

Labour Together

Building a New Britain

Investing in Britain's
Public Realm

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About Labour Together

In Labour's wilderness years, Labour Together was founded by a group of MPs fighting to make the party electable again. We helped unite the Labour Party behind Keir Starmer's leadership and look outwards to the voters Labour needs to win. Today, Labour Together is a think tank offering bold ideas for Britain under a Labour government.

About the Author

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Executive Summary

Britain's economic preeminence ended around the year 1870. For most of the period since, we have been haunted by a pervasive sense of decline, particularly when comparing our fortunes to those of international peers. In recent years, that sense of decline has accelerated, becoming not just relative but absolute, with working people's real wages unchanged in 18 years.

In a recent report, Labour Together described a global “age of insecurity” that exacerbates many of our economic woes.¹ Thirty years ago, we appeared to have entered an era of order and security. The West had won the Cold War and peace reigned. Globalisation was lifting billions from poverty and delivering cheap goods to our shores. Today, in this new age, those certainties are upended. Rising geopolitical tensions are causing an increasing number of negative economic shocks. All nations have been affected, but Britain has been more affected than most. Our national underperformance in this age of insecurity is singular and striking. This paper explores the cause of that underperformance and what we can do about it.

We show that the UK's economic failure is primarily the result of low productivity. For each hour we work, Britain's economy creates less than our more productive peers. New Labour Together analysis shows that the UK's productivity shortfall versus peers increased from around 20% to nearly 25% from 2010 to 2022. This relative decline is notable. Countries that are behind the so-called “frontier” should be able to catch-up to more productive peers, by imitating what makes them so productive. Our analysis shows that if the UK had converged to peers at a typical rate, our productivity would now be 12% higher. As improvements in productivity tend to move directly to increased wages, Britons should be earning nearly £5,000 more each year - far more, it should be noted, than the recent rise in their household bills.

A key feature of the UK's low productivity is its regional composition. Britain's productivity problem is a regional problem. If every European country was able to boost its regions with lower productivity to the level of its 75th percentile, they would experience some economic growth. Because many of Britain's regions lag so far behind the best performing, the additional growth would be higher than in any other developed country in the world. This includes, quite remarkably, a country like Germany, whose least productive regions were, until just thirty years ago, occupied by Soviet troops.

The cause of the UK's uniquely low productivity is low investment. Both public and private investment in Britain have languished at the bottom of the pack for decades. The Office for National Statistics (ONS) has shown that between 2009 and 2019, capital *levels* per worker in the UK fell, reducing productivity. In comparable countries, it increased. If the UK had pursued the increase in capital-per-worker (“capital deepening”) of its peers, it would have roughly matched their productivity growth.

¹ Labour Together, *From Security Comes Hope*, October 2023. Available [here](#).

Looking ahead, productivity growth is the only way to deliver sustainable growth - and deliver the highest GDP growth in the G7. After some successes in the 2010s, employment is high. While there is some scope to boost this further, this cannot be the source of exponential growth. Instead, we must help the UK's workforce produce more while they are at work. In the last decade, we have failed to do this: productivity growth has been at its lowest in any period since the first productivity gains of the Industrial Revolution.

Delivering growth is the most fundamental of Labour's missions, underpinning improvement in public services and spreading opportunity. This is partly about the level of growth. High trend growth is associated with lower recession risk, as new analysis set out in this paper shows. It is also about the resilience of growth. Reducing risk protects households from sudden shocks that push up bills, such as those experienced as a result of Britain's vulnerable energy system. Growth must also be broad-based across the income distribution and regions. The negative impact of high income inequality on relative social mobility is well-known, popularised most famously by Alan Krueger's "Great Gatsby Curve". In this paper, we show that high *regional* inequality has the same impact, and illustrate it through our own "Pip Pirrip Curve", offering a British literary protagonist for this very British problem.

Delivering on the growth mission is also crucial for improving public services. We show that if the UK's productivity had converged appropriately with peers, we could have had c.15,000 more doctors, over 40,000 more nurses, and around 75,000 more teachers while keeping spending constant as a share of GDP.

Growth is at the heart of Keir Starmer and Rachel Reeves's agenda and investment is the cornerstone of boosting growth. This paper outlines a set of principles that can guide Labour's plans to invest in Britain's public realm:

1. **Public investment must be fiscally responsible.** The financial crisis created by the Conservative's budget last Autumn shows that fiscal space in the UK is a concern for financial markets. Failing to account for these concerns will increase the risk of damaging crises and mean higher rates even in good times, further undermining economic security for working people.
2. **Public investment should focus on where it can best crowd in private investment.** Both public and private investment are much lower in the UK than in comparable advanced economies. But 85% of the shortfall is due to private investment, so public investment cannot make up the shortfall alone. Every pound of public investment should sit alongside proactive measures to crowd in private investment.
3. **Investment should build resilience, and in particular, Britain's energy security.** In an age of insecurity, we must reduce the vulnerabilities that come from our reliance on imports, and particularly imported fossil fuels.
4. **Investment should focus on regions where investment has historically been lowest.** There has been severe regional inequality in how public funds are spent, with transport

spending particularly low in the North relative to the South, which have left a lasting imprint on regional inequality in Britain.

5. **Investment should focus on areas where it can have the biggest impact on productivity.** This will boost aggregate growth, drive wages higher, and increase the funds available for public services.
6. **Investment should be seen as one tool among many.** In particular, it should be paired with regulation and partnership approaches to maximally crowd in private investment.

Based on these principles, we argue there are three areas for investing in the public realm that Labour could emphasise to the country: energy, housing and infrastructure.

The Energy Independence Act

The UK energy system relies on imported gas. The high pass through from wholesale to retail prices allowed by the Government, and the long-running underperformance of energy efficiency programs, means UK households have been exposed to a much bigger shock than those in the EU. This is a key reason why the UK is expected to have the lowest growth in the G7 in the years to come. In a global age of insecurity, the risks to households from imported energy will continue to be high. The Office for Budget Responsibility (OBR) estimates the fiscal cost of remaining on gas at 13% of GDP by 2050-51. Investing in homegrown energy will build resilience, boost growth and crowd-in private investment.

As outlined by Ed Miliband, an Energy Independence Act could address this fundamental challenge. At the heart of this would be the policies set out under Labour's plans to invest in Britain's energy system. Funds that are still unallocated within that policy should be directed with an eye towards which green investments will be most growth-enhancing. Further thought should be given to how best to integrate Labour's investment plans in our energy system into a wider industrial strategy, and how the UK can become a leader in green innovation.

The British Homes Act

Homebuilding in the UK has been too low and too slow for far too long, with the restrictive planning system the prime culprit. Given the constrained fiscal situation in the UK, housing should be a focus of Labour's investment programme. Planning reform can unlock private investment and potentially generate revenue for the Treasury. We welcome the Labour Party's proposal to build a new generation of "new towns". The last New Towns programme, initiated by the post-war Labour government, still generates around £1 billion a year for the Treasury. It is also beneficial because inadequate housing supply is a key constraint on growth, driving outmigration from high-productivity areas such as London among those in their 30s and 40s. Our analysis shows that, after controlling for occupation and qualifications, being in London earns you a nearly 25% wage premium. This implies that keeping people in London could boost their wages by £9,000 and provide £5 billion for the Treasury.

We propose a British Homes Act, which will support the drive for homebuilding that Keir Starmer has argued for. Central to this bill should be extensive reform to the planning system. But it should also include institutional reform. The Government could create a new vehicle, GB Homes, building on the Joseph Rowntree Foundation's proposal for a national master-planner. GB Homes would develop a national strategy for homebuilding and work with regions and local authorities to develop plans and ensure their delivery through greater private investment, while sharing some of the proceeds from land value extraction.

The British Infrastructure Act

Of all possible public investment, infrastructure has among the largest impacts on productivity. It crowds in private investment by increasing the connections between producers and consumers. We can further enhance the impact with other levers, such as planning reform, to make building infrastructure quicker and cheaper. Infrastructure is also an area where there has been particularly high regional inequality in spending. As the Resolution Foundation has shown, inequality in transport spending explains most regional inequality in capital spending.

A British Infrastructure Act would look at the full set of tools at a future Labour government's disposal. It would start with reforms to the planning system and government management of infrastructure programmes, to provide consistency and longer planning horizons for infrastructure planning. It would prioritise rectifying regional inequalities in infrastructure spending. It would be underpinned by a framework that could assess whether to renew the HS2 link to Manchester, and if not, how best to distribute the funds across the North.

This paper offers an outline of these three Acts. Taken together, they explain how Labour's ambitious proposals for unlocking investment could transform Britain's public realm. The case for doing so is now unarguable. For too long, Britain has been held back by low investment, suppressing productivity. This has kept wages low and curtailed growth, starving public services of funding. Labour's willingness to use the state as a catalytic investor, leading so that private sector investors can follow, is a genuine dividing line between the two major parties at the next election. The Conservatives have shown themselves to be either unwilling or unable to boost investment. The Britain we live in has been governed by that ideology for thirteen years. It is time to build a new Britain.

Introduction

Over several years, leading think-tanks and academics have argued that low levels of investment are the primary cause of the UK's relative decline.² This paper supports that argument.

We propose a constructive framework for investment that Labour can take to the country next year. A persuasive and rigorous offer on investment is central to delivering Labour's foundational mission: growth. The framework this paper outlines is drawn from three places. First, our own original analysis, which centres on analysing Britain's productivity relative to international peers, its effects on wages, and the extent to which it is explained by low investment at a national and regional level. Second, the best work by think-tanks and academics over the past several decades. Third, from our own in-house public opinion work.

The policy work we do at Labour Together is always focused on voters: what they want, what they are concerned about, how they talk, think and feel. Policy without politics lacks a theory of change. In researching this project, we have not only travelled metaphorically through the economic literature. We have travelled literally, across the country, conducting extended deliberative focus groups in partnership with Yonder and polling the views of tens of thousands, with the support of Opinium. That work informs much of the framework outlined in this paper.

The framework describes a plan for investment that would transform Britain's public realm. Much of this investment will be done by the private sector, unlocked with catalytic public investment alongside regulatory reform and better partnerships between the state, businesses and workers. This paper sets out why and where the British state must invest.

²For example: (1) IPPR, *Now is the time to confront UK's investment-phobia*, June 2023. Available [here](#). (2) Resolution Foundation, *Cutting the Cuts*, March 2023. Available [here](#).

Part One: The “British Disease”

Our low growth, low productivity, low wage economy

The British Disease

Anxiety about the UK’s relative economic decline is as old as aggregate economics statistics. From the moment we could look backwards in time, the past looked rosier than the present. After the Industrial Revolution, Britain was the wealthiest nation in the world. But after a peak in around 1870, a slow decline began. By the start of the Great War, Britain had sacrificed its advantage, with the US economy around 8% larger per head³.

In the interwar years, Britain oscillated. Winston Churchill’s decision to return to the gold standard at the pre-war level (despite the inflation experienced between) meant internal devaluation was necessary. As a result, the UK missed the roaring twenties⁴. The decision to unhitch from gold early in the Great Depression then set Britain on a different course from the rest of the world again, with the UK strongly outperforming peers in the 1930s⁵. Overall, relative economic decline looks to have paused in the interwar period⁶.

After the Second World War, our decline began again. Recovering from the war, our European counterparts experienced a ‘golden age’ of growth, not just catching up but overtaking Britain. In 1950, the economies of France and West Germany were 25% and 40% smaller than the UK’s. By 1973, they were both larger. In the same period, Britain wound down its Empire, humiliated itself in Suez, and was twice refused entry into the European Common Market. A sense of national decline entered the public consciousness⁷. The term the “British disease”⁸ came to describe a toxic brew of low productivity growth and fractious industrial relations.

In the period after Britain’s entry into the Common Market, in 1973, and before the financial crisis of 2008, that decline reversed. Increased openness to trade and competition spurred

³ For the best treatment of the history of UK economic growth, see the late great Nicholas Crafts’s *Forging Ahead, Falling Behind and Fighting Back*, 2018.

⁴ Keynes, John Maynard. "The economic consequences of Mr Churchill (1925)." *Essays in persuasion*. London: Palgrave Macmillan UK, 1931. 207-230.

⁵ Eichengreen, Barry J. *Golden fetters: the gold standard and the Great Depression, 1919-1939*. NBER series on long-term factors in economic development, 1996.

⁶ Crafts, *Forging Ahead, Falling Behind and Fighting Back*, 2018, p.62. Given the macroeconomic vicissitudes of the period, this is a fine judgement. I agree with Crafts that a pause in relative decline is the central case. But much data points in either direction, including Figure A below which suggests a big relative decline.

