

# Beyond Boosterism

Realigning the policy ecosystem to unleash private investment for sustainable growth

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## The Economy 2030 Inquiry

The Economy 2030 Inquiry is a collaboration between the Resolution Foundation and the Centre for Economic Performance at the London School of Economics, funded by the Nuffield Foundation. The Inquiry's subject matter is the nature, scale, and context for the economic change facing the UK during the 2020s. Its goal is not just to describe the change that Covid-19, Brexit, the Net Zero transition and technology will bring, but to help the country and its policy makers better understand and navigate it against a backdrop of low productivity and high inequality. To achieve these aims the Inquiry is leading a two-year national conversation on the future of the UK economy, bridging rigorous research, public involvement and concrete proposals. The work of the Inquiry will be brought together in a final report in 2023 that will set out a renewed economic strategy for the UK to enable the country to successfully navigate the decade ahead, with proposals to drive strong, sustainable and equitable growth, and significant improvements to people's living standards and well-being.

## The Nuffield Foundation

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## Executive Summary

The UK is a low investment nation. This matters. It means British workers have less kit to work with, worse infrastructure to rely on and fewer ideas to implement, and leaves fewer British firms able to compete. That translates into lower productivity, holding back wage growth and growth in all of our living standards. Living off the past, not investing in the future, has consequences.

Investing too little for one year is manageable, but doing so year after year is a recipe for relative decline: this is precisely what the UK has been doing, and where it finds itself. For almost all of the past two decades, the UK has been in the relegation zone (bottom 10 per cent) of the high-income OECD business investment league table. Output per hour worked has grown by just half a per cent per year since 2005, half the rate of the OECD as a whole, and weak capital growth is an important reason for this.

There is no plausible route to the UK ending this period of stagnation that does not involve turning around this dire investment performance. The question, for Britain and this paper, is how.

### UK business investment is low and needs to rise

This report's focus is business investment. Public sector investment matters and is a clear area where the UK underperforms, as discussed in a companion paper to this for the Economy 2030 Inquiry. But businesses are responsible for around two-thirds of national investment. Business investment fell in the

2000s as a share of GDP, fell further during the global financial crisis, and has stagnated since 2016.

If UK business investment had matched the average of France, Germany and the US since 2008 – something that would have required just over 2 per cent of GDP additional investment each year – our GDP would be nearly 4 per cent higher today, enough to raise average wages by around £1,250 a year.

A growth boom is badly needed by UK workers, who are currently earning wages no higher than 2005, and the evidence suggests that growth booms are nine times more likely if investment is also booming. And wider objectives, from levelling up to net zero, also require large scale private investment in the years ahead if they are to be achieved. Reviving the UK's economic performance means the UK's future must involve higher investment levels than its recent past.

**A return to economic stability is necessary but the goal is a new investment ecosystem which ensures firms are willing to invest and able to do so**

The leaders of both main political parties argue that they offer greater economic and political stability in the years ahead than that Britain has recently experienced (under Liz Truss for Rishi Sunak, and under the entire Conservative government for Kier Starmer), arguing this will drive higher business investment.

Stability is clearly desirable. The period since 2016 has been one of highly elevated economic uncertainty, most obviously about the form of the UK's new relationship with the European Union. Brexit has also caused permanently higher trade costs with our nearest neighbours, so it is not a coincidence that UK business investment has flatlined after 2016, even as most advanced economies saw strong investment growth pre-pandemic.

But while Brexit might be the biggest cause of uncertainty, it is far from the only one. Corporation tax has changed in almost every year since 2010, during which time the UK has had nine Business Secretaries, four versions of the government department responsible for businesses, and industrial strategies or growth plans too numerous to count.

A period of political and economic stability will help. But it will not be sufficient. To understand why, recall that the structural fall in business investment happened not around the time of the Brexit vote, but during the early 2000s – a period of political stability and an economic environment so stable the then Governor of the Bank of England labelled it the NICE – non-inflationary continuous expansion – decade.

As well as stability, a clear economic strategy for how the UK will succeed in the years ahead (the focus of the Economy 2030 Inquiry) will include strategies for specific industries and objectives – in particular, a strong UK response to the US Inflation Reduction Act. But this paper focuses on rewiring the UK investment ecosystem across the board to deliver two core objectives: first, increasing firms’ – or, more accurately, their management’s – desire to invest in productive and sustainable assets and second, enhancing their ability to do so.

### Raising firms’ willingness to invest is central...

A precursor to firms investing is them actually wanting to do so. Many people look at low investment levels and say this must reflect firms not being able to make sufficient return on investments in the UK. The result is often a policy debate very focused on Corporation Tax.

There is certainly scope for Government to encourage investment with the right Corporation Tax regime. Investments pay back over long periods, so the most important thing is for the system to be stable, not the yo-yo we have seen in recent years, most obviously with the headline rate of Corporation Tax. Investment allowances, which deduct the cost of some investments from taxable profits, were also cut in the early 2010s, before being repeatedly temporarily expanded at short notice more recently, with the latest iteration currently set to end in March 2026. The temporary nature of today’s higher investment allowances makes little sense, as tax revenues are foregone just to encourage firms to bring forward investment rather than actually do more of it.

**The Government should immediately make permanent the (currently temporary) full expensing of business plant and machinery. Broadening which investments can be fully expensed to all business capital is also desirable, if costly in the short-run. Any lasting costs should be defrayed by tightening the limits on**



**the tax deductibility of interest, reducing the tax systems' bias towards debt financing. More importantly, governments should commit to keeping the Corporation Tax regime – both its rate and allowances – stable over time.** Tax incentives for R&D are also important for ensuring that smaller, more innovative and typically more financially constrained firms are supported, and enhanced incentives for net zero (or other strategic) investments should be explored as part of the UK's response to the Inflation Reduction Act.

Although we should get our tax regime right, it is not the main driver of low investment in the UK. Nor are rates of return: our analysis shows that low investment goes alongside a relatively high average profit rate on existing capital in the UK – past investors have done well. This implies that the management of British firms are not investing despite there being returns to be had, and this fits with other evidence that UK firms are substantially less well-managed than US firms, leading to lower productivity, profits, research and development expenditure and patenting. Poorly managed firms also make less accurate forecasts, which leads to lower investment.

But the UK stands out for something more than the (lack of) quality of its management: the extent to which those managers are under uniquely little pressure from above (owners) or below (workers) to focus on long-term growth. This reflects the fact that the ownership of UK-listed firms has become more remote – with foreign ownership of UK public firms rising from just over 10 per cent in 1990 to over 55 per cent in 2020 – and extremely dispersed. Meanwhile, workers in UK firms lack the sort of voice or formal role in corporate governance seen elsewhere in Europe. The challenge is to bring the voice of owners and workers back into the picture, so managers without a long-term plan feel the pressure both from above and below to do something differently.

**...which will require significant reform of the pensions landscape, but to concentrate ownership rather than solely to provide financing**

There is an active debate in the UK about how best to encourage pension funds to return to UK listed shares, largely motivated by the idea that the provision of more capital will drive higher investment by these firms. In aggregate, though, there is little



evidence that the lack of finance is a major barrier to investment among established firms. Instead, there is a need to consider pension reform as a route to raising investment levels by rebuilding concentrated firm ownership. This is because structural and regulatory forces in the pensions system have weakened the engagement of UK firms' owners' over the past two decades. Private defined benefit (DB) pension schemes, formerly the anchor investors in the UK stock market, have largely vacated it. Defined contribution (DC) schemes, with 20 times as many active members as DB schemes, are fragmented and almost exclusively invest passively through pooled investments. Our DC and DB pension funds in aggregate now allocate only 2 per cent of their assets to directly held UK equities.

The result is UK firms having the lowest share in the OECD of 'blockholder' shareholders who are big enough to affect firm decisions on their own. It is rational for small, fragmented shareholders not to incur the substantial costs of monitoring the management of the firms they own, but this is a significant collective action problem, risking firms being run myopically and foregoing profitable investment opportunities.

To underpin a return to significant block ownership, policy makers will need to consider each strand of the pension landscape – legacy Defined Benefit (DB), Defined Contribution (DC) and Local Government Pension Schemes (LGPS) – separately. But the common objective is a pension funds ecosystem that not only holds more UK equities, but does so via far larger funds able to provide more concentrated – and therefore engaged – ownership. These larger funds will also be able to invest more in unlisted high-growth firms and infrastructure projects.

DB schemes hold assets worth £1.7 trillion, around 70 per cent of all pension assets, and have driven most of the move out of equities and to bonds over the last 20 years. The discussion on how these assets may return to UK equities has focused on changing regulations for existing legacy schemes, a debate that misses the key issue today: many DB schemes are on an exit ramp out of existence, so the real question is not how they are regulated, but where does that exit ramp take them and their assets. And, having been in deficit for many years as longevity rose and interest rates fell, the majority of DB schemes, are now in surplus. The path of least resistance is that schemes will be bought out by insurance

companies, as trustees lock in certainty for their members and free employer sponsors from uncertain liabilities. Those insurance companies would provide scale but, due to their regulation, will largely hold the transferred assets in very low-risk assets. With those regulations unlikely to change substantively, policy should intervene to offer alternative routes to DB schemes on the exit ramp out of existence that allow them to remain part of the pensions landscape, where they would be well suited to investing in riskier assets, including directly held UK equities, at scale.

The UK Pension Protection Fund (PPF) – which absorbs pension funds when an employer becomes insolvent - provides a model for this approach. As a large consolidated scheme of nearly £40 billion run with a long-term focus rather an eye on ceasing to exist, the PPF has retained exposure to risky assets while the wider DB universe has de-risked – investing around 40 per cent of portfolio in bonds relative to 70 per cent in the wider DB universe.

**We suggest that the Government take two steps to increasing the amount of DB pension assets that are invested in this way. First, it should provide a specific legislative regime around superfunds,** which are a way to consolidate existing DB funds as an alternative means of allowing employers to end their liabilities. That regime should allow members to benefit from the higher returns a fund generates by investing in risky assets, by allowing them to share some of the surplus created by the superfund. **Second, and more radically, the Government should legislate to expand the remit of the PPF to allow it to act as a state consolidation option for solvent pension schemes,** giving trustees who want the certainty associated with buy-outs an alternative route. These reforms will create several large DB funds with both the incentives and capabilities to invest actively in UK equities – monitoring and disciplining management to run businesses for long run value.

Defined Contribution and Local Government schemes are smaller in total, but have a longer future than DB legacy schemes. For both, consolidation has been a priority for policy makers over the last five years. However, this has largely been from the perspective of reducing operating costs (to deliver better value for members) and has had variable success: the DC universe remains fragmented with almost 27,000 schemes in existence (2,000 of which are non-micro and have more than 12 members) and the strategic asset allocation of LGPS remains the remit of almost

100 different local pension boards. To deliver more concentrated active ownership of UK firms, this consolidation process needs to be turbocharged so that, for example, DC schemes are big enough to invest actively and to directly hold shares, as we see with the UK's largest DC scheme, Nest, which uses funds with an active investment approach and has set up an investment subsidiary to begin to insource some investment strategies.

**To accelerate the consolidation of DC schemes, we recommend that the Government goes ahead with setting stringent value-for-money tests, and mandates funds which fail to meet these to transfer assets to a number of authorised Master Trusts (multi-employer DC pension trusts) that will act as consolidators.**

The Government should target for there to be fewer than 250 non-micro DC funds by the end of the decade: this would still be double the number of funds in the Australian system today, which supports around £1 trillion of assets (this is the size that the UK DC industry is expected to reach in 2030). **For LGPS, we recommend that the Government announces that their £300bn of assets are pooled into one consolidated pension fund.** This fund would have similar in-house scale and expertise as the large Canadian and Dutch pension funds.

Together, these reforms will help drive scale in the active pension market and will over the medium term create a set of large funds able to act as blockholders of UK firms and to invest directly in unlisted, productive assets. The result would be a pensions industry that looks more like those in Australia or Canada than today – remaining in private hands, making its own decisions about which assets to invest in, but delivering lower costs and with the scale that makes owning and actively managing significant chunks of UK firms feasible. This would deliver at least as good outcomes for savers and, crucially, significantly better outcomes for the UK economy as a whole.

### Worker voice is an important spur for investment

Compounding the lack of 'owner voice' is a lack of worker voice. UK firms are unusual in Europe in having no mandatory requirement for worker representation on corporate boards. By contrast, half of EU Member States plus Norway have mandatory employee representation on (supervisory or executive) boards for larger

companies, meaning that workers have some formal authority in corporate decision-making.

In this respect, the UK more closely resembles the US, which follows a corporate governance system of shareholder primacy: shareholders elect the corporate board, which manages the company on behalf of the shareholders. But issues around a lack of engaged owners apply less in the US where a higher proportion of firms have a controlling shareholder than in the UK.

The absence of a formal mechanism for encouraging worker voice at the company level in the UK is matched by a decline in the proportion of workers who feel they have a say in workplace changes, and, indeed, in the proportion that think that they should be involved in such changes. But this fatalism is not in our long-term interest.

The evidence from European countries that have introduced mandatory worker representation suggests that this can support a focus on value creation in businesses. There is no evidence that it generates large pay hikes; instead, it delivers increased investment, and improvements in broader measures of firm performance such as productivity, survival and job quality. This is consistent with a mechanism through which repeated interactions between workers and managers facilitate cooperation, build trust, and improve decision-making for the longer term.

**We therefore propose the mandatory inclusion of worker representatives at the board level in larger firms.** The UK Corporate Governance Code, which applies to listed companies, introduced new measures to encourage greater engagement between boards and managers. But making board-level representation mandatory for listed firms and larger companies would represent a material change for UK firms, and it would be necessary to get the details right. Nevertheless, such arrangements are normal by European standards, and were, in fact, the policy of a Conservative Prime Minister just a few years ago.

**Firms wanting to invest only helps if they are able to do so**

The combination of these suggested pensions and corporate government reforms would galvanise managers to have a focus on long-term value creation and growth, driven by new stakeholder

engagement from 'above' and 'below', boosting firm' willingness to invest. But, even if firms are willing and have the finance to invest, they still have to be able to actually make an investment happen. Too many firms still face obstacles that prevent them doing so, with a key example being the lack of lab space in innovative clusters, such as Oxford and Cambridge, which prevents firms from investing and expanding there.

Around half of business investment is in buildings, and much of the rest needs a building to house it. Construction is made more costly in the UK by the stringency and unpredictability of the planning system, driven by the significant degree of discretion awarded to decision-makers. The UK has relatively liberal product and labour markets, but the same is not true for land: developments can be refused even if they meet the specification of a local plan, and six out of every ten (61 per cent) of local authorities in England don't even have an up-to-date plan. Furthermore, those plans are typically made at a very local level, not across a functional economic area, and, as we will explore in a future report, local decision-makers face limited fiscal incentives to allow new business construction.

Consistent with this, the UK has actually seen no increase in the amount of built-up land per capita since 1990, and if anything, a fall this century. This is in stark contrast to every other G7 economy, which not only have higher levels of built-up land per head, but have seen substantial increases decade-on-decade. As with the lack of block shareholders, this is the kind of UK exceptionalism that underpins our status as a low investment nation.

Beyond direct restrictions on commercial development, the challenges of getting housing and infrastructure built combine to prevent local economic development in areas where there is demand for it, including high-tech clusters that are key for the UK's growth prospects. Planning restrictions are also creating barriers to much-needed net zero infrastructure investment, including new onshore wind farms (which have been de facto banned in England since 2015), new solar farms and grid connections.

