reversed. Importantly, the increases in the National Living Wage **must be done gradually and cautiously** as it is much easier to give pay rises than pay reductions. Reductions in the minimum wage can only really be done by freezing the value of the minimum wage so its real value gradually erodes as prices in the economy increase. Therefore, if future increases in the minimum wage are done too rapidly with negative employment effects, it could be difficult to reverse, and it could **risk undermining the strong consensus that has been built up during the past two decades**.

- Minimum wage rates are a relatively easy lever for governments to pull to try and help those at the lower end of the wage distribution, but they are not a panacea; **low wage work cannot simply be legislated away by the imposition of ever higher minimum wage rates**. A wide variety of policies influence living standards, of which productivity is critical. Productivity growth in the UK has been sluggish and efforts to improve productivity are urgently needed. A wide variety of supporting policies, such as tax and welfare policy, employment, education and skills, as well as social care and childcare funding also play a key role in determining living standards.

- As an example, minimum wages can boost pay for low wage workers, however **household income after taxes and benefits is more important when considering living standards.** Minimum wage *workers* are generally not the same as minimum wage *households.* Many minimum wage workers (for example students) may live in households with people who are relatively higher earners.

Younger workers: Why are they paid less – and what will happen with Youth Rates?

- The National Minimum Wage 'Youth Rates' are a key policy battleground in the 2019 General Election. Labour has pledged that **all workers above 16 will be eligible for their 'Real Living Wage'** and the Conservatives have proposed **that all workers above 21** will be eligible for the higher National Living Wage.

Why can younger workers be paid less than older workers?

Younger workers typically occupy a **more vulnerable position in the labour market**, and their **employment is at greater risk** than older workers to changes in the minimum wage. The lower National Minimum Wage 'Youth Rates' have therefore been thought of as **protecting youth jobs**, by avoiding risks such as employers recruiting older and often more experienced workers at no additional wage costs.

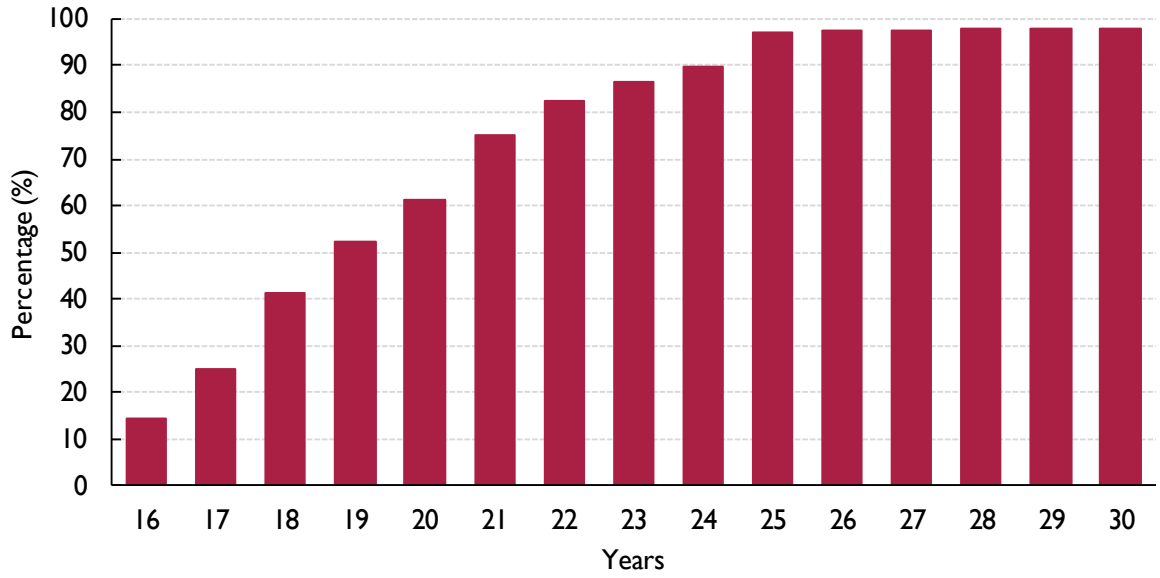
Lower rates of pay are meant to **promote the long-term labour market position of young workers** by ensuring they are not encouraged to leave education or training too early, and by encouraging employers to offer younger workers training on the job in lieu of pay to acquire skills and experience. Lower rates also reflect evidence that **younger workers are more likely to be unemployed**, and that spells of unemployment can be more damaging for young workers, causing **long-term 'scarring effects' on their future earning and employment**.

- When advising the government on Youth Rates, the LPC's objective is to ensure that it enables young people to make a **successful transition from education to employment**, and to access job roles which provide them with work experience valued by employers. Recently, the LPC advised the Government to **gradually lower the age of eligibility of the National Living Wage from 25 to 21.** LPC argued that **21 is a more 'natural' cut-off point** as 21-24 year olds on most measures – such as educational participation, unemployment rates as well as where and how they work – are very similar. Another important reason was fairness, as 21-24 year olds in low-paid sectors generally do the same work, with only small, if any, differences in experiences and productivity.

- The LPC will **continue to monitor the situation for 18-20 year olds**, but note this is an important period where most young people transition from education into the labour market, and for some it is a vital launch pad for later transitions into higher-paid work. Meanwhile, **16-17 year olds occupy a distinct position**, as they are required to be in education or training, and they are often in part-time and casual jobs, primarily in hospitality and retail. Recent NIESR research for the LPC showed that employers feel more able to justify paying lower rates to 16-17 year old workers.

- The LPC advice to gradually lower the age of eligibility to 21 has been accepted by the Conservatives. It would affect around 15% of jobs held by 21-24 year olds, **amounting to almost 300,000 jobs.** In contrast, Labour has promised to scrap the Youth Rates altogether, calling it discrimination against young people. All workers above 16 would be eligible for their 'Real Living Wage'**.** Figure 6 shows the proportion of jobs paid at or above the National Living Wage by different ages. It is clear that a large proportion of 16-17 year olds, in particular, would be affected.

Figure 6. Percentage of jobs paid at or above the National Living Wage, by age, UK, 2018



Source: LPC's review of Youth Rates. LPC analysis of ASHE data.

- The Labour Party proposal of lowering the age of eligibility to those aged 16 and above represents a significant policy change, and **risks damaging the employment prospects of those aged 16-24**. There are good reasons why especially 16-17 year old workers' wages tend to be lower, reflecting less experience, education and training, and more need for on-the-job training, than older workers. If employers have to pay a 16 year old the same as a 25 year old, they may be more likely to hire the 25 year old with more experience. This could lead to spells of unemployment or lack of work opportunities among young people, which may cause long-term negative impacts on their future earnings and employment.

Recent NIESR work on minimum wages

Aitken, A., Dolton, P. & Riley, R. (2018) The Impact of the Introduction of the National Living Wage on Employment, Hours and Wages, Low Pay Commission, NIESR report.

Aitken, A. (2019) Is the National Living Wage working? NIESR blog.

Ebell, M., Speckesser, S., Rolfe, H.; Bursnall, M. & Naddeo, A. (2018) National Minimum Wage and National Living Wage Impact Assessment: Counterfactual research, Department for Business, Energy and Industrial Strategy, NIESR report.

Hudson-Sharp, N., Manzoni, C., Rolfe, H. & Runge, J. (2019) Understanding employers' use of the National Minimum Wage youth rates, Low Pay Commission, NIESR report.

Runge, J. (2019) Younger workers: the political battle ahead on the minimum wage, opinion piece in Personnel Today

National Institute of Economic and Social Research

Nuffield Foundation

2019 UK GENERAL ELECTION BRIEFING: EDUCATION POLICY PRIORITIES AND A LOOK INTO THE MANIFESTOS

Janine Boshoff, Héctor Espinoza, Elena Lisauskaite, Stefan Speckesser, Lei Xu
National Institute of Economic and Social Research (NIESR)

OVERVIEW

Labour, *Conservatives* and *Lib Dems* have **all pledged to increase the education budget.** But we ask, from early years via schools to further and higher education: **What can be done to make the education system more effective and fairer?** How can outcomes across different levels of education be improved? How can we reduce inequality in education success? Can education help people after losing jobs?

First, we **compare the UK with other large European countries** in terms of education spending and productivity of the economy. Then, we look into **six education policy areas** and identify key policy priorities. The last part **reviews the election manifestos** from this angle.

KEY FINDINGS

- **Increasing early years spending** to a level comparable to the European average (0.6% of GDP) is useful. Expenditure is low compared to other countries and has very high social benefits. Critically, proposals must detail how childcare will be delivered.
- Education policy must do more to **remove barriers for children from poor families**, improving financial support.
- **Quality and financial sustainability of apprenticeships need to improve**. Good quality apprenticeships must be created for people with both high and low previous skills. Developing industry links can inform the number of apprenticeship offerings at each level.
- Further Education (FE) and vocational training **outside the A-Level-University way** must be created.
- **Fair and sustainable university education** calls for a review of the funding formula**.**
- Reversing the decline in adult education and updating skills after job loss in an economy of accelerated structural change requires **significant resources for labour market training.** Public expenditure on this component must be linked to industrial policy objectives.

HOW DOES THE UK COMPARE TO OTHER COUNTRIES?

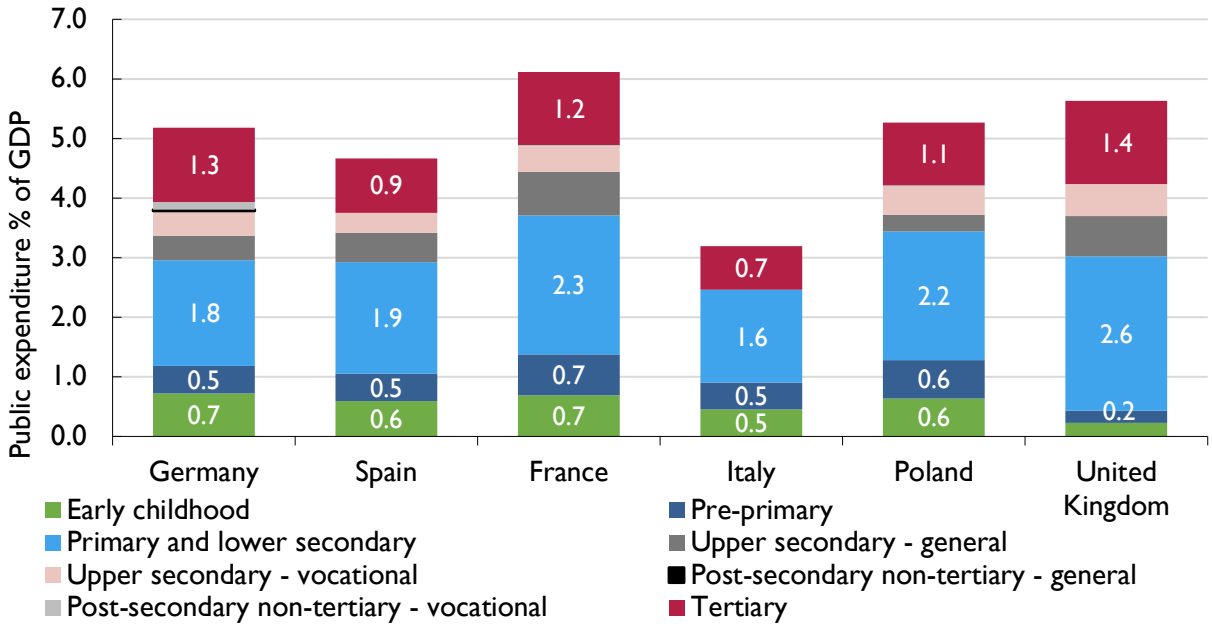
Spending

- Of the six large European countries, **only France spends more on education than the UK** as a percentage of GDP (6.1% of GDP compared to 5.6%, Figure 1).

- Combined **spending on primary and lower secondary education is the highest (3.8%)**, slightly higher than in France (3.5%), and much higher than in Germany.

- However, **spending on early years compares very unfavourably**. France spends 3.5 times more on early childhood and pre-primary education. Not included here, but an important benchmark: **Sweden's public expenditure for this is eight times the British**: 1.8% of GDP on early childhood plus another 1.3% of GDP on pre-primary education.

Figure 2. Public education spending as % of Gross Domestic Product



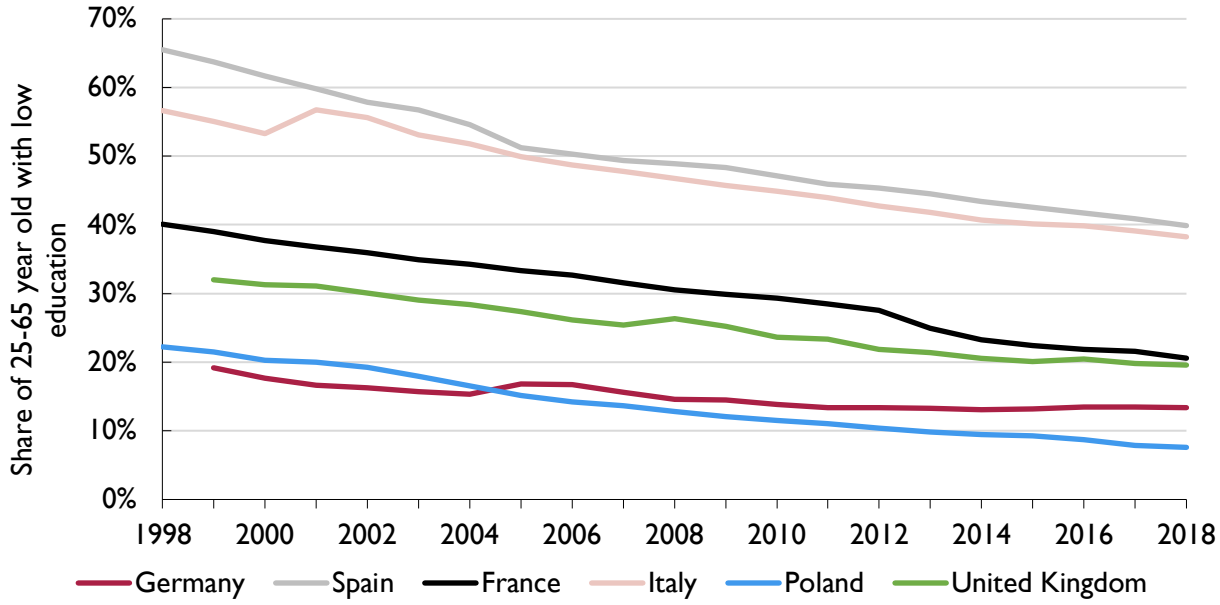
Source: Eurostat, Series educ_uoe_fine06 (last available: 2016), downloaded 21 November 2019

Adult skill outcomes

- The share of adults (25-65) having very low skills is going down in all countries, but the **UK still has a larger share of people without more than secondary school education than Poland or Germany** (Figure 2)**.** This mainly results from relatively larger proportions having achieved vocational education by age 18 to 19.

- The **progress towards zero low skilled adults has levelled off** in recent years in Germany and the UK. France has been much more successful over the last 20 years.

Figure 2. Adults population with at best lower secondary education



Sources: Eurostat, Series lfsa_pgaed (last available: 2016), downloaded 21 November 2019

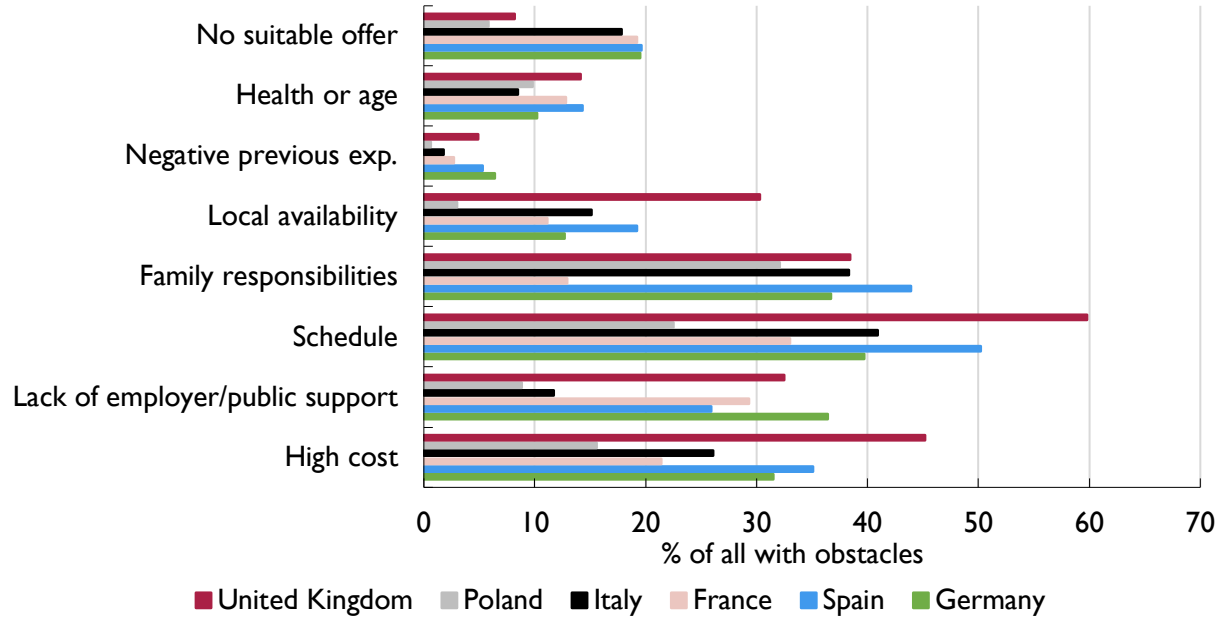
Barriers

- Coming from **a poor family is the main barrier** for young people to gain skills.

- For adults, cost is the key obstacle (Figure 3): **45%** of British adults aiming for better skills but unable to start adult education said that the **costs were too high (21% in France)**. 60% were too busy (33% in France). 30% said there was no appropriate course locally, ten times more than in Poland.

- Long working hours, difficulties of funding adult education and lack of availability are the key barriers.

Figure 3. Obstacles to participation in education and training, 25-65-year olds



Sources: Eurostat, Series trng_aes_177] (last available: 2016), downloaded 21 November 2019

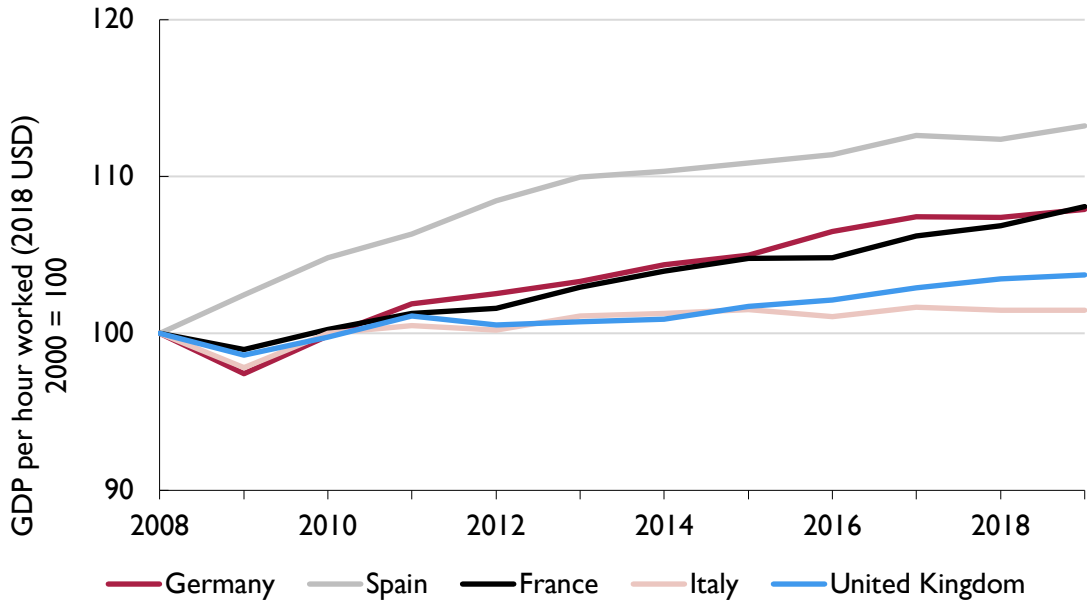
Labour productivity

- GDP per hour worked, an indicator of labour productivity, has remained near its pre-crisis levels in the UK (Figure 4).

- Since 2008, UK labour productivity has been outperformed by its closest European peers. Instead, it is growing only slightly above the lowest performing country (Italy).

- Labour productivity is closely linked to the skills of the workforce, and the UK's poor performance suggest there is a mismatch between skills supplied and those demanded by employers.

*Figure 4. Development of labour productivity**



*Poland excluded from graph as growth was much higher than in "old" EU States
Sources: Conference Board Total Economy Database™, downloaded 21 November 2019

KEY POLICY AREAS

1) Early years and young children

Situation

- A **complicated set of financing instruments** (See Figure 5) subsidise nursery education, largely from age three (with more help for people on low incomes). Care, learning and welfare are strictly regulated; some services offering extra help for poor families (Sure start) saw spending cuts.

- Early years education has **large social benefits**:
  - Development of children, savings in healthcare costs, **positive long-term impact on learning** in schools and beyond (implications for adult earnings, social mobility, etc.).
  - Positive labour market impact for women, especially from deprived households

- **Public expenditure on early years in the UK is low**, see above, and extension of provision would create large benefits.

Figure 5. Early years education

Policy instrument	Programme	Benefit	Target
Free childcare	Universal entitlement	15 hours a week for 38 weeks a year	All 3- and 4-year olds
	Extended entitlement	Additional 15 hours a week	3-4-year olds (parents < £100,000 p.a.)
	2 years old offer	15 hours a week for 38 weeks a year	40% of most disadvantaged 2-year olds
Tax relief	Employer provided childcare vouchers (and nurseries)	32% subsidy for basic-rate taxpayers	Until age 15
	Tax free childcare	20% subsidy	Until age 10 (parents < £100,000 p.a.)
Subsidies	Working tax credit	Reimbursement of up to 70% of childcare expenses	Until age 14 or younger (low income)
	Universal credit	Reimbursement of up to 85% of childcare expenses	Until age 15 or younger (low income)
VAT exemptions	VAT	VAT exemptions, 20%	Childcare providers
Other	Sure Start	Various services (learning, health, well-being, emotional development, etc.)	Parent and children under 4, low income families

Source: Farquharson, C. (2019). Early education and childcare spending. IFS, Briefing Note

Policy priorities

- Increasing spending, specifically to help disadvantaged families, and from earlier.

- Detail how the extension of early years can be delivered/the system can be more integrated.

2) School attainment and education progression

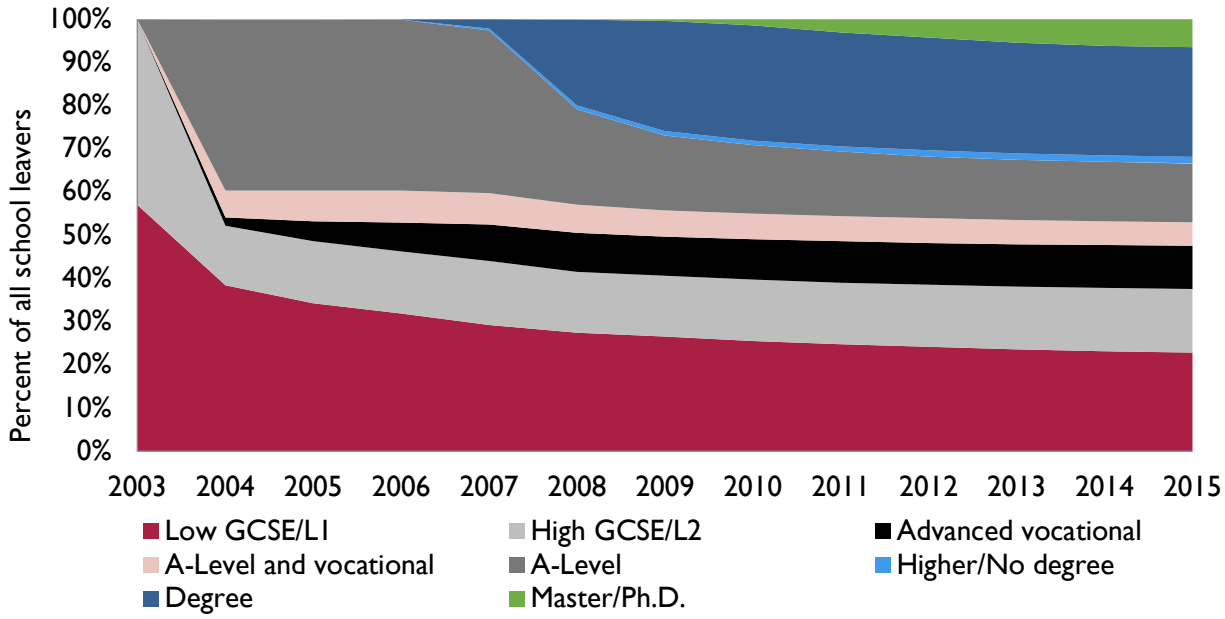
Situation

- 50% leave schools without "good" GCSEs. **At age 18, only half of all young people are ready to start university or skilled work** (having achieved A-Levels/Advanced vocational), **half are not.**

- Those with good GCSEs and then A-Levels progress well (see the increasing shares with bachelor or master's degrees in Figure 6 below); **those with low GCSE marks are stuck**.

- In adult age, **education outcomes and labour market opportunities are unequally distributed**: One third of school-leavers had gained highest skills until age 28, 40% have at best GCSEs or lower technical education. And: **The situation is worse for young people from poor families**.

Figure 6. Highest qualifications of school leavers until age 27/28*



*Cohort with GCSE's in 2002/03; Source: Espinoza and Speckesser (2019)

Policy priorities

- **Improving GCSE attainment**, specifically for young people from poor families: Helping poor families with targeted financial support will improve education and social mobility.

- **Improving post-16 learning for those with low GCSE's**, so they can make transitions to higher level skills in the long run.

- **Reversing funding cuts:** Relative to per pupil spending in primary schools, expenditure per student in secondary schools has been decreasing since the 1990s. At given/increasing numbers of students, this will not allow secondary education to meet address challenges to improve attainment, offer attractive careers to teachers and improve basic education to learn for future high-skilled jobs.

3) Apprenticeships

Situation

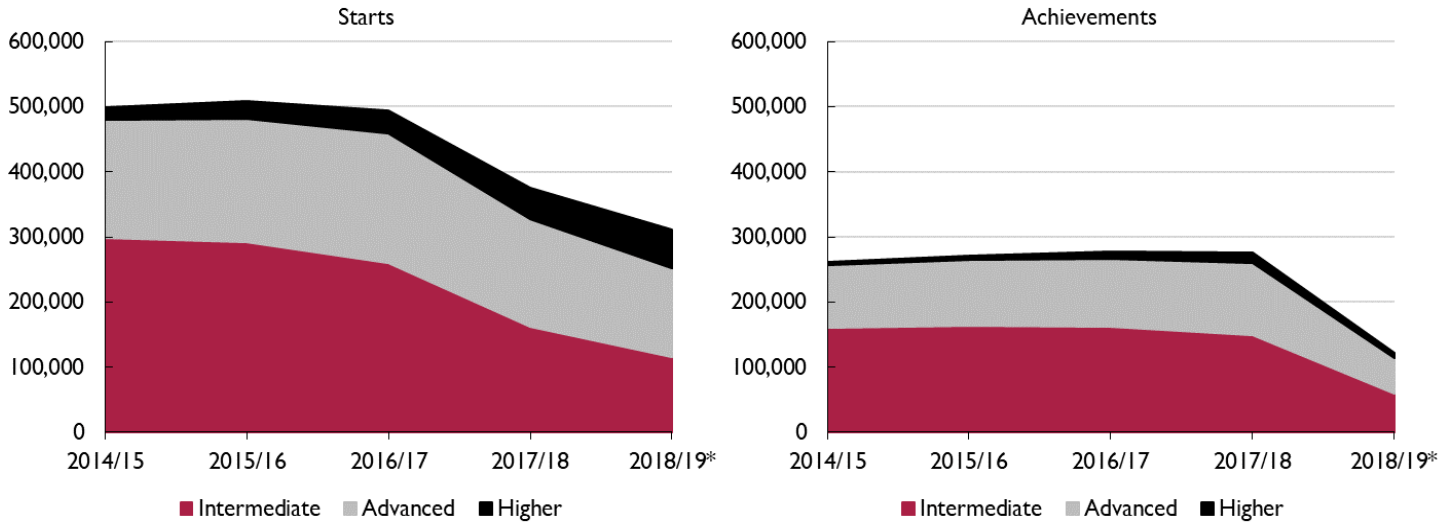
- For people of all ages, apprenticeships are the main route to **gain skills while working**.

- Government reforms tried to increase availability and attractiveness (funding, introducing new "standards", targets for public sector, etc.), but **quality, duration, drop-out, achievements and earnings benefits resulting from apprenticeships are really very different in reality**.

- **And: Only two thirds of starters achieve the apprenticeship qualifications.**

- Large decreases in lower level apprenticeships and **high growth in higher apprenticeships** (see Figure 7) create **new challenges**: Higher apprenticeships often replace existing programmes for graduates, exhaust training budgets quickly, have a long duration and a higher risk of non-completion. Also, **they don't benefit people with low level qualifications**.

Figure 7. Starts and achievements of apprenticeships



Source: Department for Education; downloaded 19 November 2019

Policy priorities

- **Improving quality of apprenticeships at all levels**. 12-months durations are short compared to other countries and *every* apprenticeship should offer attractive education credentials (not only competence assessment), so people gain versatile skills and progress in education. **The effectiveness of the whole system needs to be reviewed.**

- Higher apprenticeships currently don't benefit **young people, those with low qualifications, or small businesses. Make sure apprenticeships help these people, too!**

- **Improving achievement of apprenticeships** by providing the right skills, helping people form realistic expectations with better information, careers advice, quality control and support/ mentoring for apprentices.

4) Technical and professional education

Situation

- Figure 8 shows how **opportunities** for people aiming for higher skills and better jobs **differ if they have vocational qualifications or A-Levels**:

    - Most A-Level have a clear route to higher skills by taking degree courses.
    - Students with good technical qualifications progress far less often: In the Sankey diagram (Figure 8), there is **much less progression after Level 3 vocational education** indicated by a large proportion of this group not connected to any further or higher education.

- **High-level technical education (Level 4/5) offers an alternative route** of advanced education, offering good job and earnings prospects especially in technology and engineering jobs, **but hardly anyone takes these courses** or perhaps even knows about them.