⁷ This is covered well in eg (1) Stephens, Philip. *Britain alone: The path from Suez to Brexit*. Faber & Faber, 2021. (2) Weldon, Duncan. *Two Hundred Years of Muddling Through: The surprising story of Britain's economy from boom to bust and back again*. Hachette UK, 2021. And (3) Harrison, Brian. *Seeking a role: the United Kingdom 1951-1970*. Vol. 10. Oxford University Press, 2009.

⁸ Harrison, Brian. *Seeking a role: the United Kingdom 1951-1970*. Vol. 10. Oxford University Press, 2009, p.117

businesses to adopt modern technologies and practices and productivity rose⁹. In 1973, US labour productivity was more than 50% higher than Britain's. In part, this was due to workers being more skilled and having more capital, but nearly 80% of the gap came from Total Factor Productivity ("TFP"), the efficiency with which an economy converts inputs into outputs. By 2000, the TFP gap had closed to 11%, halving the US's overall productivity lead¹⁰. From the mid-1990s, the ICT revolution took hold. The UK's relatively flexible labour markets meant it was well placed to embed these new technologies in organisational practices, and Britain started to close the gap with Europe, with productivity growth rates 0.3% to 0.4% higher than France and Germany from 1995 to 2007¹¹.

Today, the British disease is back with a vengeance. Britain is currently experiencing its longest period of stagnation since the Napoleonic Wars, with real wages no higher than they were in 2005¹². Britain's poor economic performance should be put in a wider context. As Labour Together has written before, the world is experiencing an age of insecurity¹³ defined by growing geopolitical tensions. The result has created risks to global supply chains, for everything from energy supply to the production and distribution of microchips, causing inflation to soar across the world.

International events do not explain Britain's decline, however. In the post-financial crisis years, Britain has performed particularly poorly¹⁴. In Europe, productivity growth has outpaced the UK ever since 2010¹⁵, despite the Eurozone crisis. In the United States, real wages have increased by 14% over the same period¹⁶. As Figure A shows, not only is relative economic decline back, we are now in absolute decline. The UK's economic policy regime has clearly failed.

⁹ Proudman et al., *Is international openness associated with faster economic growth?*, 1998. Available [here](#).

¹⁰ Crafts, *Forging Ahead, Falling Behind and Fighting Back*, 2018, p.106

¹¹ Ibid, p.104

¹² The Times, *No growth in average earnings since 2005*, June 2023. Available [here](#).

¹³ Labour Together, *From Security Comes Hope*, October 2023. Available [here](#).

¹⁴ This is sometimes attributed to the boom during the lead up to the financial crisis. But MPC member Jonathan Haskel has recently found that less than 1/10th of the slowdown in TFP in 2010-19 can be explained by exceptionally fast TFP growth before then. And because pre-crisis output gaps were synchronised with peers, the impact on relative TFP growth should be even lower. See Goodridge and Haskel, *Accounting for the slowdown in UK innovation and productivity*, June 2022. Available [here](#).

¹⁵ See Penn World Tables 10.01. Available [here](#).

¹⁶ Average Hourly Earnings of All Private Employees has increased from 23 to 33 ([source](#)). CPI for all urban consumers has increased from 217 to 307 ([source](#)). Calculation: $(33/23)/(307/217)=1.014$

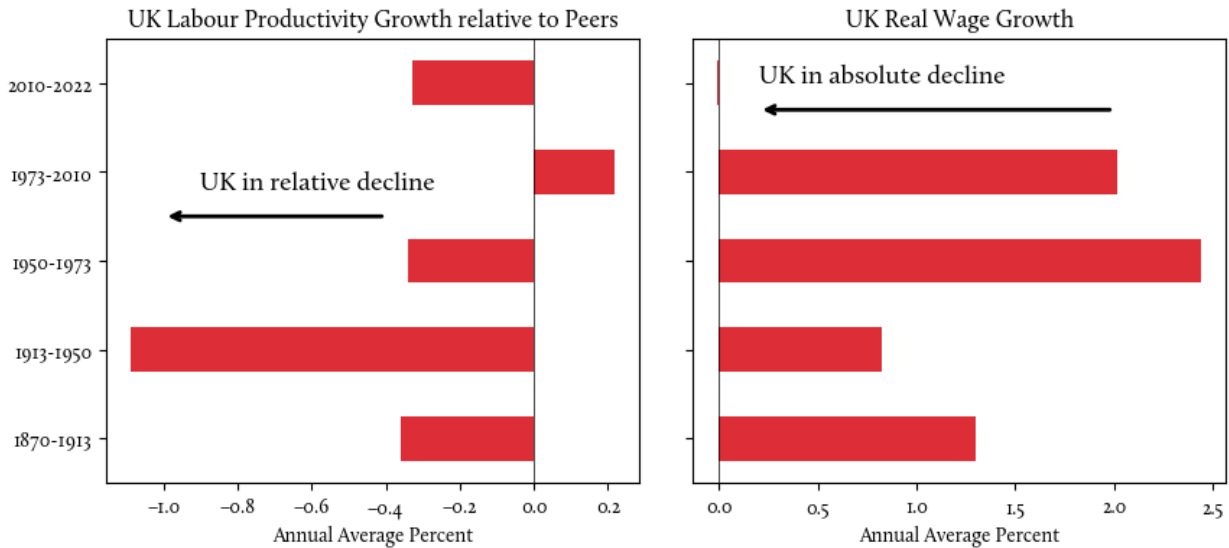


Figure A: The performance of the UK's economy since its apogee. Sources: ONS, Long-term productivity database, Bank of England's Millennium of Macroeconomic Data, Author's Calculations. Notes: Peers are defined as the average of the US and the modern-day Euro Area.

To truly understand today's British Disease, we have to consider the regional picture. The UK is stagnating in some places more than others, and now has some of the highest levels of regional inequality in the developed world.¹⁷ This trend began with the industrial decline of the 1980s, but is now largely driven by within-industry productivity differentials¹⁸. To solve the British Disease today, we have to cure it region by region. To do that, we must understand where the real differences between regions lie.

Mind the productivity gap

There are two components to economic output. One is the number of hours we work (labour input). The other is how much we produce within the hours we do work (productivity).

The source of Britain's relatively poor performance is not the former. True to national stereotypes, we work fewer hours than Americans, and we work more than the French¹⁹. Instead, the true cause of our relative decline is productivity (or, more accurately, our lack of it). As *Figure B* shows, the UK's productivity gap with our international peers is wide and getting wider. In 2010, Britain was already considerably less productive than our European and American peers. Since then, the gap has widened by a further 5%.

¹⁷ Stansbury et al, *Tackling the UK's regional economic inequality: Binding constraints and avenues for policy intervention*, 2023. Available [here](#). Note that the extremity of the UK's spatial inequality depends on the metrics and levels of aggregation.

¹⁸ Ibid.

¹⁹ See Penn World Tables 10.01. Available [here](#).

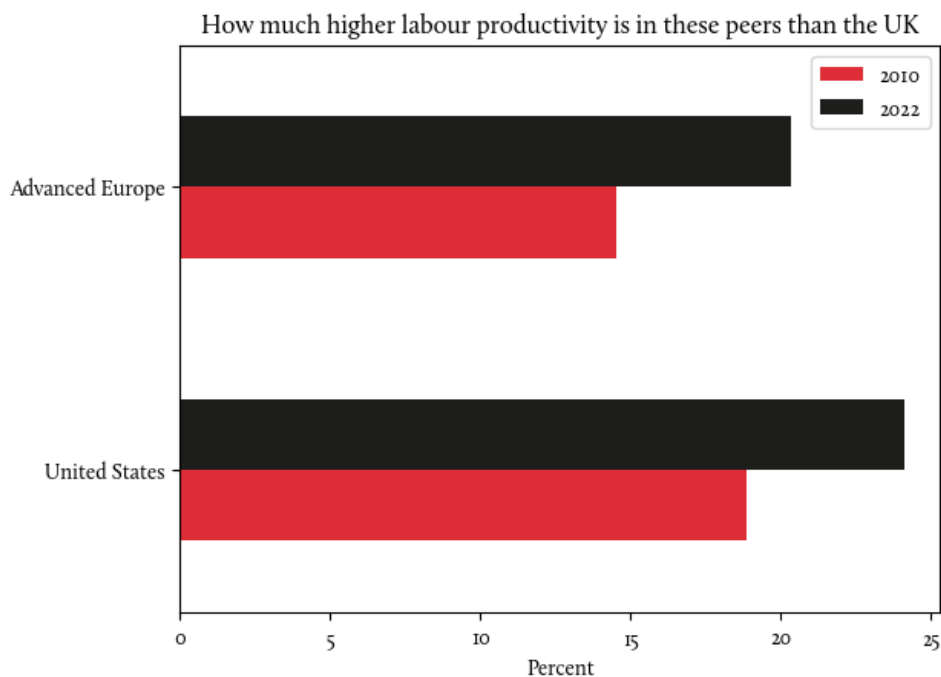


Figure B: Mind the UK's productivity gap. Source: OECD Productivity Database, GDP per hour worked, 2015 PPPs, Author's Calculations. Notes: "Advanced Europe" defined as medium-large European countries with productivity levels above the UK's in 2010 and without major oil reserves: Austria, Belgium, Denmark, France, Germany, Netherlands, Switzerland.

This should not have happened. Productivity increases tend to be the result of the adoption of new technologies and organisational practices. Because Britain started behind its peers, it should have had the opportunity to catch up. The conventional heuristic used by economists is that countries away from the 'frontier' close 2% to 3% of the productivity gap each year²⁰.

With the UK 20-25% behind the United States in the last decade, our productivity growth should have been around 0.5-0.75% higher every year. Since 2010, that means we should have seen our productivity gap close by around 7%. Instead, it grew wider by a further 5%.

Britain's poor productivity growth matters because it directly affects wage growth. At times, productivity and wages can diverge because labour markets are not fully competitive. Wages can also be pushed down by institutional features such as employers being dominant in a local labour market or unions being weakened by hostile legislation. But applying the methodology

²⁰ See for example: Sala-i-Martin, X. (1994); "Cross-Sectional Regressions and the Empirics of Economic Growth", *European Economic Review*, 38, 739-747. More recent work with similar results includes: Rivas, Maria Dolores Gadea, and Isabel Sanz Villarroja. "Testing the convergence hypothesis for OECD countries: A reappraisal." *Economics* 11.1 (2017): 20170004.

of Stansbury and Summers²¹ to the UK, we find that even though the level of productivity and wages can diverge, changes in productivity appear to fully translate into changes in wages (see *Appendix 1* for more details)²².

To understand the human impact of this, we then analysed the wage growth that British workers *should* have expected against the wage stagnation that they experienced. This new analysis, set out in detail in *Appendix 2* and illustrated in *Figure C*, puts this figure at nearly £4,750 per person, per year²³. That is more than double the increase in household energy bills since Russia's invasion of Ukraine.

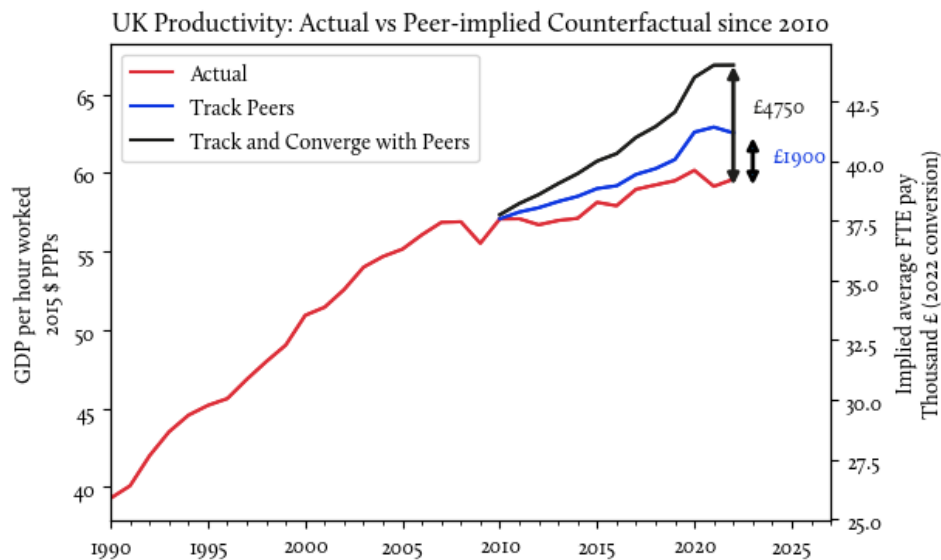


Figure C: The wage growth that wasn't. Source: OECD Productivity Database, 2015 PPPs, Author's Calculations.