We therefore make the following recommendations to boost the construction of business structures in the UK and allowing productive areas to grow, while avoiding congestion and sprawl and protecting the natural environment.

**1. Development plans must exist and provide certainty that compliant developments will proceed.** This involves making local land-use plans simpler, more proactive and more binding. In particular, we propose adopting a zone-based approach with designated growth areas, a shift of community engagement to the ex ante phase of planning, and improved tools to facilitate the planning process, together with statutory requirements for Local Authorities to have plans, and nationally determined housing requirements.

**2. Plans and decision-making relating to commercial and business developments should be carried at the right level – which will almost certainly need to be across larger areas than current local planning authorities.** Planning should take place at a level where the costs and benefits of proposed developments are largely captured – ideally reflecting a functional economic area.

**3. Local authorities should have meaningful financial incentives for development, both commercial and residential.** Allowing local authorities to retain more of the revenues that new developments generate, and use these revenues for local benefit, is likely to increase support for development at the local level.

There are of course significant political constraints to planning reform. **If national progress remains elusive, then some of these principles can be feasibly explored for combined authorities.**

**Additional support is needed to help SMEs invest and grow**

While access to finance in the aggregate is not the leading barrier to investment in the UK, there is evidence that some smaller, high growth potential, firms suffer acutely from a lack of access to long-term capital to enable them to invest and scale. This problem has a regional angle, with firms outside of London and the South East receiving a smaller proportion of venture and growth equity funding than the prevalence of high growth companies would suggest.

The British Business Bank (BBB) has been doing important work in this space, having developed a range of funding schemes for businesses of varying maturity across both debt and equity products, but on a relatively small scale compared to similar institutions elsewhere. The German development bank KfW's

investment in small businesses and startups is at least three times greater than the BBB's, even when the latter's Covid support lending is taken into account. **To ensure that the BBB scales up and operates as a permanent part of the financing landscape, rather than a body whose future and role is tied up with government Spending Review timetables, we recommend allowing it to borrow capital through the issuance of government-guaranteed bonds** in the same way that KfW is able to.

Our suggested pensions reforms will help to channel some capital towards high growth potential SMEs and other less liquid assets. Alongside reforms that address the liquidity, regulatory and cost-related barriers to pensions investing in these asset classes, it is also important for trustees to have relevant expertise. **We propose that the BBB offers a co-investment fund which would allow pension funds to invest as a limited partner alongside it, piggy-backing on its expertise.** This vehicle could also be constructed to reduce the fees that pension funds face in entering the asset class, encouraging more capital to be invested in the UK.

For the wider set of SMEs, where the diffusion of productivity-enhancing technologies and practices is a key objective, the evidence suggests that direct business support policies can help to address barriers – whether financial, managerial or because of information constraints – that prevent firms from making investments, particularly in areas where technological progress is rapid – as we are now seeing with AI. Governments tend to offer targeted business support programmes that focus on information provision or managerial training, sometimes in conjunction with some financial support such as grants – just as the UK did in its recent Help to Grow programme. Such programmes tend to be targeted at, and taken up by, firms that have a desire to grow or improve their productivity. The evidence base on the effectiveness of such programmes is growing, but this is another policy area where there has been a lot of chopping and changing in the UK, confusing businesses and hampering evaluation. **The Government should build on the existing £500m Help to Grow framework, expanding experimentation and evaluation within the continuity of the broad programme, so that it can draw robust conclusions on the specific design of interventions that can have a positive impact on businesses.**



## Higher investment will need resources from domestic savers or overseas

If the UK succeeds in raising its investment levels, then the resources for it will have to come from somewhere, and this can only be from higher domestic savings or, through a higher current account deficit, abroad. The reforms discussed above will make the UK more attractive for foreign direct investment (FDI) and other forms of external financing, but policy makers should also aim to finance part of the increase with higher domestic saving. This is because the UK's current account deficit is already large, and big deficits can create macroeconomic risks. Moreover, countries with high investment generally finance some of this through higher domestic savings, perhaps in part because capital is not fully internationally mobile, with some 'home bias'. The UK's national savings rate is extremely low – the second lowest in the OECD, and the savings rate of UK households is so low that, once they have invested in housing, no funds are left for net investment in businesses.

The only savings policy that has had a material impact on UK households' saving rates in recent decades is the introduction of auto-enrolment, which has seen the share of workers saving for a pension rise from 47 per cent in 2012 to 77 per cent in 2019.

**We recommend a phased increase in the minimum savings rate within auto-enrolment, specifically by levelling up the minimum contributions by both employers and employees to 6 percentage points,** a 50 per cent increase in the total and enough to finance a 'Living Pension'. This would raise aggregate savings in the UK and also help to address the separate problem of widespread insufficient saving for retirement.

## Stable and strategic growth policy for the long term

These policies will only work if they persist, and are expected to persist. One way of trying to achieve greater policy stability is through strengthening the institutions that govern growth policies. We propose a new Growth Act to establish an independent statutory body, the National Growth Board, that would report to the Cabinet Office. This body would build upon the previous Industrial Strategy Council, but be broader in scope and more permanent in its nature. Its powers would be analogous to the Climate Change Committee – advising government on a multi-year growth strategy and reporting on progress, with legislative and budgetary recommendations to meet growth ambitions. It would

co-ordinate the work of different growth, financing and investment arms of UK government which currently sit under the Treasury, and the Business, Science, Energy and 'Levelling Up' departments by issuing 'comply or explain' recommendations to their respective government departments. As well as helping to secure policies that increase the amount of investment in the UK, this institution would play a key role in shaping the nature of that investment via a strategic approach to policy that builds on the UK's strengths in services and certain areas of high value manufacturing including clean technologies. It could also help manage the crucial interactions and conflicts between different demands on land, helping to streamline planning policy in light of sustainable growth objectives.

Transforming the ecosystem for business investment in the United Kingdom will be arduous and complex, but it is necessary to return the UK to sustainable growth in living standards. **The reforms set out above will not be the end of the story, and must be enacted along with the overall strategic change that the Economy 2030 Inquiry recommends. But, taken together, they will move the UK from living off the past to investing for the future.**

## Section 1

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### The UK has a deep-seated investment problem

The UK has an investment problem. There is broad agreement that the stagnation in the UK economy is due in part to its low rate of business investment, a long-standing problem that has got much worse since 2016.

Investment cannot stay this low for much longer – only around one-third of our low business investment relative to our peers can be put down to our economic structure –and will need to rise if the UK’s economic growth rate is to accelerate and the net zero transition to proceed: major accelerations in GDP growth are around 9 times more likely if investment is also booming, and reaching the UK’s net zero target will require investment totalling around 2 per cent of GDP.

### The UK is a low investment nation

The UK economy is more than 15 years into a period of very low economic growth. Underlying this has been stagnant growth in labour productivity, which has caused incomes to stagnate and fall further behind those in neighbouring countries.<sup>1</sup> Labour productivity has grown just half a per cent per year since 2005, half the rate in the OECD as a whole. And productivity actually fell by 0.6 per cent in the four quarters to Q1 2023.

There are a wide range of views about the cause and extent of Britain’s productivity growth problem. But one area of broad agreement is the role played by the UK’s low investment rate, which our previous work has shown is an area where the UK stands out.<sup>2</sup> This report focuses on business investment – which comprises about 60 per cent of

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<sup>1</sup> Resolution Foundation & Centre for Economic Performance, LSE, [Stagnation nation: Navigating a route to a fairer and more prosperous Britain](#), Resolution Foundation, July 2022.

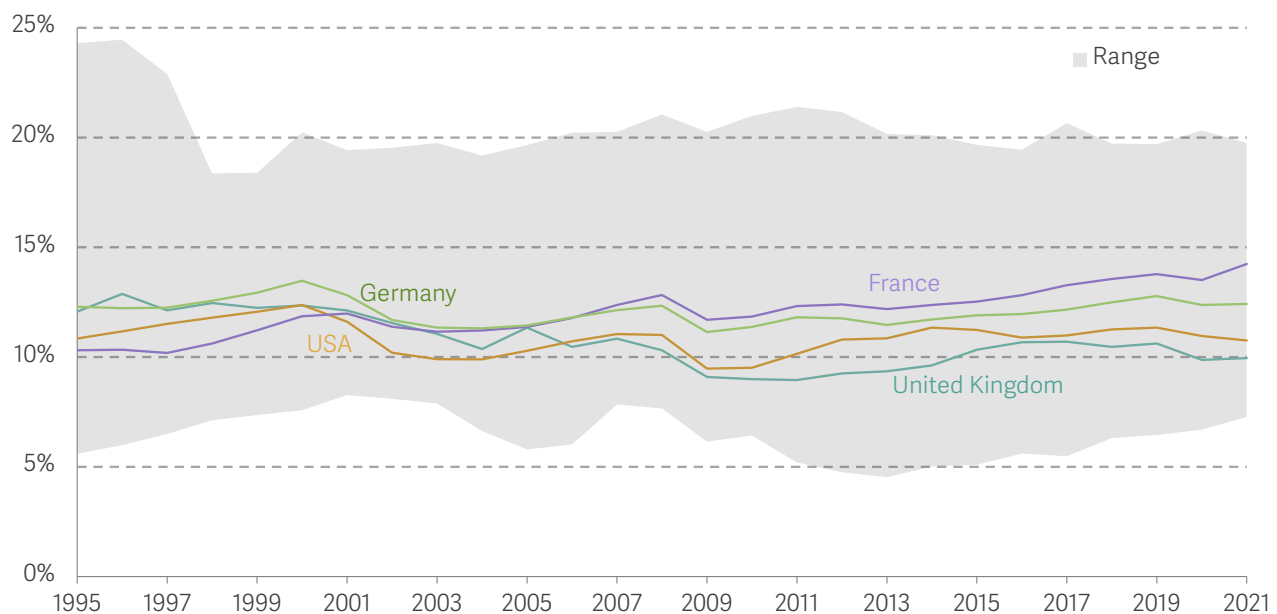
<sup>2</sup> J Oliveira-Cunha et al., [Business Time: How ready are UK firms for this decisive decade?](#), Resolution Foundation, November 2021.

total investment – and the crucial role of public sector investment has been covered in a companion report in the Economy 2030 Inquiry.<sup>3</sup>

In the years since the financial crisis, the UK's business investment rate – the fraction of GDP devoted by firms to building structures, buying machines and doing research and development – fell back from already the relatively low rate in the 2000s, leaving us further behind rates in comparable countries (see Figure 1). Among a set of 21 high-income OECD countries, the UK's share of business investment in GDP fell from 16th in 1995-2007 to 20th place in 2008-2021, ahead only of Greece.<sup>4</sup> Investing too little for one year is manageable, but doing so year after year is a recipe for relative decline.

**FIGURE 1: The UK business investment rate started falling in the late 1990s and is low by international standards**

Gross fixed capital formation of the corporate sector as a proportion of value added, by country: 1995-2020



NOTES: Range includes 'high income' OECD countries, specifically, Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, South Korea, Spain, Sweden, Switzerland, United Kingdom, United States.

SOURCE: Analysis of OECD, GFCF database.

It is true that the picture looks more promising on intangible assets – a concept that reflects “know-how” in businesses (see Box 1). Research and development (R&D) expenditure is a key example of intangible investment which is included in gross fixed

<sup>3</sup> F Odamtten and J Smith, *Cutting the Cuts*, Resolution Foundation, March 2023. Business investment which matters for growth (and society) directly, and also indirectly via complementarities with business investment across infrastructure, innovation and human capital.

<sup>4</sup> The set is Austria, Australia, Belgium, Canada, Switzerland, Germany, Denmark, Spain, Finland, France, Greece, Italy, Japan, South Korea, the Netherlands, Norway, New Zealand, Portugal, Sweden, the UK and the USA. This is the set of countries for which data are available from the OECD excluding former Communist countries, middle-income countries, very small countries and Ireland.

capital formation (and “capitalised” for the purposes of the national accounts). This is an area where UK businesses do better than previously thought; taking into account recent ONS restatements, overall investment in R&D as a share of GDP exceeds the OECD average, although still lags behind countries like the US and Germany.<sup>5</sup> And the UK underperforms by less if we include a broader set of intangible investments (such as market research and branding, or training) in our comparisons, although these are harder to measure and define, and therefore not normally included in national accounts data.<sup>6</sup> Nevertheless, if we consider the outcomes of intangible investments, we can see that there is room for improvement in the UK across areas that matter for productivity: the UK’s management practices are not best in class, and patenting intensity and digitisation in firms tend to be middling versus other advanced economies.<sup>7</sup> So it doesn’t seem likely that the UK’s performance on intangible investment makes up for its poor performance with respect to investment in tangible assets – underinvestment across both, together with skills, explains the UK’s productivity gaps with its key comparator countries.<sup>8</sup>

### BOX 1: What are intangible assets?

Intangible assets that measure a company’s ‘know-how’ are an increasingly important feature in today’s knowledge-based economies.<sup>9</sup> Some such intangibles are included, alongside tangible fixed capital investments, in the national accounts measure of investment (gross fixed capital formation). These include R&D, software, data and other innovative property. But other categories of intangible capital are not (see Figure 2). In general, these are areas where

the flow is harder to measure, or harder to measure as cumulating into a stock (for example, the flow of CEO time cumulating to a stock of organisational capital). But including broader intangibles can provide a more complete picture on investment intensity in advanced, service-based economies such as the UK. For this reason, the ONS and other statistical offices measure investment in intangibles as a complement to gross fixed capital formation in the national

<sup>5</sup> According to the latest OECD data, which includes revised UK data submitted by the ONS in February 2023, Gross Expenditure on R&D was 2.9 per cent of GDP in 2020, just above the OECD average of 2.7 per cent, but lower than the share in the US (3.5 per cent) and Germany (3.1).

<sup>6</sup> The UK market sector excluding agriculture invests 30 per cent of gross value added when including these broader intangible assets, this compares to 32 per cent in USA and 25 per cent in Germany.

<sup>7</sup> J Oliveira-Cunha et al., *Business Time: How ready are UK firms for this decisive decade?*, Resolution Foundation, November 2021.

<sup>8</sup> New work (J Van Reenen and X Yang, *Cracking the Productivity Code: A Comparative Analysis of UK’s Labour Productivity*, LSE, forthcoming) compares productivity gaps in levels between the UK and France, Germany and the US under different “boundaries” of capital investment, and concludes that the productivity gap in levels is due to insufficient investment in the factors that raise productivity; tangible and intangible capital (as well as skills). Differences in tangibles help explain the gap with all three countries, while differences in intangibles help explain the gap with the US in particular.