- The recent Post-18 review of education and funding identified **the lack of higher technical education as a main cause of UK's skill gaps** and also to reduce severely "opportunities for people who are unable, for whatever reason, to progress directly from Level 3 to Level 6"

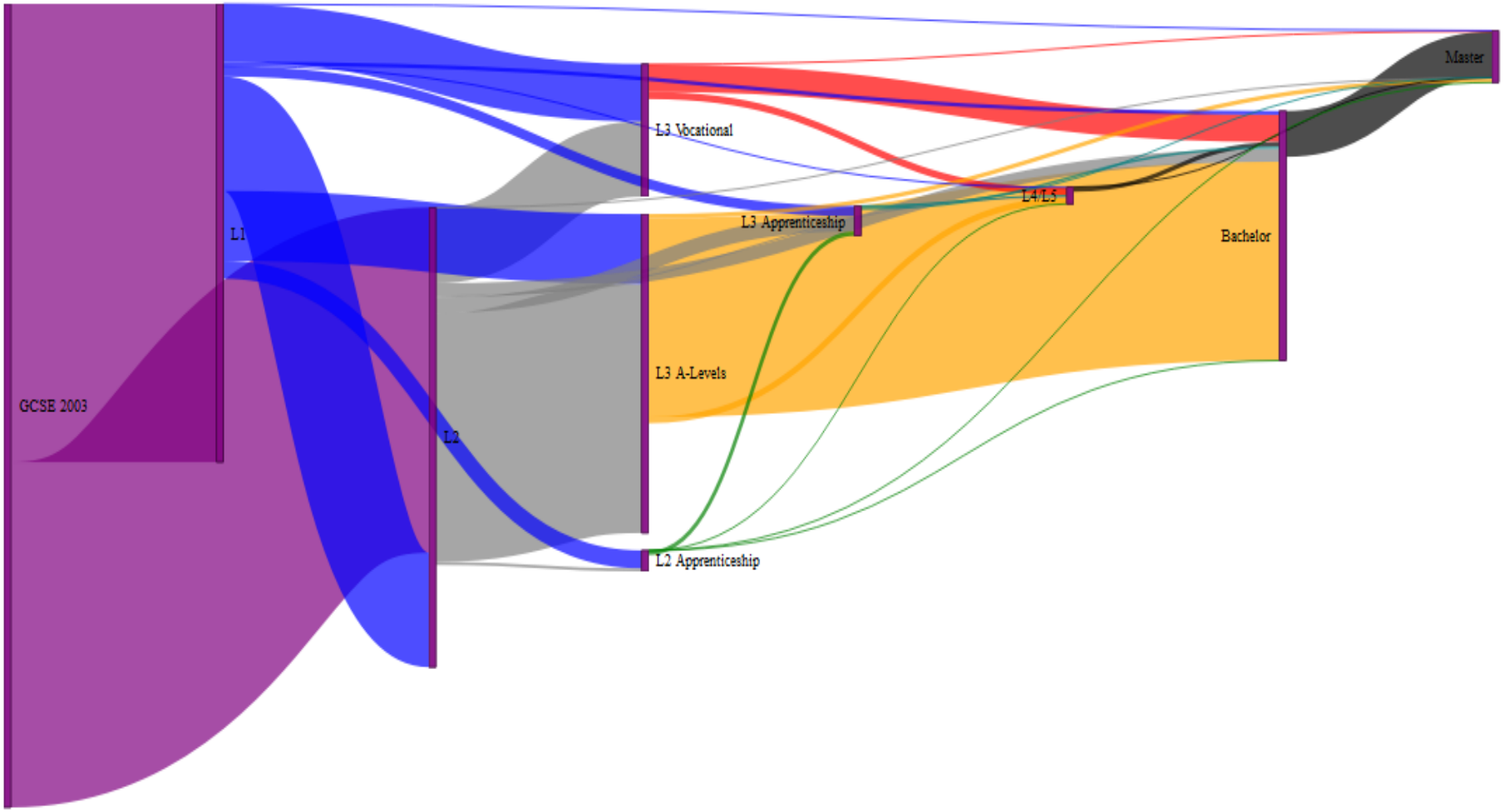
- In 1990, spending per student in FE was 50% higher than in secondary schools, in 2015 it was around 10% lower at £5,600 per student.

Policy priorities

- Implementing recommendations of various reviews: There should be **a better offer for people with technical qualifications, who want to increase skills**. Higher technical education should offer widely acknowledged qualifications. Progression routes need to be clear.

- **Removing relative disadvantages** in funding higher technical compared to higher academic (= degree course) education.

*Figure 8. Education progression**



*Cohort with GCSE's in 2002/03; Source: Espinoza and Speckesser (2019), alternative representation

5) Universities

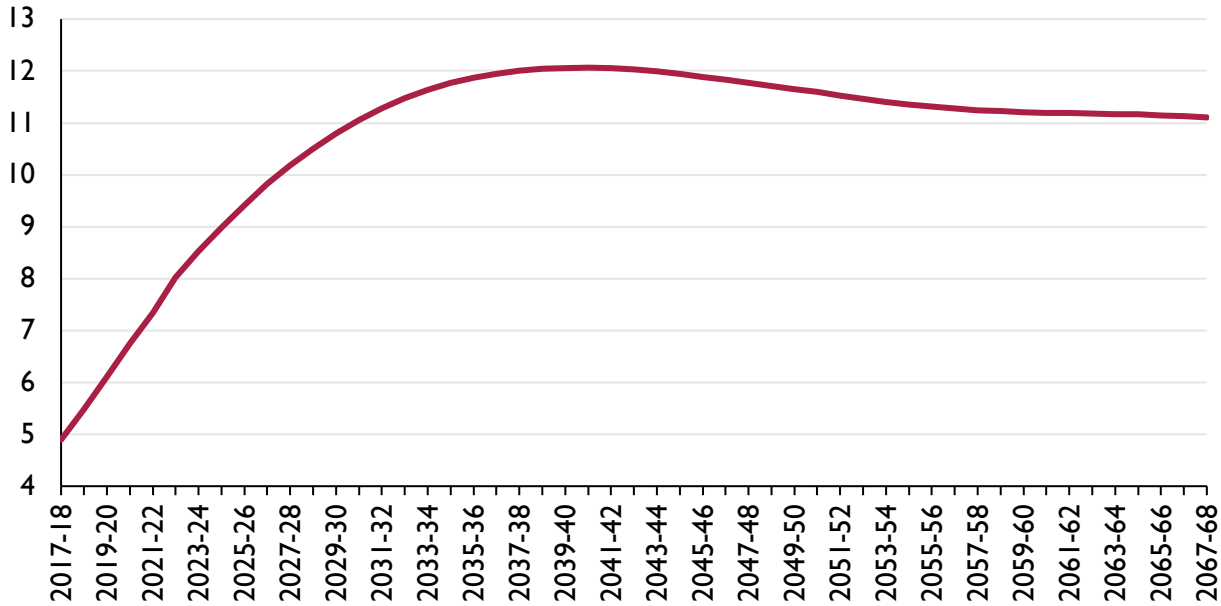
Situation

- Tuition fees of £9,250 resulting in **high indebtedness of students, reaching on average £57,800 after three-year course** at university. There are no maintenance grants, which further negatively impact poorer students.

- While recent research suggests significant earnings gains from university education, **graduates in some subjects like creative arts, English or philosophy have indeed quite low earnings**, which can only recover part of the debt over the working life.

- As **approximately 45% of loans are not repaid**, the Office for National Statistics ONS changed accounting rule to reflect its impact on the overall budget deficit, see Figure 9.

Figure 9. Additions to net debt from student loans, % of GDP



Sources: Page 92 of Office for Budget Responsibility, 2018

Policy priorities

- Implementing **recommendations of the Augar review** about the reintroduction of maintenance grants for students from disadvantaged families and a reduction of the interest rate applied to loans.

- In the longer term, replacing the system, which creates a funding gap eventually recovered by tax payers by **a system offering sustainability of university funding**, which also reflects that numbers of students are likely to increase (by 10% until 2025).

- Making sure that funding mechanisms do **not distort the universities' decision to invest in subjects, which are of high value and crucial for innovation** in the longer term.

6) Adult continued education and re-skilling

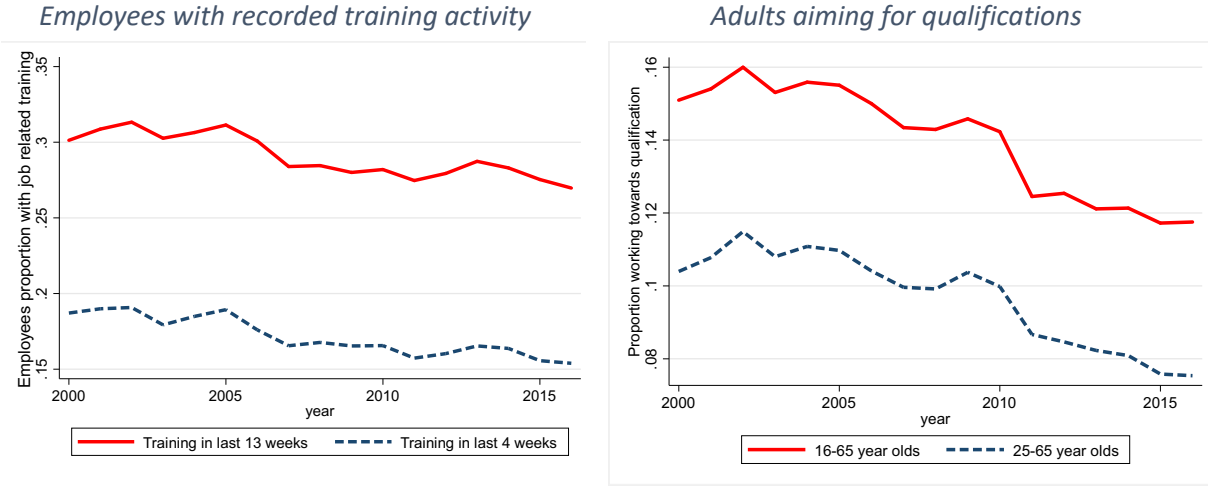
Situation

- **Further education and training are key instruments to help people affected by job loss in mid-career** to avoid unemployment, to leave it again quickly and to get better jobs – compared to other support programmes like employment retention or subsidised employment.

- As **industrial change accelerates labour market change** (decarbonisation, automation, production and services moving abroad, etc.), **programmes need to expand** in the 2020s.

- However, **participation** of training in the workplace and adults aiming for qualification **developed disappointingly**, see Figure 10:
  - The **proportion of 16-65-year old employees in training has been falling consistently** (left)
  - Even **more decline is observed for people aiming for recognised qualifications** (right)

Figure 10. Training in the workplace and studying for recognized qualifications



Source: UK Labour Force Survey, NIESR calculations

Policy priorities

- Improving support: The *Retraining Scheme*, which is only tested in some areas, and support for the hardest-to help claimants of unemployment benefits are much more limited than support for labour market training available across the OCED (somewhere between 0.5-1% of GDP).

- **Creating best value for the skills investment** for individual circumstances: Programmes must offer the greatest benefit to cost ratio and clear labour market value, i.e. sufficiently long re-employment for people after training to generate a positive return on investment.

- **Targeting subsidies carefully to those in need**, i.e. a risk of losing jobs or in industries affected by structural change rather than offering unconditional funding.

WHAT'S IN THE MANIFESTOS

NIESR identified priorities			Manifestos		
			Conservatives	**Labour**	**LibDem**
Increased early years spending, benefitting families on low incomes more		Detail how to deliver	£1 billion fund to create high quality, affordable childcare (before and after school, and during school holidays). Improve the Troubled Families programme and champion Family Hubs to serve vulnerable families with the intensive, integrated support they need to care for children – from the early years and throughout their lives.	Extend paid maternity leave to 12 months; 30 hours free preschool per week (2-4-year-olds); aim to extend to 1-year-olds; further hours at rates varying by household income. 150,000 additional early years staff; reverse cuts to Sure Start and create Sure Start Plus to provide universal service; increase funding to maintained nursery schools.	Free childcare for all 2-4-year-olds; additional for working families: free childcare for children aged 9-24 months; 35 hours per week, 48 weeks per year. Invest £1 billion a year in Children's Centres; Triple the Early Years Pupil Premium (to £1,000); additional training to staff. No further detail on infrastructure or procedures.
Improving schools	Help disadvantaged children	Funding and targeted financial support	Intervene in schools where there is entrenched underperformance; expand free schools; more support for arts, music, sports. Special Educational Needs: +£780 million funding next year and more school places Extra £14bn in funding for schools until 2024; Starting salary of teachers £30,000.	Reduce class sizes in primary school (max. 30); recruit more qualified teachers; new pay settlement for teachers. Reform of Ofsted and assessments. 'Fairer formula' applied to school funding; free school meals for all primary school children; breakfast clubs; help with costs for uniform. Increase in school spending by £10.5bn by 2022/23	Employ further 20,000 teachers; Reduce class size to 2015 level; Starting salary of teachers £30,000; annual increase in teachers' pay > 3%; by 2025 50 hours of training per year. Extra: 10.54 bn. Reform Ofsted/assessments. Additional funding to for Special Educational Needs; Free school meals for all primary school children and all secondary school children in families on Universal Credit; breakfast clubs.

NIESR identified priorities		Manifestos		
		Conservatives	**Labour**	**LibDem**
Quality and sustainable funding of apprenticeships	Apprenticeships to offer better options at Levels 2/3	Train up hundreds of thousands more highly skilled apprentices; significant numbers of new UK apprentices for infrastructure projects. No detail on further funding or Level 2 and 3	Launch climate apprenticeship fund - funded by 25% of the Levy. Support certain target groups to take up climate apprenticeships Introduce that firms can transfer unused levy fund (up to 50%) to benefit small businesses	Expand apprenticeship levy to 'Skills and Training Levy'; 25% of this to go into a 'Social Mobility Fund'; Creation of 'National Colleges' for key sectors; Expansion of apprenticeships (incl. higher apprenticeships). No detail on apprenticeships at lower levels or sustainability of funding.
Progression route to high technical skills in addition to A-Level/university route		£2 billion Investment in Further Education colleges; Creation of 20 Institutes of Technology; £500 million 'Shared Prosperity Fund' to replace ESF funding for skills of disadvantaged people; £400 million to train and teach more than a million 16 to 19-year olds in Further Education	Aligning base rate per-pupil in post-16 education to Key Stage 4; Re-introduction of the Education Maintenance Allowance. Free 'lifelong entitlement' to i) Level 3 training ii) Up to six years Level 4-6, with maintenance grants for disadvantaged learners; Integrate FE & Skills into single national system	£1 billion further investment in Further Education; Students aged 16+ from poorer families to obtain 'Young People's Premium' (in parts paid to student); Expansion of higher vocational training (Foundation degrees, Higher Nationals, etc.).
Fair and sustainable university funding		Consider Augar Review recommendations on fees; review interest rates	Abolish tuition fees and re-institute maintenance grants; proposed new funding formula, but no further detail.	Maintenance grants for the poorest students; Review of higher education finance.
Significant resource for adult education/updating skills after job loss		New 'National Skills Fund' worth £3bn. Invest in local adult education, no further detail	See above free lifelong entitlement; Restore and expand Union Learning Fund to £50m (from 12m); additional entitlement for workers affected by industrial transition;	Introduce 'Skills Wallet' (£10,000, increasing until age 55) for training in adult live; access to free career guidance 'how to spend it'.

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2019 UK GENERAL ELECTION BRIEFING:

THE FISCAL RULES

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OVERVIEW

The election campaign has focussed on the tax and spending plans of the main political parties, this brief outlines:

- The case for fiscal rules as part of the country's strategy of macroeconomic management.
- The need for comprehensive reform of the process of setting fiscal policy.
- This brief accompanies: "Where is the Money Coming from?"

KEY TAKEAWAYS

- Public (so-called National) debt allows the State to share the financing of its current expenditure plans with future, typically better off generations rather than simply applying taxes on the current generation.
- The control of public debt is necessary in order to prioritise current expenditure plans but also to maintain the capacity to deal with an uncertain economic future.
- Large expenditure shocks should generally be financed by gradual increases in taxes and immediate, but strictly temporary, increases in public debt.
- Previous episodes of high public indebtedness in the UK have been reduced, as a share of GDP, by targeting sequences of primary fiscal surpluses (government net borrowing excluding net interest payments) with nominal GDP growth then acting to ensure that the level of public debt is more affordable.
- Rather than arbitrary and unrealistic rules that will be subject to constant revision, it is preferable to accept a general objective for low and stable public debt and then publish forecasts of the current and future primary fiscal surpluses that may change given economic circumstances, just as with Bank Rate under an independent Bank of England.
- It is questionable whether the Chancellor of the Exchequer should be solely responsible for setting the path of the fiscal surplus and it may be preferable for a more normative Fiscal Council, possibly chaired by the Chancellor, accompanied by independent economic forecasts to set the path of the primary fiscal surplus as a function of expenditure and revenue-raising-plans.

Public Debt

- The government issues public (national) debt in order to fund any current and planned expenditure in excess of current tax receipts. The issuance of public debt involves borrowing at term from the private sector at home or abroad, as well as the public sector abroad.

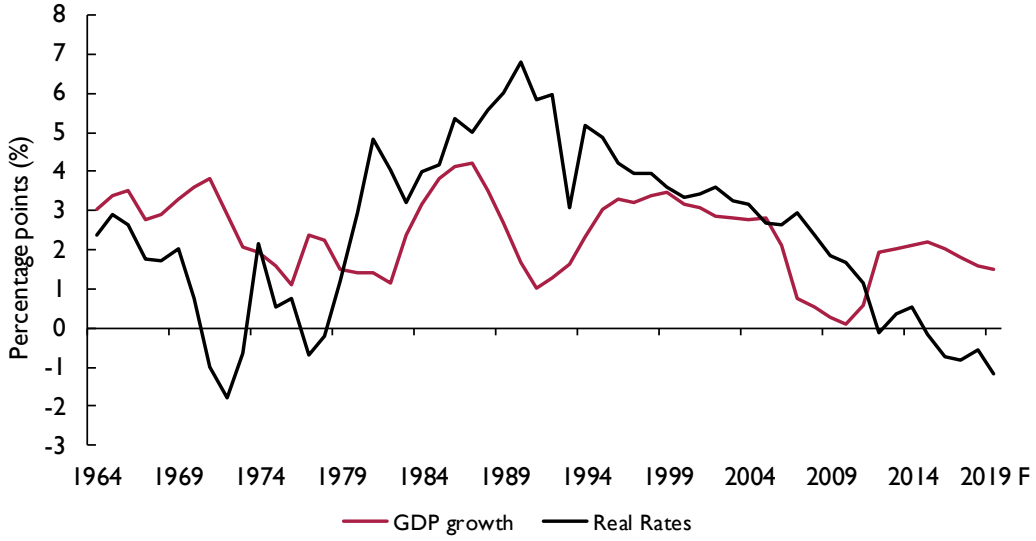
- The level of public debt needs to be managed in such a way as to allow the government to deal with any anticipated expenditure needs as they arise, such as those following the Great Financial Crisis in 2007-8, but also to leave the government with sufficient, what is called, **fiscal space** to deal with future shocks.

- There are a number of key considerations when assessing whether the level of debt is problematic: its size relative to national income, the maturity of the debt and whether it is pays a fixed interest rate (conventional) or one linked to inflation (index-linked).

- A good debt management strategy would involve **retaining space to issue more debt if required**, having a **long term maturity structure** so that not too much debt has to be refinanced in any one year, and issuing **a mix of conventional and index-linked debt** so that the fiscal position neither encourages inflationary finance nor imposes too much of a burden on the Exchequer from an inflation shock. Those entities holding the debt will wish to receive interest payment in order to match their liabilities and so public debt can help offset private sector payment risk.

- There is no widely accepted definition of an appropriate level of national debt and if it was agreed it would change in response to fundamentals such as requirements for public infrastructure, state-funded education, demographic considerations, the state's revenue raising capability and the current and prospect costs of public debt finance.

Figure 1: GDP Growth and Real Rates.



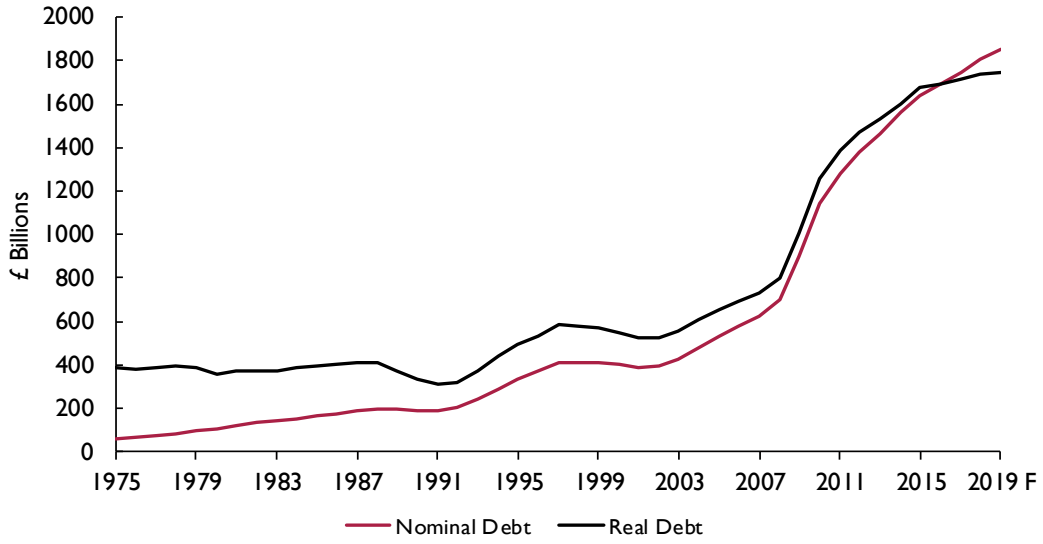
Source: NiGEM database and NIESR forecast

- In the long run, Figure 1, the real costs of public debt and the real growth of the economy tend to move together, which means it is not possible to run a permanent sequence of fiscal deficits without raising the ratio of public debt to output to unsustainable levels.

"Paying off National Debt"

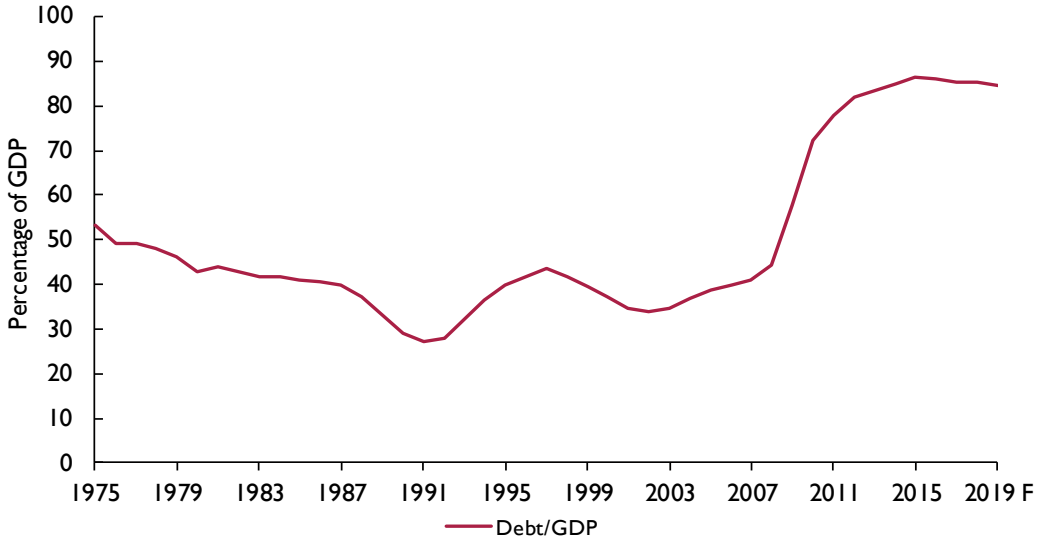
- Public or national debt tends to rise with income, both in nominal terms but also relative to the costs of a basket of goods (Figure 2), but not as a share of income in **normal times** (Figure 3).

Figure 2: Nominal Levels of Public Debt and Real Debt.



Source: NiGEM database and NIESR forecast

Figure 3: National Debt to GDP ratio.



Source: NiGEM database and NIESR forecast

- The national debt relative to income should therefore tend to rise in times of elevated public expenditure, e.g. in war-time, in a depression, and fall in times of sustained economic growth.

- Economists tend to think that tax smoothing is a good idea, which means that when public expenditures increase sharply, tax should not rise immediately, as they tend to distort economic behaviour, and this means that the ratio of debt to GDP will rise temporarily.

- The strategy for reducing the national debt burden, which in practice means reducing the debt to GDP ratio, has involved a two-step procedure. First targeting surpluses on the primary fiscal balance, which is the balance before adding back in the interest rate burden on existing national debt, that are at least as large as the interest rate burden so that the overall fiscal position is in broad balance.

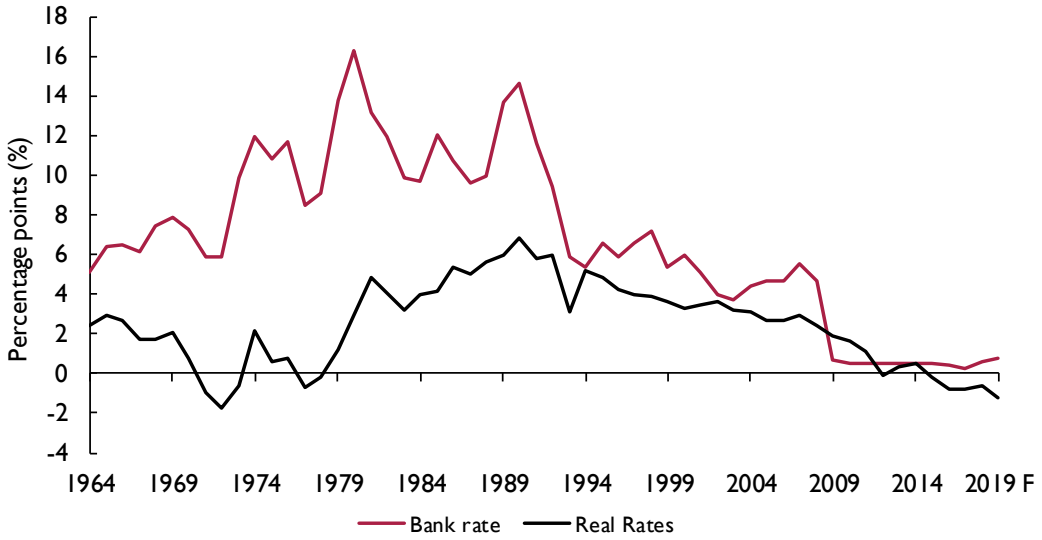
- Second, by adopting policies that limit increases in the magnitude of the national debt, the denominator, which is nominal GDP, can grow over time to reduce the debt burden. This strategy was adopted after each of the Napoleonic Wars, World War 1 and World War 2.

- The rapid increase in national debt following the Great Financial Crisis can broadly-speaking be dealt with in the same way with a gradual return to a sequence of primary surpluses. Though after the most recent crisis, we are still waiting for the return of a sequence of primary fiscal surpluses.

Monetary and Fiscal Co-ordination

- Monetary policy plays a large role in public debt accumulation. There are two main channels. First changes in Bank Rate influence aggregate demand in the economy, which affects the revenues collected by the state. Secondly, Bank Rate heavily influences the costs of funding public debt as its current level and expected path determines much of the cost of debt issuance (Figure 4).

Figure 4: Bank rate and Real rates.

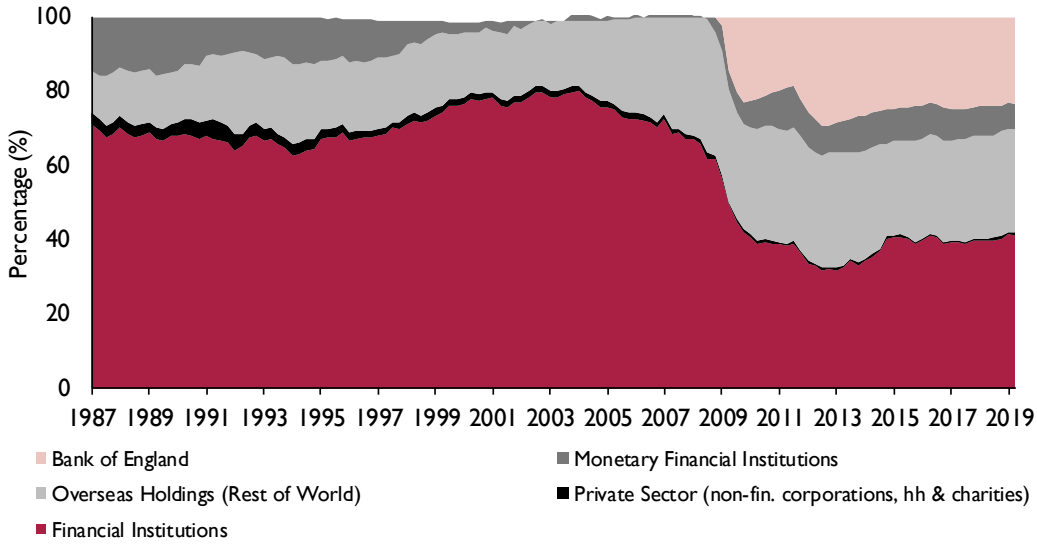


Source: NiGEM database and NIESR forecast

- Since 2009, the Bank of England has been buying public debt from the non-financial private sector and now holds come 25% of the outstanding debt stock (Figure 5). These operations, known as Quantitative Easing (QE), have reduced the stock of debt that would otherwise be held by the

private sector and consequently stabilised its price at a level higher than would otherwise have obtained. The net effect is that longer term interest rates are some 1-1.5% lower than they would otherwise have been.

Figure 5: Public debt holdings



Source: ONS.

- The profits from this trade, which are remitted to the Treasury, have temporarily ameliorated the fiscal balances. This is because the purchase of bonds yielding typically 2% or more is financed by borrowing at Bank Rate, which has typically been 0.5%.

- The overall fiscal deficit, which includes interest rate payments on debt and flows from these central bank operations, is directly affected by Bank Rate and so we propose making the **primary fiscal balance** the explicit instrument of fiscal policy.

- As shown in a variety of papers the primary balance has, what economists call a state-contingent role in supporting the economy, particularly when monetary policy is constrained at the zero lower bound. This means that the appropriate future path of primary fiscal surpluses will change with the view of the economy and they must be set in manner that is not subject to the political cycle and so implies a strong role for an independent Fiscal Council for judging the appropriate stance of fiscal policy.

Fiscal Rules

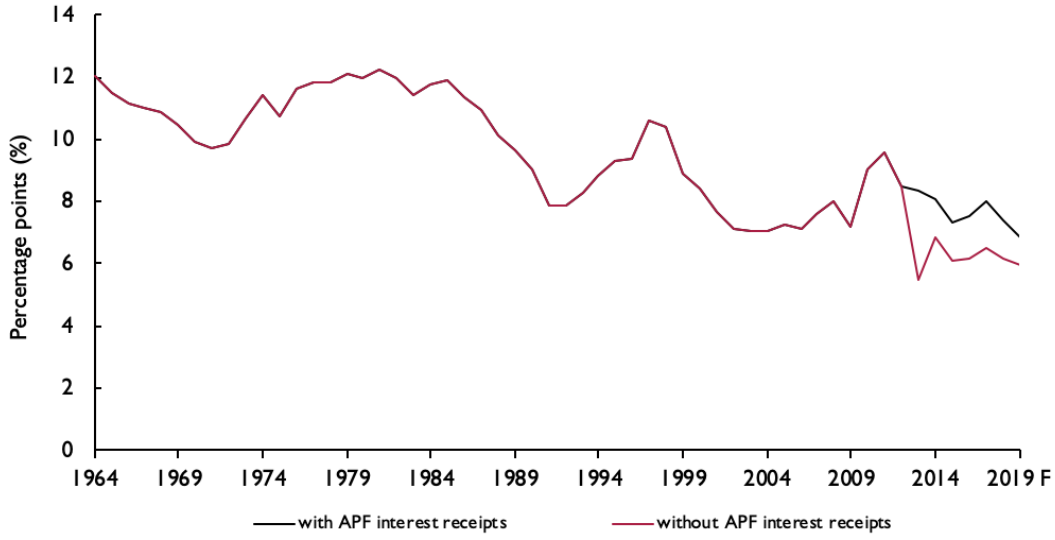
- Currently the Office for Budget Responsibility (OBR) more or less only assesses whether the Chancellor's self-imposed plans are likely to be hit. There is not mandate for assessing the optimality of those plans, individual departmental expenditures or of various tax reforms.

- The regular changes in the fiscal rules suggest there is a fundamental problem in being able to write down a "timeless" objective for fiscal policy, which can be simply numerated. An appropriate conceptual basis would be to **target low and stable levels of public debt in the long run**. The instrument would then be a state-contingent **path of the primary fiscal surplus.**

- To promote transparency and credibility, we would have a fixed annual timetable for the Budget in the Spring and a spending assessment in the Autumn, at which the fiscal path for the current year and the next five fiscal years would be set.

- The rules proposed by the Conservative and Labour Parties are subject to the criticisms that **they are arbitrary and difficult to monitor**. **They simply will not last**. Each party has adopted rules for debt interest rates payments as a fraction of public revenue and I show the series since 1964 with a line at the end for the series including remittances to HMT from the Bank of England under QE. It shows how even this target is distorted by central bank policy.

Figure 6: Interest Payment to Revenues ratio.



Source: NiGEM database and NIESR forecast

- The path of primary fiscal surpluses can be set by HMT in the form of a Fiscal Policy Council of experts and Whitehall advisers. The Chancellor would choose to chair such a Council.