²¹ Stansbury and Summers, Productivity and Pay: Is the Link Broken?, December 2017. Available [here](#).

²² This is in line with the findings of Oulton et al. though they use a welfare growth decomposition approach. See: Oulton, *The Productivity-Welfare Linkage: A Decomposition*, March 2022. Available [here](#).

²³ The COVID-era jump is because of the difference in labour market policies during the pandemic. The US laid off low productivity workers and so had a big boost in productivity. In contrast, furlough actually reduced productivity. Because labour market composition had largely normalised by the end point of this analysis, this should have little impact on the final figures. Note that the conversion from real wages to real productivity is not constant over time because factors such as depreciation have had a bigger impact on consumer prices than the GDP deflator, as Alfie Sterling shows [here](#).

Time to 'level up' productivity

Britain's poor productivity is in fact a regional story. Productivity in the UK is unique in its regional inequality. Manchester, for instance, is more than 40% less productive than London²⁴. A similar-sized European city, such as Lyon, is just 20% less productive than its metropole, Paris²⁵.

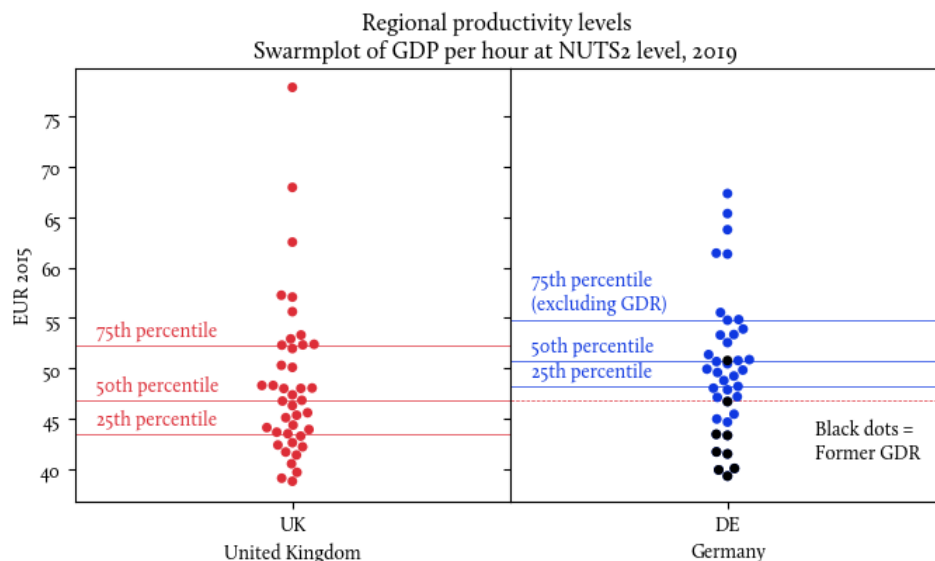


Figure D: London-centric Britain. Source: ARDECO, Author's Calculations

New Labour Together analysis²⁶ shows that Britain's low regional productivity explains most of Britain's productivity gap with international peers. We calculate that boosting productivity of all "NUTS2" regions (these split the UK into around 40 areas with 800,000 to 3 million inhabitants) to at least that of the 75th percentile would have a far bigger impact in the UK than in European peers. This includes even Germany, which is remarkable given, until just 33 years ago, its poorer half was occupied by the Soviet Union. Our analysis shows that more than 35% of UK regions have productivity below that of the least productive non-occupied German region, and around 70% of UK regions have productivity below that of the average non-occupied German region.

²⁴ Resolution Foundation, *Bridging the Gap*, June 2022. Available [here](#).

²⁵ Resolution Foundation, *Bridging the Gap*, June 2022. Available [here](#).

²⁶ This is calculated using ARDECO data for 2019.

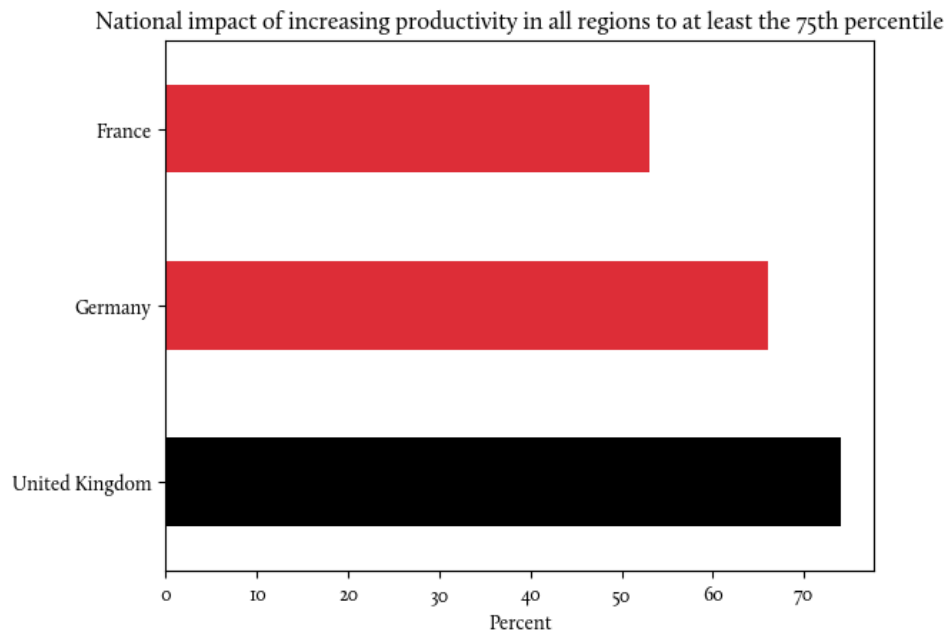


Figure E: If NUTS-2 played catch up. Source: ARDECO, Author's Calculations. Note: Regions are employment-weighted for this calculation, 2019 data is used.

Britain Needs Regional and National Investment

If Britain's productivity levels are a notable outlier, so too are levels of investment. Both public and private investment in the UK have been consistently low relative to our peers for some time, typically at or near the bottom of the pack²⁷. The Institute for Public Policy Research (IPPR) has calculated that if UK investment had been at the G7 average since 2005, total investment would have been over £560 billion higher by 2021²⁸.

Investment is also far too volatile. As the Resolution Foundation has noted, public investment growth in the UK is the second most volatile among advanced economies²⁹. This short-termism limits the ability for both the public and private sector to plan ahead. It also means supply chains cannot be built that would deliver projects more cheaply and effectively.

As *Figure F* shows, both public and private investment have been consistently below typical levels for advanced economies. Our analysis finds that boosting investment to average levels would require public investment at a further 1% of GDP and private investment at a further 5% of GDP.

²⁷ Resolution Foundation, *Cutting the Cuts*, March 2023. Available [here](#).

²⁸ IPPR, *Now is the time to confront the UK's investment-phobia*, June 2023. Available [here](#).

²⁹ Resolution Foundation, *Cutting the Cuts*, March 2023. Available [here](#).

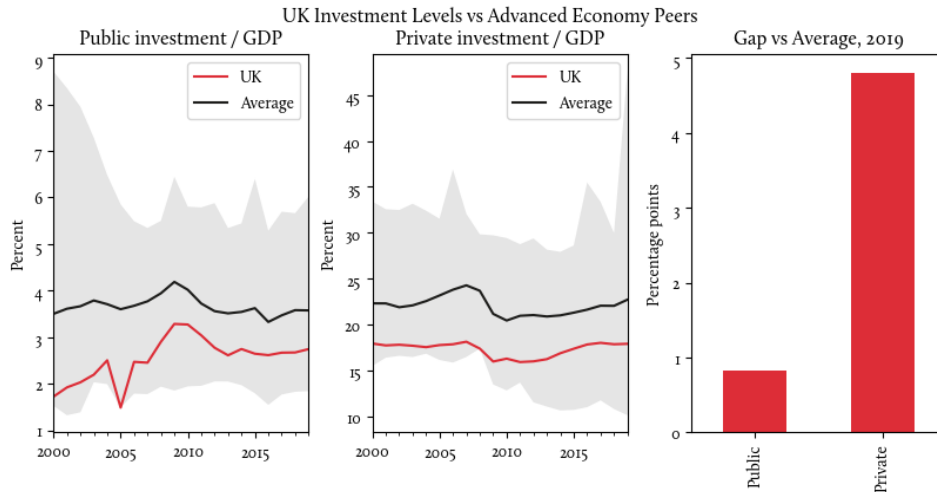


Figure F: Low UK investment levels. Source: IMF Investment and Capital Stock Database, Author's Calculations. Note: Advanced Economies are the 31 OECD countries that appear in the IMF's Investment and Capital Stock Database.

Investment is a regional problem. New analysis from Labour Together shows that, in 2019, 23 of the UK's 41 regions had investment per worker lower than all but the four lowest regions in France: the overseas departments of Guadeloupe, Martinique, La Réunion, and Mayotte. Investment per worker in these regions was similar to the level for the bottom half of UK regions³⁰.

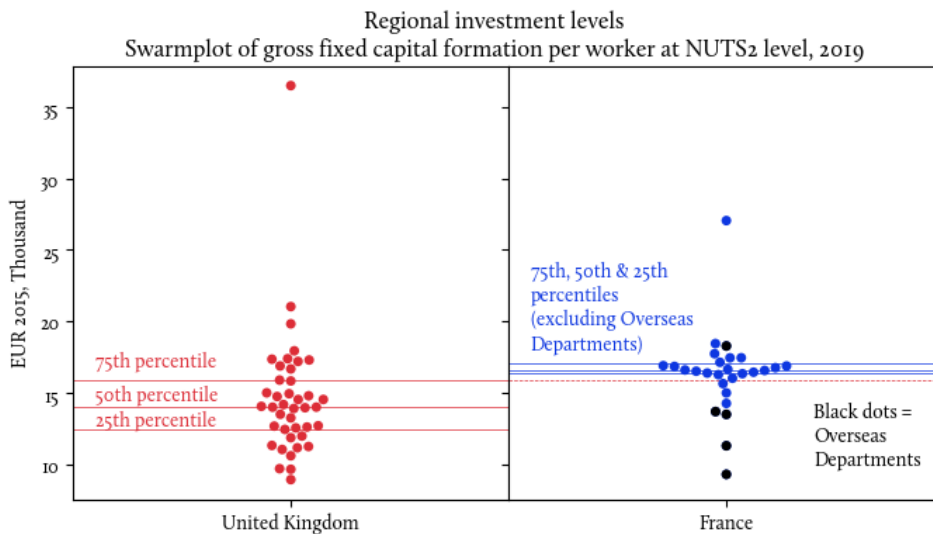


Figure G: Britain's low regional investment per worker. Source: ARDECO, Author's Calculations.

³⁰ Calculated using ARDECO data with codes ROIGT for gross fixed capital investment and SNETD for number of workers.

Britain's low productivity is directly traceable to its low investment levels. Workers become more productive either because they have more capital to deploy, are more skilled, or processes become more efficient (so-called "Multi-Factor Productivity")³¹. The ONS has decomposed productivity growth on this basis for the UK, United States and Canada across three decades (avoiding the outliers of the financial crisis and COVID)³². This data shows that low investment versus our peers is a long-running problem for the UK economy, but in recent years low investment has moved from being a *relative* to an *absolute* drag on UK labour productivity³³. If the UK had added to capital per worker as its peers did, its labour productivity growth would have been similar.