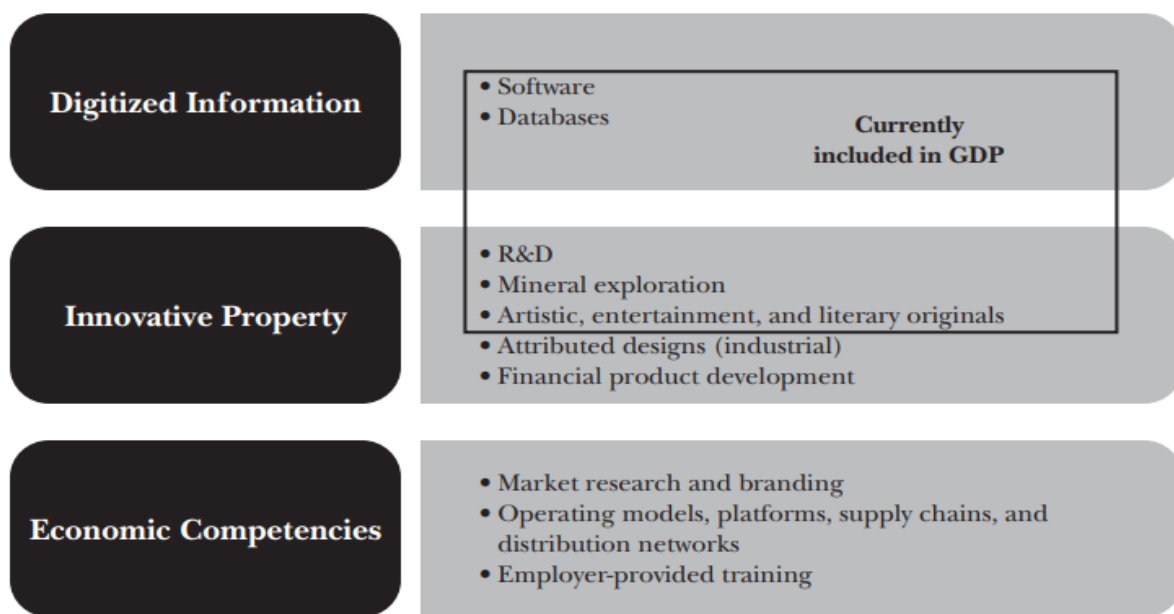
<sup>9</sup> C Corrado et al., *Intangible Capital and Modern Economies*, Journal of Economic Perspectives, Volume 36, Number 3, Summer 2022.

accounts; and recent advances have generated internationally comparable measures which can complement

comparisons based on national accounts.<sup>10</sup>

## FIGURE 2: Many forms of intangible investment are not measured in the national accounts

Intangible capital by broad categories and types of investment



SOURCE: C Corrado et al., *Intangible Capital and Modern Economies*, Journal of Economic Perspectives, Volume 36, Number 3, Summer 2022.

## Investment is unsustainably low and needs to rise

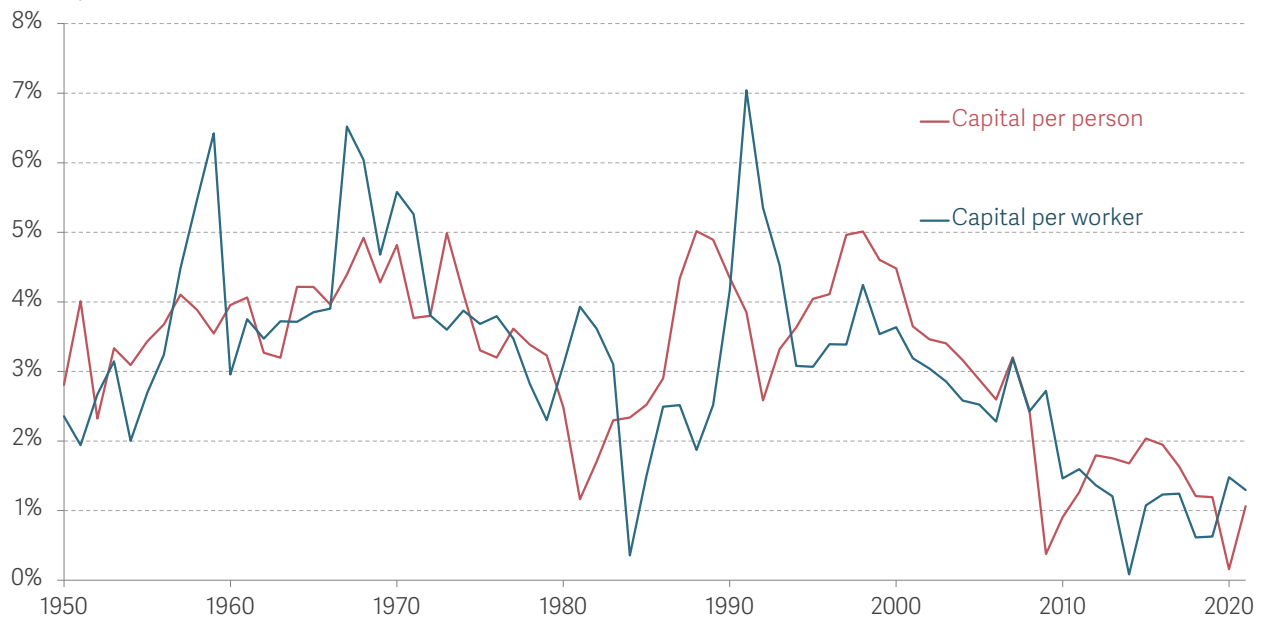
A business can get away without investing for the odd year – consuming previous money saved, and sweating assets accumulated in the past. But the UK's low rates of business investment have persisted for many years. When combined with lacklustre investment in the public sector, the result has been a marked fall in the rate of growth of capital per person or per employee, as shown in Figure 3 (in other words, the fall in the investment rate is not accounted for or offset by slower growth in population or employment).<sup>11</sup> Moreover, as we set out in more detail in Section 6, the counterpart to low domestic investment has not been the investment of savings abroad, as, for example, in Germany, but just very low saving.

<sup>10</sup> See the EUKLEMS & INTANProd database at [EUKLEMS & INTANProd - Luiss Lab of European Economics](#).

<sup>11</sup> Public investment is discussed in: F Odamtten and J Smith, *Cutting the Cuts*, Resolution Foundation, March 2023.

**FIGURE 3: The capital stock per worker or per person is growing more slowly than before**

Growth rate of whole economy non-dwellings capital services per worker and per person: UK



SOURCE: Analysis of Bank of England, A Millennium of Macroeconomic Data; ONS, Labour force estimates.

## The UK's sectoral composition does not explain its low investment rate

The UK's tradable output is highly concentrated in services: the UK is both the most services-specialised large economy in the world and the world's second-largest exporter of services in nominal terms.<sup>12</sup> This is sometimes taken to mean that the UK can get by as a weightless or 'investment-light' economy, or at least that it probably does more intangible investment that is not capitalised in the ordinary national accounts data, as discussed earlier. This is wrong, or at least overstated, for two reasons. First, although it is true that manufacturing is more capital-intensive than tradable services, the gap between these sectors is small in comparison to how they differ to other parts of the economy (see Figure 4). Moreover, both manufacturing and tradable services are relatively intensive in unc capitalised intangible assets – manufacturers have to do marketing too, for example. Second, most of the capital in the economy is in non-tradable or public sectors that provide final goods in their own right, or inputs to production in other sectors. Raising production and efficiency in the economy as a whole will therefore require more capital in non-tradable sectors which, by their nature, differ less in their composition across industrialised countries. Overall, only around one-third of the

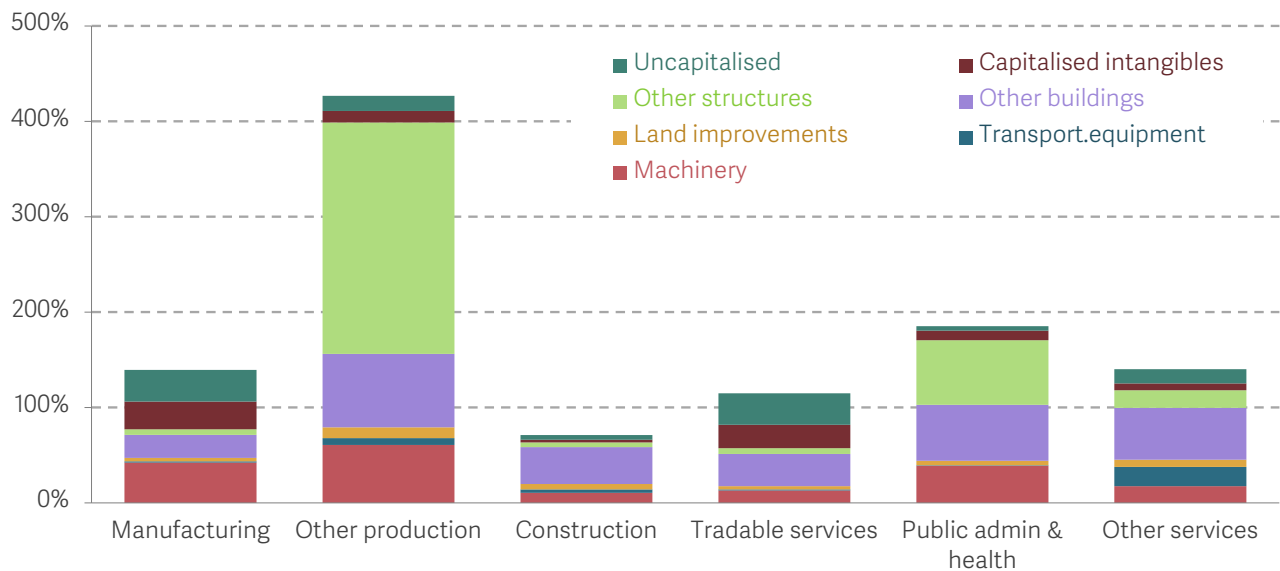
<sup>12</sup> J De Lyon et al., *Enduring Strengths: Analysing the UK's current and potential economic strengths, and what they mean for is economic strategy at the start of the decisive decade*, Resolution Foundation, April 2022.



shortfall in the UK's business investment rate compared to France, Germany and the US is attributable to differences in the sectoral composition of the UK economy.<sup>13</sup>

**FIGURE 4: Manufacturing and tradable services both use lots of uncapitalized intangible capital**

Capital stock as a proportion of gross value added, by asset type and sector group: UK, 2021



NOTES: Excludes real estate.

SOURCE: Analysis of ONS, Sector Value-Added and EU-KLEMS 2023 Release.

The UK's investment rate is low in spite of high inward foreign direct investment

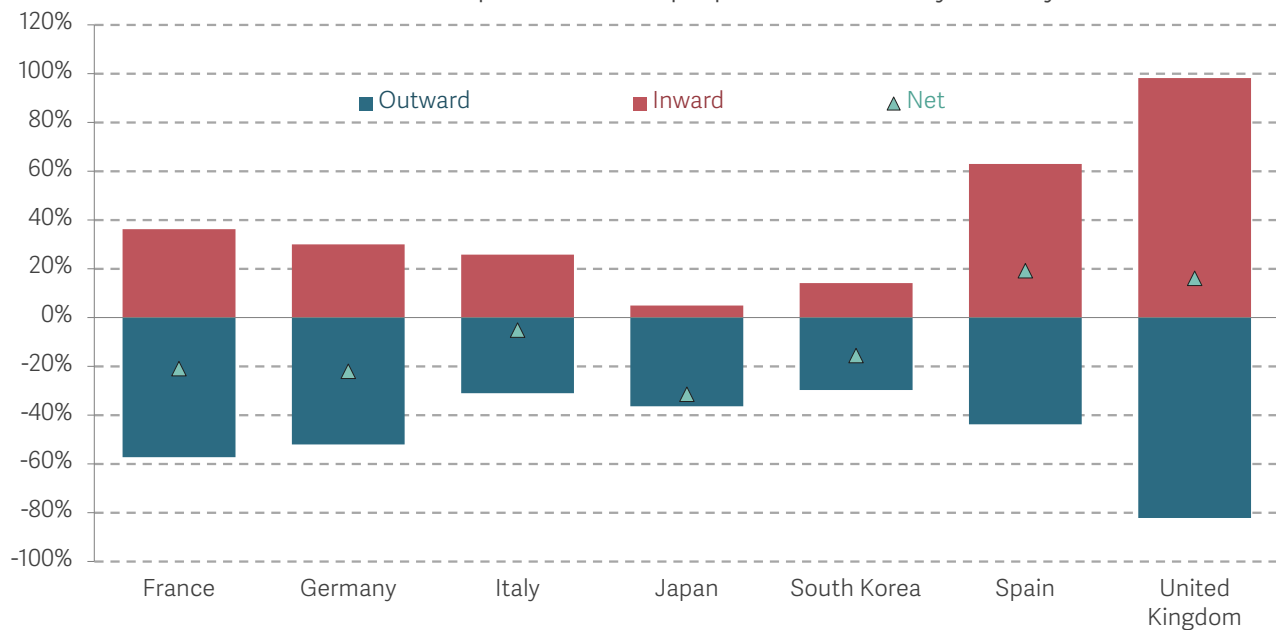
One aspect of investment in which the UK has done well in the past is inward foreign direct investment (FDI), whereby foreign entities acquire substantial stakes or control in UK firms. The stock of UK-inward FDI as a share of GDP substantially exceeds that in other middle-sized high-income economies (Figure 5), with inflows holding up well in the first few years since the Brexit referendum in 2016.<sup>14</sup>

<sup>13</sup> See Figure 24, in J Oliveira-Cunha et al., *The business response to Covid-19 one year on: findings from the second wave of the CEP-CBI survey on technology adoption*, November 2021.

<sup>14</sup> S Bhalotia et al., *Trading Up: The role of the post-Brexit trade approach in the UK's economic strategy*, Resolution Foundation, June 2023.

**FIGURE 5: The UK has a large stock of both inward and outward FDI**

Gross inward and outward FDI positions, as a proportion of GDP, by country: 2020



NOTES: FDI positions represent the value of the stock of direct investments held at the end of a reference period.

SOURCE: Analysis of OECD: Most recent FDI statistics for OECD and G20 countries, updated on 20 April 2023.

There is substantial evidence that foreign-controlled firms are often highly productive and can bring know-how and skills to the host economies.<sup>15</sup> In this sense, the UK's success in attracting FDI is to be welcomed. But FDI may not add substantially to the UK domestic capital stock, for two main reasons. First, FDI often represents purchases of or loans to existing UK corporate entities rather than new 'greenfield' investments, and in this sense is best thought of as a means of financing. Second, UK FDI outflows are also high. These outflows are also often benign, facilitating valuable subsequent inflows of property income into the UK, but, all other things equal, outflows of FDI represent a reduction in the financial resources available for capital investment in the UK.

For these reasons – the fact that the UK is not yet underachieving in FDI, and the indirect link to higher domestic investment – this report does not deal in detail with the issue of FDI, which will be covered in more detail elsewhere in the Economy 2030 Inquiry in light of changes to the UK's openness post-Brexit.