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2019 UK GENERAL ELECTION BRIEFING: WHERE IS THE MONEY COMING FROM?

Arno Hantzsche and Garry Young
National Institute of Economic and Social Research (NIESR)

OVERVIEW

The main political parties have meticulously set out costings of their spending plans for the next Parliament and how they would finance them if elected. This briefing focuses on:

- The fiscal rules adopted by the political parties.
- The underlying fiscal position and how it has changed since the last Office for Budget Responsibility (OBR) forecast was published in March.
- The fiscal outlook on the basis of each of the political parties' plans.
- The credibility of the fiscal plans.

KEY TAKEAWAYS

- The fiscal outlook has weakened since the last OBR forecast in March. We see no headroom for extra spending or reduced taxes within the existing settlement. This means that all parties could breach their fiscal rules in the next parliament if their plans are not amended.
- There are material differences between the parties' plans, but none imply levels of spending or taxation outside of previous UK historical experience.
- All parties stress the importance of only borrowing to pay for investment. In all cases overall borrowing is expected to increase from current levels.
- The fiscal outlook is very uncertain with known risks associated with Brexit and demographic change. This means that promises not to raise taxation are not credible and unhelpful.
- There should be more consideration of long-term fiscal challenges and how the public might be prepared for dealing with them.

This briefing note is a companion piece to 'Fiscal Rules' by Jagjit Chadha that discusses the case for fiscal rules and the need for reform of the process for setting fiscal policy.

Fiscal rules

- Each of the main political parties has set out its own rules to guide its fiscal plans. The fiscal rules are summarised in table 1.

Table 1 Fiscal rules of the main political parties

Political Party	Fiscal Rules
Conservative	• Balance the current budget within three years. • Public investment will not exceed 3% of GDP. • The ratio of debt interest cost to tax revenue to remain below 6 per cent.
Labour	• Public sector net worth to rise in value over the Parliament. • Balancing the current budget at the end of a rolling 5-year forecast period. • The ratio of debt interest cost to tax revenue to remain below 10 per cent.
Liberal Democrats	• 1 per cent surplus on current spending • Borrowing would only be allowed to pay for capital investment projects judged by an independent watchdog to generate more money for the taxpayer than their initial cost • Ensure overall national debt continues to decline as a share of national income.

- All political parties now agree that borrowing should only be used to finance investment and not day-to-day spending. This means that the current budget – the difference between revenue and day-to-day spending – should normally be balanced or in surplus. The Liberal Democrats have adopted the toughest fiscal stance in aiming for a 1 per cent surplus on current spending.

- This means that any plans for additional day-to-day spending need to be matched by additional tax revenue, assuming that there is no headroom of revenue over day-to-day spending within the existing tax and spending settlement.

The underlying fiscal position

- The main political parties have all made announcements about their plans for additional spending and its funding without having a clear independent guide to the most likely fiscal outlook based on existing policies. This is because the most recent public finance forecast by the Office for Budget Responsibility (OBR) was in March.

- Back in March the OBR was expecting the overall deficit to decline from 1.1 per cent of GDP in 2018-19 to 0.5 per cent of GDP by 2023-24. Within this, there was expected to be a current budget surplus – the balance between revenue and day-to-day spending - of 1.0 per cent of GDP in 2018-19, rising to 1.6 per cent of GDP in 2023-24. These forecast numbers **provided a reasonable amount of headroom for additional spending or lower taxation** against the government's then fiscal mandate of aiming for the structural budget deficit to lie below 2 per cent of GDP in 2020-21. But the OBR noted that, as well as more conventional risks, anticipated changes to the accounting treatment of student loans would 'absorb almost half the Government's current headroom of 1.2 per cent of GDP against the fiscal mandate as well as making a balanced budget harder to achieve'.

- Since the March OBR forecast there have been **several developments that have weakened the fiscal outlook**. These are: first, a more realistic accounting treatment of student loans that now takes account of expected future write-offs at the time when loans are made; second, new estimates of capital depreciation that alters how spending is split between day-to-day spending and investment; third, additional spending announced in the 2019 Spending Round in September; fourth, a changed, predominantly weaker, outlook for the economy.

- Table 2 shows our estimate of a neutral fiscal benchmark, derived by updating the March 2019 OBR forecast for known developments including recent data and a different economic outlook. This is produced by re-running NIESR's November 2019 forecast to include only announced public spending commitments (the NIESR forecast had anticipated some post-election spending increases over and above those that had been announced). The forecast assumes continuing Brexit-related uncertainty but no change in the UK's trading relationship with the EU. This would be consistent with a range of Brexit outcomes that involve a long transition period.

Table 2 A revised 'neutral' fiscal benchmark (£ billion and % of GDP in italics))

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2014-25
Total current receipts	811.4	833.1	864.3	894.8	925.6	958	992.4
	37.5	*37.2*	*37.2*	*37.3*	*37.3*	*37.3*	*37.4*
Total current expenditure	757.2	796.2	817.1	842.4	871.2	904.2	941.1
	35.1	*35.5*	*35.2*	*35.1*	*35.1*	*35.2*	*35.4*
Depreciation	48.8	50.3	51.9	53.5	55.2	57.1	59.1
	2.3	*2.2*	*2.2*	*2.2*	*2.2*	*2.2*	*2.2*
Current budget surplus	5.4	-13.4	-4.7	-1.1	-0.8	-3.3	-7.8
	0.3	*-0.5*	*-0.2*	*0.0*	*0.0*	*-0.1*	*-0.2*
Gross investment	95.6	98.6	104.9	109.2	110.8	111	113.5
	4.4	*4.4*	*4.5*	*4.5*	*4.5*	*4.3*	*4.3*
Net investment	46.8	48.3	53	55.7	55.6	53.9	54.4
	2.2	*2.2*	*2.3*	*2.3*	*2.2*	*2.1*	*2.0*
Total managed expenditure	852.8	894.8	922	951.6	982	1015.2	1054.6
	39.5	*39.9*	*39.7*	*39.6*	*39.5*	*39.5*	*39.7*
Public sector net borrowing	41.4	61.7	57.7	56.8	56.4	57.2	62.2
	1.9	*2.8*	*2.5*	*2.4*	*2.3*	*2.2*	*2.3*
Memo:							
Nominal GDP	2160.4	2240	2321	2401.3	2483	2567.2	2656.5

Source: ONS (Public Sector Finances, 21 November 2019) and NIESR.

- According to the latest data, public sector net borrowing was £41 billion (1.9 per cent of GDP) in 2018-19. There was a **small current surplus of £5.4 billion** (0.25 per cent of GDP) once borrowing to finance net investment of £46.8 billion is excluded. The neutral fiscal benchmark builds in slightly higher spending in the current fiscal year (2019-20) to take account of preparations for a no-deal Brexit, but otherwise shows little change in spending and revenue items as a share of GDP over the coming years. This **implies public sector borrowing of between 2 and 3 per cent of GDP and a small current deficit in most years**.

- These figures show a significant change from the outlook presented by the OBR in March. The upward revision in public sector net borrowing in 2018-19 from £22.8 billion to £41 billion is largely due to accounting changes. The most significant accounting change is the new treatment of student loans that added £12.4 billion to borrowing in 2018-19. Compared with the old method, interest and dividends received is reduced because less interest accrues to the government. This reduces current receipts and so makes the current surplus smaller. At the same time, capital grants to the private sector are increased to reflect the expected cancellation of student loans. This does not affect the current deficit but it does add to total net investment and net borrowing.

- There has also been a substantial change to **the current surplus. This has been revised down from £20.4 billion in March to £5.4 billion in the latest data**. This has been affected by a significant accounting change to the treatment of depreciation. Blue Book revisions to capital stock and depreciation data add £8.4 billion to depreciation in 2018-19, raising current spending and reducing net investment in equal measure. This reduces the current surplus, but leaves public sector net borrowing unchanged.
- The other major change is the extra spending announced in the 2019 Spending Round. This adds £2.1 billion to spending in 2019-20 and £13.4billion in 2020-21, which we assume would continue into future years although this was not announced.

- The projected small current budget deficit contrasts with the underlying surpluses assumed by the political parties. Conservative plans are based on an underlying current surplus of around £4 billion per year, while Labour plans are based on a current surplus of £6 billion in 2023/24. It is unclear what assumption the Liberal Democrats are making, but it appears that they are assuming a current surplus of around 1 per cent of GDP as their manifesto proposes roughly equal increases in taxation and day-to-day spending.

The fiscal outlook under different parties' plans

- The manifestos have set out the political parties' plans in meticulous detail.

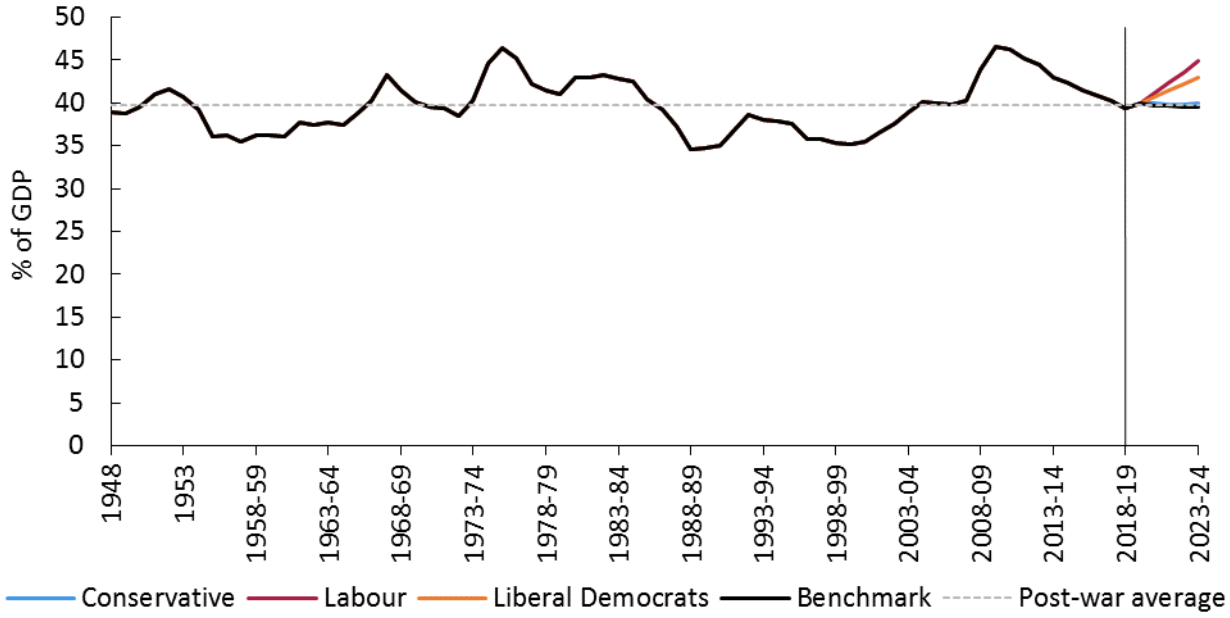
- The additional spending measures in the **Conservative Party** manifesto are limited, amounting to an extra £2.9 billion in day-to-day spending and £8.1 billion in capital spending in 2023-24. This would be sufficient to raise Total Managed Expenditure to 39.9 per cent of GDP in 2023-24, almost exactly equal to its post-war average of 39.7 per cent.

- The additional spending measures in the **Labour Party** manifesto are substantial, amounting to an extra £82.9 billion in day-to-day spending and £55 billion in capital spending in 2023-24. This would be sufficient to raise Total Managed Expenditure to 44.9 per cent of GDP in 2023-24, around 5 percentage points above its post-war average of 39.7 per cent.

- The additional spending measures in the **Liberal Democrat** manifesto are also substantial, amounting to an extra £62.9 billion in day-to-day spending and £26 billion in capital spending in 2023-24.[i] This would be sufficient to raise Total Managed Expenditure to 43.0 per cent of GDP in 2023-24, over 3 percentage points above its post-war average of 39.7 per cent.

- Figure 1 shows the parties' spending plans in historical perspective. It shows the sharp differences between the spending plans of the political parties. The Conservative plans involve a continued tight grip on public spending, with spending as a share of GDP continuing at a lower level than throughout the past ten years. Given the ageing of the population, we doubt that these plans ease austerity sufficiently to meet demands for public service provision. At the other end of the scale, Labour Party plans for spending are unusually high but not unprecedented. TME as a share of GDP was higher in 1975-77 and 2009-12. However, on both previous occasions, emergency action was taken to reduce public spending from what was deemed as an undesirably high level.

Figure 1 **Total Managed Expenditure (as a per cent of GDP)**



Source: OBR Public Sector Finance databank and NIESR calculations.

- While the main political parties have sharply different plans for public spending, they all agree that additional day-to-day spending should be financed by additional taxes and other revenue, while additional capital investment can be financed by borrowing.

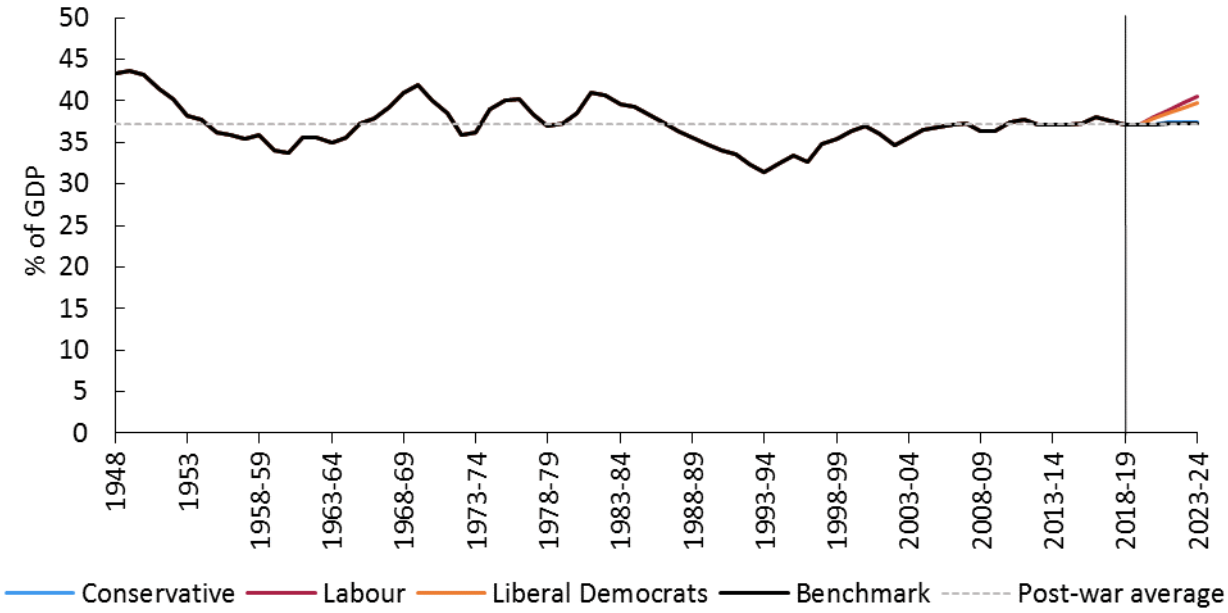
- The revenue measures in the **Conservative Party** manifesto consist of some measures that raise revenue, notably the decision to keep the corporation tax rate at 19 per cent, rather than cutting it as previously announced, and tax cuts. The net effect is to increase revenue to more or less pay for additional spending. These measures would result in Total Current Receipts rising from 37.2 per cent of GDP to 37.4 per cent of GDP, again almost exactly equal to the post-war average of 37.2 per cent, but a little higher than has been common in the past thirty years.

- The revenue measures in the **Labour Party** manifesto are more substantial. They are focused on raising more revenue from companies and wealthy individuals to pay for additional spending. They also include additional tax revenue from a higher level of activity generated by the fiscal measures.[ii] These measures would result in Total Current Receipts rising from 37.2 per cent of GDP to 40.5 per cent of GDP, the highest level since 1982-83.

- The revenue measures in the **Liberal Democrat** manifesto are also substantial, but different to Labour. As with Labour, the effect of the revenue raising measures is intended to pay for additional spending. They include a 'Remain bonus' in 2024/25 that is assumed to come from the economy being stronger as a result of not leaving the EU. These measures would result in Total Current Receipts rising from 37.2 per cent of GDP to 39.8 per cent of GDP.

- Figure 2 shows the parties' revenue plans in historical perspective. The Conservative plans involve maintaining the current level of receipts as a share of GDP, while Labour and the Liberal Democrats are planning rises towards 1970s levels.

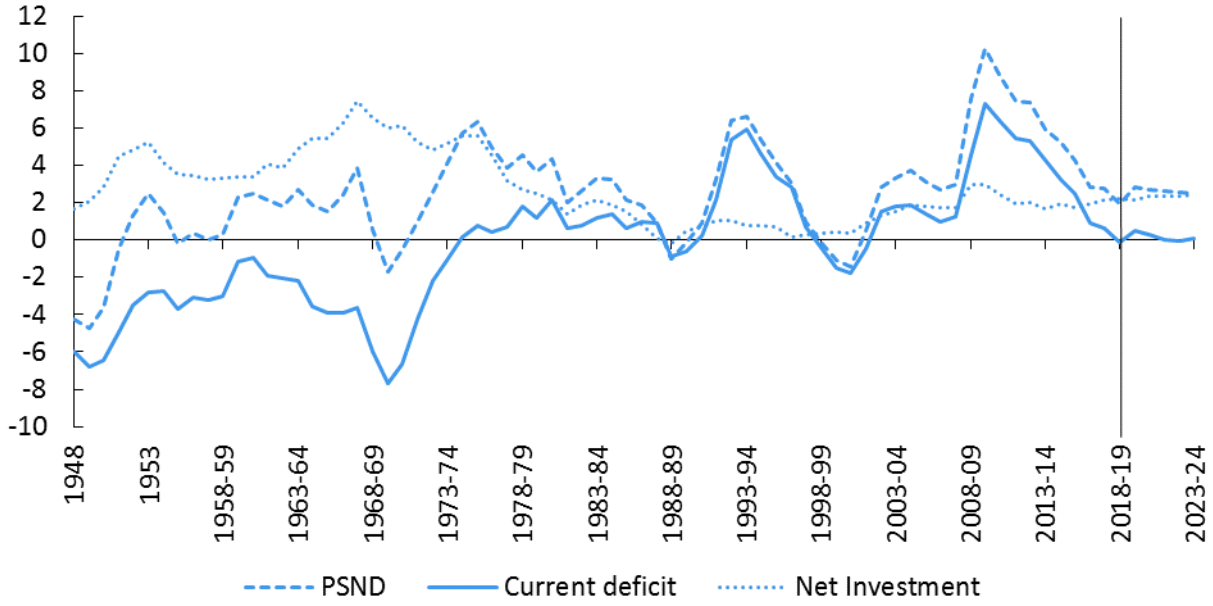
Figure 2 **Total current receipts (as a per cent of GDP)**



Source: OBR Public Sector Finance databank and NIESR calculations.

- Figure 3 draws out the implications for **borrowing** over the next five years **of the Conservative Party plans**. It shows net borrowing running at around 2.5 per cent per year, the post-war average, to pay for a similar level of net investment.

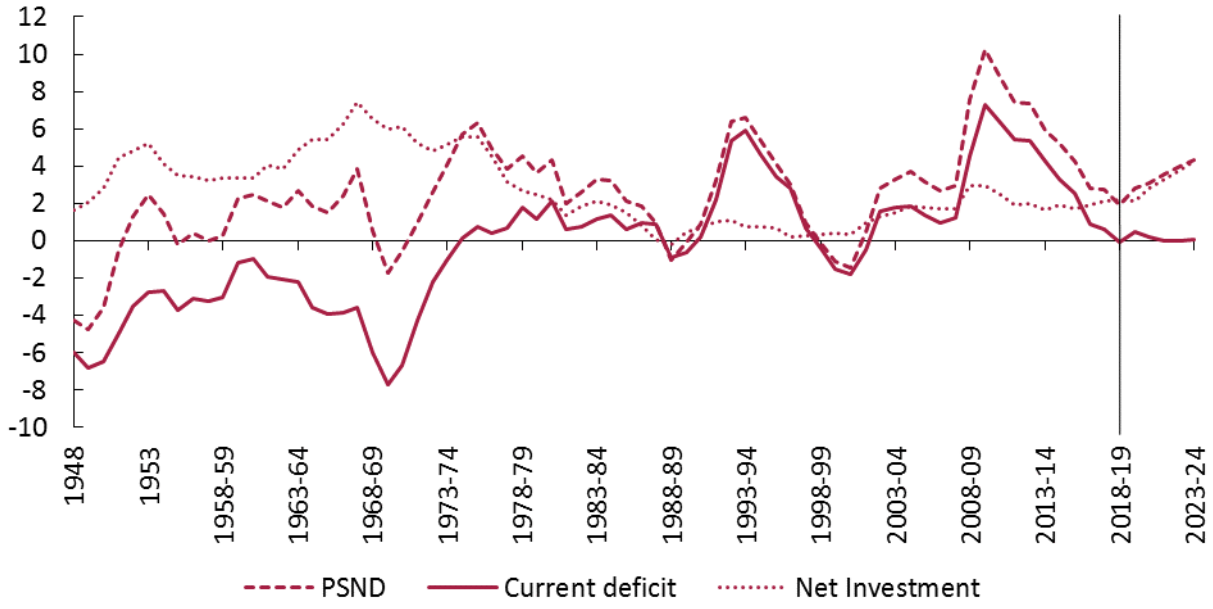
Figure 3 **Implications of Conservative plans for borrowing (as a per cent of GDP)**



Source: OBR Public Sector Finance databank and NIESR calculations.

- Figure 4 draws out the implications for **borrowing** over the next five years of the **Labour Party plans**. It shows net borrowing rising to around 4 per cent per year, a high level by post-war standards, to pay for a similar level of net investment.

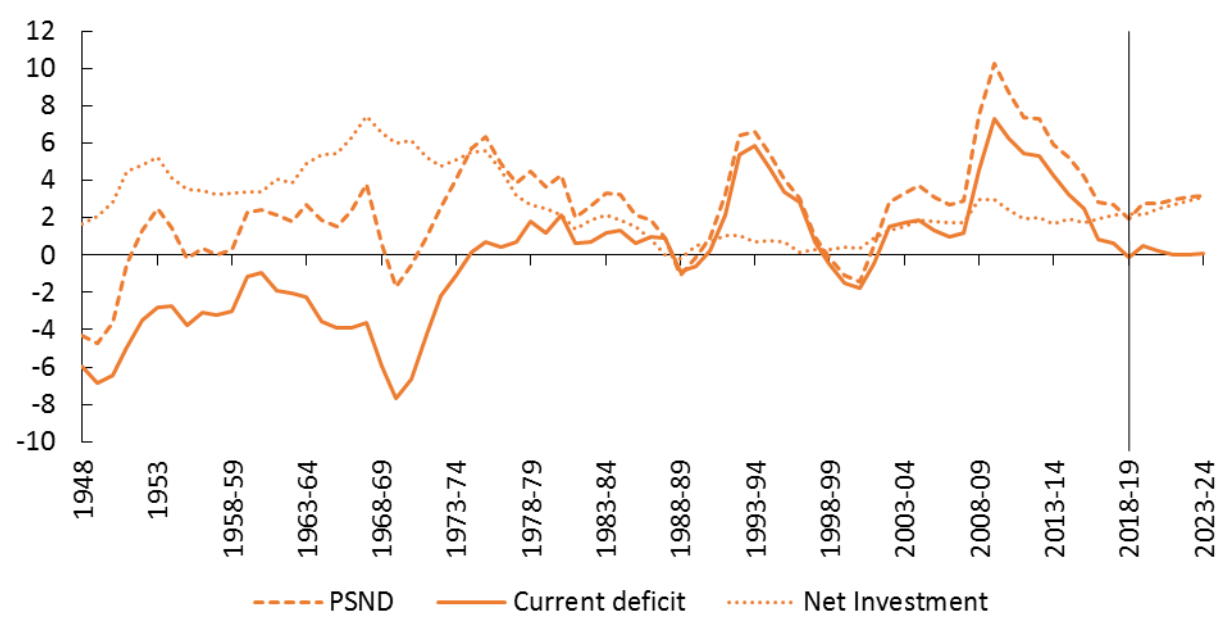
Figure 4 **Implications of Labour plans for borrowing (as a per cent of GDP)**



Source: OBR Public Sector Finance databank and NIESR calculations.

- Figure 5 draws out the implications for **borrowing** over the next five years of the **Liberal Democrat plans**. It shows net borrowing rising to around 3 per cent per year, not far above post-war averages, to pay for a similar level of net investment.[iii]

Figure 5 **Implications of Liberal Democrat plans for borrowing (as a per cent of GDP)**



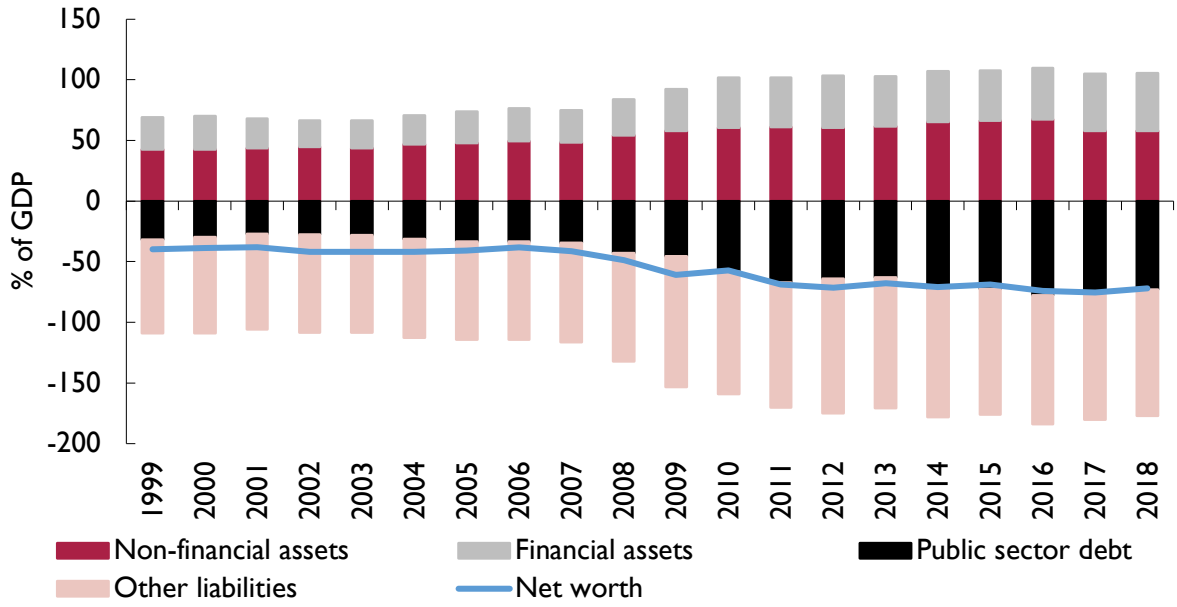
Source: OBR Public Sector Finance databank and NIESR calculations.

Credibility of the fiscal plans

- The fiscal rules are focused primarily on flows of borrowing and investment, but they have a counterpart in terms of debt and asset stocks, broadly the accumulated value of deficits and investment. Until recently the government had a target for the ratio of public sector debt to GDP to be falling in 2020-21; previous UK governments had targets to keep this ratio below 40 per cent. But with net debt (public sector net debt excluding public sector banks, PSND ex) at £1,798.5 billion or 80.4% of GDP at the end of October 2019, there is little appetite to try and hit such ambitious targets.

- Debt is only one part of the public sector balance sheet. The public sector balance sheet sets out what is owned and what is owed.[iv] Net worth is the difference between assets and liabilities. At the end of 2018/19, public sector net worth was estimated at - £1,567 billion, close to the value of public sector debt securities at £1,615 billion, with other liabilities, including the estimated cost of unfunded public sector pensions, roughly offsetting the value of public sector assets (figure 6).

Figure 6 **The public sector balance sheet (per cent of GDP)**



Source: ONS, International Monetary Fund's Government Finance Statistics framework in the public sector finances: Appendix E, 21 November 2019.

- The public sector balance sheet has weakened since the financial crisis, reflecting the long period where borrowing has been in excess of net investment. There are likely to be significant errors in the measurement of some items on the balance sheet that could mean that the measured deterioration exaggerates the actual change. But there is little appetite to rebuild the balance sheet. It is often argued that governments should 'fix the roof while the sun shines' by strengthening the balance sheet so that there is space for debt to rise to absorb shocks when they occur. But with long-term interest rates so low and the government having ample tax raising capacity in reserve there does not appear to be any urgency to levy higher taxes now to strengthen the balance sheet.

- On the basis of the fiscal plans in their manifestos, all political parties envisage a rise in underlying public sector debt reflecting forecast deficits.[v] Whether public sector debt falls as a share of GDP depends on whether nominal GDP growth is fast enough to offset the effect of deficits of 2.5 per cent of GDP and above.

- Both the Labour Party and Liberal Democrats have some aspiration to improve the state of the balance sheet gradually. Consistent with its emphasis on borrowing only to invest, the Labour Party now has a target for public sector net worth to rise in value over the Parliament. Net worth would also rise if the Liberal Democrats aspiration of a 1 per cent current budget surplus was achieved.
- While the fiscal rules are reasonably clear about the targets of policy, the political parties are less clear about how in government they would react were circumstances to change. Yet there are many uncertainties about the costings and huge risks to the outlook that are not quantified. Some of the known and unknown risks are described below.

- A well-understood long-term risk is how future governments will pay for an ageing population that will require more resources for both the NHS and social care. The Office for Budget Responsibility has estimated the cost of these effects.[vi] The OBR estimate that health spending would rise from 7.6 per cent of GDP in 2022-23 to 13.8 per cent of GDP in 2067-68, state pension costs would rise from 5.0 per cent of GDP in 2022-23 to 6.9 per cent of GDP in 2067-68, adult social care costs from 1.3 per cent of GDP in 2022-23 to 1.9 per cent of GDP in 2067-68, an overall increase in age-related spending of 8.7 percentage points of GDP. In our own analysis, we showed how age-related demands are increasing the amount of public services that are required in the next five years.[vii] This suggests that simply holding the spending to GDP ratio at its post-war average is no longer sufficient to meet the demand for public services. Rising spending will require rising taxation if future governments borrow no more than they invest. Some consideration should be given to building in a rising long-term tax to pay for long-term higher spending.

- An important well-understood medium-term issue is how to resolve Brexit. In an accompanying briefing, we have set out the impact on the public finances of different forms of Brexit. We outline that, compared with remaining in the EU, leaving the EU on the terms of the Prime Minister's deal would result in tax revenue being lower by about £10 billion per year in the next Parliament and by about £30 billion in the long term (by 2030). This type of calculation is behind the Liberal Democrats' assumption that there would be a 'remain bonus' if the UK stayed in the EU.

- On top of these known risks there are a vast range of unknowns, including uncertainty around the parties' costings, the possibility of a more severe economic slowdown than expected, and the emergence of new priorities for public spending. The promise by the Labour Party to compensate women born in the 1950s whose pension age was raised in 1995 and again in 2011 is an example of this. This compensation is estimated to have added £58 billion to Labour's planned spending in the next Parliament to the additional spending already announced in the manifesto.

- With such a background of uncertainty, future governments will need to be ready to react to unfavourable fiscal developments when they occur. Inevitably that is likely to mean raising taxes. Political parties should avoid pledging not to raise taxes in the next Parliament as such a promise is not robust to the possible circumstances that may arise. Often in the past governments have reacted to changed circumstances by changing the fiscal rules. While it may make some sense to adapt fiscal rules in the light of new circumstances, the lack of any consistency to the fiscal rules damages their credibility.