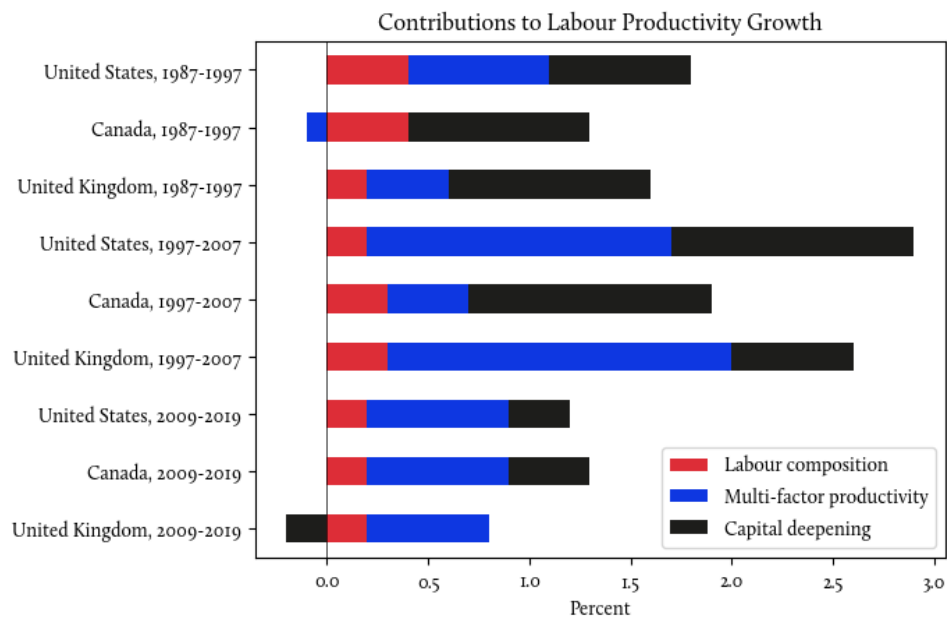


Figure H: What's causing low productivity. Source: ONS, BLS and Statistics Canada via ONS. Notes: ONS calculations of contributions of capital deepening, labour composition and MFP to market sector output per hour worked growth.

³¹ The OECD explains the definition and measurement of productivity [here](#).

³² ONS, *International comparisons of UK productivity (ICP), final estimates: 2020*, January 2022. Available [here](#).

³³ There is a view, in eg J G Fernald & R Inklaar, The UK Productivity "Puzzle" in an International Comparative Perspective, that lower TFP growth explains much of the fall in investment. This relies heavily on a neoclassical framework, but even within this it does not explain capital shallowing. And from an endogenous growth perspective, we should expect investment to boost TFP, as Haskel has argued.

Productivity growth is the bedrock of a sustainable growth strategy

Growth can be achieved in two ways: either by increasing labour input or by increasing productivity.

The UK does have some opportunities to increase labour input. While the gender gap in overall employment rates (covering both full-time and part-time work) is almost half the OECD average, the gender gap is slightly larger than the OECD average when looking only at full-time employment³⁴. Reducing the barriers for women to switch from part-time to full-time work could increase output. And Labour has already set out a range of proposals to ease the return to work for those with caring responsibilities or chronic conditions³⁵ that could boost participation.

But there are only 24 hours in the day, and attempting to increase how many of them are devoted to work is not a sustainable growth strategy³⁶. We have tried this before. The early part of the Industrial Revolution has been characterised as an industrious revolution, with increases in hours worked driving growth³⁷. It was only in the 1820s, when factories were adapted to make better use of steam power, that productivity took off³⁸. This is why when Robert Malthus wrote in 1798 he looked at population growth with fear; there was no increase in productivity to support it, and the historical record suggested it would end with one of his Four Horsemen: War, Famine, Pestilence and Disease³⁹.

The stylised facts of economic growth in the 2010s would be familiar to Malthus. The decade did see some success in increasing employment. The cleanest reading on this comes from comparing employment-to-population ratios for “prime aged” (24-55 years old) males across

³⁴ OECD, *Gender Differences in Employment Outcomes*, August 2022. Available [here](#).

³⁵ Disability Rights UK, *Labour will guarantee disabled people moving into work a return to benefits without the need for reassessment*, Jan 2023. Available [here](#).

³⁶ It also has the welfare-disadvantage of implying less leisure time. Here we should distinguish between people taking on more hours or not taking retirement because of financial insecurity and people joining the labour force because a barrier to entry has been removed. Average hours worked per week has more than halved from 1830, from 67 to 32. This is a good thing. (See the Bank of England’s Millennium of Macroeconomic Data database, tab 54, series ‘Composite series of Average Weekly Hours worked adjusted for part time work, sickness, holidays, and stoppages’.)

³⁷ De Vries, Jan. "The industrial revolution and the industrious revolution." *The Journal of Economic History* 54.2 (1994): 249-270.

³⁸ Koyama, Mark, and Jared Rubin. *How the world became rich: The historical origins of economic growth*. John Wiley & Sons, 2022.

³⁹ Malthus, Thomas Robert. "An essay on the principle of population (1798)." *The Works of Thomas Robert Malthus*, London, Pickering & Chatto Publishers 1 (1986): 1-139.

cycles.⁴⁰ This ratio had been around 88% in the expansion of the 2000s, but got to 90% before COVID hit⁴¹.

This boost to employment was paired with scant progress on productivity. In *Figure I*, we decompose trend British growth for each decade, starting with the accession of George III and ending with the arrival of the COVID pandemic⁴². (For details on the construction see Appendix 3.) From the end of the Napoleonic Wars to the arrival of George Osborne, the average decade saw productivity growth add 17% to the size of the economy. In the 2010s, productivity contributed substantially less to growth than in any other decade in that period, and less than a quarter of the average. Despite notable success on employment, trend growth was the least impressive of any decade in over a century. If Britain is to get back to growth, therefore, it has to increase productivity.

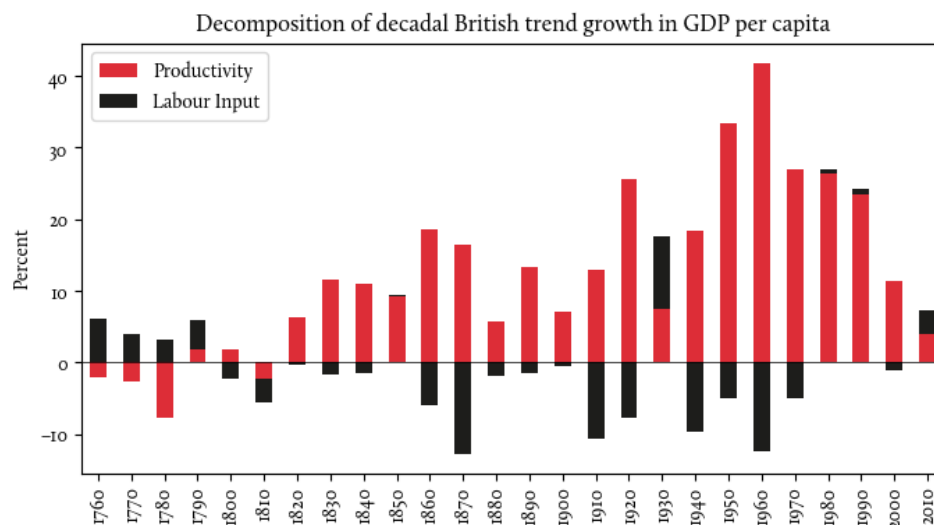


Figure I: Where the growth came from. Source: Bank of England's Millennium of Macroeconomic Data, ONS, Author's Calculations.

Why Growth Matters

From growth, comes security

In a recently published paper - *From Security, Comes Hope* - Labour Together explored how insecurity (largely, though not exclusively, financial insecurity) defines life in Britain today. The

⁴⁰ Note: This is the best comparison because: a) an ageing population means that we have more older workers, who may have retired, b) increasing female participation is a long-running trend across advanced economies, and c) the lion's share of the early 2010s employment boost was an inevitable cyclical rebound.

⁴¹ Data available from St. Louis Fed [here](#).

⁴² We calculate the trend using a HP filter. Removing the cyclical component retains focus on medium and long-term growth strategies.

paper argues that the job of a government, during this “age of insecurity”, must be to promote greater security and resilience in people’s lives.

Broad-based and resilient growth is critical to guarding against negative threats to security. It keeps people in work and guards against real-terms falls in wages. But it also provides the foundations for a positive conception of security: it creates the foundation for people to pursue their own hopes and ambitions.

The biggest threat to economic security is recession. Overall GDP may only fall by a small percentage, but the impact is concentrated on those who lose their jobs, particularly those with low incomes and little savings. For them, the welfare cost of a recession has been estimated at 5% of *lifetime* consumption⁴³.

Using the Jordà-Schularick-Taylor Macrohistory dataset, which covers 18 advanced economies since 1870, we analyse the association between trend growth rates and recession probability⁴⁴. As *Figure J* shows, in periods where trend growth is high, recessions are less than half as frequent, partly because the starting point for growth is higher (and so you can fall further without entering recession) and partly because the volatility of growth is lower when trend growth is high.

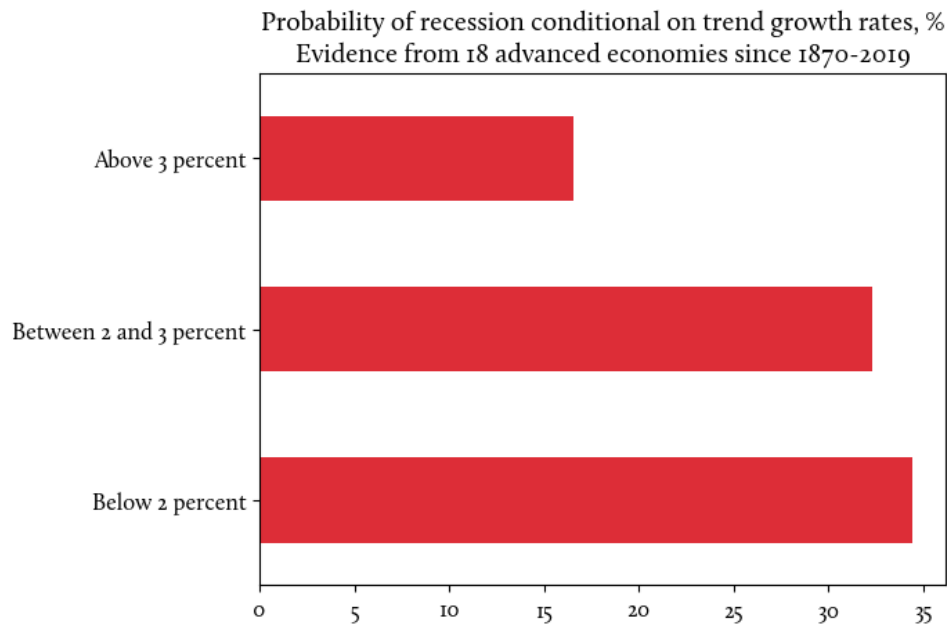


Figure J: Higher trend growth makes recession less likely. Source: Jordà-Schularick-Taylor Macrohistory dataset, Author’s Calculations. Note: Recession defined as years where real GDP falls.

⁴³ Krueger et al., *On the distribution of welfare losses of large recessions*, 2016. Available [here](#).

⁴⁴ Trend growth we calculate by applying a HP filter to the real GDP series of Barro. Because the HP filter will still see unsustainable growth as implying a slightly higher trend, these results should be even stronger.

Even outside of recession, higher growth will limit unemployment through a number of channels. A higher trend growth rate means more opportunities for productive investments, which means a higher demand for capital, which will boost the neutral real interest rate⁴⁵ and mean that interest rates are less likely to drop to the zero lower bound. This is useful because at the zero lower bound conventional monetary policy is ineffective, so the economy can be stuck with low demand and high unemployment.

When the economy is growing strongly, the opportunities people are able to grasp are more numerous. People switch jobs more frequently, partly because vacancies are higher and partly because they are more secure and therefore able to do so, supported by deeper savings and the likely security of the next job. This enables people to move to more productive, better paid jobs, or move to a sector that is a better fit for their skills and interests.

Growth is also crucial for being able to provide a better life for one's children. In a period of rapid growth, absolute social mobility is much higher. For relative social mobility to be high, it is important that growth is broad-based. Alan Kruger's 'Great Gatsby Curve' shows a strong relationship between overall inequality and relative social mobility⁴⁶. The UK's low social mobility fits this analysis, with social immobility in line with high inequality⁴⁷.

New analysis from Labour Together, illustrated in *Figure K*, shows that there is also a regional version of the Great Gatsby Curve: where regional inequality is high, social mobility is low. We call this the Pip Pirrip curve, in honour of the Dickensian hero who travels from the country to pursue his 'great expectations' in London, with mixed results - a new British protagonist for a very British phenomenon⁴⁸.

⁴⁵ Boocker et al., What is the neutral rate of interest?, October 2023. Available [here](#).

⁴⁶ Krueger A. 2012. The rise and consequences of inequality in the United States. Speech, Cent. Am. Prog., Washington, DC. https://obamawhitehouse.archives.gov/sites/default/files/krueger_cap_speech_final_remarks.pdf

⁴⁷ Goldman Sachs, UK Social Mobility - A Tough Climb, February 2022. Available [here](#).