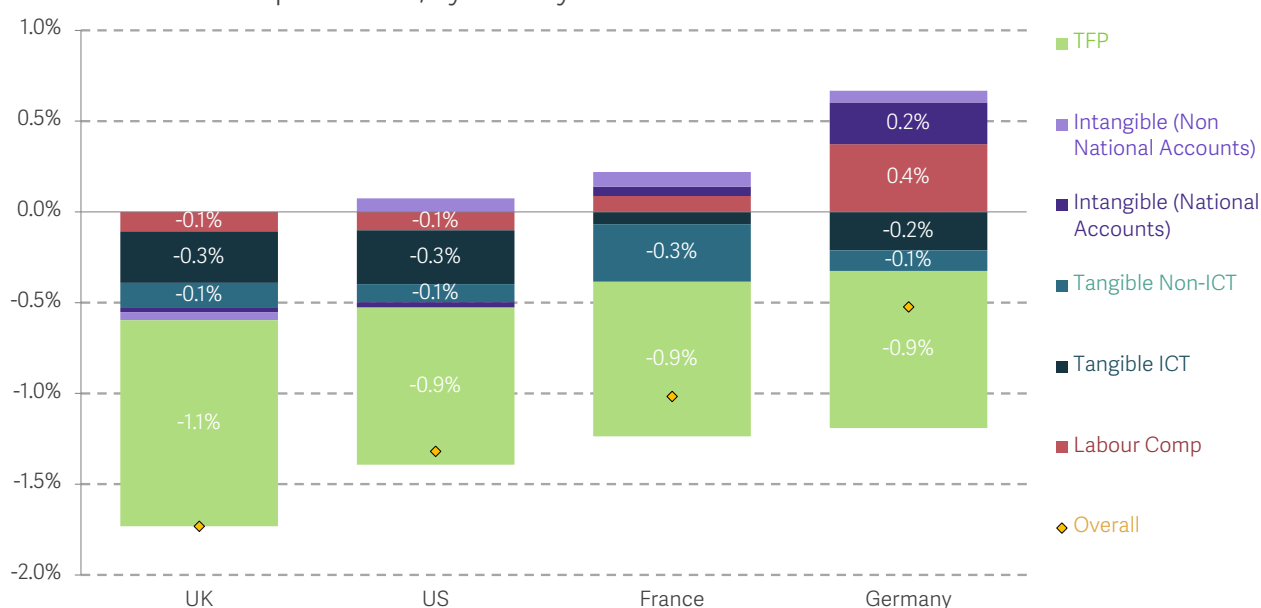
<sup>15</sup> See, for example, G Awano, *Foreign direct investment and labour productivity, a micro-data perspective: 2012 to 2015*, ONS, 2017; N Bloom et al., *Americans Do IT Better: US Multinationals and the Productivity Miracle*, American Economic Review, 2012; and J Haskel et al., *Does Inward Foreign Direct Investment Boost the Productivity of Domestic Firms?*, Review of Economics and Statistics, 2007.

## Investment in productivity-enhancing capital and ideas in businesses will be key to restoring growth

The UK's poor productivity performance since the financial crisis relative to its own past and comparator countries is well documented.<sup>16</sup> A decomposition of the slowdown of labour productivity growth before and since the financial crisis (Figure 6) in the UK and key comparators shows that weak investment, particularly in tangible assets, has been a key area in the latter period in the UK.<sup>17</sup> All countries, including the UK, saw a large fall in total factor productivity (TFP) growth following the financial crisis (though the UK's fall was the largest), but the fall in the contribution from capital investment – across both tangible and intangible assets – was particularly large in the UK.

**FIGURE 6: Investment and total factor productivity both drove productivity growth lower in the UK after 2008**

Change in the average annual growth in gross value added per hour and contribution from factors of production, by country: 1996-2007 & 2008-2019



NOTES: Labour composition refers to the distribution of hours worked in an economy across different industries.

SOURCE: Analysis of EUKLEMS, 2023 Release.

Furthermore, the contribution from human capital accumulation (i.e. labour composition) fell in the UK, while it increased in France and Germany. Overall, investment contributed around 1.1 per cent of the UK's average annual productivity growth before the financial

<sup>16</sup> See: J Oliveira-Cunha et al., *Business Time: How ready are UK firms for this decisive decade?*, Resolution Foundation, November 2021 and Resolution Foundation & Centre for Economic Performance, LSE, *Stagnation nation: Navigating a route to a fairer and more prosperous Britain*, Resolution Foundation, July 2022.

<sup>17</sup> Note that this analysis is consistent with the findings of Van Reenen and Yang in forthcoming work (J Van Reenen and X Yang, *Cracking the Productivity Code: A Comparative Analysis of UK's Labour Productivity*, LSE, forthcoming) who provide two decompositions, one using 'national accounts'- consistent data, and the other using the uncapitalised intangible assets in the breakdown as we have done here.

crisis, but only 0.7 per cent afterwards (and we discuss the contribution of Brexit to this in the next Section). Over 11 years, 0.4 percentage points per year cumulates to a shortfall in potential supply of 4.4 per cent of GDP.<sup>18</sup>

In an accounting sense, the quality and quantity of inputs such as capital and skills are important determinants of long run economic growth.<sup>19</sup> Over shorter horizons, TFP tends to play a bigger role in growth fluctuations. Investment is both cause and effect of improvements in TFP: the new processes and ideas that TFP embodies are often implemented with new capital, which is in turn purchased and installed in order to make these processes possible.<sup>20</sup> In this sense, decompositions of labour productivity growth between capital deepening and TFP miss the fact that these two components can drive each other.

Sectoral decompositions of the UK's productivity slowdown show that much of the slowdown can be attributed to high value-added, intangible-intensive sectors: in particular, pharmaceuticals, transport equipment, and computer software and telecommunications.<sup>21</sup> Such sectors are generally considered to be strengths of the UK, and are important as part of a new economic strategy for the UK.<sup>22</sup>

It is clear, then, that getting businesses investing in tangible and intangible assets, and improving innovation, will be key to restoring sustained productivity growth and hence living standards in the UK. Moreover, when we look at episodes of accelerating economic growth among industrialised economies, investment seems to play a crucial role. A standard classification of 'growth accelerations' is to look for periods where real GDP per person growth over a long period (e.g. 8 years) is high (greater than 3 per cent annualised), has accelerated the last 8 years by more than two percentage points, and has delivered a new high in the level of real GDP per person.<sup>23</sup> Investment booms are strongly associated with these growth accelerations: a classification model suggests that

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<sup>18</sup> The contribution of intangible capital investment held up quite well in the UK, and it is the tangible investment (IT and non-ICT) that has suffered. There was also a fall in the contribution of fixed capital investment in the US, France and Germany, but these countries all saw an increase in the contribution of intangibles after 2008, implying less of a slowdown on capital investment on aggregate.

<sup>19</sup> See F Caselli, [Growth Accounting](#), The New Palgrave Dictionary of Economics, January 2018

<sup>20</sup> See P Goodridge and J Haskel, [Accounting for the slowdown in UK innovation and productivity](#), The Productivity Institute, June 2022

<sup>21</sup> See: D Coyle and J Mei, [Diagnosing the UK Productivity Slowdown: Which Sectors Matter and Why?](#), The Productivity Institute, April 2022, and: P Goodridge and J Haskel, [Accounting for the slowdown in UK innovation and productivity](#), The Productivity Institute, June 2022.

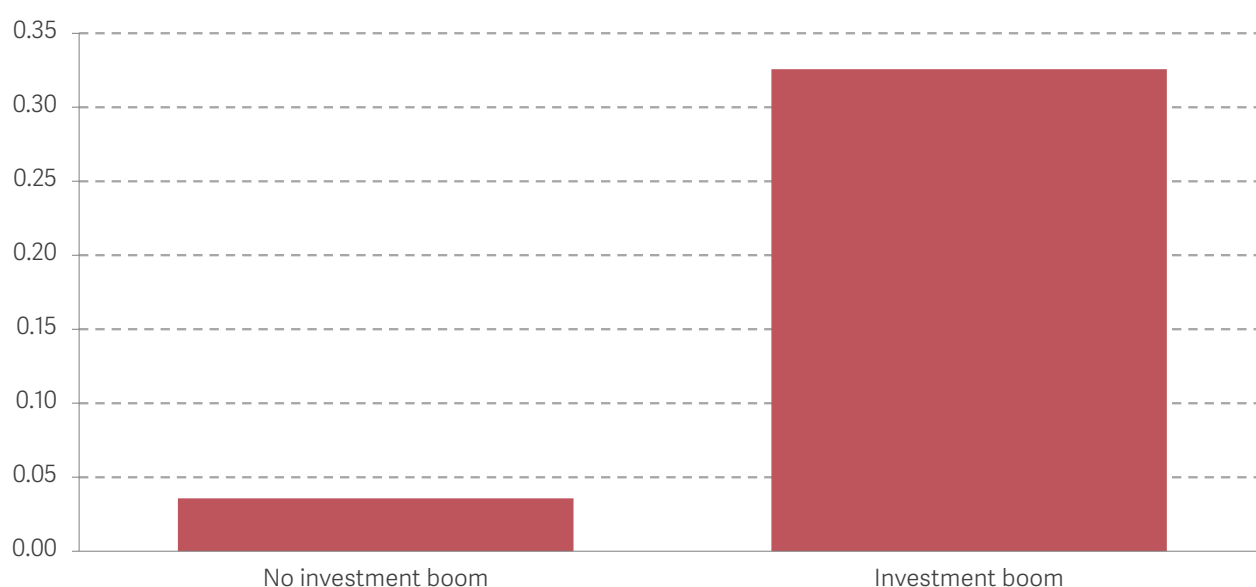
<sup>22</sup> For analysis of the UK's comparative strengths, see: J De Lyon et al., [Enduring Strengths: Analysing the UK's current and potential economic strengths, and what they mean for is economic strategy at the start of the decisive decade](#), Resolution Foundation, April 2022.

<sup>23</sup> R Hausmann, L Pritchett & D Rodrik, [Growth Accelerations](#), Journal of Economic Growth, 2005.

the odds of experiencing a growth acceleration are around 9 times larger when there is an investment boom (see Figure 7).<sup>24</sup>

### FIGURE 7: Growth accelerations are much more likely with investment booms

Probability of growth accelerations with or without an investment boom: OECD countries plus China and India, 1950-2019



NOTES: Investment booms are defined as net investment growth (growth in capital stock per person) over an 8-year period increasing by 5 percentage points (the 75th percentile of investment accelerations in our dataset). We use total capital rather than business capital in order to get a large sample of countries over time.

SOURCE: Analysis of University of Groningen, Penn World Table 10.01.

Another way to illustrate the need for investment is to consider what is the UK's shortfall in national accounts business investment relative to the US, France and Germany since 2008 has done to potential GDP. A simple production function approach would suggest that a 2 percentage point increase in business investment per year would leave the business sector capital stock around one quarter larger after 14 years (given depreciation of that extra capital and growth in other production factors), enough to boost potential GDP by 3.8 per cent – worth an extra £1,250 on yearly wages.<sup>25</sup>

<sup>24</sup> Analysis of University of Groningen, Penn World Table 10.01. Note that this dataset does not distinguish between the investment of different sectors. There are a few examples of growth accelerations occurring without an investment boom in our dataset, but the vast majority fall into two buckets: the first is when the timing of investment booms do not match up for the initial year of a growth acceleration (for example: in Australia in 1989 and Finland in the late 1990s); the second is periods where investment does accelerate but does not meet our threshold for its classification as a boom but would if this threshold were lowered to exceeding the median historical investment acceleration (for example: the UK in 1989 and New Zealand in 1968).

<sup>25</sup> According to ONS capital stocks and Blue Book data, the business sector capital-output ratio is about 1.6 and the business sector comprises around 2/3 of GDP. GDP grew an average of 1.1 per cent per year between 2008 and 2022. Assuming that the capital stock depreciates by 6 per cent per year, then 2 per cent of GDP in business investment amounts to 18 per cent of 2022 GDP, around 17 per cent of the business sector capital stock. Assuming an output elasticity of 1/3, this results in 5.6 per cent higher business sector output (supply), or 3.8 per cent higher GDP.

In fact, the UK got lucky in recent years, with an increase in the supply of labour helping to offset the stagnant productivity growth (around 1.1pp of the 1.7 per cent average annual GDP growth between 2010 and 2019 is estimated to come from increased labour supply).<sup>26</sup> But the Bank of England currently expects labour supply to contribute much less to growth over the future – around 0.2 percentage points per year during 2023-25. Whilst policy can and should act to boost labour supply, it will be doing so in the face of continued headwinds from demographics, population health and lower reliance on immigration in light of Brexit. This makes an increase in labour productivity growth and hence investment in capital and innovation, even more important.

### Substantial investment and innovation are also required for net zero

Substantially higher rates of investment will also be required to meet the UK's commitment to net zero. The CCC estimates that the least costly way to net zero will require additional annual investment of over £50 billion by 2030, as shown in Figure 8.<sup>27</sup> Large-scale investments are needed across the economy, but particularly in electricity supply, residential buildings and surface transport. Public sector investment will, of course, be crucial in a number of areas, but the majority of finance is expected to come from the private sector (around three-quarters overall, according to OBR estimates, but varying across sectors).<sup>28</sup>

New technologies are central to this story, with 84 per cent of the UK's decarbonisation to 2035 requiring low carbon technologies or fuels, either alone or in combination with behaviour change.<sup>29</sup> In general, net zero investments are expected to be high-return investments, generating efficiency and cost savings over time, and also broader economic benefits associated with energy security and resilience, improved health and via the potential for capturing opportunities for UK businesses to serve growing global demand for relevant products and services. Indeed, our previous analysis has highlighted the UK's comparative strengths in a number of net zero products and services which could be leveraged as part of a targeted sustainable growth strategy in the UK, albeit in an increasingly competitive international context, given the Inflation Reduction Act in the US and EU Green Deal Industrial Plan (this new context is discussed in the next section).<sup>30</sup>

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<sup>26</sup> See Figure 1 in L. Murphy and G. Thwaites, *Post-pandemic participation, Exploring labour force participation in the UK*, Resolution Foundation, February 2023.

<sup>27</sup> CCC, *Sixth Carbon Budget Dataset*, 2020.

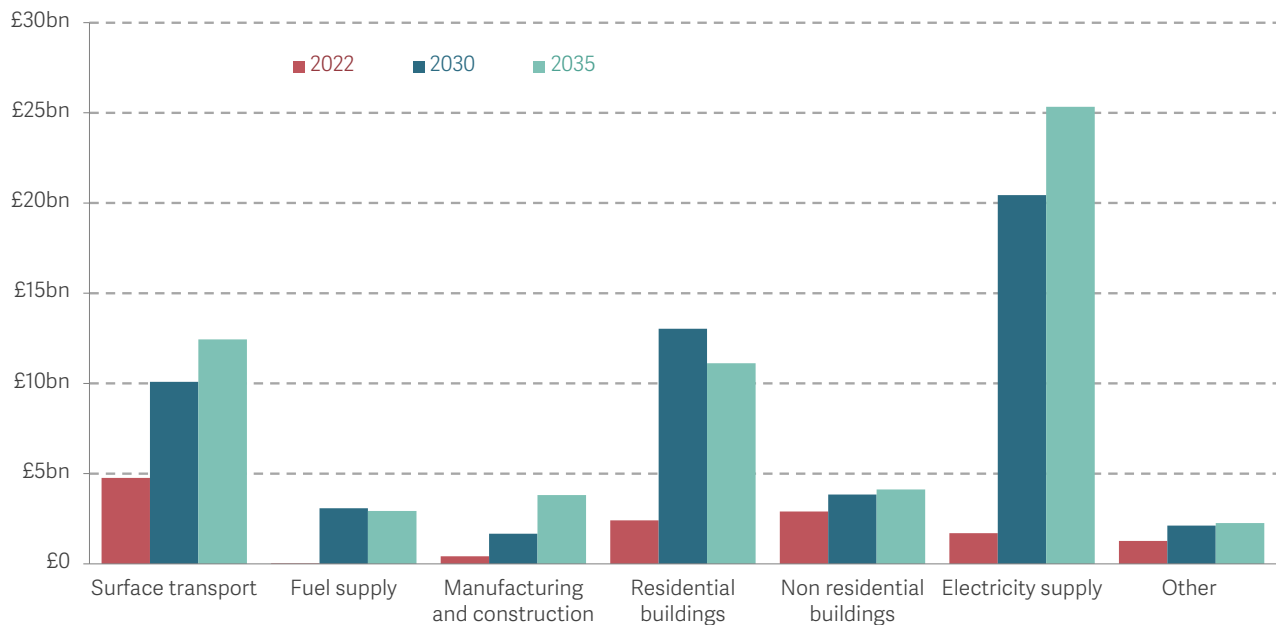
<sup>28</sup> For example, the public sector is expected to play a larger role in greenhouse gas removals, non-car transport and infrastructure and buildings, and a smaller role in the power sector. See OBR, *Fiscal Risks Report*, July 2021.