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[i] This assumes that additional infrastructure investment of £130 billion would be spread evenly over the five-year Parliament.
[ii] This is based on NIESR analysis of the GDP effects of higher public investment.
[iii] In his 15 November speech, Liberal Democrat Treasury spokesman Ed Davey committed to current account surpluses of 1 per cent of GDP in every year in its five-year costings, though the manifesto shows additional income and spending of a similar magnitude.
[iv] The Resolution Foundation has recently proposed new fiscal rules based on net worth. See Hughes, R. Leslie, J., Pacitti, C. and Smith, J. (2019), '*Totally (net) worth it*', Resolution Foundation.
[v] Public sector net debt includes debt to finance Bank of England lending through the Term Funding Scheme that will decline when loans automatically mature. The Bank of England contribution to PSND was worth £181 billion in July 2019.
[vi] Office for Budget Responsibility (2018), '*Fiscal Sustainability Report*', July 2018.
[vii] Hantzsche, A. and Young, G. (2018), 'Light at the end of the fiscal tunnel?', *National Institute Economic Review*, No. 244, May 2018.

2019 UK GENERAL ELECTION BRIEFING:
PLACES AND SPACES: MAPPING BRITAIN'S REGIONAL DIVIDES

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OVERVIEW

Economic performance varies widely across towns, cities and rural areas in the UK. Spatial disparities are found in all industrialised countries, although on some measures the UK is significantly more unequal than comparable countries. These disparities are matter for people because local social and economic conditions directly affect individual living standards. In fact, research shows clearly that where you are born has a large effect on your opportunities in life. Spatial disparities mainly arise because of the strong tendency of economic activity to cluster in some places, which is driven to a large degree by the co-location of highly skilled workers and highly productive firms.

In this briefing we explore the key dimensions of spatial disparities and their evolution over time. We highlight some key policies that can help tackle some of these disparities in light of the proposals set out in the manifestos. The briefing is structured in two main sections, the first explores the extent of spatial disparities in the UK and discusses why people care about them, while the second section looks at the main drivers and scope for policy.

KEY TAKEAWAYS

- Different parts of the UK do not only differ in terms of income, employment and levels of productivity, but also when looking at measures of health and wellbeing. Furthermore, these disparities are highly persistent over time and along some dimensions the gap between places has only widened in the decade following the financial crisis.
- A key driver of local economic performance are education and skills, which in turn play a major role in determining the productivity of workers. We show that large differences across regions are evident, for example when looking at the share of population that holds a university degree. Labour productivity matters a great deal, as it is the key driver of long-term differences in income per person.
- The UK economy is dominated by London which is significantly more productive than other regions. This can mainly be explained by concentration of higher-value and knowledge-

intensive service industries. Regional differences in productivity are much less pronounced in manufacturing.

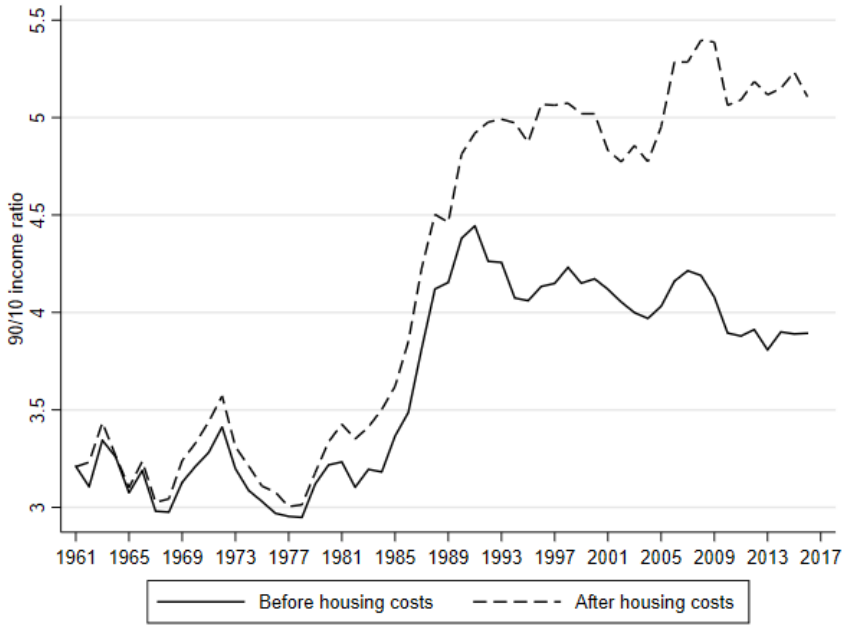
- Finding ways to reduce this dominance by improving the performance of other areas would help to 'spatially rebalance' the UK. Unfortunately, government budget cuts since 2010 have been unevenly distributed across the UK. Local government in England, and particularly cities in the North of England have been the hardest hit. These cuts have reduced redistribution and contributed to the widening of spatial disparities.
- Public and private investment is unevenly distributed across the country. For example, spending on research and development (a key driver of productivity) is highest in the South and East of England. Also spending on infrastructure is highly unevenly distributed, with London (and to some degree Scotland) receiving a disproportionately high share of spending per person.
- People living and working in a modern economy need access to high-speed internet, but currently digital infrastructure is highly unevenly distributed across places in the UK. For example, while three quarters of premises in London have access to ultra-fast broadband it is only 1 out of 3 in Wales.
- The prevalent spatial differences in economic outcomes raise the question as to whether there is a need for spatially-targeted policies. Generally, economists tend to be sceptical of 'place-based' policies, favouring policies targeted at groups of people. The EU Structural Funds have generally favoured place-based policies, with funding targeted at the most deprived areas and the UK has been a beneficiary of these.
- While there might be greater scope for using place-based policies, for example with respect to infrastructure spending, or devolution, ultimately, we should care about the effect of policies on people more than on places. Therefore, efforts to reduce the degree of spatial inequality should be judged on the extent to which they improve opportunities for all.
- Here it is important that different policies (whether spatially-targeted or not) are integrated into a larger framework with clearly stated policy aims. For example, supporting specific industry sectors will inevitably favour some places over others, there is no consensus over the 'acceptable' degree of spatial disparities. We accept that these types of policies are needed to boost aggregate economic performance, but welcome transparent discussions about the spatial implications they inevitably have.

1. WHAT ARE SPATIAL DISPARITIES AND WHY DO PEOPLE CARE ABOUT THEM?

- The UK has a high degree of inequality compared to other major developed countries, across a wide range of dimensions, such as income, poverty, employment, well-being and health. We care about them because these inequalities manifest themselves differently across groups and places in the UK.
- Overall, income inequality in the UK is high, particularly when considering the costs of housing (see **Figure 1**). We show the ratio of income of the "top 10%" versus the "bottom 10%" rose sharply in the 1980s and has remained high since. The figure also shows that before cost of housing is considered, inequality had been on a slight downward trend since the late 1990s. However, when including housing costs, inequality has continued to rise. This also indicates that poorer parts of the society are spending an increasing share of their income on housing.
- Average wages and total household income vary significantly across the UK, both at regional level and at smaller spatial scales such as local authorities. Average wages in London are £735 per week, which is around £300 more than in Blackpool in areas such as the North West, Blaenau Gwent in Wales or North Devon in the South West.

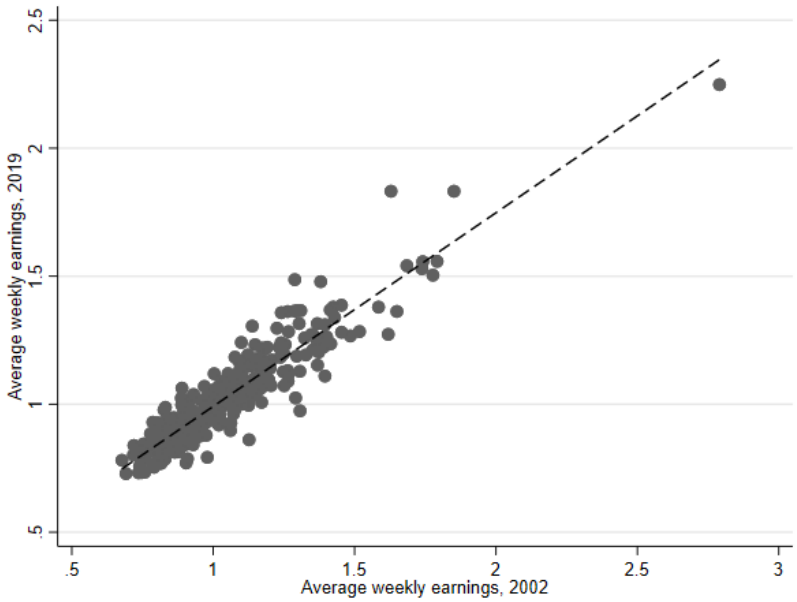
- Structural differences between places can lead to long-lasting differences in economic opportunities for people living in different places. **Figure 2** illustrates the persistence in wage difference across different regions, by comparing average weekly wages in 2002 to 2019. Wages are "normalised" which means that areas with values below 1 have average wages below the UK average. In general, there are little signs that the lagging regions have been catching up to the UK average. The strong upward slope of the dashed line shows that areas with relatively low wages in 2002 also had relatively low wages in 2019.

Figure 1 Income inequality in the UK



Note: The figure shoes net household equivalised income earned by households at the 90th percentile (those earning more than 90 percent of other households) compared to the net income of households at the 10th percentile (those earning higher than the bottom 10 percent). Incomes are measured net of direct taxes and inclusive of state benefits and tax credits, and at the household level. Monetary amounts are pounds per week in 2017/18 prices. Source: All statistics are based on IFS calculations using the Family Expenditure Survey (FES) up to and including 1992, and the Family Resources Survey (FRS) thereafter.

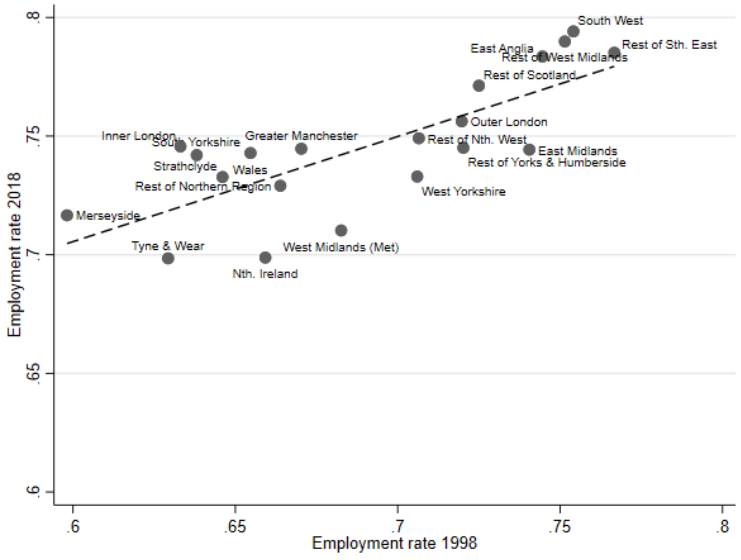
Figure 2. Normalised weekly wage across local authorities relative to UK average, 2002 vs. 2019



Source: Authors' calculations from Annual Survey of Hours and Earnings (ASHE) data. Graph shows average area wage in 2002 (relative to UK average) against average area wage in 2019 (relative to UK average). For example, 1 = 100% of UK average, 3 = 300% of UK average.

- While employment in the UK is at a record high, there are still persistent differences across regions (see **Figure 3**). The South West has an employment rate close to 80%, while Northern Ireland and Tyne & Wear have employment rates below 70%. As in the case of differences in income, there is a high degree of persistence in employment rates over time. Although employment rates have increased between 1998 and 2018 in all regions, regions with relatively lower employment rates in 1998 also had relatively lower employment rates in 2018. In addition, there is variation in opportunities between people living within these regions.

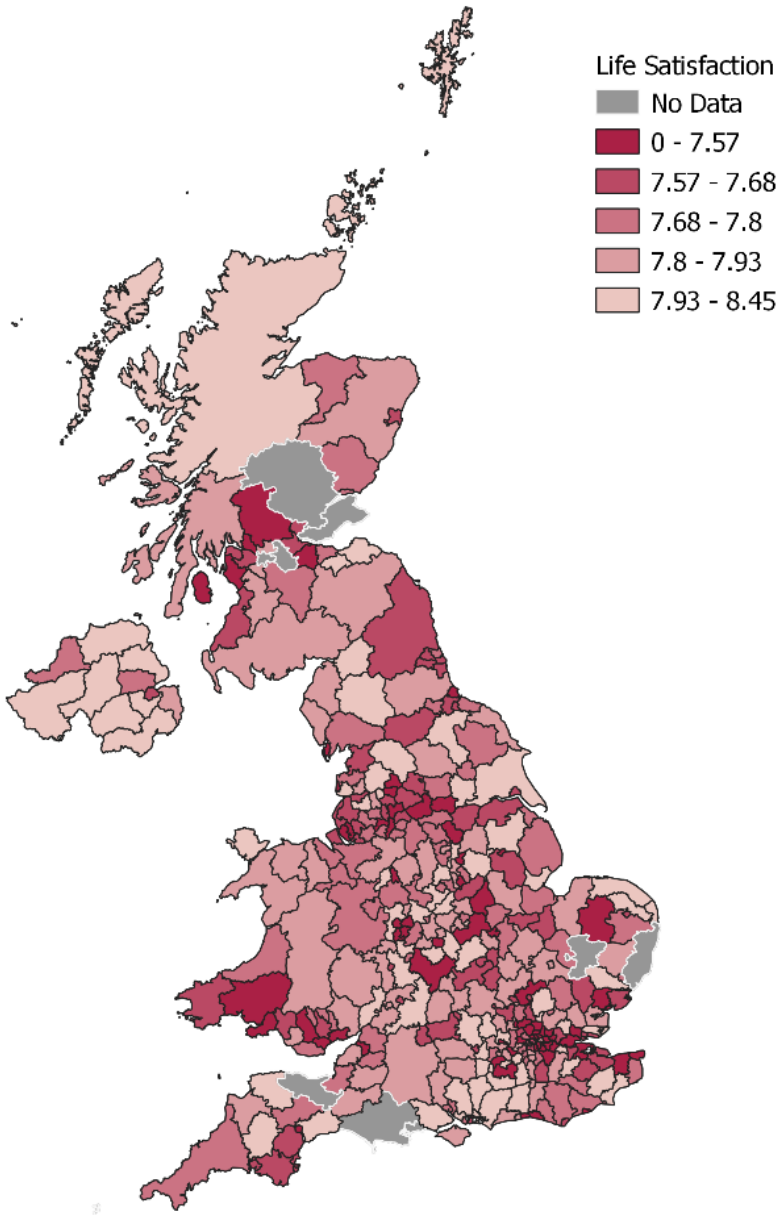
Figure 3. Change in employment rates across UK regions, 1998 and 2018



Notes: Authors' calculations from the Quarterly Labour Force Survey. Dashed line indicates average change in employment rate between 1998 and 2018.

- An alternative approach to measuring well-being is to measure subjective wellbeing, such as happiness, life satisfaction or anxiety. **Figure 4** shows the variation in self-reported life satisfaction across local authorities in the UK, with the lighter shades showing higher levels of life satisfaction. Although London continued to report some of the lowest average life satisfaction in the UK in 2018/19, average life satisfaction has improved the most in London over the last 6 years (by 4.6%). Over the same period, average life satisfaction has also improved in the North East (3.8%), the North West (3.8%), and the West Midlands (3.6%).

Figure 4. Average Life satisfaction in the UK by local authority, 2018/19



Note: Map shows responses to question "Overall, how satisfied are you with your life nowadays?" People are asked to respond on a scale of 0 to 10, where 0 is "not at all" and 10 is "completely". Source: ONS wellbeing data.
https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/bulletins/measuringnationalwellbeing/april2018tomarch2019

- Just as average incomes differ across places, average price levels do as well because of differences in the cost of goods and services in different parts of the country. For example, a

haircut or restaurant meal in London is on average more expensive than in most other places of the UK. This is often referred to as the "purchasing power", or the amount of money is needed to buy the same (or very similar) goods and services in different places.

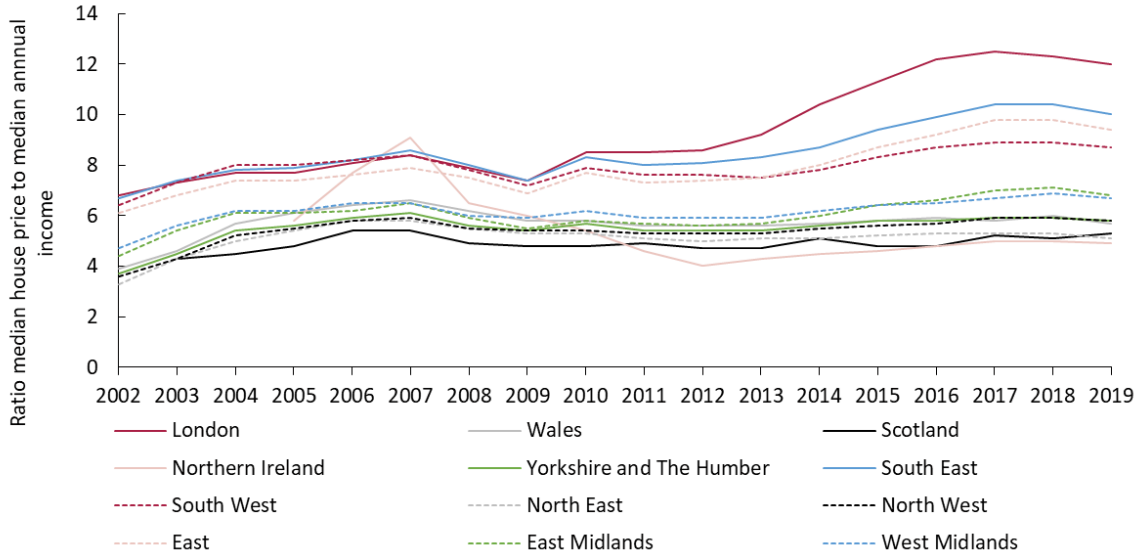
- In **Figure 5** we show how much one would have to spend in different regions of the UK to buy a bundle of goods and services that costs the average UK citizen £100. Again, this highlights the stark differences across places, as people in Wales or Northern Ireland on average only need to spend around £74-78 to buy this "representative basket". Londoners need to spend a little more (around 5%), though this needs to be seen against the backdrop of considerably higher wages.

Figure 5. The costs of a representative £100 basket of goods across the UK

Notes: Authors' calculations based on ONS data. In order to track relative price changes across time, the ONS produce a representative "basket of goods" that includes goods and services that people frequently purchase. Using this data, we constructed the same "basket of goods" for each of the regions to analyse the relative prices that households face in each region.

- Another important factor in determining living costs are house prices. **Figure 6** shows how since 2002 house prices have risen sharply compared to incomes, and particularly so in London, South East, East and South West. This Figure looks at incomes of the "median" person (or house), i.e. the precise income at which 50% of people have a higher and 50% have a lower income. Our analysis shows that the median house in London costs around 12 median annual incomes, which compares to around 5 annual incomes in Northern Ireland, the North East or Scotland.

Figure 6. Ratio of median income to median house price across UK regions, 2002 – 2019.



Notes: Annual data on median house prices for England and Wales from ONS, Scotland from Registers of Scotland, and Northern Ireland from OpenDataNI; annual median incomes calculated from Nomis data on weekly median income.

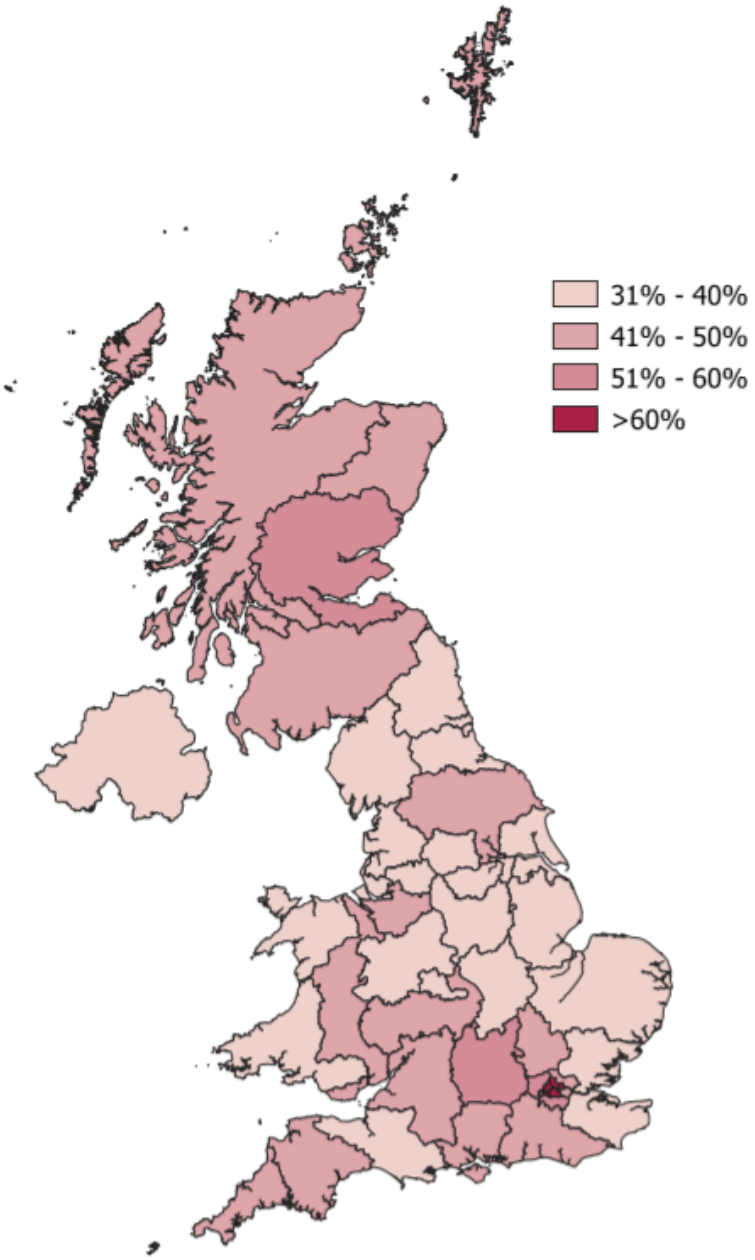
2. WHAT DRIVES SPATIAL INEQUALITY?

- Spatial inequalities are to a large degree driven by geographic concentration of more educated people and more productive firms and a reflection of different patterns of industry specialisation. The role and scope for policy should be to enable the benefits of growth to be shared more evenly, and to stimulate the productive and employment capacities of lagging regions, fostering on inclusiveness and cohesion. Some important drivers of spatial inequality are disparities in education, productivity, as well as adverse effects of past spending cuts and Brexit.

Education

- High regional dispersion in education outcomes are a key driver of income and well-being. Most of the variation in wages and local economic performance is driven by differences in skill levels of people. There is a lot of evidence on the skill premia attached to graduate education, and areas that have high concentrations of highly educated workers tend to have higher productivity and wages. International evidence has shown that increasing the quality of education would improve the employability of the labour force, but other policies would be needed to improve job quality in regions with low-skilled jobs.
- In the UK about 43% of the working population aged 25 - 64 have a tertiary degree. Regions in the UK with the lowest share of tertiary graduates are the North East and West Midlands (33%) while the highest can be found in the South East, Scotland (both 47%) and London (57.5%). See **Figure 7** for a detailed map of regions in the UK.
- The lack of suitable skills can also be a drag on productivity when employers are unable to fill jobs with workers that have the right skillset. This skill shortage appears to be more of a concern in some places than in others. For example, following the latest Employer Skills Survey, 31% of total vacancies in the UK in 2017 are for high-skilled workers, while 17% of employers report skill gaps among employees, or vacancy issues related to skill shortages.
- Further information on the education can be found in the NIESR election briefing on "Education policy priorities and a look into the Manifestos".

Figure 7. Proportion of population with university degree across NUTS-2 regions, 2018.

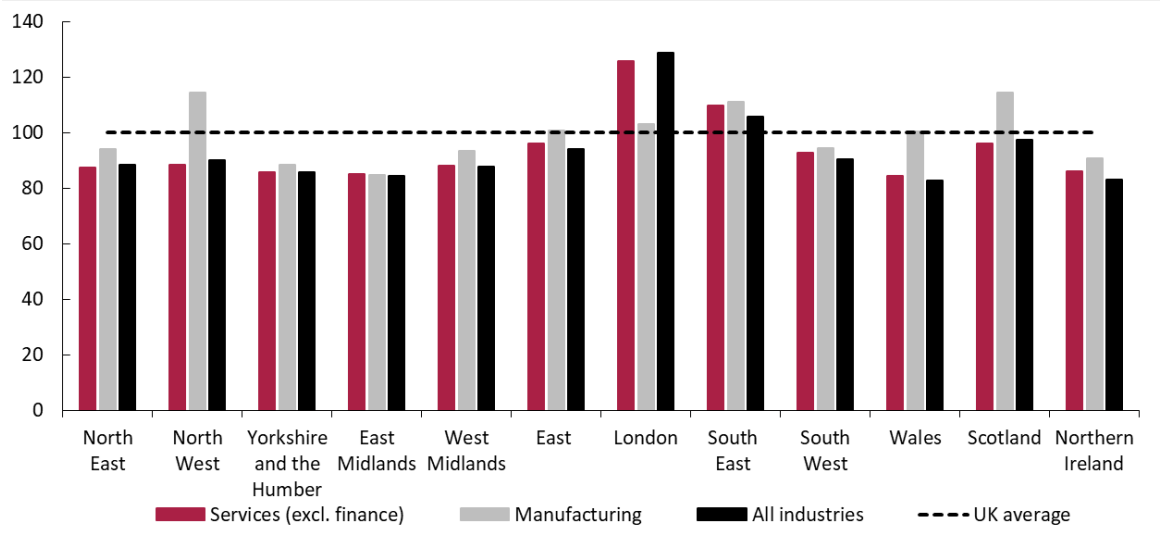


Source: Authors' calculations based on Eurostat data.

Productivity is the main factor explaining regional differences in GDP per capita

- Productivity is the main factor explaining differences in output per person across UK regions. Differences in labour market participation and employment can also play a substantial albeit smaller role. For example, a higher unemployment rate in the North East helps explain lower levels of GDP per person while in Northern Ireland it is lower labour market participation.
- The UK exhibits large regional disparities in productivity compared to most other OECD countries, with a large gap between London and most other regions (see **Figure 8**), which is a drag on overall productivity, which has stagnated in the UK following the financial crisis.
- London has the highest level of labour productivity (measured in output per hour worked), followed by the South East, Scotland and the West Midlands. Wales, the North East and Northern Ireland, all have much lower levels of productivity. The most productive and largest manufacturing sector is that of the North West, followed that of the South East and Scotland.
- Regional productivity outcomes are also reflection of the differences in industry structure prevalent across regions. Figure 8 shows that the differences in productivity are more marked in the service sector (excluding finance), which represents approximately three-quarters of the UK economy. London's service sector is 25 per cent more productive than the UK average. At the same time. the East Midlands, Northern Ireland and Wales are around 20 per cent less productive than the national average.
- Knowledge-intensive sectors in London have a higher productivity and are also larger compared to the rest of the country. London's information and communication sector comprises almost 10 per cent of total jobs. London is followed by regions such as the North East, the North West and the West Midlands in ranking of productivity in this sector, but where it accounts for less than 4 per cent of the total jobs.
- London's finance sector is almost forty per cent more productive than the UK average, and also the largest. The finance sector accounts for 377,000 jobs in London, equal to 7 per cent of total London jobs; this is in contrast with 3.3 per cent in the rest of the UK.
- Regional productivity differences in large sectors such as the distribution sector are more minor.
- The most productive and largest manufacturing sector is that of the North West, accounting for over 330,000 jobs, followed by the West Midlands (305,000 jobs) and the East Midlands (286,000). Lower levels of manufacturing productivity are found for the East Midlands, Northern Ireland, and Yorkshire and the Humber.
- With regards to other industries, the London and the South East construction sectors are also the most productive ones, but the differences with other regions appear smaller. The highest levels of labour productivity in other production activities, which includes agriculture, mining and utilities are again found in London and the South East, as well as in the North East.

Figure 8: Labour productivity in manufacturing and services sectors (excl. finance) across UK regions, GDP per hour, 2017.

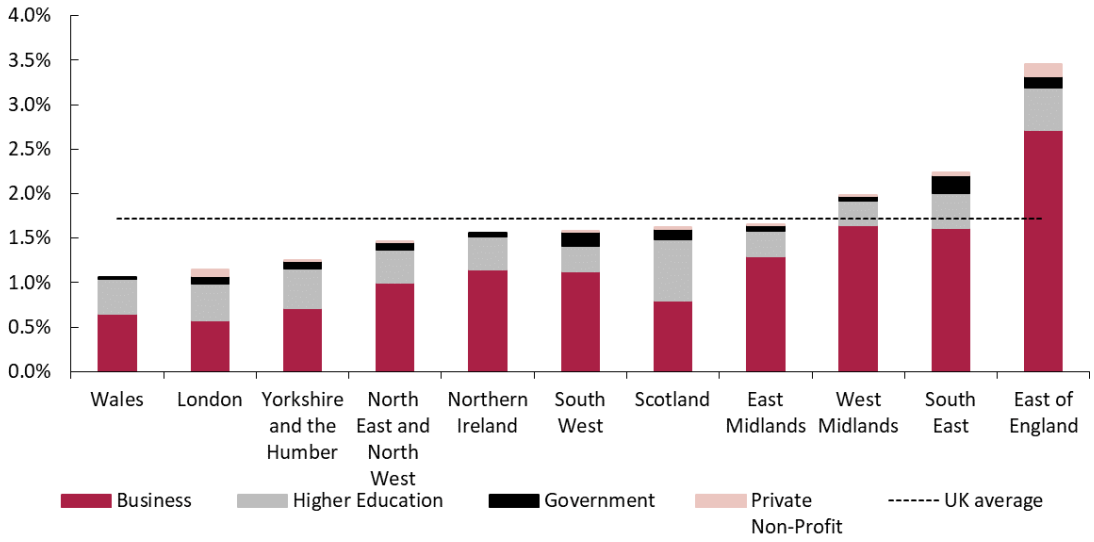


Source: Authors' calculations based on ONS data.

Lower innovation effort in most UK regions

- Spending on research and development (R&D) is commonly used as a proxy for the level of innovative activity that is conducted in a place. Higher spending on R&D tends to translate into better innovation outcomes (e.g. new products or production processes) that raise the competitiveness of firms. More competitive firms tend to have higher revenues, productivity, wages and contribute more to regional economic development, e.g. via business taxes.
- In the UK, average spending on R&D is 1.7% of GDP, of which 1.2% is conducted by private businesses, 0.4% by higher education institutions and 0.1% by the government. Compared to other EU countries, the UK ranks 11th in terms of R&D expenditure as a share of GDP.
- However, the regional breakdown (**Figure 9**) of R&D spending reveals significant geographical concentration. The regions with the highest relative spending on R&D are the East of England, followed by the South East and West Midlands (all above national average). As a share of GDP, R&D spending is lowest in Wales, London and Yorkshire and the Humber.
- Looking at the regional distribution of R&D spending is important since the government's Industrial Strategy has committed to raise the national average spending on R&D to 2.4% of GDP by 2027. There is scope for making the UK 'more equal' if R&D expenditure levels are raised relatively more in regions that currently have lower spending.