⁴⁸ Much of the literature on the Gatsby Curve looks at peer effects and networks as key channels explaining the relationship. These likely apply at a regional level too. In the UK context, housing is also probably particularly important, with high housing costs barriers to moving to high-productivity areas, as set out in Britton et al., London Calling, September 2021 (available [here](#)).

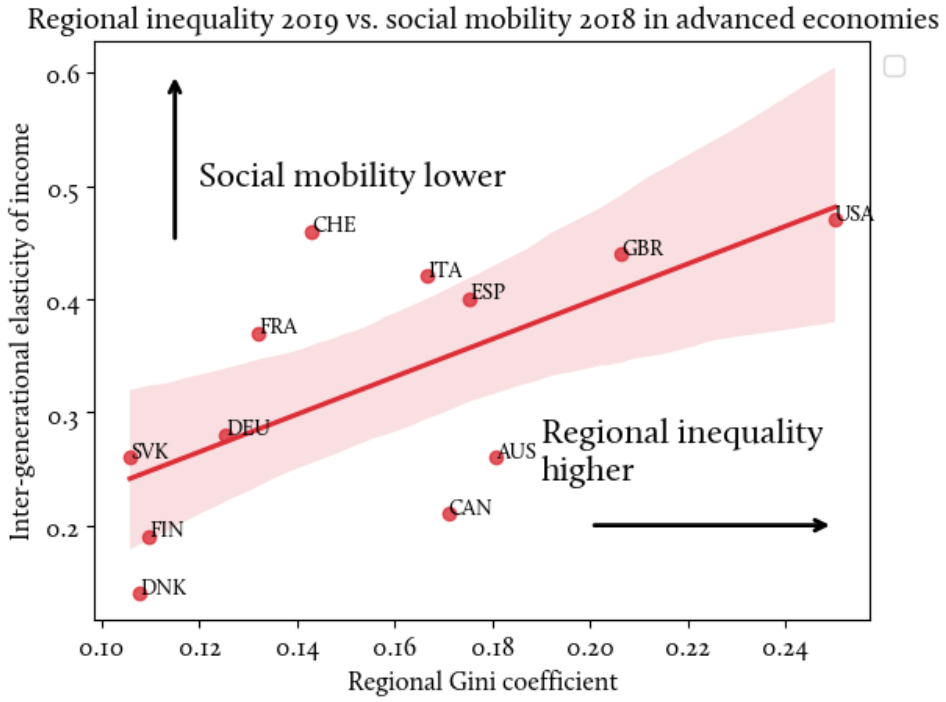


Figure K: The Pip Pirrip Curve. Sources: IMF and OECD.

Growth is essential to fund public services

Where insecurity in Britain is not directly economic today, it is often the result of public services that are beginning to crumble (some, in the case of school ceilings, quite literally). Once more, the root cause is the absence of growth and ever decreasing funding, either in real or absolute terms. After a decade of improvement under New Labour, public service performance has stalled or declined after a decade of austerity.

Healthcare outcomes reflect strained resources

Real-terms healthcare spending grew 1.5% each year after 2010, but did so at a far slower rate than the postwar average of 4%. In part, this reflected political prioritisation: healthcare spending fell from 7.4% to 7.1% of GDP between 2010 and 2019, despite the increased demand from technological advances and an ageing population.

However, this reduction was mostly due to a fall in the growth rate in the 2010s. The results were clear even before the pandemic. Waiting lists doubled from two to four million between 2010 and 2019. The proportion of patients spending over four hours in major A&E leapt from 6% to 25%. And the percentage of patients waiting over 62 days for a GP cancer referral nearly doubled. After centuries of progress, British life expectancy stalled for the first time in the 2010s, and disparities in life expectancy across regions increased⁴⁹. Our analysis shows that if productivity had tracked and converged peers according to expectations, then holding the share of hospital spending in output constant, we could have had around 15,000 more doctors and over 40,000 more nurses.

Squeezed school budgets have hampered opportunity

The state of our schools tell a similar story. Real spending per pupil fell nearly 10% in the decade after 2010. The largest previous funding squeeze, from 1988-2001, saw funding rise by 17%. The ratio of secondary school teachers to pupils has fallen to be the lowest amongst developed economies, double that of international leaders. Though test results are still slowly improving, the attainment gap for disadvantaged pupils in England, having narrowed for decades, has plateaued since the late-2010s. Our analysis shows that if UK productivity had converged and tracked peers, we could have kept real spending per pupil steady from 2010 to 2022, even with the Conservative's squeeze on school spending as a share of GDP (*see Figure L*). That would have provided funding for over 30,000 more teachers. This would be enough to reverse most but not all of the increase in class size ratios we have seen since 2010.

⁴⁹ IFS, *Health Inequalities*, 2022. Available [here](#).

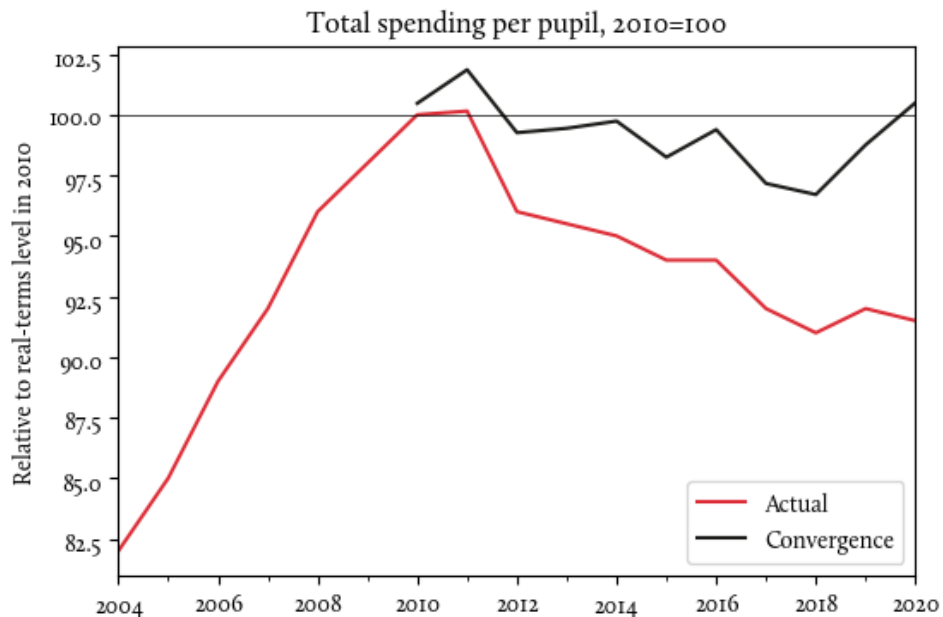


Figure L: School spending if growth was adequate. Sources: IFS, OECD Productivity Database, Author's Calculations.

Austerity hollowed out investment in physical and social infrastructure

The squeeze on public services has been particularly acute for capital spending: the long-term investments that governments make in fixed assets. As alluded to above, the Government has recently had to close many schools made from unsafe building materials. This comes after years of capital spending on schools that is low by historical standards and around 40% below the level assessed as necessary by the National Audit Office⁵⁰. As the IFS points out, the 3-year rolling average of school spending to 2023-24 is around 25% lower in real terms than in 2010⁵¹. Healthcare investment has also been low. In 2019 it was the lowest in the OECD, with Britain spending £4bn below the average for comparable nations. As NHS Trusts were forced to cut costs, short-term fixes were found, with budgets moved from capital to current spending, and nearly a third of savings in 2019 one-off moves such as selling buildings. Today, Britain has the lowest number of diagnostic machines per head in the OECD and one-quarter to one-third of the hospital beds of peers. This is the downstream consequence of low growth and the de-prioritisation of public services.

⁵⁰ IFS, *The decline in spending on school buildings*, September 2023. Available [here](#).

⁵¹ IFS, *The decline in spending on school buildings*, September 2023. Available [here](#).

Part Two: Investment Principles

To invest effectively, you have to respond to the conditions of Britain's economy: both what it implies that Britain's government *should* do, and how the financial constraints it imposes limit what it *can* do. This paper proposes six principles for public investment to guide how a government invests:

1. **Public investment can only boost economic security if it is fiscally responsible.** With copper-bottomed fiscal rules, a bolstered OBR and a new Office for Value for Money, Labour's proposed fiscal framework ensures that any approach will be prudent. (For further thoughts on the role that the OBR could play, see *Appendix 4*.) This is crucial for ensuring security: sovereign debt crises have large permanent output costs and must be avoided.⁵²
2. **Investment should build economic resilience, and in particular, Britain's energy security.** The age of insecurity elevates what economists call 'Knightian uncertainty'⁵³, risks that are hard to put a precise probability on, such as COVID and Russia's invasion of Ukraine. A prudent government must insure against these risks. One form of insurance is a strong fiscal framework, which ensures that the fiscal space will be there to mitigate crises as they arise. But resilience doesn't only come from having the money available to pay for something after it happens. Sometimes you are better off investing a little now to stop a bad thing from ever happening. It is a much better idea to fix the hole in the roof now, rather than save up enough money to buy a new one after the ceiling collapses. Investment is another form of insurance. Investments in the UK's energy supply are a prime example of this. Generating more power in Britain requires investment, but that investment will limit our exposure to the kind of external shocks that saw household bills soar in 2022 (and forced the government to step in, at vast expense, treating the symptom rather than addressing the true cause).

⁵² Reinhart, Carmen M., and Kenneth S. Rogoff. *This time is different: A panoramic view of eight centuries of financial crises*. No. w13882. National Bureau of Economic Research, 2008.

⁵³ Knight, Frank Hyneman. *Risk, uncertainty and profit*. Vol. 31. Houghton Mifflin, 1921.

3. **Public investment should be focused on areas where it can aim to crowd in private investment**⁵⁴. For example, new infrastructure (like roads and railways) creates fresh opportunities for commerce, which is reflected in a large impact on growth in most empirical estimates⁵⁵. As we showed in Figure F, both public and private investment have consistently been low relative to other advanced economies. But because private investment is a much bigger share of the economy, 85% of the gap in total investment is accounted for by private investment. If the UK were to solve its investment shortfall with public investment alone, it would have to more than triple it, bringing it to a level not seen in any advanced economy in decades. Boosting total investment can't be done by public investment alone, it requires strategies to crowd in private investment.
4. **Public investment should be focused on the regions where investment has historically been lowest.** This paper has already set out how unequally distributed investment, productivity and incomes are in the UK. That is intimately linked to a long-running dearth of public investment in many regions. Particularly important is a lack of core infrastructure in the North, essential for creating thriving economic clusters. There has also been a failure to use industrial strategy to build on the strengths of areas which have suffered from economic change, which should be remedied.
5. **Total investment should be supported most in areas where it can have the biggest impact on productivity.** This will vary depending on investment type, based on where there are binding constraints on growth. For example, in the South inducing more homebuilding should be a priority. Tackling region-specific constraints to growth is essential for building national economic security and properly funding public services.
6. **Investment must be seen as one tool among many.** Public investment must be used to 'crowd in' additional private investment, ensuring every pound the state spends is matched by further investment funded by corporate shareholders and not Britain's taxpayers. To do that, investment must be complemented by other changes. Regulatory changes are crucial across a number of investment areas. Speeding up the time it takes to connect new energy sources to the national grid, or the pace at which housebuilders can get approval for a project, are crucial to making investment work. Investment alone achieves little without using all the tools a government has at its disposal.

⁵⁴ A Abiad, D Furceri & P Topalova, *The Macroeconomic Effects of Public Investment: Evidence from Advanced Economies*, *Journal of Macroeconomics*

⁵⁵ Bom, Pedro RD, and Jenny E. Ligthart. "What have we learned from three decades of research on the productivity of public capital?." *Journal of economic surveys* 28.5 (2014): 889-916.

Part Three: Three Acts to Rebuild Britain

In the final section of this paper, we suggest three possible investment acts that would both address the British Disease explored in Part One, and apply the principles of Part Two. We set out the analytical case for these being focus areas for an incoming Labour government, and outline the key attributes policy solutions must have.

Act I: The Energy Independence Act

Rebuilding our energy security is vital for the resilience of our economy. The UK's energy system is far more reliant on gas than that of other European countries⁵⁶, and half of that gas is imported⁵⁷. Previous opportunities to reduce this reliance have been spurned by myopia. In 2010, for instance, investment in nuclear energy was dismissed because it would only come online in 2021 or 2022⁵⁸.