<sup>29</sup> CCC Sixth Carbon Budget Advice Report, Figure B2.2.

<sup>30</sup> B. Curran et al., *Growing Clean: Identifying and investing in sustainable growth opportunities across the UK*, Resolution Foundation, May 2022.

**FIGURE 8: Substantial investments are required to meet net zero**

Annual additional capital investment needed to deliver net-zero: UK, 2022-2035



NOTES: Other = Agriculture, aviation, shipping, waste, F-gases, LULUCF &amp; removals.

SOURCE: CCC, Sixth Carbon Budget Dataset, 2020, taken from B Curran et al., Growing Clean: Identifying and investing in sustainable growth opportunities across the UK, Resolution Foundation, May 2022.

It is tempting to believe that all mature economies must stagnate in the way the UK has. It is certainly true that investment rates tend to fall as the technological and demographic drivers of economic growth abate.<sup>31</sup> But the gap in both GDP and investment rates between the UK and comparable but richer countries is large and growing. Neither relative decline nor low investment are inevitable features of mature industrialised economies. The UK closed 70 per cent of the productivity gap with the US between 1970 and 2001, and half the gap with France and Germany between 1994 and 2006. As recently as 2004, the UK's business investment rate was in the middle of the pack of comparable countries. But to get back to this, substantial change is required. This is the topic of this report:

- Section 2 describes what a strategic approach to business is and is not
- Section 3 sets out reforms to raise UK firms' willingness to invest
- Section 4 looks at reforms improving firms' ability to invest
- Section 5 focuses on reforms support for small, high-growth firms
- Section 6 tackles where the resources for higher investment will come from, along with institutional reforms to make policy more pro-investment in the long run.

<sup>31</sup> To stabilise the capital-output ratio, the investment rate must be proportional to the sum of the depreciation rate on the capital stock and the growth rate of GDP, which is in turn influenced by population growth and technology.



## Section 2

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### A strategic approach to business investment

A key reason for the UK's low rate of business investment is the absence of an economic strategy for the UK. There have been substantial disagreements in recent years on what the UK economy should look like and how it should be run, and the resulting uncertainty has held back business investment, even though the average rate of profit on capital seems high. But a return to economic and policy stability is not sufficient to fix the UK's investment problem: investment started falling years before the post-GFC instability began.

A new economic strategy needs to place net zero at its heart, but simply transposing the new US system of green subsidies – even if that were feasible – would also not be sufficient. A new, broader strategy is necessary, co-ordinating policies to address a variety of barriers to investment in long-term productive and sustainable assets in the UK.

The evidence in Section 1 suggests that a material acceleration in long-run, sustainable UK GDP growth is highly unlikely to come about without an increase in investment rates. This Section explains the nature of the change that will be necessary to bring this about. In particular, academic work on 'growth diagnostics' emphasises that policymakers seeking to increase investment and GDP should look first to relax the most binding constraints on investment.<sup>32</sup> For example, if returns on investment are low, then relaxing financing constraints on firms will not increase investment, because low prospective returns, rather than a shortage of finance, are the most binding constraints. In contrast, if returns are high, it is more likely that constraints are holding back the realisation of profitable investment. Below, we show what this sort of assessment implies for the UK.

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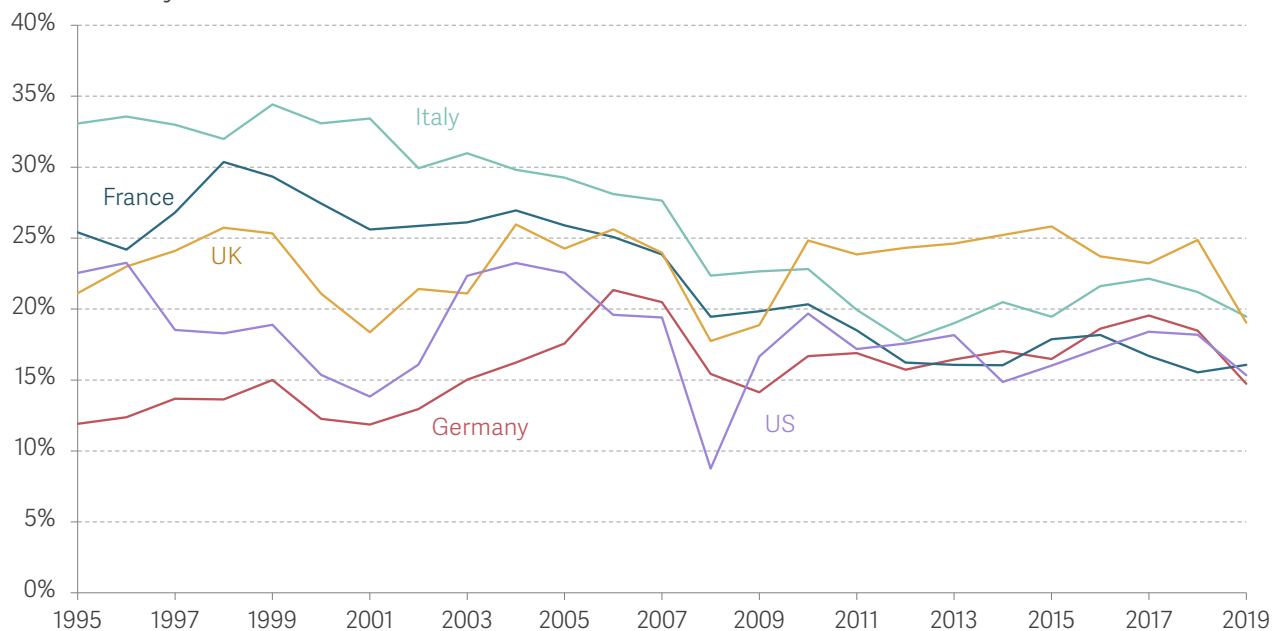
<sup>32</sup> D Rodrik et al. [Growth Diagnostics](#), 2005.

## The UK's low rate of investment does not reflect low returns

First, Figure 9 shows that pre-tax average returns on capital in the UK have been high compared to other countries. Past average returns may be a poor guide to future marginal returns if, for example, structural changes such as Brexit mean that the future will be materially different to the past, or if returns and profits are sharply diminishing when investment is increased. But high profits suggest that there are socially worthwhile investment opportunities in the UK that firms are being constrained or dissuaded from exploiting.

**FIGURE 9: The UK capital stock has been relatively profitable**

Aggregate rate of return on investment for market sector (excluding agriculture), by country: 1995-2019



NOTES: Return on capital is measured as GVA less the wage bill and depreciation, this is divided by the total capital stock to produce a rate of return. Accounting for the flow of uncapitalised intangible investments results in a similar profile.

SOURCE: Analysis of EUKLEMS, 2023 Release.

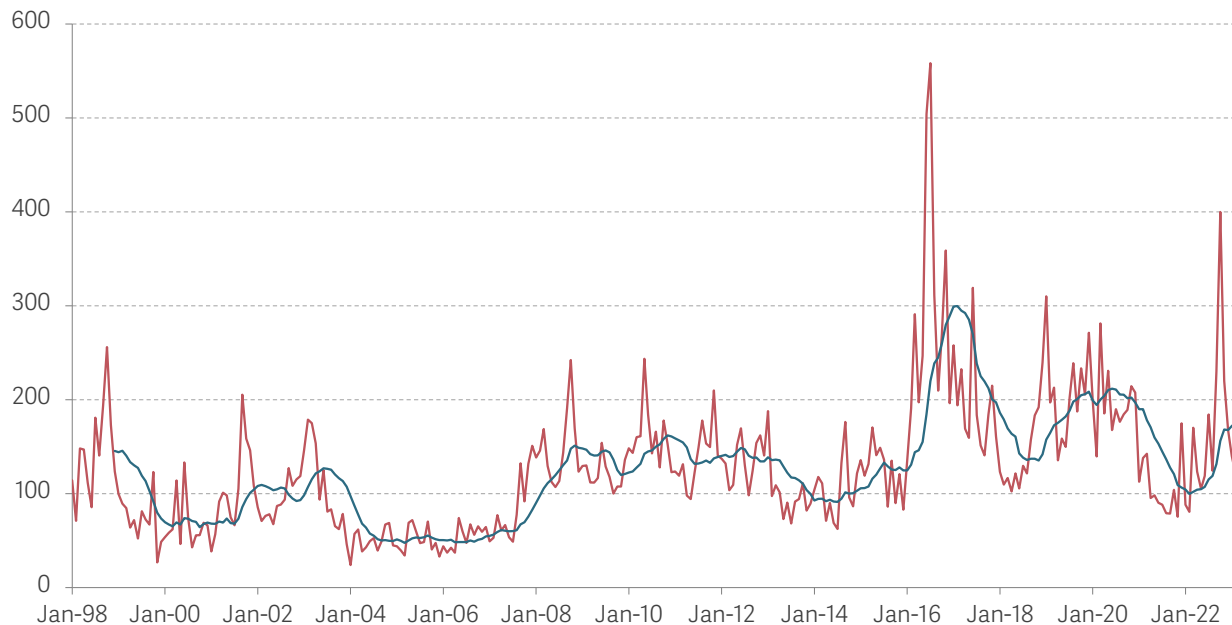
## Economic and policy stability have been lacking

Although realised returns on capital appear to have remained high, it is possible that firms' expectations of risk-adjusted returns have declined, and that this has dampened incentives to invest. There is substantial evidence that elevated uncertainty, both at the level of individual firms and in the aggregate economy, is associated with reduced

investment.<sup>33</sup> Figure 10 provides an illustration of how economic policy uncertainty has developed during the past 25 years, and shows how this reached progressively higher levels following the financial crisis and after the EU referendum result.

**FIGURE 10: Policy uncertainty has remained elevated in recent years**

Index of economic policy uncertainty, monthly and 12-month moving average: UK, 1998-2023



NOTES: Blue line plots the 12-month moving average of the monthly policy uncertainty index.

SOURCE: [www.PolicyUncertainty.com](http://www.PolicyUncertainty.com) (for the underlying methodology, see: S Baker, N Bloom & S Davis, *Measuring Economic Policy Uncertainty*, The Quarterly Journal of Economics, November 2016).

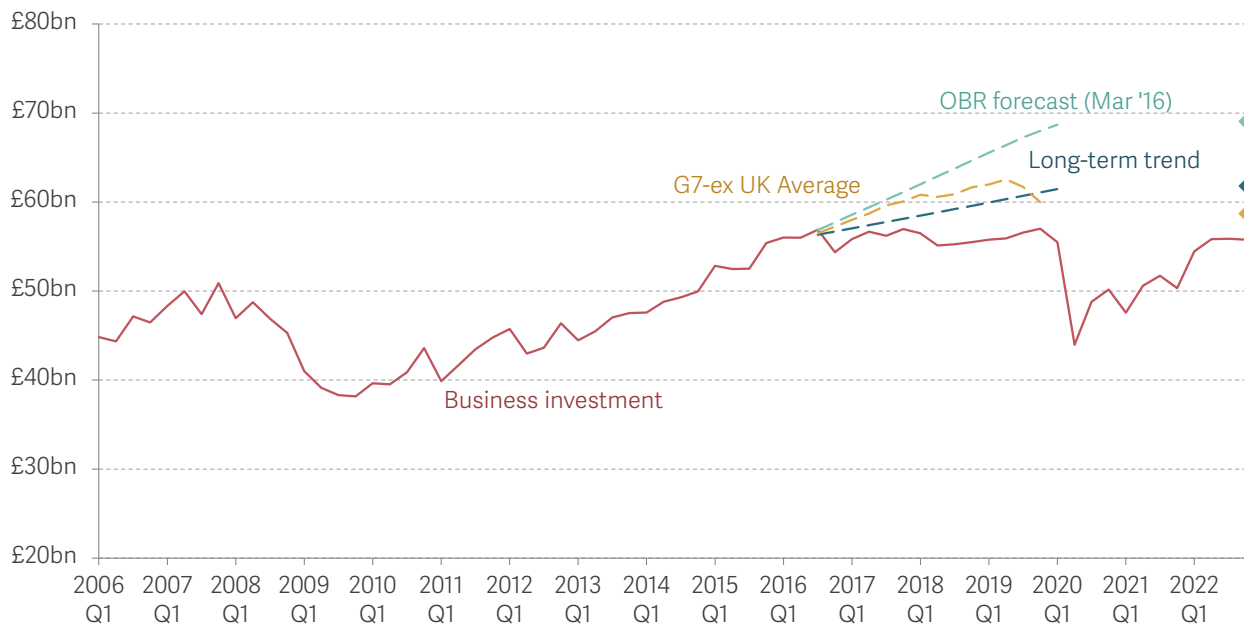
In the UK, economy-wide policy uncertainty due to macro-level shocks and changes in government has taken several forms. At the macro level, uncertainty jumped up around the time of the EU referendum. Since then, Figure 11 shows that investment has underperformed a range of possible counterfactuals: at the start of the pandemic, investment was 10 per cent lower than levels suggested by the long-term trend, 20 per cent lower than levels forecast by the OBR in March 2016 and 5 per cent lower than if real investment had grown at the same rate as in the rest of the G7.<sup>34</sup> Spikes in uncertainty can also be seen at the onset of the pandemic, and during the mini Budget in September 2022.

<sup>33</sup> See, for example: S Baker, N Bloom & S Davis, *Measuring Economic Policy Uncertainty*, The Quarterly Journal of Economics, November 2016; N Bloom, S Bond & J Van Reenen, *Uncertainty and Investment Dynamics*, Review of Economic Studies, 2007; N Bloom et al., *Investment and Subjective Uncertainty*, BFI Working Paper Series, 2022; T Hassan et al., *Firm-Level Political Risk: Measurement and Effects*, Quarterly Journal of Economics, 2019. S Kumar, Y Gorodnichenko & O Coibion, *The Effect of Macroeconomic Uncertainty on Firm Decisions*, Econometrica, forthcoming, provides evidence of the causal impact of uncertainty on investment using a survey of firms and randomised informational treatments.

<sup>34</sup> One estimate is that the referendum result reduced investment by 11 per cent over three years, reducing productivity by 2-5 per cent. N Bloom et al., *The impact of Brexit on UK Firms*, Bank of England Staff Working Paper No. 818, August 2019.

**FIGURE 11: The Leave vote coincided with a sudden stop in the growth of business investment**

Real business investment outturn, and post-referendum counterfactuals: UK, 2006-2022



NOTES: Dotted lines use prior historical trend, OBR March 2016 EFO forecast and G7 (excluding the UK) outturn investment rates to extend Q1 2016 real business investment to Q1 2020. The diamonds show the level of investment for each of these counterfactuals in Q1 2022 assuming the post-pandemic recovery was proportionally the same as in the outturn data.

SOURCE: Analysis of ONS, Quarterly National Accounts; OBR, Economic and Fiscal Outlook March 2016 and March 2023.

Business and growth policies have also seen a lot of change. For example:

- Since 2010, the UK has had nine business secretaries, four versions of its business department, and a series of industrial policies, strategies or growth plans – each meant to be for the long term. Some of these have provided explicit focus on the development of particular technologies or sectors in the UK, and others have been hesitant to set out this type of active approach.<sup>35</sup>
- Corporation tax has changed almost every year since 2010.<sup>36</sup>

<sup>35</sup> G Wilkes, *Business investment: Not just one big problem*, August 2022.