Figure 9: Spending on R&D as share of GDP across UK regions, 2017

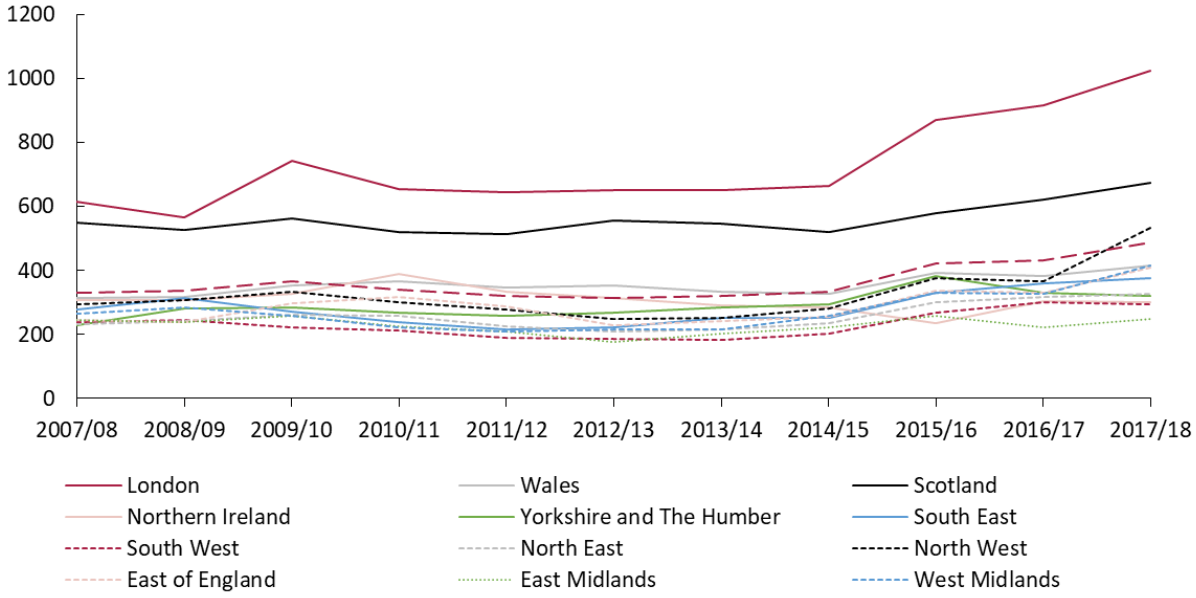


Source: Authors' calculations based on ONS data.

Underinvestment in infrastructure

- Infrastructure spending is unevenly distributed across regions as shown in **Figure 10**. Average annual spending on infrastructure in the UK was £368 per person in the period 2007-18. In London average spending per person was £739, but only £227 in the East Midlands and £231 in the South West. The region with the second highest level of spending per person was Scotland (£562 per person), followed by Wales (£359 per person).
- Considering that all major parties have pledged to invest in transport infrastructure it is crucial to consider where this money will be spent, on what type of infrastructure and with what aim. There is a strong case to spend relatively more in places that have traditionally received less money per person. There is also scope to improve transport links for example, within and between regions outside of London.
- Crucially, plans to invest in infrastructure need to be integrated with other local and national policies, including education, business environment and access to cultural amenities. The extent to which infrastructure investment helps the people it was intended to help is not straightforward. If new infrastructure leads to increases in housing rents and house prices for example, or gentrification, it could lead to relatively disadvantaged people moving out.

Figure 10. Total public spending on transport infrastructure per capita across UK regions, 2007-18.

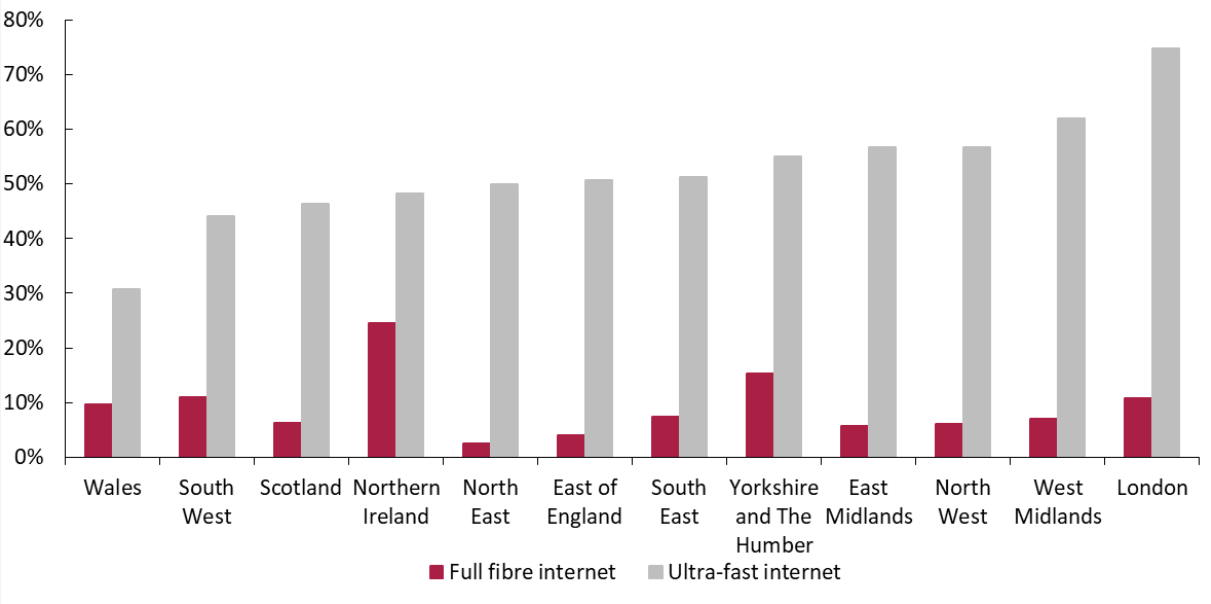


Note: Calculation based on data from IPPR North on historic total public spending on transport per capita - including revenue and capital, and from central and local government (private spending not included). Source: Raikes and Lockwood (2019).

Investment in digital infrastructure

- Around 95% of premises in the UK have access to superfast broadband internet (download speeds above 30Mbit/sec). This figure decreases to 54% for ultrafast broadband (download speeds above 300Mbit/sec) and only 8.4% for full fibre (download speeds of up 1 Gbit/s).
- **Figure 11** shows the coverage of ultrafast broadband and full fibre connections broken down by region. London appears to be the clear leader in terms of the share of premises with ultrafast broadband access (75%), followed by the West Midlands (62%). However, only 11% of premises in London have access to full fibre connections. Leaders in terms of full fibre deployment are Northern Ireland (25%) and Yorkshire & The Humber (15%), followed by the South East (11%). Regions with the lowest rate of full fibre are the North East (2%) and East of England (4%).
- Considering that digital technologies are becoming ever more important in people's personal and professional lives it is obvious that a lack of access to fast internet is a driver of geographic disparities. Speeding up the coverage of ultrafast and full fibre internet for everyone in the UK may help to reduce regional disparities as the current access to high-speed internet is unevenly distributed across the country. However, any plans to roll out faster internet across the UK needs to consider the emergence of newer technologies such as 5G mobile broadband internet.

Figure 11. Share of premises covered by full fibre and ultra-fast broadband internet, by UK region, 2019.

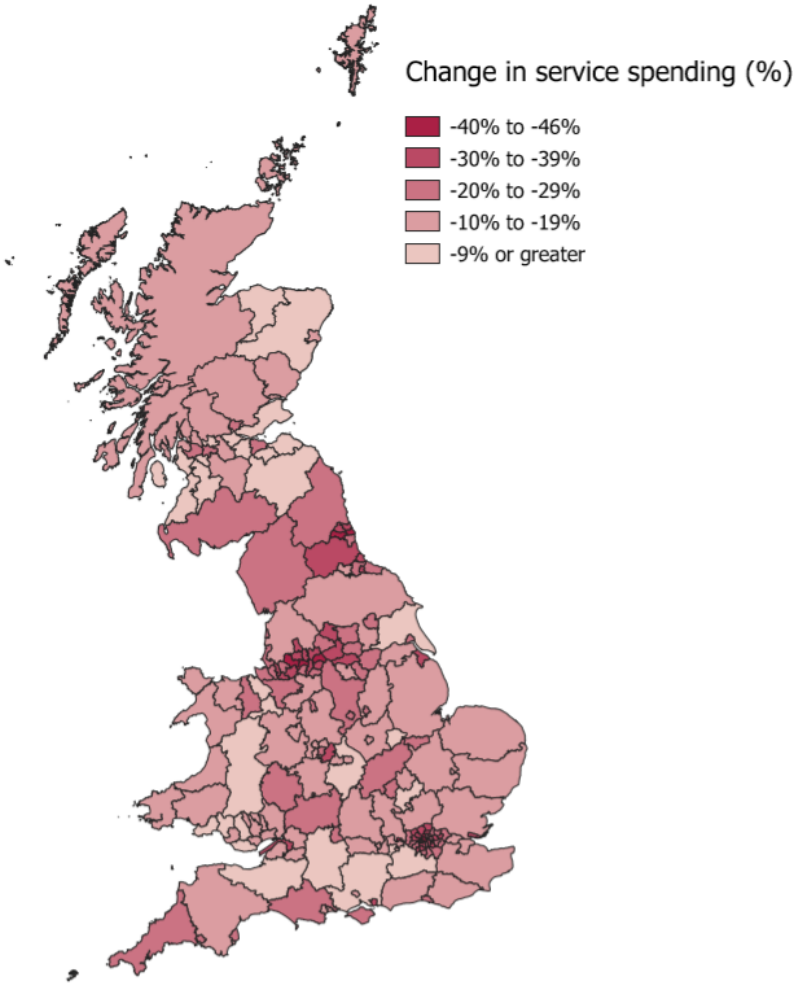


Source: Authors' calculations based on OFCOM data.

Brexit and spending reductions

- Since 2010 there have been across the board budgets cuts to almost all government departments. The Department of Communities and Local Government experienced the largest cuts, losing over half of their funding between 2010/11 and 2015/16. The effects of reduced spending have been very uneven spatially as shown in **Figure 12**. The figure shows that cities experienced the largest spending cuts. London boroughs, Liverpool, Leicester, Nottingham, Birmingham, all received a high proportion of their funding from the central government and experienced cuts of over 25% to total service spending. In relative terms, Scotland and Wales have not experienced the same degree of cuts to spending as in England.

Figure 12: Change in government service spending in Wales, Scotland and England, 2009-10 to 2016-17.



Notes: The Welsh data show service spending, excluding education spending and housing benefits. The Scottish data exclude education spending. The English data exclude police, fire, public health, education, and elements of social care spending. Source: Amin-Smith et al. (2016).

- Public and private sector organisations in the UK receive funding from the EU through a variety of different funds, which are targeted at the most deprived areas. In 2017 alone the UK received a total of about £5.5 billion. These funds are a prime example of an explicitly place-based as opposed to people-based policy.
- The two main channels through which the UK receives funding are from the European Structural and Investment (ESI) funds and the European Agricultural Guarantee Fund. The main ESI funds the UK receives funding from are the European Regional Development Fund (ERDF) and the European Social Fund (ESF). For the 2014-2020 funding round, the UK has been allocated €17.2b and €22.5b respectively.
- **Figure 13** shows how these funds have been distributed regionally and are on a per capita basis. At both regional and sub-regional level poorer areas tend to receive a larger proportion of these funds than richer areas in both per capita and absolute terms.
- According to a House of Commons Library briefing the UK Government has guaranteed all funding from the EU until the end of 2020, regardless of whether it concludes a deal with the EU. Whether there will be any participation in EU funding programmes beyond this period is clearly the subject of further negotiations with the EU. To the extend that these funds have

been effective and contributed to an evening out of disparities across the UK, the loss of these funds is likely to increase spatial inequality, holding everything else equal.

Figure 13: EU Structural Funds spending per person (in '000) and region for 2007-13 spending round.

Notes: The graph shows payments to UK regions from the ERDF, EAFRD/EAGGF and ESF. Deflated by CPI inflation and divided by annual population estimates from Eurostat. Source: https://cohesiondata.ec.europa.eu/Other/Historic-EU-payments-regionalised-and-modelled/tc55-7ysv/data

2019 UK GENERAL ELECTION BRIEFING: THE ECONOMIC BACKDROP

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OVERVIEW

This briefing focuses on:

- The state of the UK economy and UK-wide living standards going into the election.
- The causes of slow growth and the need for supply-side reforms.

KEY TAKEAWAYS

- The **global economy** has experienced a **trade-related slowdown** since the middle of 2018 when tariffs on **bilateral trade** between the US and China were increased.
- The UK economy has been suffering from a '**slow puncture'** since the EU referendum in June 2016, made worse by faltering demand from the rest of the world. Growth has continued at a positive rate, but has been at a slow pace on account of significant political and economic uncertainty.
- **Employment** is at record levels and **unemployment** is at its lowest point since 1970. There is some evidence that businesses have preferred to take on more workers than invest in capital because of uncertainty about the future relationship with the EU. Public sector employment has started to expand again as austerity is relaxed.
- Slow **productivity growth** has meant that **living standards** have not improved much in recent years. **Real wages** are little higher than they were at the time of the financial crisis more than ten years ago.
- Aggregate **saving** remains low and much of the finance for investment has been sourced from abroad via a **current account deficit of over 4 per cent of GDP**.
- Slow **productivity** growth and low **saving** do not bode well for growth in **living standards** in the future.
- These issues can be addressed by government **policies** to foster **productivity growth** and increase **national saving**. The type of policies that can help are well understood but have not been pursued methodically within a coherent growth strategy.

The state of the UK economy going into the election

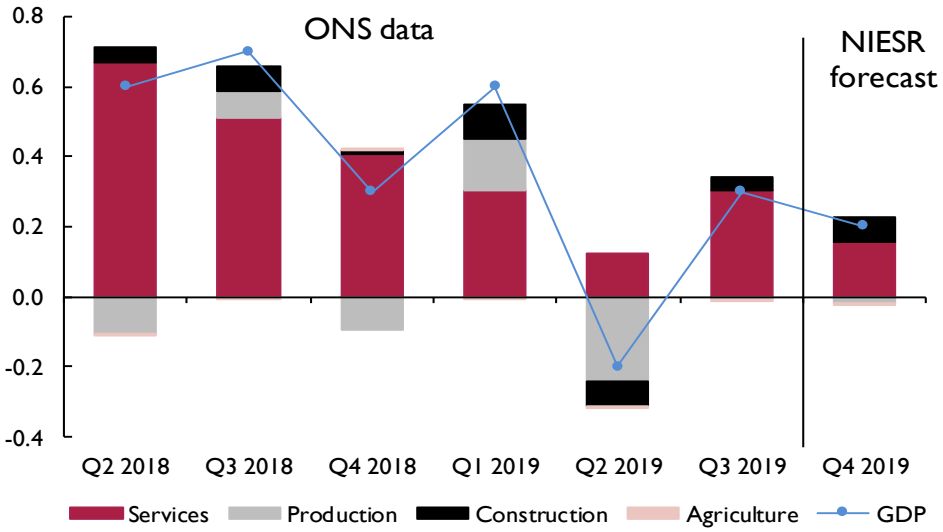
- The **global economy** has experienced a trade-related slowdown since the middle of 2018 when tariffs on **bilateral trade** between the US and China were increased. **Growth** in the OECD economies has slowed from 2.7 per cent in 2017 to 2.3 per cent in 2018 and is forecast to slip back to 1.6 per cent in 2019. The reduction in growth has been focused in **industrial production** where the three-month annualised growth rate in the advanced economies has fallen from around 4 per cent in early 2018 to zero in the most recent data.

- Despite experiencing a 15 per cent depreciation of the **pound** in the wake of the EU referendum vote in June 2016, the UK economy has since grown more slowly than the average of other advanced economies. After growing at 2 per cent in 2016, the same average rate as other OECD economies, UK growth was 1.9 per cent in 2017, 1.4 per cent in 2018, and is likely to be around the same rate again in 2019. This suggests that the level of UK GDP has fallen by about 2 per cent relative to other OECD economies since the 2016 referendum.

- Recent evidence from international business surveys also points to a weaker outlook in the UK than among its peers. For example, the EU-collected **UK services confidence indicator** remained in negative territory for the twelfth consecutive month in October, posting -21.4, around 25 points below its long-run average. This represents the longest negative run in the indicator history since the global financial crisis. Service sector confidence in the UK is substantially lower than in the EU as a whole where the level of the index was 3.7 in October, only 6 points below its long-run average.

- Figure 1 shows how the **quarterly growth rate of the UK economy** has changed over the past two years. The main point to note is the gradually reducing contribution of the **service sector** as the 'slow puncture' takes effect.

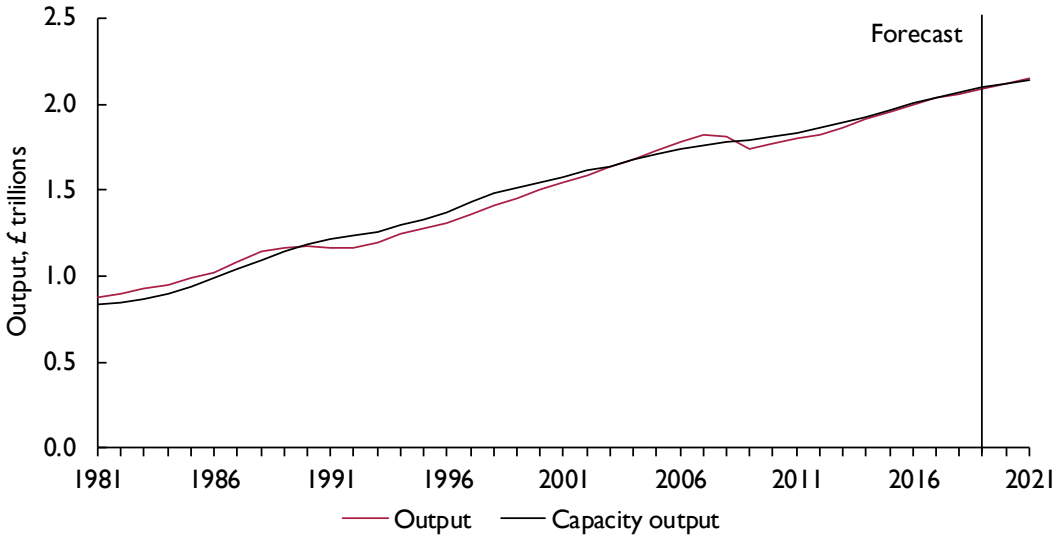
Figure 1. Contributions to quarterly GDP growth (percentage points)



Source: ONS, NIESR GDP Tracker.

- For some time now it has appeared that there is little slack in the economy. Figure 2 shows estimates of the level of **UK output** and NIESR estimates of **potential output,** the amount that can be produced with available resources. With little slack, economic growth must come from an expansion in potential output, determined by the availability of **labour, capital** and the **efficiency** with which they are used in production.

Figure 2. UK output and potential output

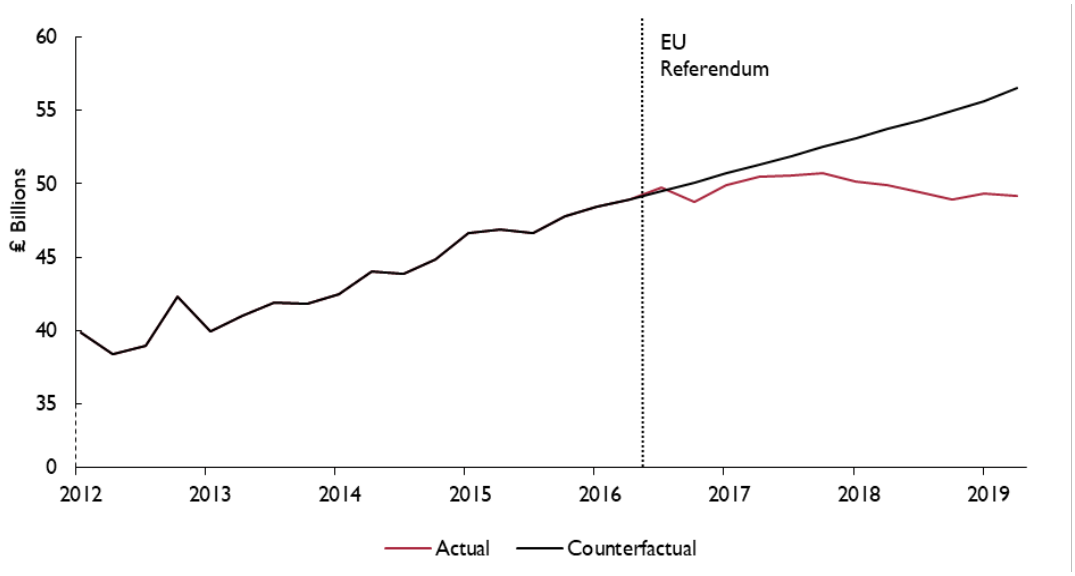


Source: ONS, NIESR estimates.

- The primary cause of the '**slow puncture**' is the uncertainty surrounding future trade relations with the EU. The main channel by which this has affected the economy is through lower **business investment**. It is also likely to have affected the dynamism of the UK economy, what it can produce and the amount of income it generates.

- **Business investment** is estimated to be **around 15 per cent lower** than it would have been had it not been for the 2016 Brexit vote (figure 3). This is due to the uncertainty that the decision to leave the EU has created. This uncertainty has led businesses to postpone investment until they know more about the new relationship with the EU.[viii]

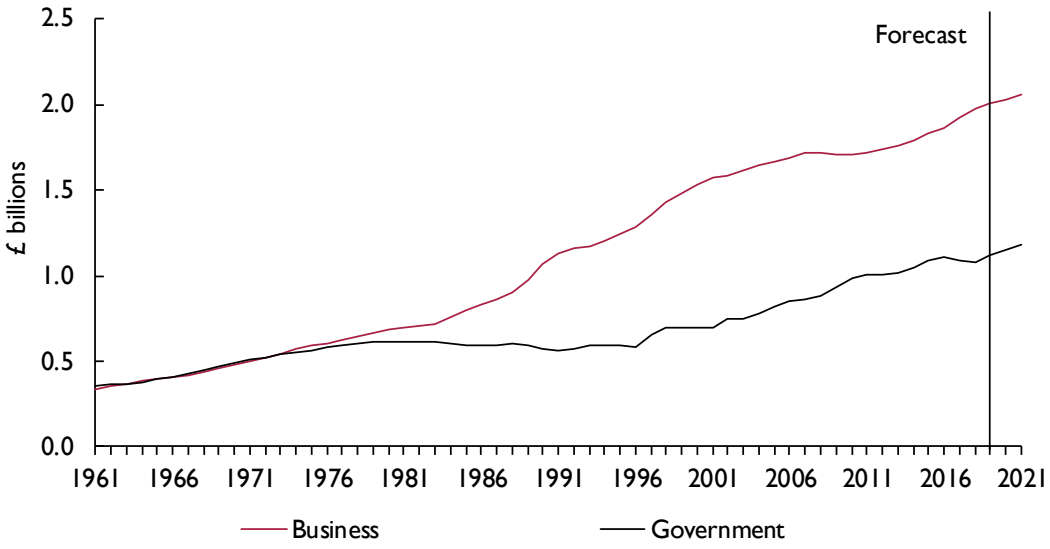
Figure 3. Business investment: actual and counterfactual



Source: ONS, NIESR estimates.

- Subdued **business investment** has contributed to a slower pace of **capital accumulation** than in the run-up to the financial crisis. Since 2009 the **measured business sector capital stock** has risen by 17 per cent compared with growth of 26 per cent in the ten years leading up to 2007.

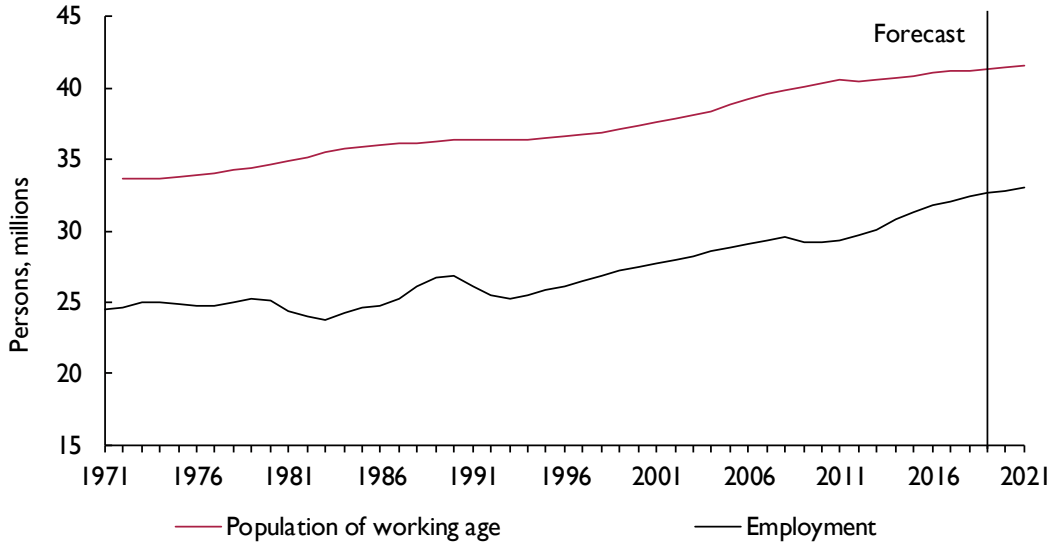
Figure 4. Business and government sector capital stock



Source: ONS, NIESR estimates.

- **Employment** has grown by 3.3 million since the financial crisis began in 2007, almost double the rise of 1.8 million in the **population of working age** over the same period (figure 5). **Net migration** continues to add to labour supply, though at a slower pace. Immigration for work-related reasons has fallen since the year ending June 2016 and can largely be accounted for by a decrease in EU citizens moving to the UK for work. Following a peak of 190,000 in the year ending June 2016, the number of EU citizens arriving for work has fallen to 90,000, the lowest level since 2012.

Figure 5. Employment and Population of working age

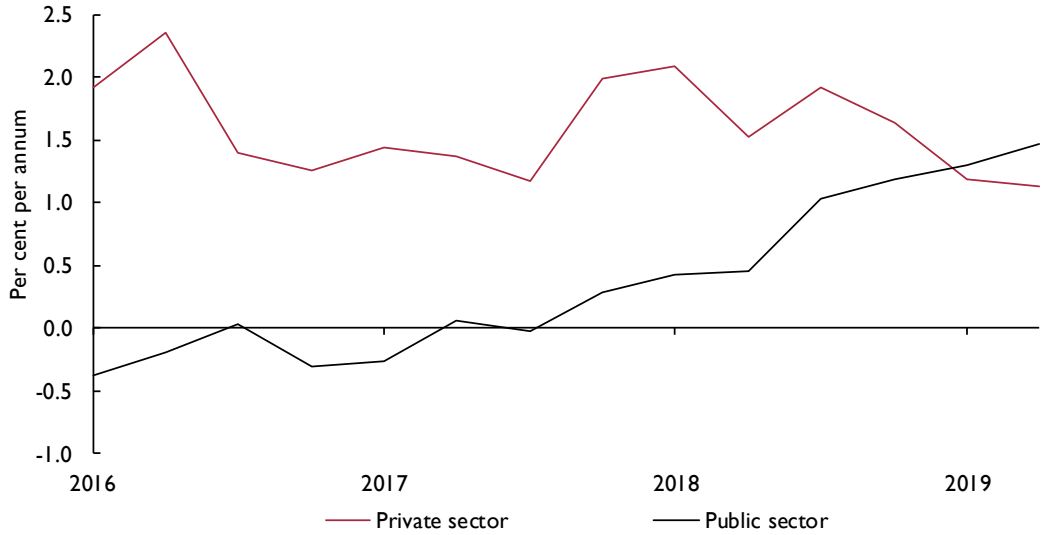


Source: ONS, NIESR estimates.

- Brexit uncertainty may have led to more labour demand since 2016 than otherwise, with businesses meeting demand by employing more workers rather than investing in capital goods as investments cannot easily be reversed.

- The strength of **employment** is one of the recent success stories of the British economies. But in the recent data, there is evidence that employment and wage growth are stabilising amidst global and domestic uncertainties. While labour demand is cooling in sectors engaged in international trade, domestically focused service sectors continue to face tight labour market conditions and additional demand is expected to come from the public sector in the near term. Public sector hiring activity has accelerated since turning positive in 2018 and following 8 years of staff level reductions (figure 6).

Figure 6. Employment growth



Source: ONS.

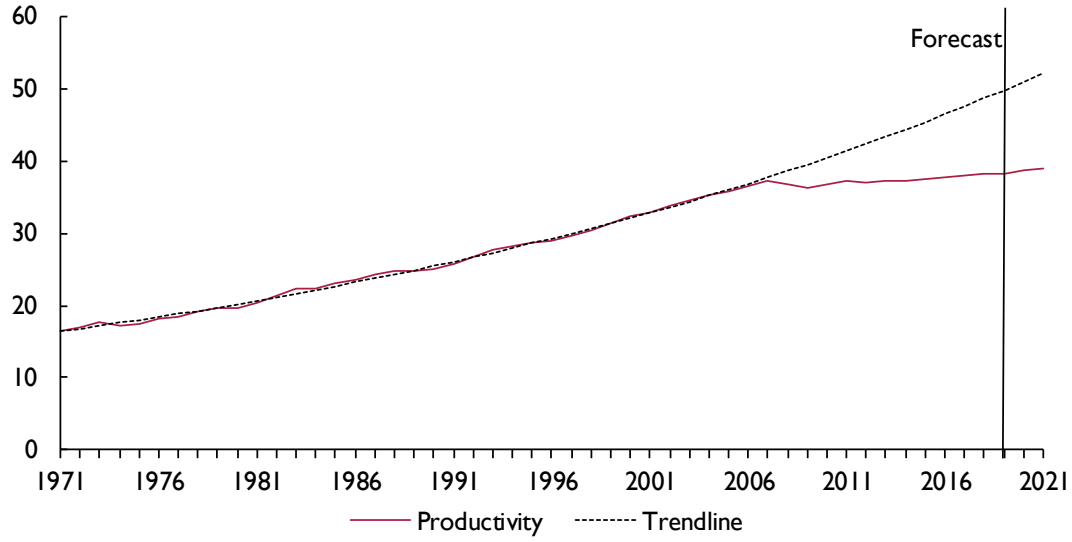
- With **employment** rising faster than the population of working age, **unemployment** has fallen and stabilised at 3.8 per cent of the labour force in the three months to September, slightly lower than the 4 per cent it reached a year ago.

Figure 7. Unemployment and proportion of population of working age not working

Source: ONS, NIESR calculations.

- **Productivity** growth has been very subdued since the financial crisis began in 2007. Some of the reasons for this were explored in out 2017 General Election briefing (Chadha, 2017). Output per hour in 2019 is only 2.9 per cent higher than at its 2007 peak. This is 23 per cent lower than a continuation of its pre-financial crisis trend (figure 8).

Figure 8. Output per hour (£, 2016 prices)

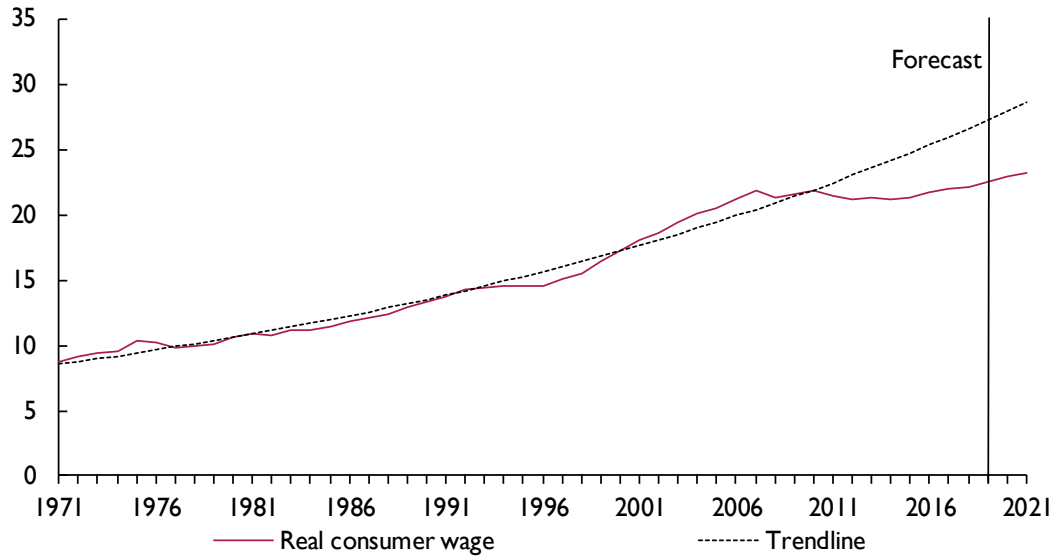


Source: ONS, NIESR calculations

- Brexit has also contributed to the **prolonged weakness in UK productivity growth**. Demand has increasingly been met by employing more workers rather than investing in capital goods as investments cannot easily be reversed. In addition, management time has been diverted towards no deal planning.[ix] Productivity has continued to be very subdued. Output per hour was 0.5 per cent lower in the second quarter of this year, compared with the same quarter a year ago.