We have also invested very little in efficiency-improving durable goods. Take heat pumps, for example. Only 0.25% of households purchased a heat pump in 2022. This is far fewer than in all major European countries. In Finland, for example, the figure is nearly 30-times higher. Britain is currently tracking at 90% below the Government's 2028 target⁵⁹. The reduction in support for home efficiency measures in 2013 meant new loft and wall insulation rates fell by 90%. As a result, the UK has the least energy-efficient homes in Western Europe. On average, we lose 3°C for every 1°C lost in a German dwelling. Had the government not subsidised households with its vastly expensive energy price guarantee, energy-inefficient dwellings would have paid around £850 more than those in band C (the average for social housing) last winter. On average, the cuts to insulation schemes were estimated to have added £170 to bills in 2022.⁶⁰

All this meant the UK was uniquely exposed to the dramatic rise in wholesale gas prices that occurred after Russia invaded Ukraine in 2022. As the IMF showed, the pass through to retail prices was far higher in Britain than amongst our peers⁶¹. Household electricity prices in the UK rose nearly 240% in the year up to July 2022, whereas the EU average grew by less than 150%. This meant Brits faced the highest cut to consumption in Western Europe, almost double the level of Germany (which was itself particularly exposed). This big hit was also spread unequally. In mid-2022, the poorest decile spent around 18% of household budgets on energy, higher than all but one EU country. In France (where nuclear power has long dominated) that figure was 10%⁶².

⁵⁶ Financial Times, *UK's dependence on gas imports to increase 70% by 2030*, February 2022. Available [here](#).

⁵⁷ Financial Times, *UK's dependence on gas imports to increase 70% by 2030*, February 2022. Available [here](#).

⁵⁸ See [here](#).

⁵⁹ OBR, *Fiscal Risks and Sustainability Report*, July 2023, p. 82. Available [here](#).

⁶⁰ Engineering and Technology, *UK households to lose billions this year over 2013 decision to cut insulation funding*, Jan 2022. Available [here](#).

⁶¹ IMF, *UK - Selected Issues*, June 2023. Available [here](#).

⁶² IMF, *UK - Selected Issues*, June 2023. Available [here](#).

This big shock, and the Government's inadequate cushioning of it, is why recent forecasts from the IMF suggest that the UK will have the lowest economic growth in the G7 in 2024⁶³. It could get worse. The Bank of England is concerned that high inflation may have unanchored expectations of inflation from its 2% target, which would mean it would have to run policy even tighter to bring expectations down⁶⁴.

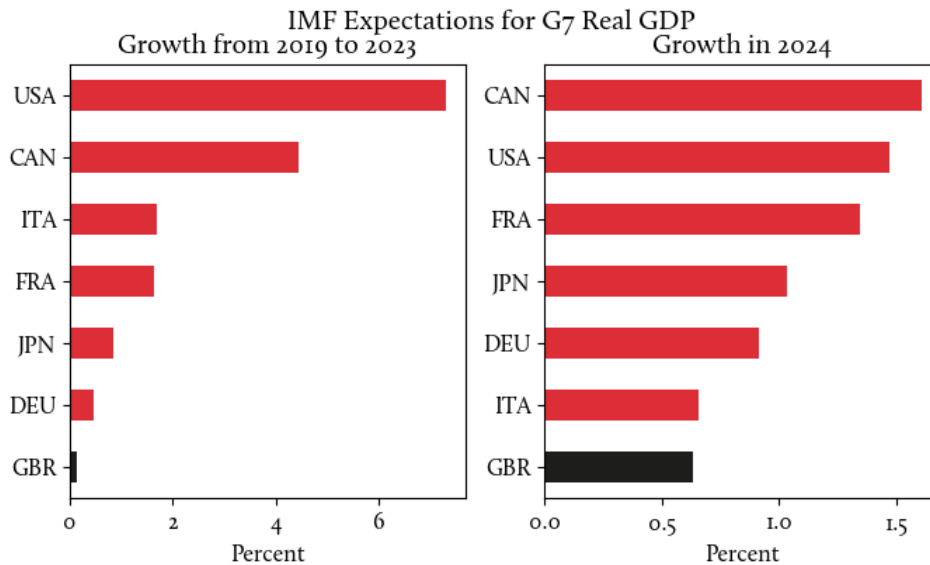


Figure M: Britain at the back of the pack. Source: IMF October WEO.

Ongoing geopolitical tensions and the global transition means the risk of major spikes in energy prices will continue to be highly elevated. These continuing risks mean the only fiscally responsible move is to fix the energy system now. The OBR's fiscal risks and sustainability reports set out in great detail the fiscal threat from the UK energy system, and demonstrate that immediate action is required. It estimates that the investment required to meet net zero if action is taken late is nearly double that if it is taken early, because of the failure to build supply chains and the greater risk of stranded assets⁶⁵.

Even if the UK abandoned net-zero altogether, it would still face high costs from exposure to gas prices. The OBR estimates the fiscal cost of remaining on gas as 13% of GDP by 2050-51, because we should expect repeated large price spikes. From a macroeconomic perspective the cost of remaining on gas is likely higher than that. Repeated price spikes have a higher chance of de-anchoring inflation expectations because they make inflation more salient. Such a

⁶³ Note that the IMF's forecast was made using data from before the COVID recovery was revised upwards by the ONS. But in many macro-econometric models, this should mean lower growth in 2024, as the output gap is now tighter.

⁶⁴ Catherine Mann, Inflation models and research: distilling dynamics for monetary policy decision-making, September 2023. Available [here](#).

⁶⁵ OBR, Fiscal Risks Report, July 2021. Available [here](#).

de-anchoring would induce material rate hikes from the Bank of England, reducing growth and government revenues. Even in good times, this risk means higher borrowing costs because it will boost both expected inflation and the inflation risk premium.

It is important to recognise that public investment in energy is a key way to boost growth even in good times. In part, this is because an economy that lives in fear suffers higher risk premiums. But it is also because the energy system sits within what is termed “core infrastructure” and so is estimated to have double the growth impact of other kinds of public investment, according to the meta-study that underpins the OBR’s capital spending assumptions⁶⁶.

Rebuilding the energy system is also an opportunity to partner with business and ‘crowd in’ private investment. The US example shows how public investment in clean energy does precisely that. The MIT/Rhodium Group Clean Investment Monitor shows that in the year following the Inflation Reduction Act, private clean energy investment increased 37% to \$213 billion.⁶⁷ Scaled to the size of the UK economy that would be £21 billion per year⁶⁸. In the UK there are clear opportunities to drive investment in gigafactories, clean steel plants, renewable-ready ports, green hydrogen and energy storage. As the Resolution Foundation has shown, these opportunities are concentrated in less productive regions, showing that this is an opportunity to focus investment on regions where it has historically been lowest⁶⁹.

But fixing the energy system is not just about making the UK a clean energy superpower. It is also about manufacturing strength more broadly. Cheap energy would boost the UK’s competitiveness in manufacturing industries such as chemicals and basic metals. Energy is not just important for a few big businesses. The International Monetary Fund (IMF) estimates that energy costs are over 10% of total costs for nearly a quarter of UK businesses, and exposure is greater among small businesses⁷⁰. Expensive energy is a threat to steel manufacturing and chemical plants, but it is also a threat to newsagents and pubs.

Reducing concerns about future crises is key to crowding in private investment. Global investment funds’ strategic asset allocations record expected growth rates and the volatility of that growth as key inputs into their models. If the UK is expected to have low growth or have a high risk of crisis, global funds will sell out of UK assets and there will be less foreign investment. This is another reason why building resilience is key for growth. For all the reasons stated above, that must start with energy.

⁶⁶ Bom, Pedro RD, and Jenny E. Ligthart. "What have we learned from three decades of research on the productivity of public capital?." *Journal of economic surveys* 28.5 (2014): 889-916.

⁶⁷ MIT/Rhodium Group, Clean Investment Monitor. Available [here](#).

⁶⁸ US GDP was \$25.5 trillion in 2022 ([source](#)); UK GDP was £2.5 trillion in 2022 ([source](#)). Calculation: $213 * 2.5 / 25.5 = 21$.

⁶⁹ Resolution Foundation, *Growing Clean*, May 2022. Available [here](#).

⁷⁰ IMF, *UK - Selected Issues*, June 2023. Available [here](#).

The Energy Independence Act

At the heart of the Energy Independence Act outlined by Ed Miliband⁷¹ could be the Labour Party's plan to deliver on its mission to make Britain a clean energy superpower⁷² and increase energy security, reducing bills through GB Energy and its Warm Homes Plan. The full state of the public finances at the next General Election remains unclear. There is still heightened macroeconomic and financial volatility, and possibly two major fiscal events to come. The exact “ramp up” profile of energy-focused investment is therefore rightly not yet determined. The current energy-focused policies announced are crucial for delivering energy security and independence. However, where there are extra funds that are not yet allocated, these could remain focused on investments that will support the transition. Within that set, there could be a significant share that will deliver high levels of growth by crowding in private investment.

The United States has an internal market that is eight-times larger than the UK's⁷³. This means that although the Inflation Reduction Act could be technology neutral, the UK has to be more targeted, as well as considering what it can now import cheaply because of US subsidies. For that reason, Britain could wrap elements of energy-focused investment within a broader regulation- and partnership-led industrial strategy that thinks carefully about where its existing endowments suggest a comparative advantage could be generated, and look at how best to build upon rather than compete with major policies put in place elsewhere. It could focus on regulation and partnership rather than subsidies, providing a strategy for sectors we identify as having dynamic comparative advantage.

Another area we could consider is green innovation (R&D policy). Innovation is ‘path dependent’: firms that invest in polluting patents will continue to do so, as their expertise in doing so grows, and so too will firms that invest in green patents⁷⁴. Innovation also occurs in clusters, with firms spurring each other to innovate more and then generating growth in a region. The UK has natural strengths, like its world-leading universities, but a big regional inequality in R&D activity, which is a barrier to growth⁷⁵. Green innovation is on the agenda for the US⁷⁶ and EU⁷⁷, but it is one priority amongst many. Moreover, green innovation is widely distributed globally⁷⁸, giving the UK the opportunity to be the bridge between Europe and the US, especially now it has rejoined the Horizon programme.

⁷¹ Ed Miliband's Speech at Labour Party Conference, October 2023. Available [here](#).

⁷² Labour Party, *Making Britain a Clean Energy Superpower*, June 2023. Available [here](#).

⁷³ US GDP was \$25.5 trillion in 2022 ([source](#)); UK GDP was \$3.1 trillion in 2022 ([source](#)). $25.5/3.1 = 8.2$.

⁷⁴ Chapter 9 in Aghion, Philippe, Céline Antonin, and Simon Bunel. *The power of creative destruction: economic upheaval and the wealth of nations*. Harvard University Press, 2021.

⁷⁵ Stansbury et al, *Tackling the UK's regional economic inequality: Binding constraints and avenues for policy intervention*, 2023. Available [here](#).

⁷⁶ White House, *Multi-Agency Research and Development Priorities for the FY 2024 Budget*, July 2022. Available [here](#).

⁷⁷ European Investment Bank, *Resilience and Renewal in Europe*, 2023. Available [here](#).

⁷⁸ European Investment Bank, *Resilience and Renewal in Europe*, 2023. Available [here](#).

We must also consider how to make public and private investment more effective and to induce further private investment through planning reforms. The reforms set out in Britain Remade's 'Powerbook' are very sensible⁷⁹.

Act II: The British Homes Act

Consider just one indication of the extent of the UK's housing crisis. By some measures, the UK is the most spatially unequal country in the world. However, the higher wages that are earned in the richest parts of the country are *entirely* consumed by higher housing costs for the median household. For those with low incomes, these housing costs are a large burden. As a result, after housing costs, poverty rates are highest in London⁸⁰.

The reason to focus on housing starts with the desire, in a fiscally constrained Britain, to use tools other than public investment, specifically planning reform and private-sector partnerships. Not only that, housing presents the opportunity to use private investment for public aims, and could even generate revenue for the Treasury.

As the Centre for Cities argues, UK homebuilding has been far too low for far too long - around half the level of France. This is directly traceable to explicit bans on homebuilding in much of the country and the ease with which narrow local interests dominate local planning decisions elsewhere⁸¹. The Labour Party has already set out important plans for planning reform. This includes a "brownfield first" approach, protecting the green belt while building on the "grey belt", land such as disused petrol stations in Tottenham, and reforming compulsory purchase orders so they pay current use value rather than (far higher) speculative 'hope' value. This will enable not just more homebuilding but also more effective land value capture.