<sup>36</sup> IFS, *Spring Budget 2023 response*, March 2023.

- A series of past reversals or withdrawals of support for key technologies for net zero (for example: energy efficiency in homes,<sup>37</sup> cancellations of two major Carbon Capture Usage and Storage competitions,<sup>38</sup> and changes in support for the development of onshore wind and solar farms<sup>39</sup>).
- A number of national business support policies which sought to help smaller firms overcome barriers to investment and innovation have been terminated abruptly (for example, the Growth Voucher program was launched in 2014 and terminated in 2015,<sup>40</sup> and the Help to Grow Digital program was launched in 2021 and terminated in 2022<sup>41</sup>).

## The UK needs an economic strategy that lasts

But, although stability is necessary, it is not sufficient. As Figure 1 showed, the UK business investment rate fell throughout much of the early 2000s before the financial crisis, which was a period of relative macroeconomic and policy stability. We should, therefore, not expect a return to stability to be sufficient to see investment and GDP growing again.

This is because the underlying reason for both policy volatility and low investment in the UK has been the lack of a comprehensive economic strategy. Despite widespread agreement on some high-level components – free trade, improved skills, the transition to net zero and, indeed, the need for higher business investment – there is also fundamental disagreement about where the UK economy should be headed and how to get there. Should the UK reindustrialise, or pursue services-led growth? Is free trade best achieved by lowering barriers with the EU, or elsewhere? Should the UK cut taxes and deregulate to be ‘Singapore-on-Thames’, raise taxes to keep the welfare state in broadly its current shape in the face of pressures from demographics and higher interest rates, or attempt a more ambitious extension of taxation and regulation towards European norms? Should the UK have an explicit industrial strategy setting out priority sectors or technologies, and what should it look like? What this broader economic strategy should look like is the subject of the Economy 2030 Inquiry, set out in this and companion papers, and brought together in our forthcoming Final Report.

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<sup>37</sup> A drop off in home insulation installations began in 2013 with decisions to reduce public funding for energy efficiency schemes, and to switch from a regulatory to a demand-led strategy, see A Corlett and J Marshall, [Shrinking Footprints: The impacts of the net zero transition on households and Consumption](#), Resolution Foundation, March 2022.

<sup>38</sup> For further discussion, see E Serin et al., [Seizing sustainable growth opportunities from carbon capture, usage and storage in the UK](#), Centre for Economic Performance - Grantham Research Institute, September 2021.

<sup>39</sup> Most recently, these are areas where there have been differences in approach across successive Prime Ministers. For example, during the Conservative Party leadership campaign in the Summer of 2022, Rishi Sunak opposed the easing of planning restrictions for onshore wind, while Liz Truss supported this. As Prime Minister, Rishi Sunak has moved towards lifting the de facto ban on onshore wind (see J Pickard, [Sunak moves to lift de facto ban on onshore wind farms in England](#), FT, December 2022) but this issue is still unclear. There have similarly been differences in opinion and uncertainty around restrictions to solar farm development.

<sup>40</sup> DBIS, [Growth Vouchers programme](#), February 2016

<sup>41</sup> DBEIS, [Final opportunity for businesses to access Help to Grow: Digital scheme](#), December 2022

An important component of a new economic strategy will be to develop a UK response to the US Inflation Reduction Act (IRA) (see Box 2) and its EU analogue, the European Green Deal. A strong response is necessary to ensure that investments for net zero and energy security are made, necessary capabilities built, and that economic opportunities associated with the UK's clean-tech strengths are realised. The UK can learn from the stability and certainty provided by the IRA over a ten-year period, but its response must recognise differences in its context. In particular, the UK's unique mix of comparative advantages, its smaller domestic market size, fiscal constraints which limit the ability for the UK to compete in terms of the scale of support, and – in comparison with the US – the greater (political) ability to use other levers to steer private sector investment towards net zero (in particular, regulatory levers such as the regulated phase-out of high-carbon technologies, and carbon pricing at the national level).<sup>42</sup> Trade relationships will be a crucial component of the UK's economic strategy, and the recent Atlantic Declaration is a promising move towards giving UK firms access to US subsidies in certain areas.<sup>43</sup> The role of the post-Brexit trade approach in the UK's economic strategy – recognising the UK's strengths as a service “superpower” – is discussed elsewhere in the Inquiry.<sup>44</sup>

Even if it were feasible, a simple transposition of the IRA to the UK would be unlikely, on its own, to address the UK's investment and growth challenges. Estimates of the impacts of the IRA on US investment help to illustrate this point. An uplift of around \$28 billion per year (over ten years) is predicted in electric power, transmission and distribution, representing a substantial (20 per cent) increase in investment in these areas, but a small increase relative to the size of the economy (around 0.13 per cent of GDP).<sup>45</sup> Given that tax credits for clean electricity and storage account for around a third of the estimated costs of the IRA's climate provisions, and assuming a similar uplift in other areas, the overall increase in the investment rate would be around 0.4 per cent. Assuming similar impacts if comparable incentives were offered in the UK, this would close around 20 per cent of the gap in business investment between the UK and its peers – an important contribution, but unlikely to be sufficient to solve its growth problems.

More fundamental change – across the economy – will be required to make UK business more willing and able to invest at the levels needed for a return to robust economic growth. The next Section of this paper proposes policy changes to make businesses more willing to invest in long-term productive and sustainable assets, covering corporate governance, and within this, the special role of pensions, and the corporate tax system.

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<sup>42</sup> L Murphy, [Winning the global green race: Lessons for the UK from the US' Inflation Reduction Act](#), IPPR, March 2023.

<sup>43</sup> See, for example: S Francis, [Rishi Sunak and Joe Biden announce green funding agreement](#), BBC, June 2023.

<sup>44</sup> S Bhalotia et al., [Trading Up: The role of the post-Brexit trade approach in the UK's economic strategy](#), Resolution Foundation, June 2023.

<sup>45</sup> J Bistline et al., [Economic Implications of the Climate provisions of the Inflation Reduction Act](#), NBER Working Paper Number 31267, May 2023.

## BOX 2: Tax incentives for net zero, skills and good jobs in the US Inflation Reduction Act

The Inflation Reduction Act was signed into law by President Biden in August 2022. With \$369 billion of support for solar, wind, electric vehicles and other clean technologies, it seeks to lower energy costs for households and businesses, accelerate private investment in clean energy, and strengthen supply chains. This support is made up mainly of investment and production tax credits over a 10-year horizon, and also direct expenditures.

Although \$369 billion is the figure that tends to be quoted (based on initial announcements<sup>46</sup>), it is important to note that given the fact that many of the tax credits are uncapped, total support could be significantly higher.<sup>47</sup>

Tax credits in the IRA are targeted at a range of technologies, and there are cases where base tax credits are enhanced in a number of ways. The domestic content requirements have

received a lot of attention due to concerns about protectionism. But other enhancements are of particular interest when considering how to encourage businesses to invest in particular places, and in “good” jobs. First, tax credits are enhanced when investments involve a certain percentage of labour hours performed by qualified apprentices and when wages above a threshold (“living wage”) are offered. Second, bonus credits are available for investments in “Energy Communities” (ex-brownfield sites, or areas related to mining operations) or in low-income communities. These provisions are aimed at creating good quality jobs in places that need them and can provide lessons for UK policymakers seeking to maximise the extent to which the net zero transitions provides “good jobs” across the country.

<sup>46</sup> “Joint Statement From Leader Schumer and Senator Manchin Announcing Agreement to Add the Inflation Reduction Act of 2022 to the FY2022 Budget Reconciliation Bill and Vote in Senate Next Week,” July 27, 2022, available [here](#).

<sup>47</sup> J Bistline et al., [Economic Implications of the Climate provisions of the Inflation Reduction Act](#), NBER Working Paper Number 31267, May 2023.



## Section 3

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### Raising firms' willingness to invest

A precursor to firms investing more is them actually wanting to do so. Many people see low investment rates as a symptom of firms not being able to make sufficient returns on investment projects; the result is that the policy debate is very focused on what role Corporation Tax plays. The design of Corporation Tax does affect a firm's payoff from an investment, but the stability and certainty of the tax regime is also important, given that investment decisions have long-term paybacks. Recent years, however, have seen the rate of Corporation Tax change several times, and investment allowances were cut in the early 2010s before being repeatedly and temporarily expanded at short notice since. We propose that the UK should immediately make permanent its recent (temporary) move to full expensing of investment in plant and machinery. Going further and broadening which types of investments can be fully expensed to all business capital is desirable, but may be costly; any lasting costs should be defrayed by tightening the limits on tax deductibility of interest, reducing the tax system's bias towards debt financing. Crucially, Governments should commit to keeping the Corporation Tax regime stable over time. Such a package could increase the capital to output ratio of the business sector by as much as 8 per cent in the long term, generating enough growth to pay for itself.

As well as being less well managed than firms in other countries, UK firms stand out for something more: the extent to which managers lack pressure from owners and from workers to focus on long-term growth. This reflects that the ownership of UK-listed firms has become more remote and dispersed over time, and UK workers lack the voice or formal role in corporate governance seen elsewhere in Europe. Addressing this issue will require significant reform of the pensions landscape, aimed at rebuilding concentrated firm ownership to drive up investment rates through better corporate control, rather than solely to ensure provision of capital (as the current debate around pension reform is focused on). The UK's pension industry has seen

the flight of private defined benefit (DB) schemes from UK equity markets, and the defined contribution (DC) schemes, which are set to grow over the next decade, are fragmented and invest passively through pooled investment vehicles. The result is that the UK has the lowest share firms with of 'blockholder' shareholders (ones big enough to impact firm decisions on their own) in the OECD. To underpin a return to block ownership, we suggest reforms across three strands of the pension landscape – DB, DC and the Local Government Pension Schemes (LGPS) – with the common objective of producing a pension system which holds more UK equities and does so in large funds able to provide more concentrated and active ownership. Our proposed reforms should also help to unlock a source of patient capital for UK high-growth firms and much-needed (green) infrastructure projects.

The lack of 'owner voice' in the UK is matched by a lack of worker voice. Many European countries have adopted a two-tier board system with a supervisory board composed of representatives of shareholders and often workers being responsible for the selection and monitoring of executives. In the UK, the absence of such a formal mechanism for encouraging worker voice comes with workers reporting having less say in workplace changes in recent years and feeling less involved in decision making. Worker representation on corporate boards can support a focus on value creation in businesses with improved productivity, firm survival and job quality. We propose the mandatory inclusion of worker representatives at the board level for all larger UK firms (both listed and unlisted) with more than 200 employees.

Together, these reforms to taxation, firm ownership and worker representation should make a material change to the way firms operate in the UK, increasing the focus on long-term value creation the incentive to invest, and thereby rates of investment.

The previous section showed that past average returns to UK business investment appear to have been high, and yet rates of business investment have been low. Understanding why firms do not appear to be willing to invest is key to raising overall rates of investment. In this Section, we look at how policy can transform the investment ecosystem to improve the incentives firms have to invest for the long term. In particular, we explore how the Government could use Corporation Tax to promote higher rates of investment, improving the payoff for new investment without rewarding the running down of old capital. We then outline how bringing the voice of owners and workers more centrally into the running of businesses can improve their long-term value, and we discuss how to achieve this, through significant reforms to the pension landscape to concentrate ownership, and a new governance regime to create a formal role for workers in the boardroom.

## More can be done to incentivise investment via Corporation Tax

Corporate taxes are not the primary source of variation in investment rates across countries and over time. However, corporate taxes do matter for investment,<sup>48</sup> and they are something that government can control. A companion report will look at the broader tax environment, including payroll taxes, national insurance and business rates, but we focus here on Corporation Tax due to its salience in the current debate and its high importance for business investment.

Two main elements of the Corporation Tax system determine how corporate profits are taxed and whether the tax code creates distortions: the statutory tax rate, and the tax base – the precise definition of a company’s taxable profits. Until the Spring Budget 2023, the UK’s statutory corporate tax rate of 19 per cent was the lowest among G7 countries and at the bottom of the distribution of corporate tax rates for OECD countries. After being increased to 25 per cent from April 2023, the new 25 per cent rate puts the UK slightly above the OECD average, although it is still the lowest among G7 countries, as shown in the left panel of Figure 12.<sup>49</sup>

In contrast, investment allowances, which determine the tax base, have historically been among the least generous in the OECD. Until April 2021, this was particularly the case for investment in plant and machinery, although this has not been the case since, thanks to the temporary ‘super deduction’, which was in place from April 2021 until April 2023, and the three years of full expensing that are due to follow it. The relative generosity of UK capital allowances with and without temporary full expensing is shown in the right panel of Figure 12.

These changes since April 2021 are an example of the instability of investment allowance rules in the UK, and frequent changes over time complicate business planning and, thus, make it harder to take long-term investment decisions.<sup>50</sup> The rules are also complex. The investment allowance rules of software purchase are an example of this complexity: software purchase is sometimes treated as ‘plant and machinery’, sometimes deducted at the rate used in the company’s accounts (with an option of using a 4 per cent straight-line deduction instead), sometimes deducted on a 6.5 per cent straight-line basis, and sometimes cannot be deducted at all.

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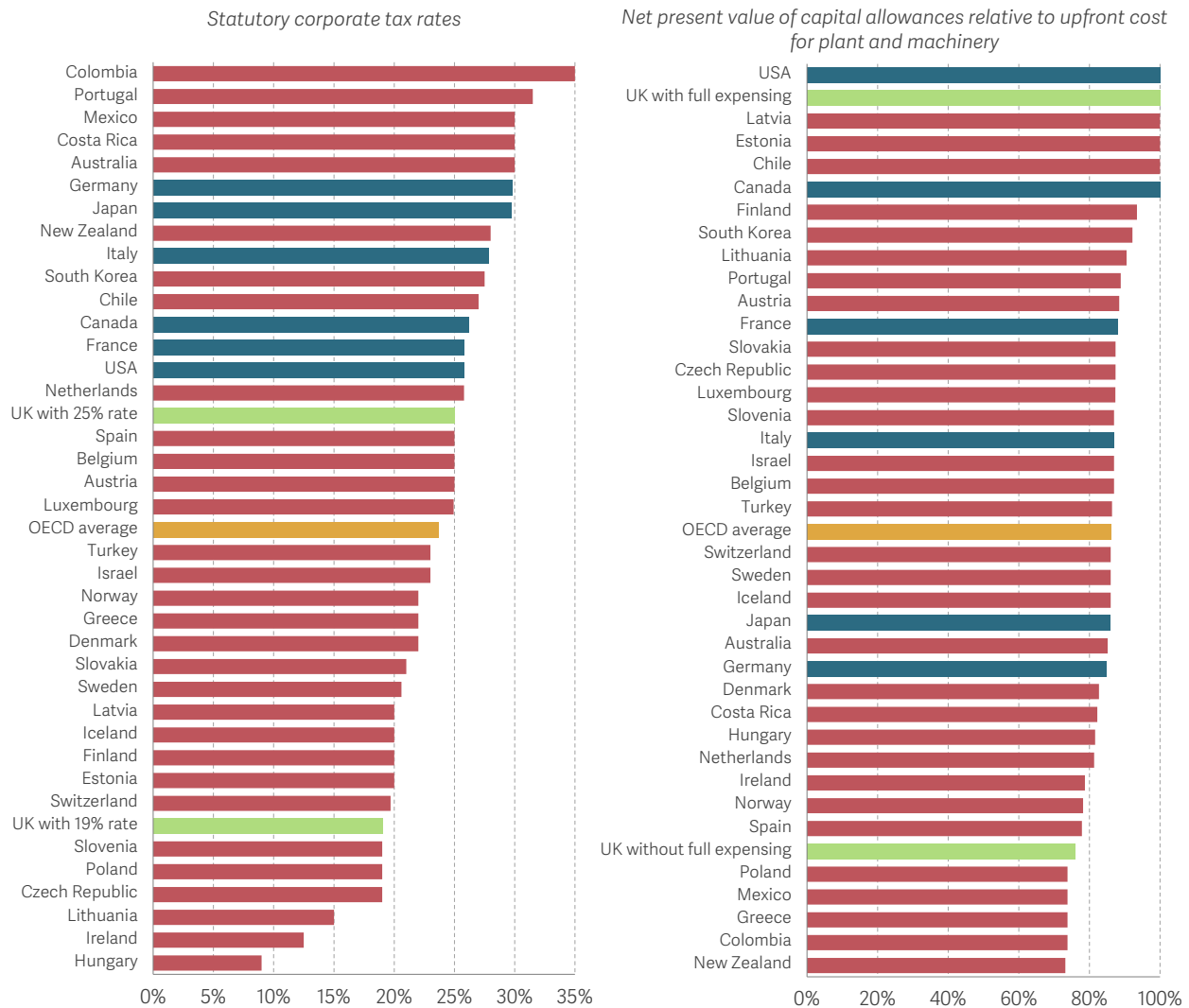
<sup>48</sup> On average, higher corporate tax rates reduce investment (see: K Hassett & R Hubbard, *Tax policy and business investment*. In *Handbook of Public Economics*, Elsevier, 2002; S Djankov et al., *The effect of corporate taxes on investment and entrepreneurship*, *American Economic Journal: Macroeconomics*, 2010; JC Suárez Serrato & O Zidar, *Who benefits from state corporate tax cuts? A local labor markets approach with heterogeneous firms*, *American Economic Review*, 2016; X Giroud & J Rauh, *State taxation and the reallocation of business activity: Evidence from establishment-level data*, *Journal of Political Economy*, 2019).