- Despite low productivity growth, **real wages** are starting to pick up in response to a tight labour market and increases in public sector pay. Similar to employment growth, earnings growth has increasingly been supported by public sector pay. The NIESR Wage Tracker suggests that **annual nominal earnings growth** is stabilising at just below 4 per cent. This is half a percentage point more than a year ago. At the same time that nominal wage growth has risen, **consumer price inflation** has fallen to 1.5 per cent per annum in October. This suggests **real wages are currently growing at around 2½ per cent per annum**.

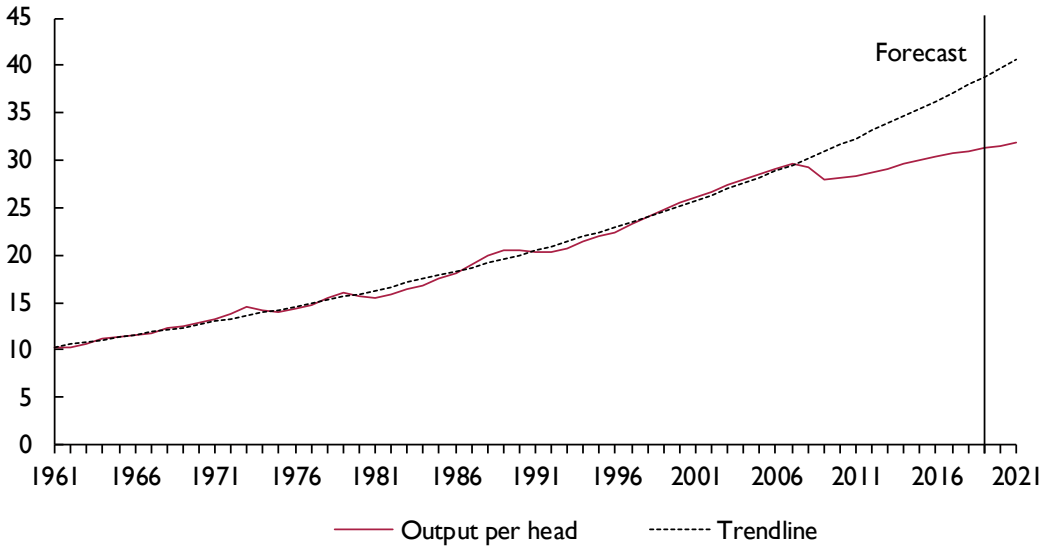
Figure 9. Real wages (£ per hour at 2016 consumer prices)



Source: ONS, NIESR calculations.

- While **real wages** have picked up in the recent data, they are only 2.9 per cent higher in 2019 than in 2007 and 17 per cent lower than a continuation of their pre-crisis trend. Slow growth in real wages is associated with little advance in **living standards** since the financial crisis. **Output per head of population** grew at an average annual rate of 0.5 per cent per annum between 2007 and 2019. This contrasts with average annual growth in output per head of 2.3 per cent between 1961 and 2007 (figure 10). **Output per head** is 20 per cent lower than a continuation of its pre-crisis trend.

Figure 10. Output per head



Source: ONS, NIESR calculations

The causes of slow growth and the need for supply-side reforms

- The slow pace of economic growth in the United Kingdom in the last couple of years has not been due to any weakness in overall demand but due to weakness of productivity growth.

- As described by Oulton (2018), there is not one UK productivity puzzle, but two. One puzzle is the lack of growth in productivity since 2007. The other is the low level of productivity in the UK relative to in other advanced countries. This has been observed since the 1960s with respect to France and Germany and relative to the United States since the early twentieth century.

- On the first productivity puzzle, concerning the stagnation in productivity since the financial crisis, the general conclusion from recent research is that it is an economy-wide phenomenon with stagnation widespread across detailed industry divisions (Riley, Rincon and Samek, 2019). One economy-wide factor that contributes to this weakness is capital shallowing, especially in the service sector, where the buoyancy of employment has not been sufficiently matched by investment. But the majority of the recent productivity weakness is accounted for by unusually slow growth of total factor productivity, the efficiency with which resources are used.

- The source of this weakness is not clear, but it is also apparent in other countries, albeit to a lesser extent. This points to the productivity weakness of the past decade having its roots in changes in the global economy affecting all countries to some extent. As a poorly-understood global phenomenon, there is not much the UK can do on its own to resolve this issue.

- The second productivity puzzle concerns the longstanding weakness of UK productivity relative to other countries. This is reasonably well understood and can be addressed by a combination of demand and supply-side policies affecting both the private and public sectors.

- The types of policies that are required include:
    - Fostering macroeconomic and policy stability to help businesses make long-term decisions without having to be concerned about major changes in their trading and investment environment.
    - Encouraging high productivity international businesses to locate in the UK so that local businesses can benefit from knowledge spillovers.
    - Improving the skills of the workforce so that technology can be used more effectively.
    - Ensuring that the physical and technological infrastructure are effective and not a source of congestion.
    - Allowing competition where appropriate to channel resources to where they can be used more effectively. Accepting that this will temporarily mean some institutions need to close and some jobs be lost.
    - Providing incentives to innovation.
- These sorts of policies can encourage productivity and so the amount that is produced in the UK. The uncertainty caused by the decision to leave the EU and the less open trading environment with the EU are both inimical to productivity growth.
- But the living standards of UK residents also depend on their claim over this output and the output of other countries that they have invested in. Low levels of saving have meant that the UK has run a current account deficit more or less continuously for the past twenty years, so that a significant proportion of the investment in the UK has been financed from abroad. This means that the claim of the UK over its own resources is diminished somewhat. At the end of 2018, the financial net worth of the UK was negative at -£224 billion, representing the UK's net financial position with the rest of the world.
- But to put this in context, the UK's overall net worth, its total cumulated saving, was £10.4 trillion in 2018, around 5 times annual GDP and an average of £156,000 per person. Around three-quarters of the measured net worth is in dwellings and land, the value of which has been affected by high house and land prices.
- A range of policies to increase national saving have been adopted in recent years, including reducing the taxation of saving and pension reform, including auto-enrolment. A more direct way to increase national saving is for government to save more and build up its balance sheet by running current budget surpluses when the state of the business cycle allows it.

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[viii] See NIESR's Prospects for the UK Economy, November 2019.
[ix] See also Bloom et al. (2019), The impact of Brexit on UK firms.

2019 UK GENERAL ELECTION BRIEFING:
UK TRADE AND TRADE POLICY AFTER BREXIT

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OVERVIEW

International trade plays a crucial role in fostering economic growth across a wide range of industries at the national and the regional level. The prospects for UK's international trade are closely tied to the future relationship between the UK and the EU. Voters are being offered a wide spectrum of choices, ranging from continued membership to the EU, a customs union-type relationship by the Labour party, a looser arrangement under a free trade agreement with the governing Conservative party, to trading on WTO terms with the Brexit party. In this Briefing we discuss the UK's current trading position and the prospects for trade in light of the menu of options discussed above.

MAIN TAKE AWAYS

- The UK has a close trading relationship with the EU. Just under 50 per cent of total trade is directly with other EU countries, and the UK is also immersed in intricate global value chains involving EU businesses.
- With the UK's exit from the EU, UK's global competitiveness is under threat because trade is regarded as a key driver of productivity, employment and business creation; it can boost wages and income, and foster knowledge diffusion and technology adoption.
- While striking early trade deals with non-EU countries will be important to help offset some of the drag that will result from more restricted trading arrangements with the EU, NIESR research suggests the benefit will be small even if the UK is able to establish FTAs with all Anglo-American and BRIICS countries.
- Political parties offer a variety of Brexit options ranging from staying in the EU to a hard Brexit. Previous research has established that the closer the link with the EU, the less disruption there will be to trade.
- The governing Conservative party is looking to implement the revised deal that was struck between the EU and the UK in October that is looking to achieve a free trade agreement (FTA). Under this deal, the UK will exit the Single Market and the Customs Union and will instead be

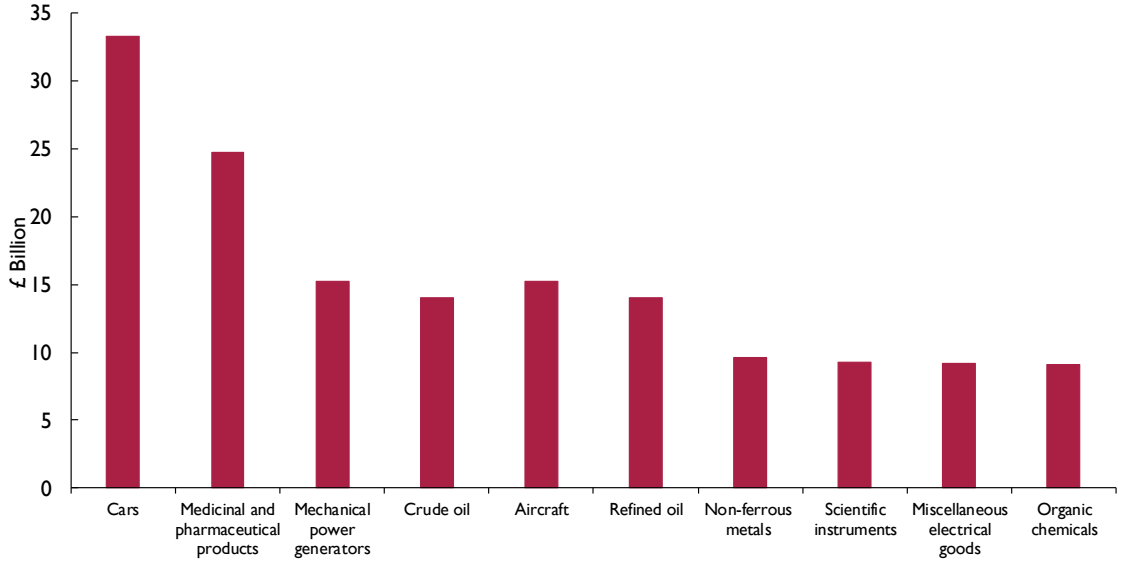
free to strike new trade deals with third countries. The Labour party offers a 'permanent and comprehensive UK-wide customs union' and 'a close alignment with the Single Market'. The Liberal Democrats and the Scottish National Party support continued EU membership. Plaid Cymru favour membership of the EU Single Market and Customs Union and the Brexit party seeks an exit without a deal.

- The UK runs a trade surplus in services of around £100bn (in 2018) which helps offset some of the deficit in goods trade. By exiting the EU, service sector trade will then be more exposed because even the most ambitious FTAs have a limited coverage for the services sector.
- All UK regions are exposed to the EU through exports, but the geographical location of exporters is not uniform across the UK. London and the South East, the East of England and the North West dominate this landscape, accounting for around 60 per cent of total exporters of goods. London dominates services trade, accounting for around 1/3 of total exporters.
- As a member of the EU, the UK also benefits from trade agreements with third countries such as Canada, Japan, Turkey etc accounting for around 14% of total exports. Of the 74 countries with which the EU has deals, the UK has signed agreements with 49 of these countries, representing approximately 7% of total exports.
- A loose trading relationship such as an FTA raises the opportunity to strike new deals with other large countries such as the United States, China and India. Our research shows that distance matters and the benefits of these potential deals would not compensate for the benefits that the UK would lose from exiting the EU.

UK trade in key figures

- The total value of UK exports and imports of goods and services (total trade) amounted to around £1,300 billion in 2018, representing 61% of total GDP. The EU is UK's largest trading partner accounting for £642 billion of total trade, or just under half of all UK trade flows (ONS Balance of Payments, 2019).
- Figure 1 shows the main goods exported by the UK in 2018. Car exports amount to £33 billion, that is, almost 10 per cent of total goods exported. The second main manufacturing exports are of medical and pharmaceutical products (7 per cent of total goods exports), followed by mechanical power generators (also 7 per cent), crude and refined oil (10 per cent) and aircraft (4 per cent).

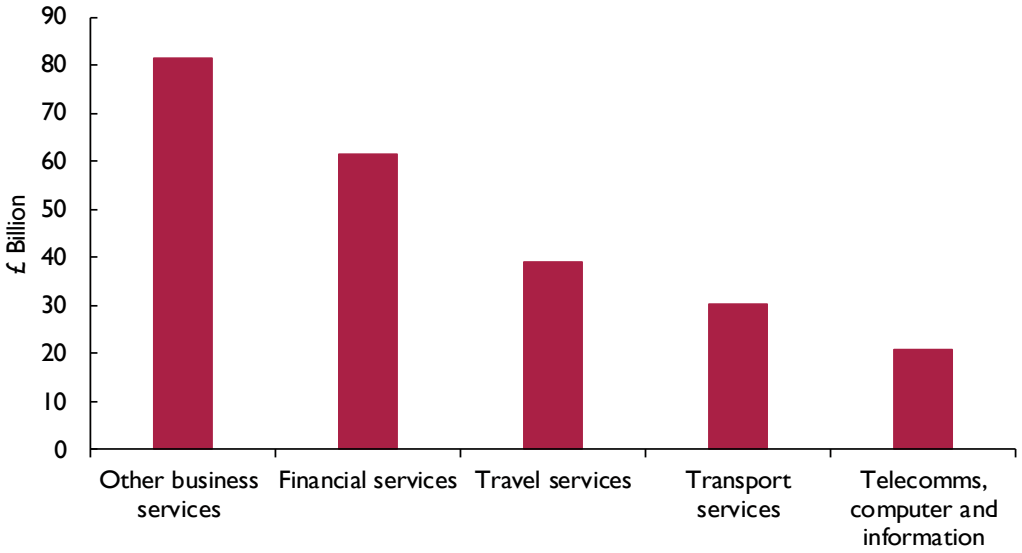
Figure 1. Main UK goods exports, 2018.



Source: Department of International Trade.

- The UK runs a trade surplus in services, which was of £107 Billion in 2018, partly offsetting the deficit in goods trade, which was £-138 billion. The trade balance with the EU was negative (£-64 billion) and the balance with non-EU countries positive (£33 billion).
- Figure 2 shows the main UK services exports (ONS Balance of Payments). The top UK services exports in 2018 was of other business services, which comprises professional, technical and trade-related services. This sector amounts to £81 billion, representing approximately 29 per cent of total service exports.
- The share of EU services trade in total trade has grown substantially since the late 90s, partly because some of the EU agreements that have reduced or eliminated barriers to service trade.
- The second main service export was financial services, amounting for £61 billion, and 21 per cent of total service exports. The financial sector is particularly vulnerable unless the EU grants equivalence. The third main service export was travel services which was of £40 billion and just under 14 per cent of total service exports. These were followed by transport services (£30 billion, and 11 per cent of UK total service exports), and telecoms, computer and information services (£21 billion, and 7 per cent of total UK service exports).

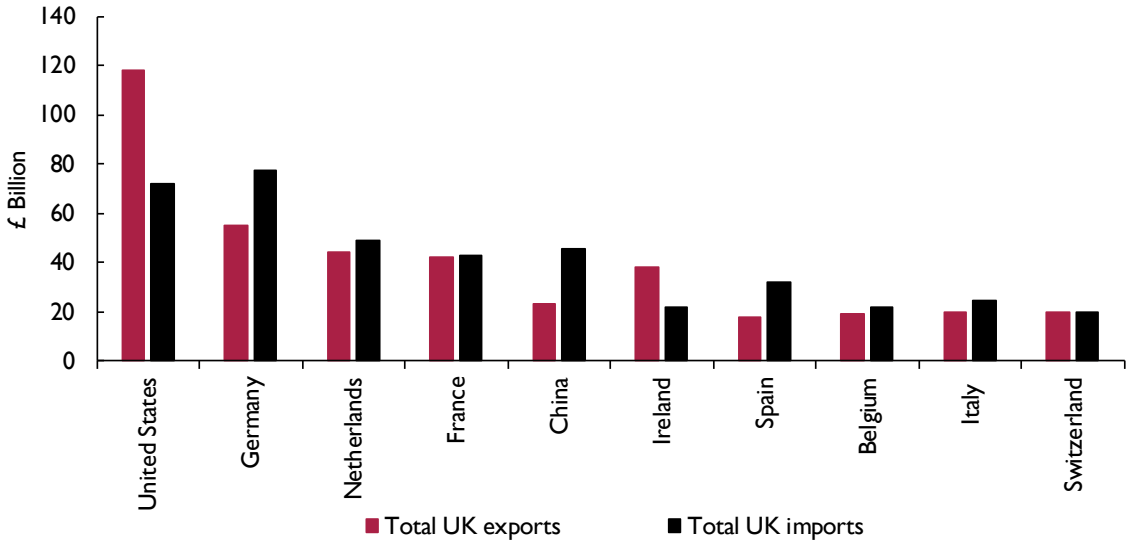
Figure 2. Main UK services exports, 2018.



Source: Department of International Trade.

- Figure 3 illustrates the main UK trading partners in 2018. The US is a main destination of UK exports (£118 billion), followed by Germany (£55 billion), Netherlands (£44 billion) and France (£42 billion). The EU, as a whole, accounts for £290 billion exports (ONS UK Trade). China is in 6th place as a destination of UK exports (£23 billion). On the imports side, the ranking is not too different; Germany is the main country of origin of UK imports, followed by Netherlands and China.

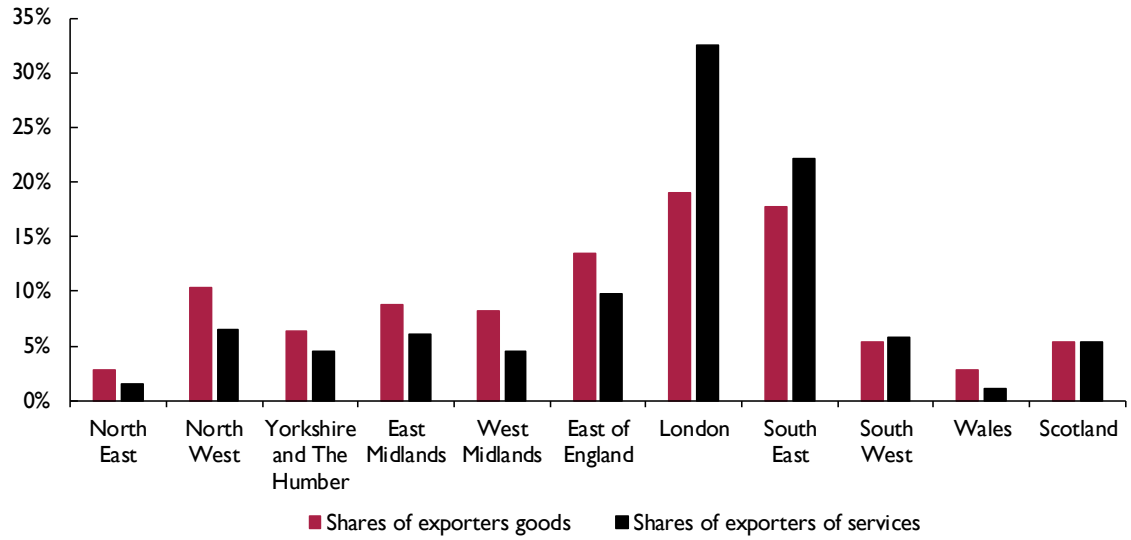
Figure 3. UK Main trading partners, 2018



Source: Department of International Trade.

- The UK is intensively involved in global value chains both through buying from third countries (backward linkages) and selling (forward linkages). The strongest backward linkages are with the United States, China and Norway (from the non-EU) and Germany and France (from the EU27).
- Evidence also suggests that the UK can also account for as much as 7% of the total value added generated by the exports of EU countries, which implies that many UK firms will most likely face multiple tariffs and delays in the post-Brexit era.
- In 2018 there were 233,900 exporters in Great Britain (source: Coriolis Technologies). This represents a decrease of almost 2 per cent since 2017. The decrease in number of service exporters from 2017 (2.3%) is estimated to be larger than the decrease in the number of goods exporters (0.9%).
- Figure 4 below shows the geographical distribution of these exporters across the UK regions for goods and services. London and the South East, the East of England and the North West dominate this landscape, accounting for around 60 per cent of total exporters of goods. London dominates services trade, accounting for around one of third of total exporters. Figure 5 illustrates that EU trade is important across all UK regions.

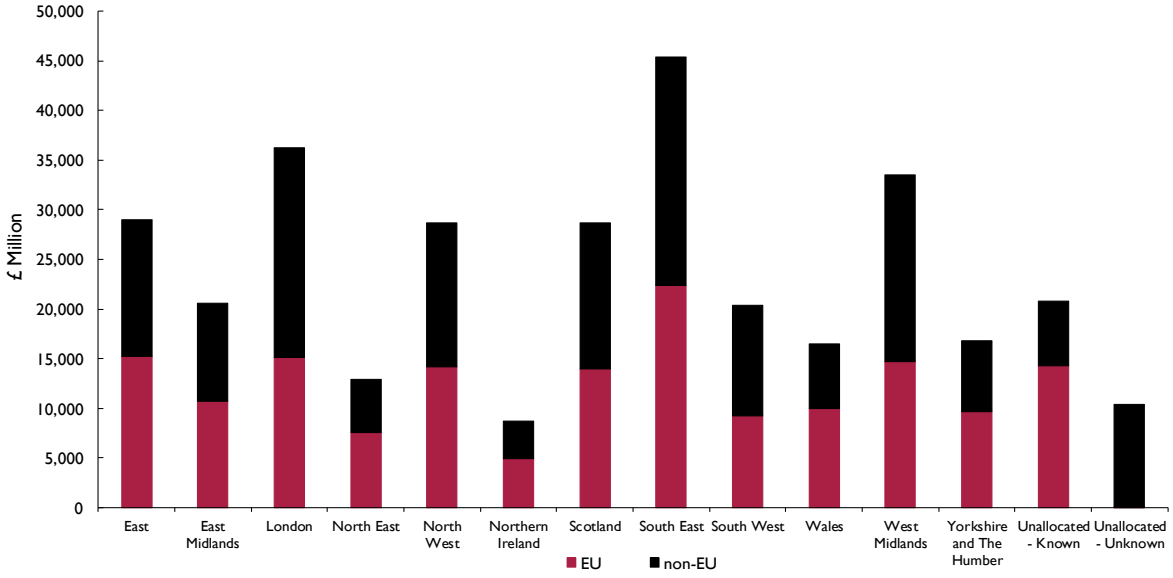
Figure 4 Geographical distribution of exports, 2018



Source: Multilateral Open Platform, Coriolis Ltd.

- There are however, regional and sectoral differences across the UK (Figure 5) The chart shows that the EU is a bigger trading partner than non-EU for most UK regions. The exceptions are London and West Midlands which trade more goods with non-EU countries. Separately, data from Coriolis Technologies suggests that London, South East and Southwest are the only three regions where the number of services exporters exceeds the number of goods exporters.

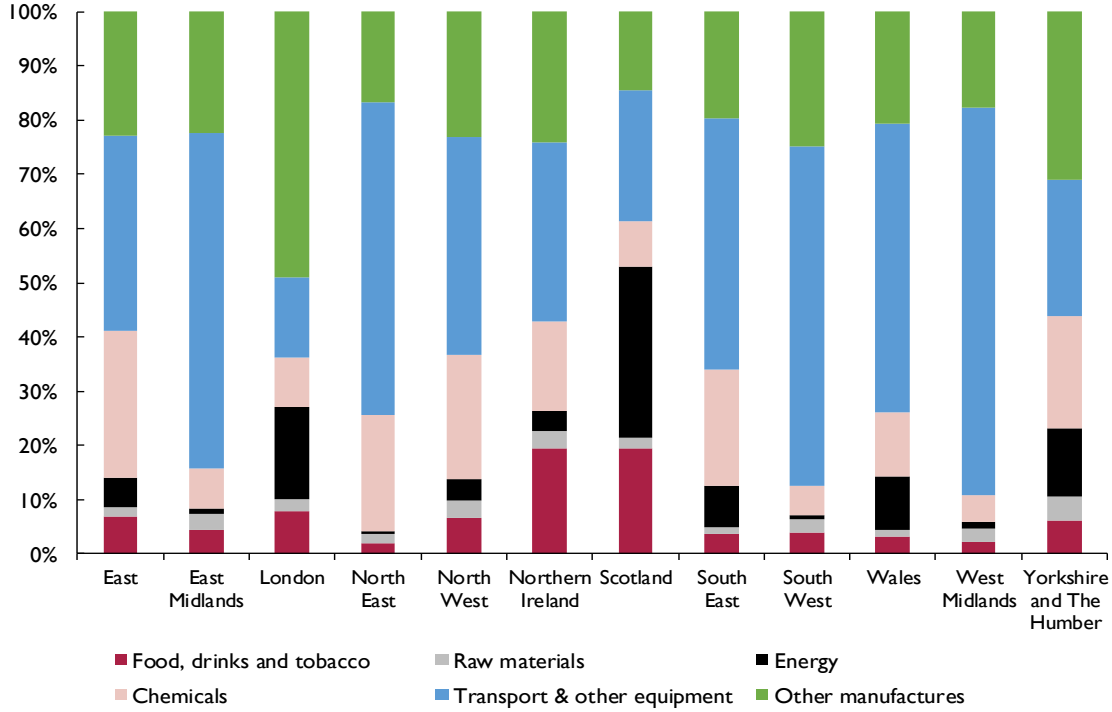
Figure 5 UK export of goods by region and partner country, 2017, £million



Source: HMRC Regional Trade in Goods Statistics data

- Figure 6 shows now the product breakdown of UK goods exports for every region. We can see there is heterogeneity in the composition of exports across regions. Manufacturing of transport (which includes manufacturing of cars) and other equipment dominates the exports of many regions. This is largest in the East Midlands, West Midlands, North East and South West and lowest in London.

Figure 6. UK goods exports by product and region, 2017.



Source: HM Revenue & Customs: Trade Statistics, 2017

Trade deals

- Trade deals vary. The most comprehensive deals such as EU membership cover an exhaustive range of goods and services and provide a framework for legal protection that involves local courts as well as the Court of Justice of the European Union. Membership encompasses human rights protection, environment protection, reduction in technical barriers, mutual recognition of professional qualifications and worker rights to ensure a level-playing field for all member nations.
- Research shows that joining the EU has increased bilateral UK-EU trade substantially (see table 2 below). Restricting the trading relationship to a FTA (as proposed by the Conservative party) could subtract, relative to a scenario where the UK remains in the EU, around 40 per cent of goods trade and 60 per cent of services trade in the long run.
- In comparison, research has shown that a closer trading relationship such as customs union (as proposed by the Labour party) could decrease trade in goods by 25% and services by 50%, again relative to a remain scenario. A `No- Deal' scenario where the UK trades with the EU under WTO rules would imply larger reductions in trade of both goods and services.

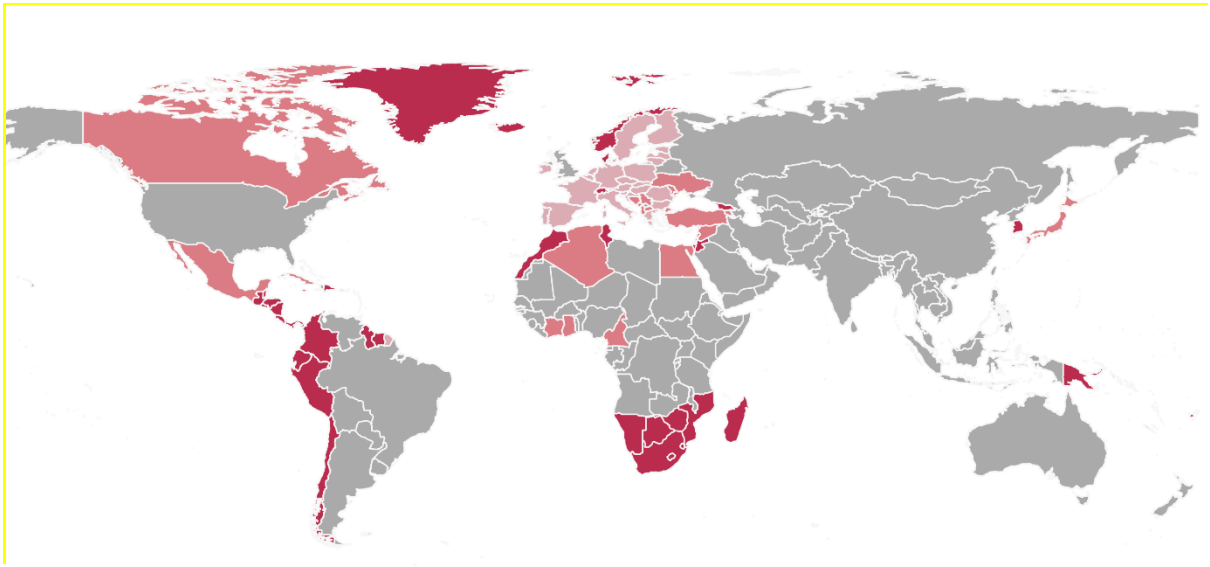
Table 2 Trade Effects on UK-EU Trade Volume of Different Brexit Scenarios (relative to remaining a member of the EU)

	Customs Union	Johnson's Deal	No-Deal
Goods	-25%	-40%	-55%
Services	-50%	-60%	-65%

Source: Hantzsche et al. (2018) and Hantzsche and Young (2019)

- So far, the UK has negotiated deals with 49 of the 74 countries with whom the EU had trade deals. This covers around 6-7 per cent of total UK exports and around 8 per cent of UK imports. The value of exports to the remaining 25 countries with whom the UK has not signed yet deals amounts to around 7 per cent of total UK exports and 6 per cent of total imports. Figure 7 below summarises the current state of play.
- Striking trade deals with non-EU countries will be important to ensure continuity and to help offset some of the drag on UK trade that will result from the new more restricted trading arrangement with the EU should the UK exit. NIESR research suggests that the benefit will be small even if the UK is able to establish FTAs with all Anglo-American and BRIICS countries Hantzsche et al. (2018).
- In addition to third-country deals discussed above, there are important negotiations with the WTO and of course, the EU (Holmes et al. 2016). There are 163 WTO members and after considering the EU countries, and the other with which the UK has already established deals, there is a large group of countries with which the UK will need to agree new trading arrangements.
- In terms of policy action, there is a need to coordinate the activities of the different UK governmental bodies, lenders and exporters to mitigate potential trade risks. More specifically, the UK government can extend the Enterprise Finance Guarantee, provide dedicated funds to small and medium exporters, and encourage banks to provide exporters with not only credits but also government information on their Brexit preparations.

Figure 7. Trade Deals with third countries



Red: Countries with both EU and UK trade agreements

Darker Pink: Countries with only EU trade agreements but not UK ones

Lighter Pink: EU countries

Grey: Countries without EU or UK trade agreements

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2019 UK GENERAL ELECTION BRIEFING

PAST, PRESENT AND FUTURE OF IMMIGRATION

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OVERVIEW

Immigration was one of the main issues around the UK's decision to leave the EU. The outcome of the General Election is likely to determine the design of a future immigration system, with party proposals ranging from the introduction of a post-Brexit "Australian-style" points system, to continuing free movement within the EU. This briefing focuses on:

- The trends in UK immigration, and data about the migrant population;
- The economic and social impacts of immigration; and public concerns about immigration;
- Present and future immigration policy including the different proposals by the main parties.

KEY TAKEAWAYS

- Immigration has been part and parcel of British life throughout the last thousand years. But there has been a **substantial increase in net migration during the past two decades**. Immigration has **fundamentally changed the UK population**; now made up of 14% foreign-born people compared to 9% in 2004.

- According to the available evidence, **immigration has generally had a small impact** on most easily measurable outcomes such as wages, employment, and productivity. Immigration appears to have had an overall **positive impact** on public finances, with migrants generally contributing more on average to public finances through taxes than they consume in welfare payments and public services.

- The impacts cannot be seen in isolation from government policies. **Successive UK governments have not responded adequately to the rise in population levels**, by failing to invest the financial windfall from migration into public services and housing. As a result, the UK public do not associate immigration with positive impacts, which has arguably driven anti-immigrant sentiments.

- The UK is often associated with anti-immigrant attitudes, but **public opinion has actually become more positive in the past two decades**. And while the UK is **divided on immigration**, there is also a lot of common ground, particularly the preference for high-skilled workers and those migrants who contribute positively to the UK economy and society.