Land value capture sounds more radical than it is. The fundamental principle is that public action should create public not private benefits. Across the world, the use of these policies has been growing, with new instruments being developed and national strategies developed⁸². The UK is an outlier because it only uses one of the five main instruments regularly - developer obligations⁸³ ⁸⁴. It does not commonly use infrastructure levies, nor does it pool land for joint development, nor does it buy, develop and then sell land.

The UK has historically used land value extraction to generate money for the Treasury. The New Towns programme was established by Labour in 1946 as part of its post-war pledge to build a

⁷⁹ Britain Remade, *Powerbook: A playbook for energy security by 2030*, 2023. Available [here](#).

⁸⁰ IFS, *Spatial Disparities Across Labour Markets*, August 2022. Available [here](#).

⁸¹ Centre for Cities, *A Very Short Guide to Planning Reform*, December 2022. Available [here](#).

⁸² Vejchodská, Eliška, Thomas Hartmann, and Rachele Alterman. "Land value capture: dynamics and diversity of instruments and strategies." *Town Planning Review* 94.2 (2023): 116-123. Available [here](#).

⁸³ OECD, *Global Compendium of Land Value Capture Policies*, July 2022. Available [here](#).

⁸⁴ OECD, *Land Value Capture in the UK*, July 2022. Available [here](#).

‘New Jerusalem’. Running until 1970, it built 32 new towns across the UK. These provided homes for 2.8 million people. To this day, they still generate around £1 billion each year for the Treasury⁸⁵. While the 1961 law introduced by the Conservatives that landowners must be paid ‘hope value’ rather than current use value is in place, this cannot be replicated. If the Labour Party’s planned reforms are enacted, it may again be possible, especially in regions where house prices are very elevated.

These are also the areas where the growth impact would be biggest. Wages are higher in London partly because people are more productive when they are part of a bigger cluster of economic activity, and partly because of the occupational mix and skills of workers in London. Labour Together analysis of the Labour Force Survey micro-data shows that of the 52% gap in wages between London and the rest of the country, most can be explained by skills and occupation types, but 23% is explained by location. (See *Appendix 5* for more details.) Stansbury et al show that currently we see people moving away from high-productivity areas, particularly London, because housing costs are too high⁸⁶. This means that we can boost wages and tax revenues with housing in and around London, thereby reducing the pressure for out-migration from the highly productive capital.

An illustrative example will give a sense of the order of magnitude of the benefits. If we built a million homes in London, this would boost wages for more than a million people by nearly £9,000 a year, generating nearly £5 billion a year in extra revenue for the Treasury. This likely understates the flywheel effect of generating a more successful agglomeration. And when this is combined with the potential for land value extraction, it points towards a homebuilding strategy that could improve the public finances.

The British Homes Act

Creating growth and boosting fiscal stability will require reforms both to the planning system and institutional changes⁸⁷. The Joseph Rowntree Foundation’s recent proposal for a national homebuilder speaks to much of what needs to be done and is consistent with much of what we outline below.

The specific institutional form and rules must balance concerns of those currently living in areas, those moving to areas after building, those who will benefit from the national uplift in growth and public services, and those in areas where property prices are less elevated and regeneration funds are required.

⁸⁵ Communities and Local Government Committee, *Principles of Land Value Capture*, September 2018. Available [here](#).

⁸⁶ Stansbury et al, *Tackling the UK’s regional economic inequality: Binding constraints and avenues for policy intervention*, 2023. Available [here](#).

⁸⁷ For example, Resolution Foundation, *Ready for Change*, September 2023. Available [here](#).

While there is more work to be done, we think there is an argument for a national institution, GB Homes, that would:

1. Develop a national strategy for homebuilding;
2. Work with regions and local authorities to develop plans, and ensure they are delivered;
3. Share in some of the proceeds of land sales, which will be concentrated in the South East, and use the money for priorities identified nationally, which could for example include infrastructure development across the country.

GB Homes could undertake a detailed exercise on how quickly supply chains and skills could be built to substantially increase the homebuilding rate in the UK, and what institutional barriers need to be addressed to prevent this from being curtailed. From this ambitious national and regional homebuilding targets could be produced, which could be more in line with peers such as France than the UK's historically low outturns.

Act III: The British Infrastructure Act

Infrastructure is a focus area for public investment for four reasons.

First, it is a form of capital spending with a big impact on productivity. Alongside energy, it is part of what is considered “core infrastructure”, and estimated to have almost double the impact on growth of other kinds of public capital spending⁸⁸. In the UK the growth impact is likely even bigger because we are starting from a low base. Transport infrastructure spending in the UK as a share of GDP has been considerably lower than other OECD countries⁸⁹. It is worth reiterating that this higher growth impact means the investment is more fiscally responsible.

Second, it is an area where public investment crowds in private investment because it increases the connections between producers and consumers. One of Adam Smith's key insights was that bigger markets have more scope for specialisation. This is why infrastructure investments can boost productivity. In the 18th and 19th centuries, the building of turnpike roads, canals and railways were a key driver for the British economy taking a lead over Europe⁹⁰. Today, the UK is far behind Europe in creating markets. In Europe, around two-thirds of citizens can access their local city centre in 30 minutes using public transport. In Britain, just 40% can⁹¹.

⁸⁸ Bom, Pedro RD, and Jenny E. Ligthart. "What have we learned from three decades of research on the productivity of public capital?." *Journal of economic surveys* 28.5 (2014): 889-916.

⁸⁹ Resolution Foundation, *Euston we have a problem*, March 2020. Available [here](#).

⁹⁰ Koyama, Mark, and Jared Rubin. *How the world became rich: The historical origins of economic growth*. John Wiley & Sons, 2022.

⁹¹ Centre for Cities, *Measuring up: Comparing public transport in the UK and Europe's biggest cities*, November 2021. Available [here](#).

Third, other levers can enhance our impact. The cost per mile of building high-speed rail is more than double that of the next highest economy⁹². As the HS2 debacle makes clear, this understates the true cost when we include the cost of the Government's flip-flopping. It is clear we are doing a lot wrong. As the Tony Blair Institute (TBI) points out, since the last reforms to the planning system in 2012, the average time it takes to gain consent for national infrastructure projects has increased to over four years, adding up to 30% in costs⁹³. So reforms to the planning process and how we plan and budget for national infrastructure can have a big impact.

Fourth, there has been huge regional inequality in transport spending. Between 2009 and 2019, the North received £349 per person in transport spending while London received £864 per person⁹⁴. If the North had received the same level of spending as London in the aforementioned time period, it would have received an additional £86bn in transport financing⁹⁵. It is not just about connectivity, it is about efficiency and punctuality. Stansbury et al. found that trains outside London and the South are far more likely to be late. The UK is substantially worse than the EU27 average in terms of punctuality and probability of being cancelled⁹⁶.

This likely goes a long way to explaining the gulf in productivity between regions. Public transport links are much less frequent in the Northern Powerhouse region than they are in the Rhine-Rhur region⁹⁷. The Resolution Foundation has shown that regional disparities in public investment are driven by transport⁹⁸. Coyle et al have traced this to HMT's Green Book, which pushes investment towards areas where the financial return is greatest.⁹⁹ This will necessarily give higher benefit:cost ratios to richer areas (like London and the South East) because higher incomes are easier to boost. Coyle points out this is an example of a Matthew principle of accumulated advantage, where those who begin with advantage accumulate more over time. Moreover, as Tom Forth has identified, there is evidence that the skew to the South in project approval may exist even where benefit:cost ratios are higher in the North¹⁰⁰.

⁹² Transit Costs Data, High Speed Rail Data Preliminary Analysis. Available [here](#).

⁹³ Tony Blair Institute, *Building the Future of Britain*, June 2023. Available [here](#).

⁹⁴ IPPR North, *Broken transport promises come as new evidence shows widening transport spending gap*, November 2021. Available [here](#).

⁹⁵ IPPR North, *Broken transport promises come as new evidence shows widening transport spending gap*, November 2021. Available [here](#).

⁹⁶ Stansbury et al, *Tackling the UK's regional economic inequality: Binding constraints and avenues for policy intervention*, 2023. Available [here](#).

⁹⁷ Centre for Cities, *Building the Northern Powerhouse*, 2016. Available [here](#).

⁹⁸ Resolution Foundation, *Euston we have a problem*, March 2020. Available [here](#).

⁹⁹ Diane Coyle & Marianne Sensie, *The Imperial Treasury: appraisal methodology and regional economic performance in the UK*, July 2018. Available [here](#).

¹⁰⁰ Tom Forth, *Investment is Political*, April 2017. Available [here](#).

The British Infrastructure Act

The British Infrastructure Act could draw upon work from throughout the progressive ecosystem.

It could start by looking at what we can do with the same amount of money. TBI's proposals to modernise the definition of nationally significant infrastructure and to streamline consultation and approvals services are sensible¹⁰¹. So is the Resolution Foundation's push for an "Infrastructure Management Revolution" including longer planning horizons, more consistency and a decentralised approach¹⁰². These should be areas that Labour's proposed Office for Value for Money should scrutinise closely.

It could give major focus to instruments that would make the distribution of infrastructure spend more equitable across regions. This is partly about the process. Coyle's recommendations for reforms to the Green Book should be top of the agenda¹⁰³. In particular, the Treasury should take a strategic view on potential productivity growth, looking at what can be achieved when growth is kick-started.

It could look across infrastructure types, physical and digital. But given the necessity of creating growth clusters to achieve levelling up, the congestion in major cities and the lack of space to increase road capacity, interurban public transport should be a key focus¹⁰⁴.

Finally, it could be joined up with regional housing and growth strategies. This points to the need to recreate something akin to the Regional Spatial Strategies, which were abolished in 2010.

¹⁰¹ Tony Blair Institute, *Building the Future of Britain*, June 2023. Available [here](#).

¹⁰² Resolution Foundation, *Euston we have a problem*, March 2020. Available [here](#).

¹⁰³ Diane Coyle & Marianne Sensie, *The Imperial Treasury: appraisal methodology and regional economic performance in the UK*, July 2018. Available [here](#).

¹⁰⁴ See for example: ResFo papers on Manchester and Birmingham, <https://nic.org.uk/studies-reports/interurban-transport-advice-note-on-roads-policy/>

Conclusion

These three acts - the Energy Independence, British Homes and British Infrastructure Act - would transform the UK public sphere, unlock growth for the British economy, and build economic security for families across the country. How this is achieved will vary across the country. The South is often capacity constrained, and investment will flood in when blockers are removed. In the North, government action more commonly will need to act as a catalyst, using the proceeds of growth generated nationally.

All this will happen in time, but not immediately. The Acts proposed in this paper would not have their maximum effect for at least two parliaments. But there is much within them that will bear fruit far sooner. A Labour government could demonstrate to voters that it is making progress and that its plan is working. Reforms to the planning system will limit the stories of delay, cost overrun and cancellation that have littered newspapers in recent years. Many of the most important infrastructure policies can be delivered relatively quickly, such as a new generation of electric buses. And there is widespread acceptance that, with the right political will, we can ramp up the homebuilding rate to at least 300,000 new houses each year in the next government's first term, and should continue to ramp upwards in the second.

What is most crucial for voters is that this package adds to their economic security rather than reduces it. A major investment programme must not repeat the crisis the Conservatives wrought in September 2022. To generate resilient growth without creating financial vulnerability, any investment program must be supported by a strong fiscal framework.

For too long, Britain has been held back by low investment, suppressing productivity. This has kept wages low. And it has curtailed growth, leaving public services under-funded. The root cause is a lack of investment, and this paper has shown where that investment could be focused to realise the greatest impact. The desire to use the state as a catalytic investor, leading where private sector investors will follow, is a genuine point of difference between the two major parties at the next election. Labour has argued that this investment is necessary. The Conservatives have shown themselves to be ideologically opposed to doing so. We live in a Britain that has pursued that ideology for thirteen years. The results are evident in a low-growth, high-inflation economy, and in our struggling public services. This paper has sought to show that investment under a new government could reverse that, and, in so doing, begin to build a new and better Britain.

Appendix

Appendix 1: Link between productivity and wages

If labour markets are perfectly competitive, then wages will be equal to marginal productivity. In reality, labour markets are not perfectly competitive, and institutional features of the labour market are important in shaping wages. For example, workers get higher wages when they have stronger labour unions and lower wages when they face a monopsony employer.