<sup>49</sup> This is the main rate of corporate tax, which applies for companies with profits over £250,000. Companies with profits below £50,000 are taxed at the small profit rate of 19 per cent.

<sup>50</sup> IFS, *Spring Budget 2023 response*, March 2023.

**FIGURE 12: The UK has a low rate of Corporation Tax compared to our peers, but, without the current temporary measures, the UK would have relatively ungenerous investment allowances**

Statutory corporate tax rates (left panel), and net present value of capital allowances relative to upfront cost for plant and machinery investment (right panel): OECD and G7 countries, 2022



NOTES: Left panel: statutory corporate tax rates among OECD countries. The UK rate was at 19 per cent and increased to 25 per cent on 1 April 2023. OECD average excludes the UK. Right panel: Net present value of capital allowance for plant and machinery among OECD countries. The UK with full expensing describes the Spring Budget 2023 measure, the UK without full expensing describes the UK net present value for plant and machinery after the expiry of full expensing. OECD average excludes the UK. SOURCE: Analysis of Tax Foundation, public data <https://taxfoundation.org>.

As well as providing relatively weak incentives for investment by international standards, the UK corporate tax system is also distortionary because it favours investing in assets

that depreciate less quickly than the investment allowance set by the tax code.<sup>51 52</sup> It also favours debt over equity financing: the interest on loans is deductible from the tax base (i.e. is treated as a cost, thus reducing taxable profits), while the cost of investing via equity, such as the risk-free rate of return that would be obtained if the same equity would be invested in government bonds, is not deductible from the tax base. This encourages firms to finance themselves with debt rather than equity, and means that fully-deductible, debt-financed investment is actually subsidised by the tax system.<sup>53</sup>

As we have mentioned already, the 2023 Spring Budget introduced full expensing for some assets – which means that companies can deduct the full cost of the investment of qualifying plant and machinery from the tax base in the year of purchase. This is a step towards a less distortive system. It partially corrects the tech bias for the qualifying hardware and other tech purchases (those subject to an 18 per cent tax depreciation rate). However, other types of assets are excluded from full expensing, most notably software, long-term plant and machinery, and buildings. The changes mean that companies are incentivised to invest in assets covered by full expensing and disincentivised to invest in the other asset types. These distortions are especially severe in a high-inflation-high interest rate environment, given that the current investment allowances allow deducting part of the asset purchase cost in the future, as opposed to the present, making it costlier for firms. Additionally, the policy aggravates the debt-financing bias of the corporate tax code: since interest payments can be deducted from the tax base, investment in qualifying plant and machinery is cheaper when the purchase is made via a loan instead of equity, favouring high leverage.<sup>54</sup> Finally, the Treasury has said that this policy will end in March 2026, but that it would like to make full expensing permanent if the fiscal conditions allow it. A temporary incentive to invest will encourage firms to bring investment forward, but has much less impact on the overall level of investment in the long-run – the OBR concluded that the policy’s temporary nature leaves the optimal capital stock unchanged in the long run – and the fact that the measure was announced as temporary but with some fuzziness over whether it could be permanent only increases the uncertainty facing businesses.<sup>55</sup>

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<sup>51</sup> In absence of the temporary full expensing introduced by the 2023 Spring Budget, the tax depreciation allowance for qualifying plant, machinery and hardware is 18 per cent. The tax depreciation for long-term plant and machinery, including investment integral to buildings, is set at 6 per cent, and the tax depreciation for buildings is 3 per cent. Assets used for qualifying R&D (except land and intellectual property) and ‘green’ mobile assets are subject to immediate deduction. Additionally, qualifying plant and machinery were fully deductible up to £1 million per year under the Annual Investment Allowance.

<sup>52</sup> Information and communication technology, such as software and computers, shares the same tax depreciation rate as traditional plant and machinery, but depreciates more quickly. For example, the tax depreciation for investment in plant and machinery is 18 per cent, and the economic depreciation is estimated to be 17.5 per cent. But tax depreciation for hardware purchases is also at 18 per cent, although its economic depreciation is estimated at 37 per cent. This implies an anti-tech bias in the corporate tax code.

<sup>53</sup> UK non-financial corporates had gross debts of £1.6 trillion in 2021, which would result in annual interest payments of £80 billion at an interest rate of 5 per cent, in turn reducing receipts by £20 billion if all of these payments were set against the headline rate of Corporation Tax.

<sup>54</sup> I Delestre, [Changes to the Tax System](#), IFS, March 2023.

<sup>55</sup> Office for Budget Responsibility, [Economic and Fiscal Outlook](#), March 2023.

Permanent full expensing, more broadly defined, could help to permanently increase the investment rate, and modification of interest deductibility could help address the debt bias

In theory, full expensing is a welcome step to a less distorting, pro-investment Corporation Tax system, but the temporary nature of the current regime undoes much of the benefits. **The full expensing announced in the 2023 Spring Budget should be made permanent, and with immediate effect.** This reduction in the Corporation Tax base will have a cost, but we would expect the long-run annual cost of a permanent relief to be substantially less than the £10 billion the OBR has scored for the temporary one, for three broad reasons. First, a great deal of the cost of a temporary relief comes because firms bring forward investment so it happens while the larger allowances are in place – this is part of the reason why the cost of the current temporary policy is high in its final year. Second, full expensing is partly offset in the long run by lower yearly depreciation allowances – firms can't claim tax relief on the same investment twice through both full expensing and depreciation allowances.<sup>56</sup> Third, and most importantly, higher investment allowances can be expected to boost investment and GDP, and this will increase tax revenues elsewhere. In principle, these additional tax revenues could be large enough to mean that overall tax revenues are unchanged. But it is very important to note that full expensing is much more likely to 'pay for itself' than a cut to the headline rate, because expensing cuts taxes only on new investment, whereas cutting the headline rate lowers the tax burdens on the stock of installed capital.

However, as we explained above, making the current full expensing policy permanent would mean the corporate tax system is biased towards investment in particular capital goods. In principle, such a bias would be merited if these kinds of investment are more tax-elastic or create greater spillovers than other kinds of investment, but there is no good evidence for this. **Full expensing should therefore be broadened to cover all types of business investment.**<sup>57</sup> This could (at least) double the gross short-run fiscal costs, given that currently allowable investment is less than one-half of the total, but it would have a commensurately larger impact on growth, as more investment is tax-relieved, and the tax distortion between different kinds of investment is removed, so the long-run costs need not be much greater.

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<sup>56</sup> This does not reduce the present value of the fiscal cost to zero, however, because claiming the reliefs earlier costs the Exchequer money.

<sup>57</sup> Anything that is currently considered a long-term depreciable asset by the legislation will be considered an expense. More specifically, tangible assets - such as computer hardware, plant and machinery, commercial buildings and land; and intangible assets - such as intellectual property and software licences, will be fully deductible from the tax base under our proposals. To avoid ambiguity and the potential for increased fraud, we suggest excluding harder to measure areas such as brand, customer lists and goodwill from full expensing. Financial assets (such as shares in other companies) or other 'non-depreciable' assets will also be excluded from full expensing. Our proposals are only for taxation purposes, accounting depreciation would remain unchanged.

As discussed above, the corporate tax system also allows interest payments to be deducted against Corporation Tax, up to a limit, introducing an unnecessary tax incentive for firms to finance themselves with debt rather than equity.<sup>58</sup> However, limiting the tax deductibility of interest could have major implications for firms that already have large debts, and would favour firms that are able to shift debt across corporate entities in different jurisdictions.<sup>59</sup> If the Government is uncertain about the ability of full expensing to pay for itself, it may **consider substantially tightening the limits on the tax-deductibility of interest.**<sup>60</sup>

Our policy proposal is more economically efficient than the pre-2023 tax system – a distortive tax base with a low statutory tax rate of 19 per cent – and the Spring 2023 Budget policy, which only covers plant and machinery. Our proposal would remove investment distortions for all assets, thereby fully removing the anti-tech bias of the legislation. By scrapping the system of tax allowances and by making full expensing permanent, our policy simplifies the tax code and makes it easier for firms to navigate legislation and make long-term investment decisions. Finally, full expensing is also fairer than the pre-2023 tax system as supernormal profits – the returns above the cost of investment – are still taxed and at the higher headline tax rate of 25 per cent. Again, this is particularly relevant in the current environment where fewer companies dominate an increasing number of industries and make ‘super-normal’ profits.<sup>61</sup> However, it is important to note that our proposed package of reforms will impact different firms in different ways, as discussed in Box 3.

We can get a rough sense of how these proposals would affect GDP and revenues in a simple model.<sup>62</sup> We model the profit-maximising decisions of firms to invest in capital or hire labour subject to the corporate tax system, using standard assumptions about how these choices depend on the relative prices the firms face. (Annex 1 describes the model in detail). We evaluate the long-run impact of two potential reforms – a cut in the headline Corporation Tax rate to 19 per cent and a move to permanent full expensing of all business capital. Table 1 shows the results. Cutting Corporation Tax rates provides a moderate boost to investment and GDP, but full expensing, by removing all the tax distortions, has a strong enough effect on investment (and then GDP) to pay for itself through higher growth.

<sup>58</sup> The limit is, roughly speaking, £2 million in interest payments per year up to a maximum of 30 per cent of taxable profits. See: <https://www.gov.uk/guidance/corporate-interest-restriction-on-deductions-for-groups>

<sup>59</sup> Action 4 Limitation on Interest Deduction, Inclusive Framework on Base Erosion and Profit Shifting, OECD.

<sup>60</sup> A recent example of a gradual phase in of this type relates to mortgage interest deductibility for residential landlords. See: HMRC, [Changes to tax relief for residential landlords](#), July 2016.

<sup>61</sup> G Grullon, Y Larkin & R Michaely, Are US industries becoming more concentrated?, *Review of Finance*, 2019; D Autor et al., The fall of the labor share and the rise of superstar firms, *The Quarterly Journal of Economics*, 2020; J De Loecker, J Eeckhout & G Unger, The rise of market power and the macroeconomic implications, *The Quarterly Journal of Economics*, 2020. J De Loecker, T Obermeier & J Van Reenen, Firms and inequality, IFS Deaton Review of Inequalities, 2022.

<sup>62</sup> J Cloyne et al., Short-Term Tax Cuts, Long-Term Stimulus, NBER Working Paper No. 30246.



**TABLE 1: Full expensing of investment is a more efficient way to boost investment than Corporation Tax rate cuts, and could pay for itself in the long run**

Policy	Impact on		
	Business capital stock	GDP	Tax revenues
Cut Corporation Tax by 6pp	+2.0%	+0.5%	-2.4%
Permanent full expensing of all business capital	+7.9%	+2.0%	+0.6%

NOTES: See Annex 1 for a description of the model used to calculate these response.

### BOX 3: Differential effects of our proposed tax reforms on different types of firms

Extending full expensing for investment in assets beyond qualifying plant and machinery is beneficial for firms that purchase tech-related assets or long-term plant and machinery, and that invest in building and structures.

While many smaller firms are already able to claim for all their investment in plant and machinery under the Annual Investment Allowance (and will be able to claim it under the 2023 Spring Budget temporary full expensing), extending full expensing to other types of asset is expected to be particularly beneficial for SME investment (academic research on bonus depreciation shows that the firms that respond the most are small and liquidity-constrained).<sup>63</sup> However, the removal of interest payment

deduction might be more likely to have a negative impact on SMEs which tend to rely more heavily on debt finance.

International dimensions must also be considered. The broader investment allowances would make the UK a more attractive destination for large multi-national firms, but the removal of interest rate deductibility would increase the average tax rate faced by firms that use debt financing. However, large firms and listed firms tend to rely more on equity financing (direct and via the stock market) than debt financing and this should help mitigate any negative effect.<sup>64</sup>

Finally, private equity firms are particularly exposed to changes in interest rates because of their

<sup>63</sup> E Zwick & J Mahon, [Tax policy and heterogeneous investment behavior](#), American Economic Review, 2017

<sup>64</sup> [What sources of credit do UK companies rely on?](#), Bank Overground, Bank of England, 2020.



commonly-used leveraged buyout strategy – where they rely on long-term debt instruments to meet the costs of acquisition – which need to be serviced with sufficient cashflow from the business. Interest rate deductibility helps buyout firms to finance their

acquisitions with debt, by reducing the tax burden of the company invested in. Removing this, at a time of higher interest rates, would therefore be painful for the private equity industry as it would imply a tax increase for the firms they are investing in.

The UK has long had specific tax incentives for investment in research and development (R&D), which can be justified on the basis of market failures.<sup>65</sup> In fact, UK R&D Tax incentives are relatively generous, and have been shown to increase R&D, innovation and jobs, particularly for smaller firms.<sup>66</sup> But this has also been an area that has seen a lot of policy change in recent years. Given concerns about fraud and error in the system, particularly amongst smaller firms, the 2022 Autumn Statement saw a rebalancing of support in the R&D tax credit scheme towards larger firms, a change which created risks for innovative smaller businesses that rely on such support; the change also risks reducing the broader spillovers that tend to flow from their activities. In response, this rebalancing was partially reversed in the 2023 Spring Budget, when enhanced support for loss-making R&D intensive smaller firms was provided. This change will help some firms in the current context (R&D in smaller, credit-constrained firms tends to suffer in a downturn<sup>67</sup>), but not all innovative firms are eligible for the announced support, including those that spend less than 40 per cent of their costs on R&D, or those that are making a profit. The Government has also been consulting on simplifying R&D tax incentives.<sup>68</sup> It is crucial to protect the overall level of R&D tax incentives and ensure that innovative, financially constrained smaller firms are supported. Moving towards a simplified system, mimicking the current policy for larger firms, is welcome, but frequent piecemeal changes are creating excessive complexity and make it difficult to plan ahead.<sup>69</sup>

Finally, we consider that improved incentives for investment in plant and machinery together with broader types of capital asset, and continued generosity in the R&D tax credits scheme, are likely to enable net zero investments which are intensive in capital

<sup>65</sup> A key justification is the presence of innovation spillovers which mean that individual firms cannot recoup all the benefits of their R&D, and left to their own devices, invest less than the socially optimal amount.