- Polling suggests that **immigration has declined as a political issue**, but while people have turned their attention to the UK's future relationship with the EU, immigration is never far away from public consciousness, and it **could quickly reappear at the centre of public debate**, especially if the future immigration system is not deemed to respond to public concerns.

- **Significant uncertainty over the actual numbers of immigrants in the UK** make informed debate and analysis of immigration policy difficult.

Trends and history of immigration in the UK

- **UK has always been a country of immigration, as outlined in a recent book by Jonathan Portes and by Robert Winder**, which this section is based on. Sometimes, public debate appears to assume that large-scale immigration only started after the Second World War. In fact, a thousand years ago, the population was already a mix of Britons, Angles, Saxons, Celts, Danes and so on. Throughout the following centuries up until the 18th century, there were a continued influx of Italians, Flemings, Dutch, French, Spanish, Irish and Jewish immigrants, often invited and encouraged to come to contribute to industries such as textile, papermaking and moneylending. **The period between the 18th and 19th century did not see influxes on the same scale**, though there were still no formal controls on immigration. In fact, by contrast, for a period there were legal barriers that prevented skilled craftsmen in leaving the country. Despite the limited immigration flows, the Alien Immigration Act of 1905, followed by further legislation throughout the 1920s and 1930s, represented **the first UK legislation that sought to apply systematic restrictions to immigration.**

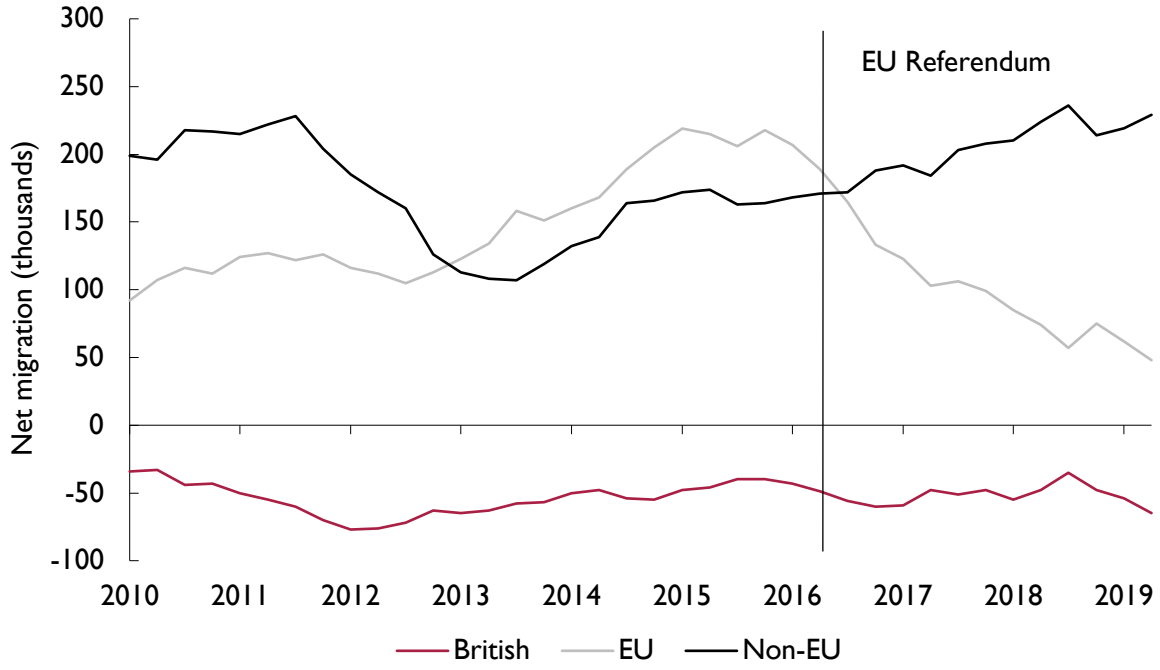
- **After the Second World War and until the 1990s, immigration inflows picked up**, including the arrival of New Commonwealth immigrants such as Empire Windrush with Caribbean migrants, Indians, African Asians, Bangladeshis and East Europeans. The Alien Immigration Act never covered 'subjects of the crown' in its restrictions, and the Nationality Act of 1948 reaffirmed the rights of Commonwealth countries and extended it to newly independent colonies such as India, Pakistan and the Caribbean Islands. While New Commonwealth immigrants were largely welcomed and helped to alleviate labour shortages, there were also tensions, manifested most famously by the Nottingham and Notting Hill riots in 1958, as well as Enoch Powell's 'Rivers of Blood' speech in 1968. **Tighter immigration restrictions were introduced, and by the 1970s immigration from the New Commonwealth countries had largely subsided**, through the Commonwealth Immigrants Acts of 1962 and 1968, the Immigration Act of 1971 and the British Nationality Act of 1981.

- **Immigration only re-emerged as a political issue after 1997 when immigration increased to an unprecedented scale**, caused initially by globalisation, people fleeing armed conflict, and the introduction of more liberal immigration policies. **The biggest turning point was the decision to give immediate labour market access in 2004 to citizens of new EU member states in Eastern and Central Europe**. This resulted in a large surge between 2004 and 2008; then a temporary slowdown between 2008 and 2012 during the financial crisis and the subsequent recession; then another surge between 2012 and 2016 including from Southern European countries as well as Bulgaria and Romania whose transitional controls expired in 2014.

- Just as the relationship between Britain and the Commonwealth countries shaped migration flows and legislation in the post-war period, the UK's relationship with the EU has shaped it since the 2000s. It culminated in the decision to leave the EU in the 2016 referendum, but **decisions around**

the future immigration system have not yet been settled. In the meantime, Figure 1 shows that net EU migration has fallen dramatically since peak levels in 2015/2016. The fall has been largely offset by non-EU immigration which has increased steadily since 2013, so overall net migration is still fairly high: there were **212,000 more people who moved to the UK during the past year than left the UK.**

Figure 1: Net migration by citizenship, UK, year ending December 2009 to year ending June 2019



Note: Office for National Statistics – Long-Term International Migration (LTIM), LTIM with preliminary adjustments based on Department for Work and Pensions and Home Office data. Source: Migration Statistics Quarterly Report: November 2019.

The migrant population in the UK

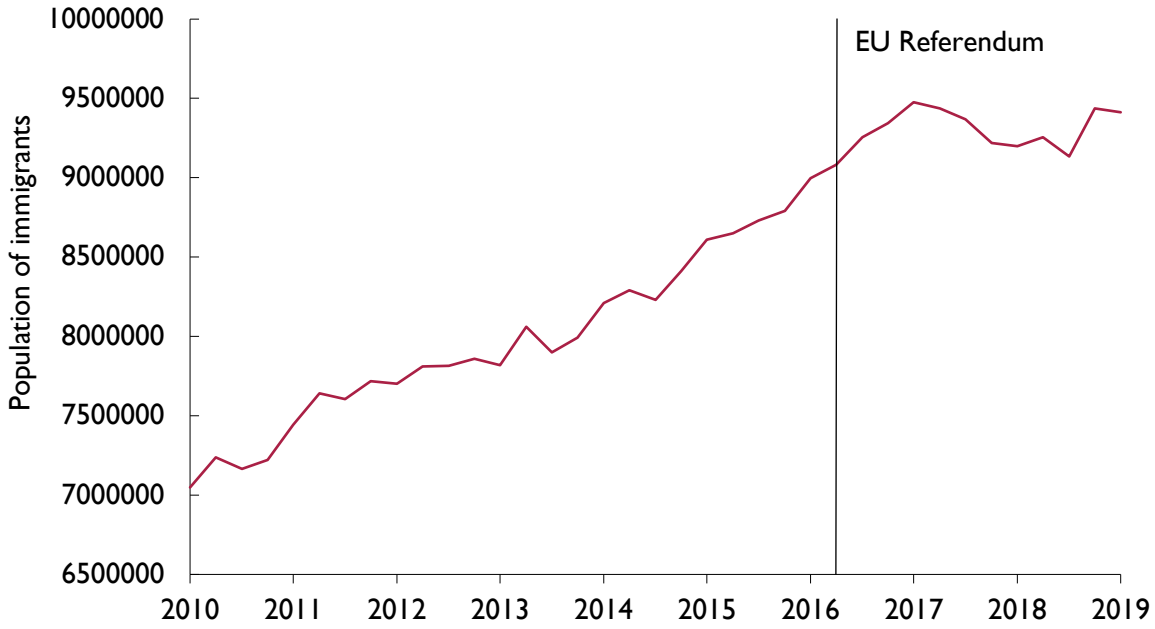
- While the UK has always been a country of immigrants, the unprecedented rise in immigration during the past decades has **fundamentally changed the country's population**. There are several ways that migrants can be defined. Commonly used data on immigration in the UK define migrants by either country of birth, or citizenship.

- But it hasn't changed quite as much as we think. British people consistently overestimate the proportion of migrants in the UK, believing that around a quarter of the population are migrants, when it is almost half that, at **around 14% of the UK population, up from about 7% of the population in 1995**. Overall, since 2004, the number of foreign-born people in the UK has **almost doubled from 5 million to almost 9 million,** but since 2017, the **migrant population has been relatively constant or even declined** (Figure 2).

- However, there is **significant uncertainty over the number of immigrants in the UK**. Unlike many European countries, there is **no official count of the number of immigrants living in the UK**. The numbers above are from the Labour Force Survey/Annual Population Survey (APS) which is currently the only official source used to estimate the number of migrants in the UK. The other

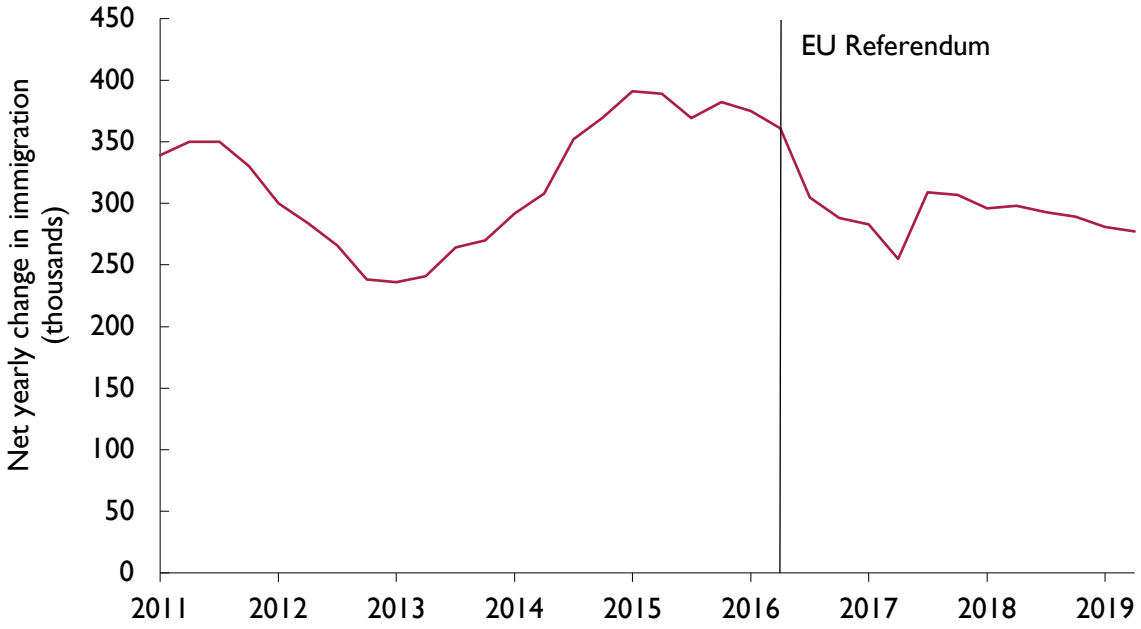
source of migration statistics is the International Passenger Survey (IPS) which is conducted at ports throughout the UK, from which various adjustments are made to create the Long Term International Migration (LTIM) figures. These are used to estimate net migration (Figure 2), but they have recently been downgraded from 'official statistics' to 'experimental statistics' by the ONS because of concerns over its coverage and weighting.[x] There are **substantial inconsistencies between the two surveys**. For instance, the IPS suggests that net migration (inflows minus outflows) has been consistently positive, close to 300,000 a year (Figure 3), while the APS suggests that the migrant population has been fairly constant since 2016, suggesting that net migration is close to zero.[xi]

Figure 2: LFS quarterly estimates of the immigrant population, 2010-2019



Source: Authors' calculations from the quarterly Labour Force Survey.

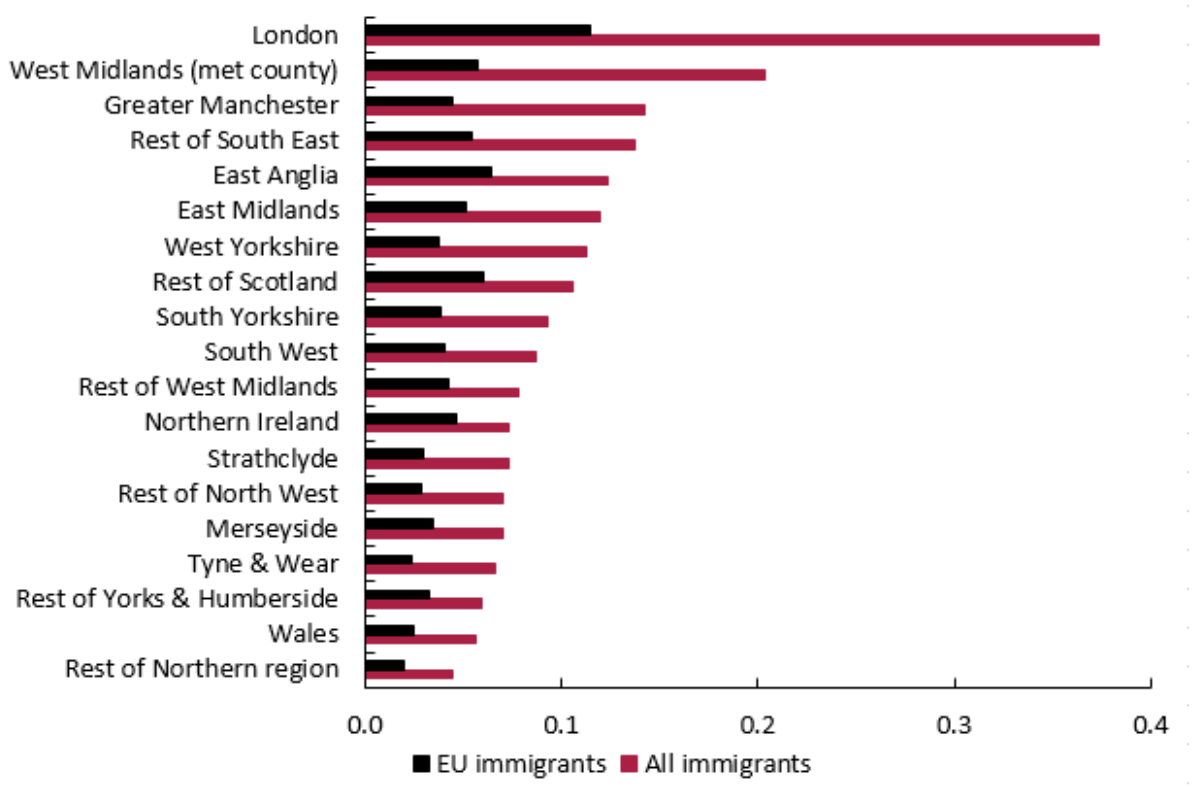
Figure 3: IPS/LTIM quarterly estimates of yearly changes in the immigrant population, 2011-2019



Source: Authors' calculations from the IPS/LTIM.

- Immigrants form a particularly large proportion of the population in **parts of the country, especially London and the South East**.

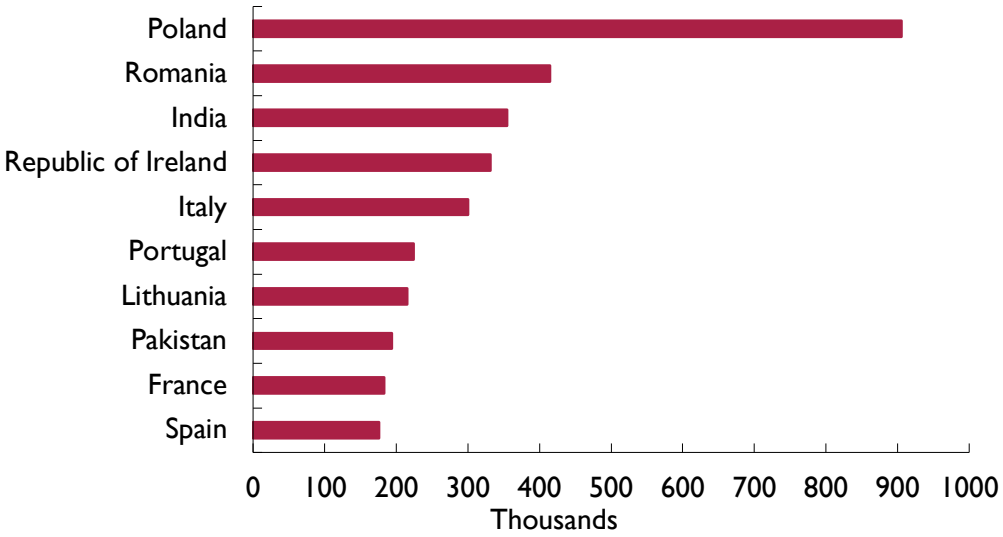
Figure 4: Regional distribution of foreign-born population, 2018



Source: Authors' calculations from the Labour Force Survey.

- **Poland is, by far, the most common country of birth** for immigrants in the UK.

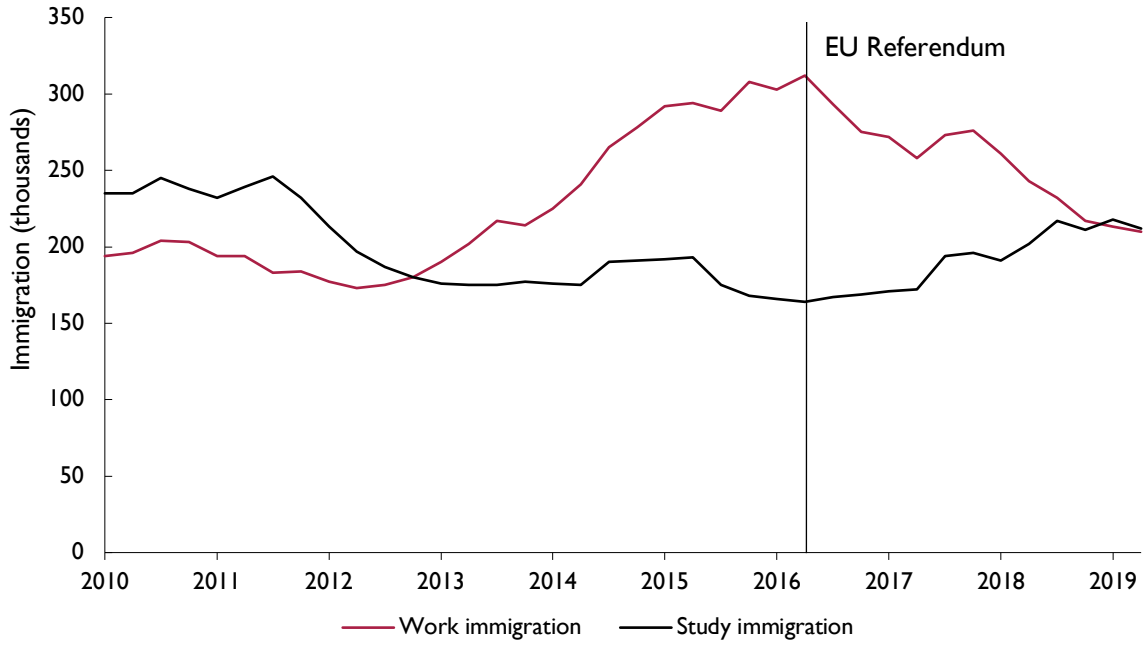
Figure 5: Non-British population in the UK, by country of birth, 2019



Source: Annual Population Survey, ONS.

- It is not just the scale of migration, but also the type of migrants that people get wrong. Driven by media coverage, Brits tend to think that refugees and asylum seekers form a large part of the migrant population, when in fact in 2018 only 0.6% of the UK population was estimated to be made up of people who originally came to the UK to seek asylum. Instead, the **most common types of migrants in the UK are those who immigrate to work, study and be with family**. Figure 6 shows the pattern of immigration by the two main reasons for coming to the UK – work and study. Since the 2016 referendum migration for work has declined, while migration for study has increased slightly.

Figure 6: Long-term immigration trends by reason for migration, UK, year ending June 2009 to year ending June 2019



Source: Migration Statistics Quarterly Report: November 2019.

Impacts of immigration

- How have the changes to the UK population affected the country? Often, the discussion around immigration focuses on two types of impacts: **economic impacts** (on jobs, wages, public finances and public services, housing, productivity and GDP) and **social impacts** (such as integration, cohesion, well-being, national identity and crime).

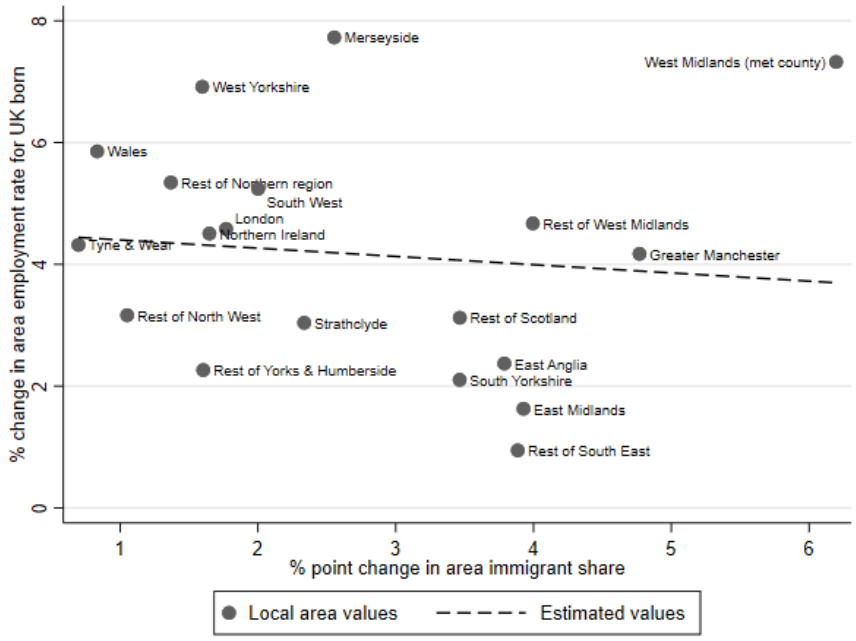
- It is often stated that immigrants take the jobs or drive down the wages of British workers. However, all existing research evidence – summarised in a detailed NIESR briefing and in a recent report by the government's independent Migration Advisory Committee – suggest **immigration has had little impact on the number of jobs or wages of UK native workers.** There is some evidence of a small negative impact on the wages of lower skilled workers, while the effect on the rest of the distribution is positive. Recent work finds small negative effects on the wages of native workers in the semi/unskilled service sector.

- Figures 7 and 8 illustrate the essence of this research by showing the **relationship between changes in the proportion of immigrants in a local area, with the changes in the employment rate for natives and in their wages, respectively.** The dotted line summarises this relationship: if immigration reduced the employment or wage prospects of British natives, we would expect to see a strong downward sloping line, which would mean that more immigrants were correlated with lower employment rates and wages for natives. However, Figure 7 shows only a slight negative correlation over the period 2011-2019 between the change in migrant share and the change in UK-born employment. Figure 8 shows a small positive correlation between the change in migrant share and the change in wages. This positive correlation between immigrant share and wages is not surprising as immigrants are likely to be attracted to areas where wages are growing, however the

best evidence that attempts to take this into account to estimate the ***causal*** **impact of immigration on employment and wages tends to find no, or little negative effect.**

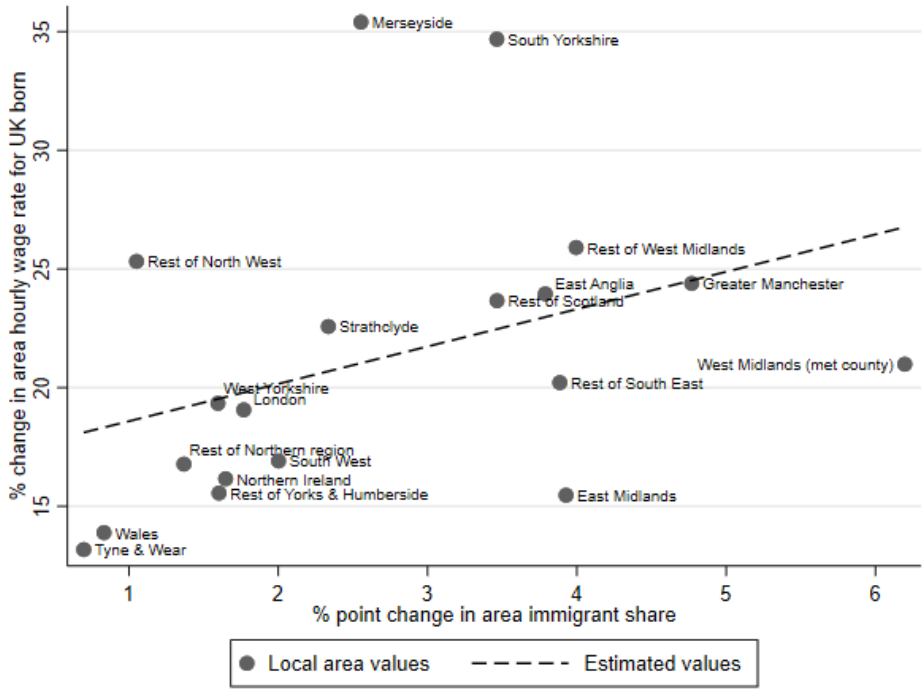
- How do we explain that immigration does not affect employment prospects of natives? While it is true that if an immigrant takes a job, a British person cannot take that specific job, this does not necessarily mean that UK unemployment goes up. The number of jobs or vacancies in an economy is not fixed. If an immigrant gets a job, they will earn money, pay taxes and spend most of the money in the UK. As such, higher immigration will **increase the demand for goods and services in the UK, which may create new jobs and raise wages**. Overall, levels of employment and wages are driven more by other things such as productivity, education and training, and the tax and benefits system.

Figure 7: Change in immigrant share and employment rate of UK born residents, 2011-2019



Note: The figure shows the percentage change in the employment rate for the UK born population in each area against the percentage point change in the immigrant share (working age population). Derived from an average of four quarters of 2011 and the first three quarters of 2019. Source: Authors' calculations from the Labour Force Survey.

Figure 8: Change in immigrant share and hourly wages of UK born residents, 2011-2019



Note: The figure shows the percentage change in the hourly wage rate (hrrate) for the UK born population in each area against the percentage point change in the immigrant share (working age population). Derived from an average of four quarters of 2011 and the first three quarters of 2019. Source: Authors' calculations from the Labour Force Survey.

- People often argue that immigrants, sometimes with reference to low-skilled EU migrants, may have caused a decline in productivity, for instance by reducing incentives of employers to invest in labour-saving or productivity-enhancing technologies. But there are also several ways migrants could push up productivity, for instance through innovation and knowledge transfer, or by providing complementary skills enabling higher-skilled natives to move into higher-skilled jobs, or by giving natives incentives to acquire new skills. Overall, the emerging evidence, including that of the government's independent Migration Advisory Committee is **uncertain about the impact of immigration on productivity,** with some evidence of positive effects.

- One of the most prevalent concerns about immigration is that it puts a strain on public services. And it is true that migrants, like everyone else, use public transport and public services such as the NHS and schools, and they claim benefits. But they also pay taxes which fund these services. So, the question of whether migrants affect the quality of public services is primarily a question about whether immigrants cost more by using public services than they contribute through taxes. And there is evidence which shows that **immigrants overall pay more in than they take out**, mainly because they are young, healthy, typically in work, and they are often not resident in the UK during the parts of the lifecycle where you are a financial strain on the state such as when you are in schooling or retired. Migrant workers also contribute in other important ways to the NHS by filling important labour market shortages as nurses and doctors. In schools, while migrants are a higher fraction of the pupil population than the school workforce, studies show that higher numbers of pupils with English as a second language does not affect parental school choice or attainment among native pupils.

- The evidence on the effect of immigration on house prices is mixed. At least one study finds a negative effect of immigration on house prices, due to existing residents moving away from areas experiencing an increase in migration. More recently, the Migration Advisory Committee found some evidence that migration leads to a rise in house prices, but this evidence is not very robust. Arguably, the **main driver of the rise in housing costs is the dysfunctional nature of the UK housing market**, in which new houses are not being built at the required pace to keep up with population changes.[xii]

- Overall, immigration over the last couple of decades has probably had a small positive impact on public finances, possibly some positive effects on productivity, and no or little impact on overall employment and wages. But the **economic impacts of migration cannot be seen in isolation from government policies, particularly on public services and housing**. Even if migrants contribute positively to public finances and this contribution, in theory, could be used to maintain or even improve the standard of public services, this is of little comfort in practice if the UK government fails to adjust public infrastructure to rising population levels. If the provision of public services, infrastructure and housing fails to keep pace with both natural increase and net migration, then then the availability and quality of these services is likely to fall; a situation made worse, if for example, the overall net gain to the public finances is used on other priorities, such as tax cuts. Similarly, successive UK governments have failed to train enough health care staff and social workers and instead relied on migrant labour to fill labour shortages, it is natural that the UK public connect migration with the lack of investment in the domestic labour force.

- Economic impacts are only part of the story. As we have seen, immigration has changed the UK which is now a visibly and recognisably multi-ethnic society. However, the **impacts on things like integration, community cohesion, well-being, and national identity are more diverse and harder to measure, partly because some of them are largely subjective.** One of the social impacts that can be measured is the impact on crime. Available evidence suggest that **migrants are not more likely to commit crime than similar natives**, including in studies examining recent waves of Central and Eastern European migrants**.**

Immigration policy: past, present and future

- The UK has a centralised migration system through the Home Office which is responsible for the country's immigration policy at a national level. Current UK policy for immigration and asylum **distinguish between UK and non-EU migrants and asylum seekers**. For EU migrants, the freedom of movement of people within the EU applies, while non-EU migrants are required a visa. Table 1 provides an overview of UK immigration and asylum policies.

The UK immigration and asylum policies

UK's Points-based system
All non-EU migrants are required a visa if they want to stay in the UK for more than a few months. Visas are subjects to a points-based system based on having a job offer, meeting a required salary, speaking English and having enough funds to cover maintenance. The points-based system includes five tiers, each of which comprises several different visa categories and some sub-categories, with associated conditions and eligibility requirements. The system has been criticised for being too complex, not enough transparent, objective and flexible.

Settlement Status
EU citizens living in the UK have time until 31 December 2020 to apply for settled status under the EU settlement scheme. As of 15 October 2019, the House of Commons Library estimated 53% of EU nationals in Britain had applied for status under the scheme.

UK asylum policy
To seek asylum in the UK individuals must apply upon arrival and undertake an asylum interview. While waiting for the decision asylum-seekers are not entitled to work or claim benefits but can apply for housing and cash allowance. Only if granted refugee status individuals can work in the UK.

UK citizenship policy
To be granted UK citizenship individual must have lived in the country for a minimum of five years, have been granted the indefinite leave to remain status for the previous year, meet the English requirements and pass the 'Life in the United Kingdom' test.

- Since 2010 restrictive measures have been placed on almost every migration stream: high skilled routes were closed to people without a job offer, seasonal schemes terminated and a cap limited the number of Tier 2 visas issued annually. The Conservative Party committed themselves to **reducing net migration to the 'tens of thousands'** ahead of the 2010 general election. To reduce numbers Theresa May institutionalised what has been called the hostile environment aimed at discouraging illegal immigrants from come to the UK. In 2014 and 2016 Immigration Acts were introduced and a variety of checks were introduced to prevent people accessing employment, housing, banking and healthcare services, for example, without providing proof of their immigration status. Policymakers faced significant constraints and indeed failed in achieving this target due to the inability to change EU migration policy and freedom of movement in particular.