In the middle of the 2010s, the Economic Policy Institute in the United States produced a chart which showed that from 1973 to 2013, mean real productivity in the US increased by over 140%, but median real wages by less than 10%¹⁰⁵. This led many to a view that the link between productivity and pay was broken. However, as Stansbury and Summers argued, it could be that productivity boosts pay but other forces have lowered pay¹⁰⁶. Their analysis showed that changes in productivity appear to still have a high pass through to pay.

We have replicated their analysis for the UK from 1990. From the Bank of England's Millennium of Macroeconomic Data dataset, we take its composite average weekly earnings series, which we deflate by its preferred consumer price index measure, as well as labour productivity per head at basic price and the unemployment rate. These data only go until 2016, so we update to 2019 from the ONS. We regress the rolling three-year growth in wages on the rolling three-year growth in productivity and the rolling three-year average of the unemployment rate. The coefficient on productivity is 1.01, with a confidence interval from 0.61 and 1.40. This suggests that there is full-pass through from productivity growth to wage growth in the UK. Figure N below illustrates this relationship.

¹⁰⁵ Economic Policy Institute, *Wage Stagnation in Nine Charts*, Jan 2015. Available [here](#).

¹⁰⁶ Stansbury, Anna M., and Lawrence H. Summers. *Productivity and Pay: Is the link broken?*. No. w24165. National Bureau of Economic Research, 2018. Available [here](#).

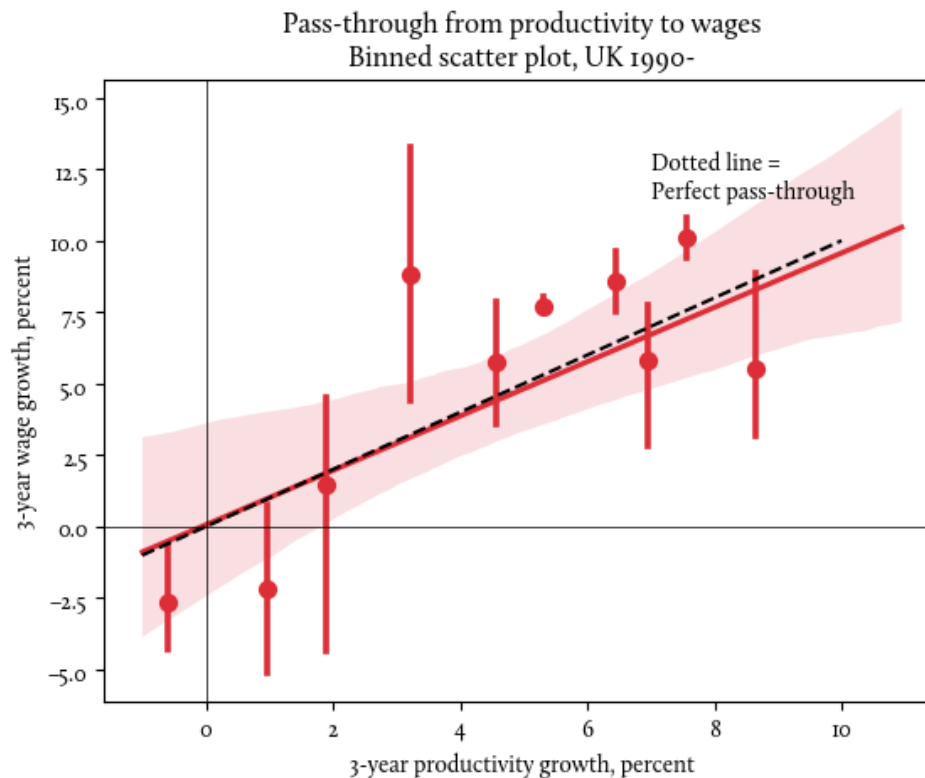


Figure N: Pass-through from productivity growth to wage growth. Sources: Bank of England's Millennium of Macroeconomic Data, Author's Calculations.

Appendix 2: Productivity growth shortfall

Estimating what a country's productivity growth should have been if performance is adequate is complicated by two factors. First, there are periods when productivity growth at the technological frontier is faster and periods where it is slower. For example, the mid-90s to mid-00s had high TFP growth in the US because the ICT revolution was being deployed in organisations, making them more efficient. But TFP growth in the US has slowed since it is easier to become more productive in periods where there is rapid global TFP growth. Second, when countries are far from the technological frontier, they can grow faster. They don't have to wait for the next new idea to come along, they can benefit from the diffusion of ideas from richer countries. Just as this applies to India compared to the higher-productivity United States, it applies to the UK compared to the higher-productivity United States. There is a large literature on this convergence, from which a heuristic has emerged: countries close 2-3% of their gap with the frontier a year.

This implies that a benchmark for adequate productivity growth is equal to the productivity growth on the frontier plus convergence at 2-3% a year. If over a period productivity growth is below this, this indicates a failure, and if it is above, this indicates a success.

To estimate this, we first define the frontier. We take the average of the United States and “Advanced Europe”, defined as medium-large European countries with productivity levels above the UK’s in 2010 and without major oil reserves: Austria, Belgium, Denmark, France, Germany, Netherlands and Switzerland. This selection avoids countries with high productivity that comes from various forms of manna (tax havens, big oil producers). Using the OECD’s Productivity Database and 2015 PPPs, we calculate the gap between productivity in the UK and the average of the United States and Advanced Europe.

We then estimate how the UK’s productivity would have evolved from 2010-22 if (a) the gap had stayed constant (b) the gap had closed at 2.5% a year. (b) implies productivity would have been 12% higher. We translate that into full-time earnings to make it more comprehensible (though note that this translation varies over time). This suggests that the shortfall in earnings is nearly £5,000 per worker. This is illustrated in Figure C below.

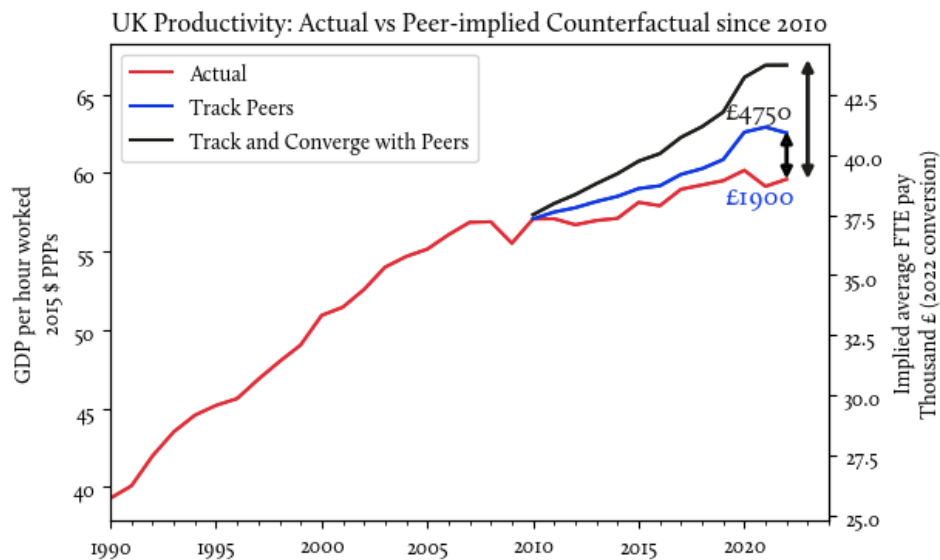


Figure C: The wage growth that wasn't. Source: OECD Productivity Database, 2015 PPPs, Author's Calculations.

Appendix 3: Decadal decomposition of trend per capita growth

Assessments of the sources of growth are made difficult by short-term fluctuations across the business cycle, and the noise in measurements of productivity over a couple of years. To see where growth is coming from it is important to take a longer-term perspective, and valuable to use techniques to avoid short-term fluctuations from impacting results.

To do this, we created long time series of labour input per capita and labour productivity for the UK, splicing together two or three time series from the Bank of England's Millennium of Macroeconomic Data dataset and the ONS. Our measure of labour input was the product of a time series we calculated of the employment to population ratio and one of hours worked per worker.

We then applied a Hodrick-Prescott filter to both series. This allows us to find the underlying trend and smooth over business cycle fluctuations. We then calculated the growth in each decade since the 1760s, as shown in Figure I. This shows us that productivity growth was the lowest since the industrial revolution started having an impact on productivity statistics, and trend growth overall was very low by modern standards, and only avoided being the lowest because we worked more.

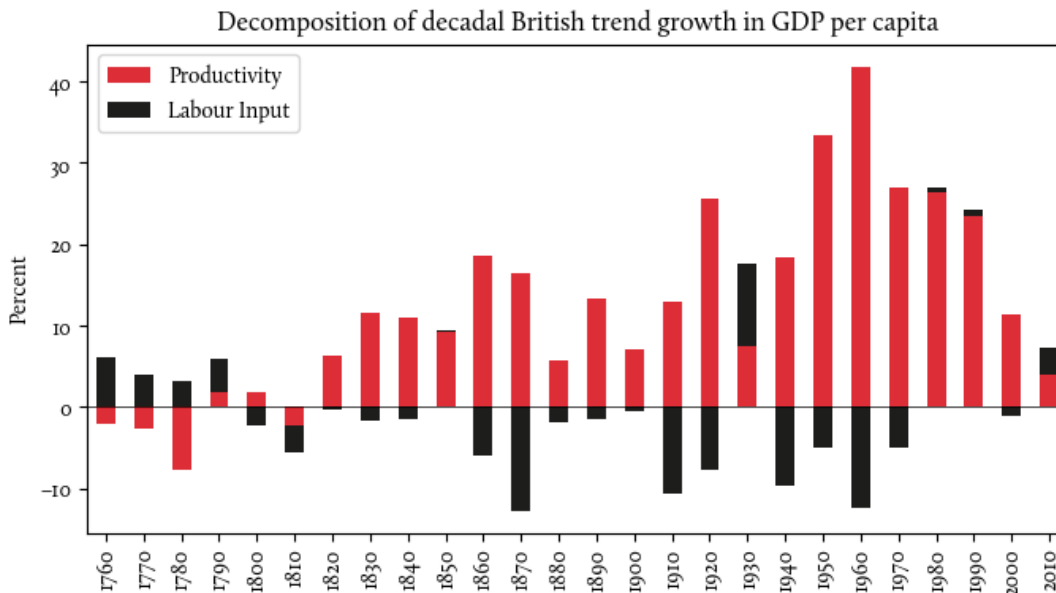


Figure I: Where the growth came from. Source: Bank of England's Millennium of Macroeconomic Data, ONS, Author's Calculations.

Appendix 4: Reflections on OBR Modelling

The OBR's modelling of the impact of capital spending on potential output currently takes the average of estimates across advanced economies from a 2014 meta-study which uses data that ends in 2008¹⁰⁷. The OBR is currently undertaking a review of this approach, which we welcome. Their current approach is likely too pessimistic about the growth impact government investment would have in the UK. A core feature of most economic models of investment and growth is that when the starting capital stock is low, the return on investment is high. So the impact for the UK should be bigger than average given investment has been low for decades. We also think that distinctions should be made between different kinds of capital investment where possible, as there is evidence, including in the metastudy they cite, that core infrastructure spending has a bigger growth impact than other forms of capital spending¹⁰⁸.

Appendix 5: London Wage Premium

Workers' productivity is not just a product of their skills. When workers from the developing world move to, say, the United States, they experience an instant large jump in their productivity¹⁰⁹. This is because they are now part of better organised and equipped organisations and agglomerations. The same logic applies when people move between regions within a country. The same person is likely to be more productive in London than in Bury.

However, because housing costs are high in places like London, people are more likely to move if they are highly paid. This may come because they are highly skilled, or are in a job that is normally highly paid.

To assess what the London wage premium is, we built a dataset from the two-quarter longitudinal microdata of the ONS's Labour Force Survey from 2013-19. Looking at nearly 1.5 million responses over that period, we could see the impact of being in London on wages holding other factors constant. We ran a pooled regression of log wages on a dummy for whether residence was London or not, and dummy variables for education level and occupation. This showed that skills and occupation explains the lion's share of the 52% gap in wages between London and the rest of the country. But a full 23 percentage points were explained by location.

¹⁰⁷ See Footnote 4 in OBR, *The demand- and supply-side effects of policy measures*, November 2022. Available [here](#).

¹⁰⁸ Bom, Pedro RD, and Jenny E. Ligthart. "What have we learned from three decades of research on the productivity of public capital?." *Journal of economic surveys* 28.5 (2014): 889-916.

¹⁰⁹ See for example the work of Lant Pritchett.