- Last year, the **UK government (led by the then PM Theresa May)** published a **White Paper which outlined a potential post-Brexit immigration system**, partly based on the recommendations made by the independent Migration Advisory Committee. This proposed to **abolish freedom of movement and instead treat all nationalities the same**, including the opportunity to apply for a Tier 2 visa for skilled workers which would require applicants to satisfy a number of criteria such as salary, occupation, skill-level and non-availability of workers from within the UK. It suggested the existing £30,000 threshold as the salary cap, though this seemed to be up for consultation, and currently the independent Migration Advisory Committee are reviewing the salary threshold. The proposal also included other measures such as a temporary work visa for migrants earning less than the salary cap, and perhaps some schemes to cover specific shortage occupations. Conceptually,

this would have resembled immigration systems outside the EU such as Australia, New Zealand and Canada, and ensured that migration focused predominantly of "skilled migrant workers", though the salary threshold (which are above the UK average wage) would have hit many professions who are not usually seen as low-skilled.

- Immigration policy impact on different sectors and policy areas and changes of migration patterns driven by policy restrictions could exacerbate staffing shortages. We know that significant numbers of EU and other migrants work in public services such as health and education, and therefore these and other sectors are more vulnerable to the potential effects of Brexit.

How the main parties compare on immigration?

- **Brexit** is on the agenda of all parties. The Conservatives have committed to **deliver Brexit** ending free movement for the EU. In contrast, the Liberal Democrats have promised to revoke Article 50, maintain freedom of movement, and extend full participation in civic life to EU citizens by allowing those who have lived in the UK for five years or longer to **vote in general elections**. Labour has indicated they will give the people the final say on Brexit by putting a **new deal to a public vote**, alongside the option to remain. If UK remains in the EU the freedom of movement will continue and if the UK leaves the EU the freedom of movement will be subject to negotiations. They also propose **automatic right to EU nationals to continue living and working in the UK.**

- The Conservatives promise to 'fix' the immigration system by proposing a point-based system inspired by Australian's approach and deciding **who comes to the country on the basis of the skills they bring**. To attract 'the best and brightest' they propose fast-track NHS visa for those with job offers as well as science and technology visa, the start-up visa and post study work visa for graduated. The Liberal Democrats advance proposals on skills and jobs by suggesting **moving 'policymaking on work permits and student visas out of the Home Office** and into the Departments for Business and Education respectively, and establish a new arms-length, non-political agency to take over processing applications.' They also suggest replacing Tier 2 work visas with more flexible merit-based system, introducing a new two-year visa for students to work after graduation and giving asylum seekers the right to work three months after they have applied. They also propose to introduce 'Training up Britain' programme to make the most of migrants' skills. Labour pledges **no minimum income requirement** as well as **equal worker rights** and a **Real Leaving Wage for all**. In the Labour's vision the immigration system "must allow us to recruit the people we need, and to welcome them and their families. Our work visa system must fill any skills or labour shortages that arise. The movement of people around the world has enriched our society, our economy and our culture". The Labour Party concretely committed to **close the immigration removal centres Yarl's Wood and Brook House** and put savings in £20 million fund to support the survivors of modern slavery, people trafficking and domestic abuse.

- With respect to refugees and asylum seekers, the Liberal Democrats propose resettling 10,000 vulnerable refugees every year and 10,000 unaccompanied refugee children from elsewhere in EU over the next 10 years. They want to '**move asylum policymaking from the Home Office to the Department for International Development** and establish a dedicated unit to speed and quality of decision making'. The Labour Party want to 'work with others to resume rescue missions in the Mediterranean, co-operate with the French authorities to put an end to the horrific camps, and establish safe and legal routes for asylum seekers. The Conservatives suggest they will continue to

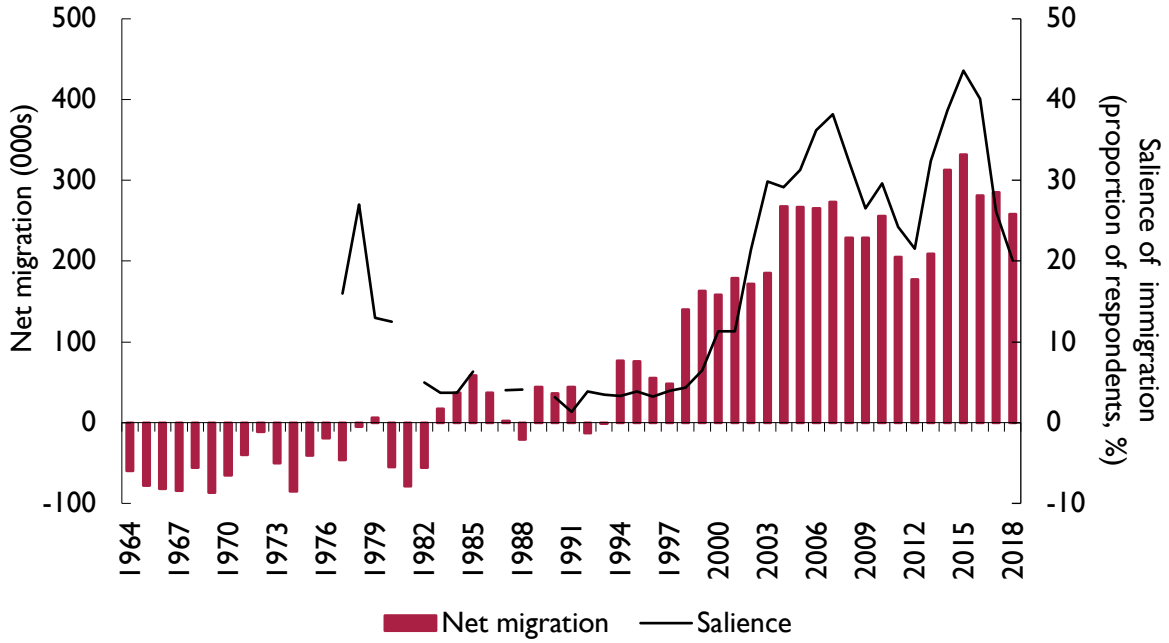
grant asylum and support to refugees but with the aim of "helping them to return home if it is safe to do so". The Liberal Democrats suggest **limiting the Home Office powers**, recognising that managing migration require more than border control policies.

- Overall, given that Brexit would mark a turning point on UK immigration policy and give the next parliament a unique opportunity to reform the UK immigration system, it can be argued that this is not reflected in the details in the party manifestos, and it has **certainly not been reflected in how immigration has featured in the public debate so far during the election campaign.** Regardless of the outcome of this election, the exact design of Britain's future immigration system is still not clear.

UK public opinion on immigration

- Coinciding with the large rises in net migration during the past two decades, immigration became a highly salient issue in the UK, with more people seeing **immigration as one of the most important issues facing the country.** Figure 6 shows how the importance of immigration as a political issue **declined during the economic crisis**, then **rose as economic concerns subsided and in the leadup to the EU referendum**. It then **declined following the referendum**, partly due to the rise in salience of related topics such as EU/Brexit. But while people have turned their attention to the UK's future relationship with the EU, immigration is never far away from public consciousness, and it could quickly reappear at the centre of public debate, especially if the future immigration system is not deemed to respond to public concerns.

Figure 6: Net migration (000s) and salience of immigration (proportion of respondents, %)



Note: *The figure shows net migration on the left axis derived from the Long-Term International Migration statistics (ONS, 2019), and on the right axis the proportion of survey respondents who see migration as one of the most important issues facing the UK (salience), according to Ipsos MORI's latest issues index. Sources:* Ipsos MORI (2019) and ONS (2019).

- Generally, **public opposition to immigration has been widespread** in the UK. While the salience and levels of immigration has changed over time, a majority of the British public **consistently wants to see immigration levels reduced**. But at the same time, attitudes towards economic and cultural impacts have **become more positive since the late 2010s and 2010s, especially after the Brexit referendum**, and among all political divides including among Remain and Leave voters. This may seem paradoxical, but it may be due to a reassurance effect that the issue is finally being addressed, or that the public debate has made people more aware of migrants' contributions. The human aspects of migration have also been highlighted through the debate about EU citizens' rights and the Windrush scandal. Overall, the UK public as a whole now has a **fairly balanced, and even positive, view on the impacts of immigration**.

- But while the UK public as a whole are now fairly balanced, most people do not actually seem to hold this balanced view: people are either positive or negative. In fact, according to polling, **Britain are among the most divided countries in Europe on immigration**, and these **divisions seem to be growing**. Britain are divided along education, generational and social lines. In particular, people with higher education tend to have more pro-immigration attitudes, and younger generations hold more pro-immigration views than older generations. These divisions mean it is hard to find a policy compromise which will satisfy everyone.

- However, it is often understated that there are areas where **large parts of the public can find common ground on immigration.** Most importantly, there is strong evidence that British people, regardless of their broader immigration attitudes, prefer some migrants over others. In particular, there is a **higher acceptance of high-skilled compared to low-skilled migrant workers**. This preference is related to the higher economic benefits of welcoming high-skilled migrants, due to their ability to support themselves through employment and paying taxes. This is the background for the typical **public support of an Australian-style points-based system which often appears to be shorthand for a controlled and selective immigration system**, in contrast to EU free movement.

- But recent NIESR research also suggests that the UK public, more fundamentally, **supports immigration when it is economically beneficial and socially useful rather than necessarily high-skilled**. People express support for low-skilled migrants when questioned about specific jobs rather than in generic terms as low-skilled, and readily acknowledge the contribution of some low-skilled professions in filling important labour market shortages. As such, it is arguably a misinterpretation of public opinion to set too strict restrictions on low-skilled immigration. The support for a controlled and selective immigration system also means that the policies that were concerned with reducing the number of migrants **probably misjudged public opinion which is more concerned with controlling migration to ensure that migrants contribute, rather than necessarily reducing numbers**.

- There is also evidence that the UK public, regardless of their broader immigration attitudes, show signs of the same implicit **'ethnic hierarchy'**, as they express **more support of White, English-speaking, European and Christian migrants**, compared to non-White, non-Europeans and Muslim migrants. This would suggest that future post-Brexit immigration policies should still treat EU citizens favourably, but research finds that the overriding concern among the public is the skill-level and therefore control and selectivity. Other factors such as country of origin and religion are secondary.

[x] ONS (2019) 'Understanding different migration data sources: August 2019 progress report' https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/articles/understandingdifferentmigrationdatasources/augustprogressreport

[xi] There are some differences between the two surveys, for example, in the coverage and definition of migrants, and you cannot automatically estimate net migration from population numbers as these could also be affected by other factors such as deaths of migrants, but these factors cannot alone explain the substantial differences.

[xii] See for example the articles in the National Institute Economic Review, August 2018 (https://journals.sagepub.com/toc/nera/245/1)

2019 UK GENERAL ELECTION BRIEFING:
THE MACROECONOMICS OF PARTIES' TAX AND SPENDING PLANS

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OVERVIEW

Most economic analyses of parties' tax and spending promises treat the government's budget like that of a household, ignoring the impact of proposed policies on the economy. This briefing aims to fill this gap by providing a macroeconomic assessment of announced fiscal policies. It focuses on:

- The impact of the parties' tax and spending plans on economic output and consumer prices.
- The combined impact of parties' Brexit policies and tax and spending plans on the economy.
- How monetary policy is likely to respond to prevent inflation rising above target.
- A discussion of economic policies beyond tax and spending and their effect on the economy.

KEY TAKEAWAYS

- With the economy operating near production capacity, the main impact of tax and spending policies is to shift resources from the private sector to the public sector, particularly in the case of the Labour Party and Liberal Democrat policies. The effect on aggregate output is small and estimated to boost GDP annually by 0.2 per cent (Conservative Party) to 0.4 per cent (Labour Party, Liberal Democrats) over the next Parliament, 2020-24.
- The economic impact of different parties' plans depends crucially on the outcome of Brexit. Even combined with the proposed fiscal stimulus, a UK-EU free trade agreement or customs union would leave GDP smaller than it would have been with continued EU membership.
- The economic impact of proposed fiscal policies also depends on the response of monetary policy and inflation expectations. If there were more economic slack, the proposed policies would provide a larger boost to economic activity (adding 3½ per cent to GDP over 2020-24).
- Economic policies beyond tax and spending are likely to have important implications for future economic prosperity but these will depend on how those policies are implemented.

Macroeconomic impact of proposed fiscal policies

- Table 1 summarises the tax and spending proposals set out in party manifestos as they are considered in the following analysis. We have adjusted the figures in the manifestos by stripping out the assumed second-round effects on government revenue that come from expected changes in the size of the economy. We have also ignored revenues expected to be raised by anti-tax avoidance measures. The direct effect of the proposals on the public finances is assessed in an accompanying NIESR Election Briefing (here).

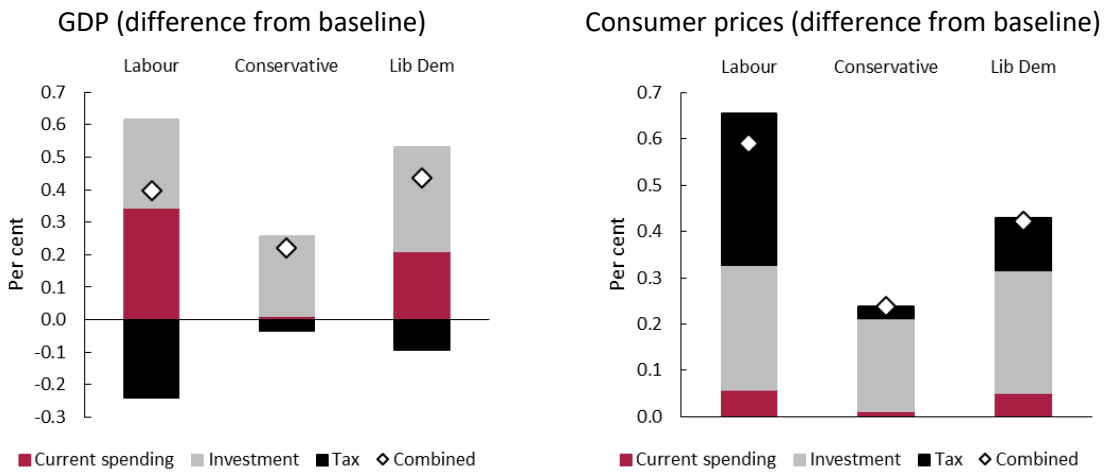
Table 1 Major parties' tax and spending plans

	Labour	*Conservative*	*Liberal Democrats*
Current spending	**+£83 bn pa** by 2023-24	**+£3 bn pa** by 2023-24	**+£50 bn pa** by 2024-25[(c)]
Investment	**+£40 bn pa** over 10 years	**+£20 bn pa** over 5 years	**+£26 bn pa** over 5 years
Tax revenue	**+£71 bn pa** by 2023-24[(a)]	**+£4 bn pa** by 2023-24[(b)]	**+£31 bn pa** by 2024-25[(d)]

Notes: *(a) excludes anti-tax avoidance measures, fiscal multiplier effect. (b) excludes anti-tax avoidance measures. (c) accounts for cancellation of 2019 Spending Round measures. (d) excludes anti-tax avoidance measures and Remain bonus.*
Sources: *Parties' costings documents.*

- We assess the **macroeconomic impact using the National Institute Global Economic Model NiGEM**. We first simulate the economic effects of changes to government consumption (current spending), government investment (capital expenditure), the income tax rate, the corporate tax rate and a residual tax revenue category against a **common baseline** that takes no account of the parties' different approaches to Brexit.
- Figure 1 summarises the impact of tax and spending proposals on economic output (GDP) and consumer prices over the next Parliament (2020-24). The **combined macroeconomic impact** arises from the individual impact of higher current spending, higher government investment and higher tax revenue, and feedback effects across policies.

Figure 1 Macroeconomic impact of tax and spending plans (2020-24 average)



Source: NIESR, NiGEM simulation.

- Overall, the **macroeconomic impact of proposed tax and spending measures is small**. This is because the economy is operating at close to full capacity and constrained by supply capacities. The economic backdrop is discussed more fully in an accompanying NIESR Election Briefing (here).

- **Labour policies are estimated to increase GDP by 0.4 per cent** over the next 5 years, with current spending plans making the largest contribution (0.3 percentage points). Assuming that public investments through the proposed National Transformation Fund impact the economy in a similar way to historical investment projects, this adds around 0.3 percentage points. Higher income and corporate tax rates dampen economic activity by 0.2 percentage points. With the economy operating close to its productive capacity, **higher spending puts upward pressure on prices**. While prices are estimated to be 0.6 per cent higher than otherwise over 2020-24, they are prevented from rising further by a monetary policy response discussed in the next section.

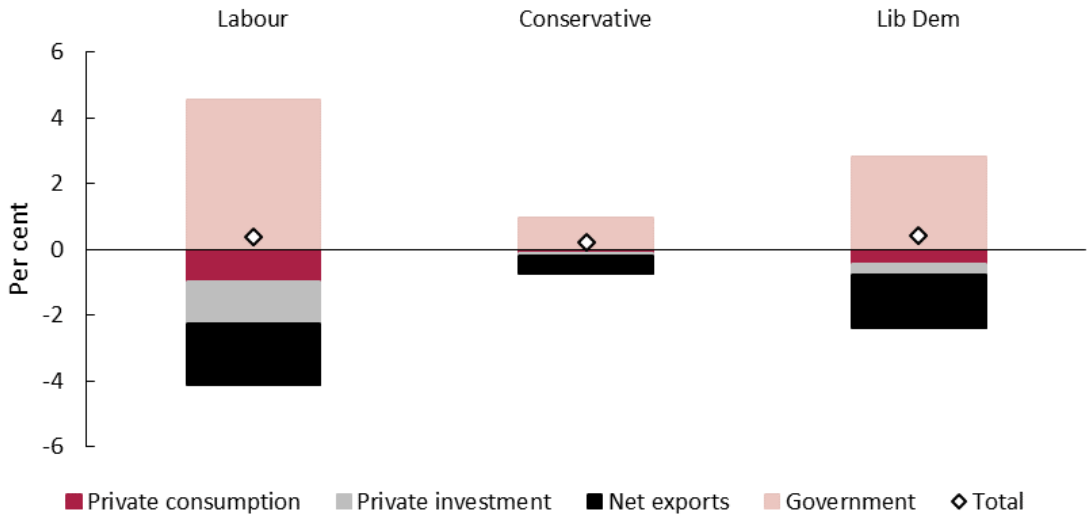
- The **Conservative manifesto** contains only modest current expenditure and tax measures in addition to plans set out for the 2020-21 financial year in the 2019 Spending Round. While most of the planned capital expenditure will still have to be allocated to specific projects, it is estimated to raise GDP by 0.2 per cent over 2020-24. This increases the consumer price level by 0.2 per cent.

- **Liberal Democrat proposals are skewed towards higher investment spending**, raising GDP by 0.3 per cent over 2020-24. Together with higher current expenditure and higher income and corporate taxes, the impact on economic output and prices is 0.4 per cent. This is **similar to Labour's policies**.

- By focusing on the economy as a whole, our analysis abstracts from **distributional and compositional effects** which vary across party manifestos. Another NIESR Election Briefing focuses on regional inequalities (here). To illustrate compositional effects in the economy as a whole, Figure 2 breaks down the GDP impact of tax and spending plans into effects on the components of aggregate demand. It shows that all parties' plans involve a **reallocation of resources from the private sector to the public sector**, which is substantially larger for Labour Party and Liberal Democrat plans compared to Conservative proposals. While higher public spending and investment increase the share of the government in the economy, a higher interest rate and exchange rate make private sector investments more costly and exports less profitable (**'crowding out effect'**).

- **Conservative Party investment plans would increase the size of government by 1 per cent of GDP** while reducing the private sector component in aggregate demand by 0.7 per cent of GDP. Liberal Democrat measures increase government consumption and investment by nearly 3 per cent of GDP. **Tax and spending plans set out by the Labour Party** squeeze the size of private sector investment by 1.3 per cent of GDP, net exports by 1.3 per cent of GDP and private consumption by 1 per cent of GDP, offset by an increase in the size of government by 4 ½ per cent of GDP. This does not account for **nationalisation plans** which would further reallocate private sector demand to the public sector.

Figure 4 Macroeconomic impact on components of aggregate demand (2020-24 average)



Source: NIESR, NiGEM simulation.

The combined effect of fiscal and Brexit policies

- The impact of tax and spending plans depends crucially on the **economic environment** in which they are implemented. Over the next Parliament, the UK's economic environment heavily depends on the **outcome of Brexit**.

- For the present analysis, we assume that a Conservative majority would ratify the Brexit deal negotiated by Prime Minister Johnson and establish an **EU-UK free trade agreement** (see NIESR's economic analysis here). Labour's manifesto stresses the ambition to negotiate a **customs union with the EU** and to continue the UK's participation in main funding programmes (NIESR's analysis of a customs union deal is here), subject to a confirmatory referendum. The Liberal Democrats are campaigning to revoke Article 50 and continue the UK's EU membership.

- An accompanying NIESR Election Briefing (here) summarises our estimates of the **economic and fiscal impact of different Brexit outcomes**. Table 2 compares the impact of the parties' preferred Brexit outcome on economic activity and fiscal revenue with the impact of proposed tax and spending policies. The impact is shown relative to a neutral scenario of continued EU membership without proposed additional fiscal measures.

- A UK-EU free trade agreement is estimated to reduce UK GDP by around 2 per cent relative to what it would otherwise have been over the next 5 years. This is explained by additional regulatory barriers to trade compared to continued EU membership. Combined with the small economic benefit that Conservative Party investment plans yield, the **combined impact of Conservative Brexit and fiscal policies is estimated to reduce GDP by around 1½-2 per cent** relative to continued EU membership and without additional fiscal measures. Should a future Conservative government fail to negotiate a free trade agreement with the EU and **leave without a deal**, GDP would be around 3 per cent smaller than otherwise.

Table 2 The economic and fiscal impact of Brexit and fiscal policies (2020-24 average)

	Labour	***Conservative***	***Liberal Democrat***
Assumed form of Brexit	Customs union (EU membership)	Free Trade Agreement (No deal)	Continued EU membership
GDP impact (per cent)			
Brexit	-1.6 (0.0)	-1.8 (-2.9)	0.0
Fiscal policies	0.4	0.2	0.4
Combined effect	-1.2 (0.4)	-1.5 (-2.7)	0.4
Revenue impact (£ bn/year)			
Brexit (effective shortfall)	-5.1 (0.0)	-4.0 (-12.5)	0.0
Fiscal policies (budget)	-52.5	-21.8	-43.5
Combined effect	-57.6 (-52.5)	-25.8 (-34.3)	-43.5

Source: NIESR, NiGEM simulation.

- The customs union deal proposed in Labour's manifesto would have a similar effect on GDP as a result of regulatory barriers inhibiting services trade. Only partly offset by higher public spending, the **combined macroeconomic impact of Labour policies is to reduce GDP by around 1 per cent of GDP** relative to continued EU membership and without additional fiscal measures. Should a **second referendum** result in a decision to continue EU membership, only the fiscal boost of 0.4 per cent of GDP would materialise.

- The **Liberal Democrats policy of continued EU membership** combined with fiscal stimulus leaves a positive net effect of 0.4 per cent of GDP.

- The negative fiscal consequences of Brexit would only materialise gradually over time as EU-UK trade and migration links loosen. In contrast, the impact of higher public investment financed by higher public borrowing will widen the public deficit immediately over the next Parliament. The **fiscal impact of tax and spending proposals overshadows the fiscal impact of Brexit by far**.

- Prime Minister Johnson's negotiated Brexit deal would lead to an estimated **average government revenue shortfall of £4 billion** per year over 2020-24 as the result of a smaller economy. A no-deal Brexit would squeeze revenues by £12 ½ billion a year. Assuming continued participation in various EU programmes, as envisaged in the Labour Party manifesto, a **customs union deal would squeeze revenue by around £5 billion** a year. In other words, the fiscal benefit of continued EU membership (**'Remain bonus'**) is £4-5 billion per annum, a little smaller, but in the same ball-park, than the assumed £10 billion per annum budgeted by the Liberal Democrats.

- The support to the economy from more day-to-day and investment spending itself increases the government's revenue base (**'fiscal multiplier effect'**). We estimate that current and investment expenditure proposals put forward by the Labour Party and the Liberal Democrats generate an additional £5 ½ billion per year over 2020-24, irrespective of the parties' other tax-raising policies. The fiscal multiplier effect of the Conservative Party's proposals is much smaller at £0.3 billion.

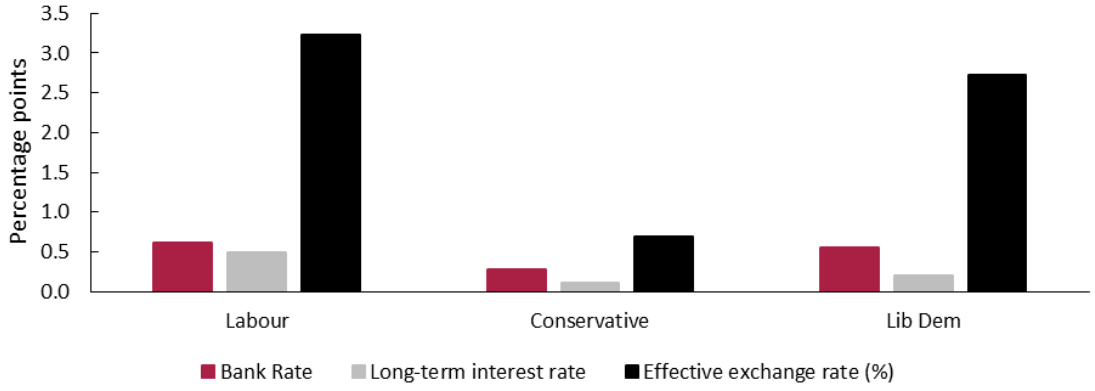
Monetary-fiscal interactions

- The macroeconomic impact of the parties' tax and spending proposals largely depends on the **response of the Bank of England's Monetary Policy Committee** and **market expectations of future interest rates**.

- Our analysis assumes that monetary policy reacts to deviations of inflation from the Bank of England's target by raising Bank Rate by 0.3-0.6 percentage points (figure 3). Forward-looking financial markets respond by **increasing long-term interest rates that are also associated with an exchange rate appreciation**, in the Labour and Liberal Democrat scenarios of around 3 per cent (½ per cent for Conservative Party plans).

- A fiscal expansion that adds to inflationary pressure would soon be offset by tighter monetary conditions. This explains the small size of macroeconomic effects, despite plans of historically large fiscal interventions. It is consistent with the **view that the economy currently operates near full capacity** (see also NIESR's latest UK economic forecast here).

Figure 3 Financial market response to tax and spending plans (2020-24 average)



Source: NIESR, NiGEM simulation.

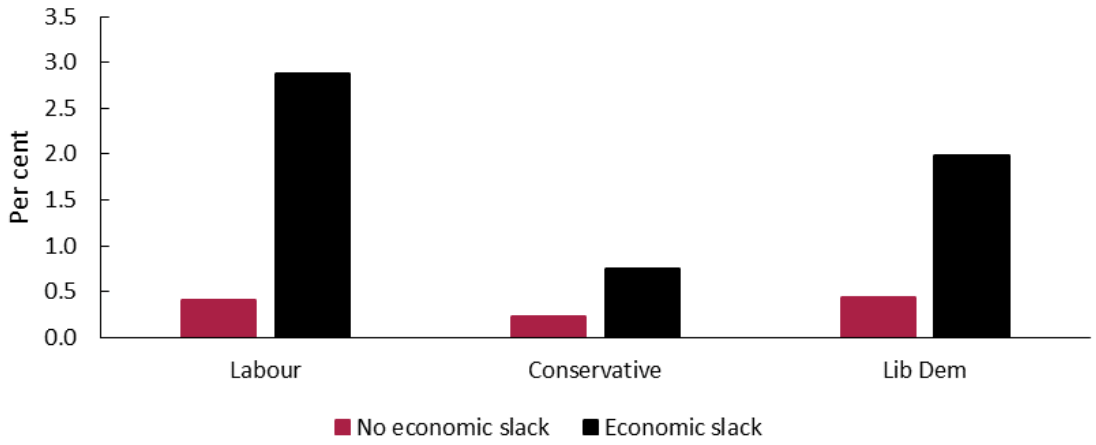
- The macroeconomic effect would be much larger if the economy were operating with **substantial amount of slack**. In this alternative case, a fiscal expansion would increase economic output without putting upward pressure on wages and prices.

- As an illustration, we present an **alternative scenario** in which wages do not respond to the fiscal stimulus, in other words the wage Phillips curve is very flat. As a result, the price response to fiscal policy measures is muted. This would be consistent with a **positive output gap**. It would allow the

Bank of England to maintain the pre-stimulus path for Bank Rate. We also assume that financial markets do not respond to higher debt and deficit levels by pricing higher long-term interest rates. All major parties justify borrowing-financed public investment with the fact that long-term rates are at historical lows and appear unlikely to move up soon.

- Figure 4 illustrates that if there was sufficient economic slack and wage and price inflation did not pick up in response to parties' proposed fiscal measures, **fiscal stimulus would be substantially more powerful**, with Labour policies adding an estimated 3 per cent to GDP over 2020-24, Liberal Democrat measures adding around 2 per cent, and Conservative policies boosting economic output by just under 1 per cent of GDP (black bars).

Figure 4 Macroeconomic impact of fiscal plans in alternative scenarios (2020-24 average)



Source: NIESR, NiGEM simulation.

- The reason for larger output effects in the presence of economic slack is the assumed **absence of a monetary policy response** and the **muted response of long-term interest rates**. If interest rates do not respond to higher government spending, this supports borrowing and investment. It also means that the sterling exchange rate remains flat compared to the main case in which it appreciates in line with interest rates, supporting export activity.

Economic policies beyond tax and spending

- We have assumed that the impact of current expenditure, public investment and tax on the economy is similar to the impact of comparable policies in the past. While it is possible that a rapid expansion of demand could encourage productivity growth by incentivising better use of existing resources, we have not allowed for such effects in our analysis.

- We have also not considered any **direct effects of proposed policies on productivity**, which could potentially be quite large but are difficult to assess without more detail. For instance, all three major parties propose higher funding for education and skills training. If successful, these measure might make the UK's labour force more productive and thereby increase the output potential raising welfare in the long run. The effect of education policies on productivity is discussed more fully in an accompanying NIESR Election Briefing (here).

- We have not included in our analysis spending promises that were made **outside of published manifestos**, such as Labour's promise to compensate women born in the 1950s whose pension age was raised in 1995 and again in 2011.

- The main parties' manifestos include various **other economic policies** beyond tax, spending and plans for future EU-UK trade and migration. These policies are likely to have additional implications for the economy and long-run prosperity.

- Examples include **Labour Party plans to nationalise** rail, mail, water, energy and broadband provision. Our analysis assumes that productivity in these industries remains unaffected by ownership. Historical evidence suggests public ownership and reduced competition may lower productivity in these sectors. A full assessment would have to take into account how nationalisation is implemented.

- There are other risks associated with large scale reforms of the economic system, including the possibility of a loss of confidence in government administration that could impact on the value of sterling and financial markets.

- Other examples include **climate policies** which in our analysis feature through their immediate impact on public spending and investment. By potentially mitigating the future economic impact of climate change, their long-run macroeconomic impact may be larger. Similarly, minimum wage and migration policies may not only have direct effects on those affected, which are discussed in dedicated NIESR Election Briefings here and here, but are likely to feed back to the macroeconomy.

Throughout the course of the General Election 2019, The National Institute of Economic and Social Research has produced a number of short briefings examining the key issues facing the electorate. These briefings aim to improve the public understanding and the quality of media coverage, and as well as furthering our understanding of public policy questions facing the nation. Where manifestos touch on the topics, we have integrated a balanced assessment of party policies. This book collects those briefings, and covers The Economy and Brexit, Education, Regionals, Productivity and Trade, Minimum Wages, and Immigration.

We are grateful to the Nuffield Foundation for funding most of this work as part of its mission to ensure public debate in the run-up to the General Election is informed by independent and rigorous evidence.

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