<sup>66</sup> An international comparison of R&D incentives is in: OECD, *R&D Tax incentives: United Kingdom 2021*, 2021. Evidence on their impacts is in: A Dechezleprêtre et al., *Do Tax Incentives for Research Increase Firm Innovation? An RD Design for R&D, Patents and Spillovers*, CEP 2016; N Bloom et al., *A toolkit of policies to promote innovation*, Journal of Economic Perspectives, 2019, gives a broader review of evidence on R&D tax credits.

<sup>67</sup> P Aghion et al., *Credit constraints and the cyclicity of R&D investment: evidence from France*, Journal of the European Economic Association, 2012.

<sup>68</sup> HM Treasury, *R&D Tax Reliefs Review: Consultation on a Single Scheme*, January 2023.

<sup>69</sup> See, for example: J Tragner, *Spring Budget 2023 – what it means for UK innovation*, Forrest Brown, March 2023.

and innovation.<sup>70</sup> As discussed in Section 2, the UK's response to the Inflation Reduction Act, while targeted and employing a range of policy levers, should consider where there is scope for further enhancing tax incentives for net zero investments in fixed capital or innovation.<sup>71</sup> There are examples in the UK already, for example: electric vehicles and charging points are eligible for full expensing in the year of purchase.

## UK firms have low quality management and dispersed owners

While we should aim to get our tax regime right, it is not the main driver of low investment in the UK and, as we showed in Section 2, neither can we blame low rates of return. For investment to take place, it is important that a firm's decision-makers are able to identify, and willing to seize, productive investment opportunities. The evidence suggests that the management of UK firms are simply choosing not to invest.

Internationally comparable measures of management practices in firms point to the UK lagging many developed market comparators, with only a small proportion of UK firms being as well managed as the best 25 per cent of US firms (see Figure 13). This is important, as management practices relate closely to firm performance: more structured management practices are associated with higher productivity, higher profits, output growth, and growth in R&D expenditures and patents.<sup>72</sup> Well-managed firms are also significantly better at forecasting both the growth of the aggregate economy, as well as of their own firm, and do so with greater certainty, meaning they are more likely to make productive investment decisions as they are better able to identify promising opportunities.<sup>73</sup> Structural policies such as strengthening competition, openness to trade and FDI, education, appropriate regulation – considered elsewhere in the Inquiry – are all key for improving management practices in firms across the economy, while targeted business support policies have been shown to be effective (see Section 5). Our focus here is on ownership and governance structures as methods of disciplining management to focus on long-term value creation.<sup>74</sup>

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<sup>70</sup> Additional market failures apply with respect to net zero innovation – over and above the greenhouse gas externality, the evidence suggests that spillovers tend to be higher for “green” versus “dirty” technologies within energy and transport, and financing constraints appear to have been larger for clean tech firms that have been viewed as more risky by investors compared to other technology areas. For more discussion, see Stern & A Valero, [Innovation, growth and the transition to net-zero emissions](#), Research Policy 50(9), November 2021.

<sup>71</sup> As recommended by C Skidmore, [Mission Zero](#). Independent Review of Net Zero, 2022.

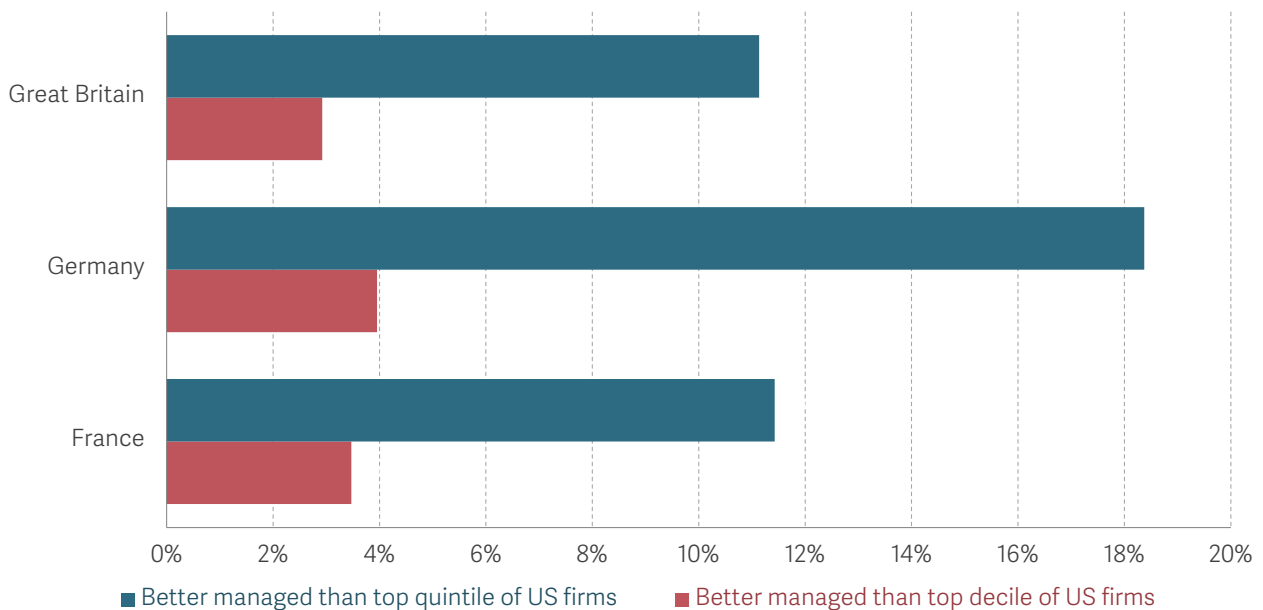
<sup>72</sup> D Scur et al., [The World Management Survey at 18: lessons and the way forward](#), Oxford Review of Economic Policy, 2021.

<sup>73</sup> N Bloom et al., [Do well managed firms make better forecasts?](#), POID Working Paper, January 2022. T Goodman et al., [Management Forecast Quality and Capital Investment Decisions](#), The Accounting Review, 2014 demonstrates how better forecasts are linked to better investment decisions.

<sup>74</sup> D Scur et al., [The World Management Survey at 18: lessons and the way forward](#), Oxford Review of Economic Policy, 2021.

**FIGURE 13: Few UK firms are as well managed as the best in class in the US**

Proportion of firms at least as well-managed as the top quintile and decile of US firms, by country



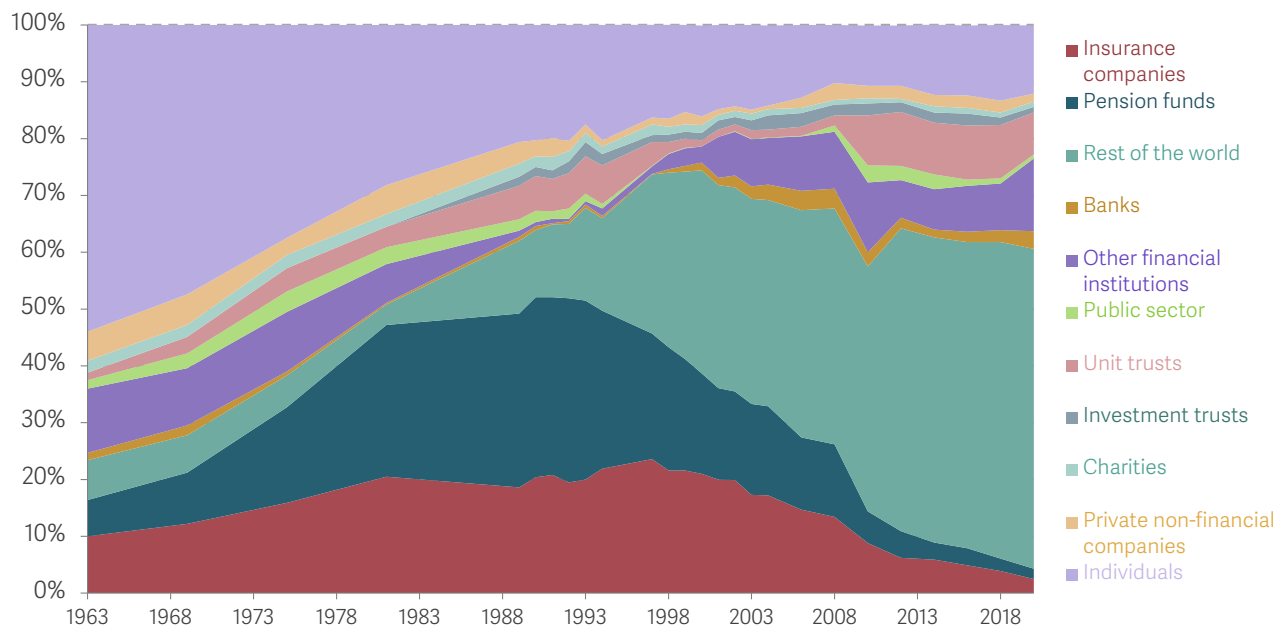
NOTES: Share of firms that are at least as well managed as US firms in the top quartile and decile respectively.

SOURCE: Analysis of World Management Survey public data, <https://worldmanagementsurvey.org>.

Accompanying the problem of lower quality management is the unusually remote and dispersed ownership of large companies in the UK. Figure 14 shows how the beneficial ownership (i.e. who ultimately owns) of UK-listed equities has changed dramatically since the 1960s. Insurance companies and pension funds grew their ownership to a high of 52 per cent by the early 1990s, as direct ownership of equities by individuals became less prevalent, before falling to the point where they now only amount to just over 4 per cent of the ownership base. Alongside this retrenching of insurance and pension ownership has come the rise of international ownership, as UK financial markets became more globalised from the late 1990s: the share of firms whose beneficial owners is located outside the UK rose from 30 per cent in 1998 to 56 per cent in 2020 (the latest data).

**FIGURE 14: Beneficial owners of UK-listed firms have become more international over time**

Proportion of UK-listed firms owned by investor type: UK



NOTES: 'Investment trusts' not separable from 'Other financial institutions' in this dataset prior to 1989.

Data divides ownership of mutual fund accounts using analysis from a sample of share registers.

SOURCE: Analysis of ONS, Ownership of UK quoted shares 2020.

The ownership of UK firms is also dispersed, with firms often lacking a 'blockholder' – defined as a shareholder who is able to impact firm decisions by exercising their voting rights.<sup>75</sup> Indeed, among OECD countries, listed companies in the UK have the least concentrated ownership (see Figure 15). Although a low concentration indicates that the UK does a better job at protecting the rights and returns of minority shareholders, this lack of concentration in ownership is problematic, since evidence suggests that blockholders are central to promoting a culture of long-term value creation in firms. Having significant skin-in-the-game incentivises owners to engage with, and monitor, management, and enables them to impact decisions through voting behaviour at AGMs and the threat of sale; as well as disciplining managers, engaged owners can also help keep managers informed about developments across the economy.<sup>76</sup> The large stakes of blockholders also insulate managers from short-term pressures to boost earnings at the

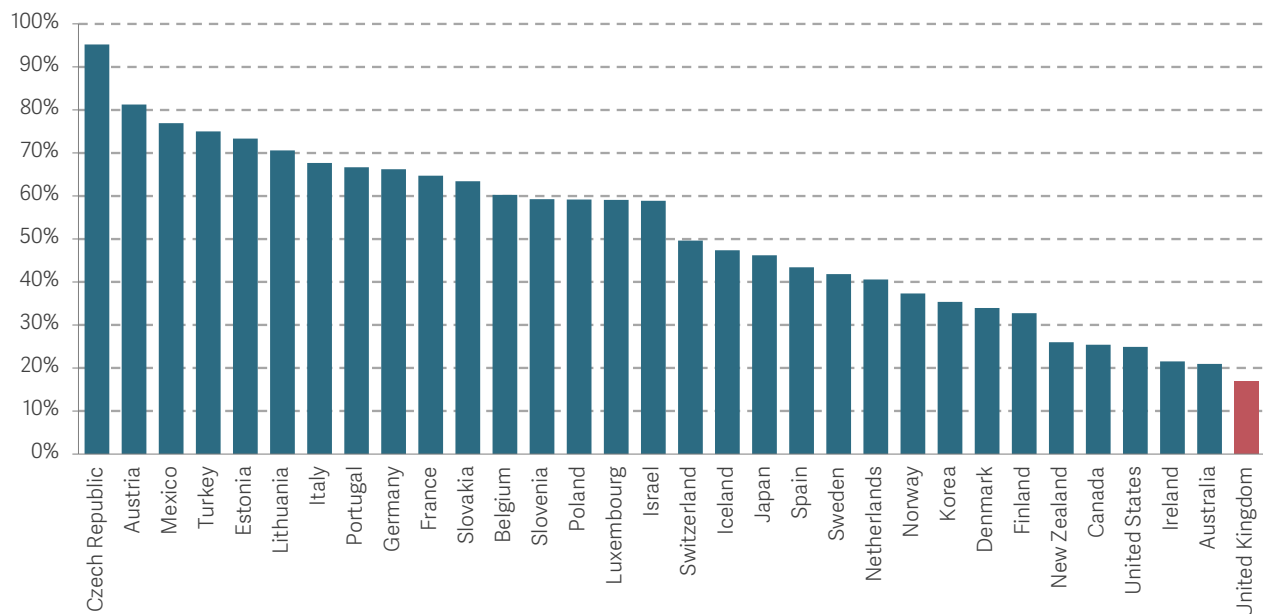
<sup>75</sup> By contrast, Germany's stock market has become more internationalised (like the UK) but family owners continue to dominate (unlike the UK): see J Franks, C Mayer & H F Wagner, *The Survival of the Weakest: Flourishing Family Firms in Germany*, Journal of Applied Corporate Finance, 2016.

<sup>76</sup> Evidence suggests that stock liquidity improves firm value by enhancing blockholders' ability to discipline management by exit; see: A Edmans, V W Fang & E Zur, *The Effect of Liquidity on Governance*, The Review of Financial Studies, 2013. Evidence of engagement as helping to drive value is found in M Becht et al., *Returns to shareholder activism: evidence from a clinical study of Hermes UK Focus Fund*, The Review of Financial Studies 2009, and M Becht, J Franks & H Wagner, *The Benefits of Access: Evidence from Private Meetings with Portfolio Firms*, forthcoming 2023, which both look at behaviour of mutual fund managers. A Brav, W Jiang & H Kim, *The Real Effects of Hedge Fund Activism: Productivity, Asset Allocation, and Labor Outcomes*, The Review of Financial Studies, 2015 finds similar impacts for hedge fund activism.

expense of investment.<sup>77</sup> The fact that UK firms lack these sort of concentrated, engaged owners means that they are often run more myopically, and are less likely to make productive positive returning investments and more likely to pay out dividends instead.<sup>78</sup>

**FIGURE 15: The ownership of UK firms is unusually dispersed**

Proportion of listed companies that have a controlling shareholder, by country: 2012



NOTES: Controlled firms identified using a Shapely-Shubik algorithm to identify owners that have enough votes to change a vote decision. The algorithm has been adjusted to allow for owners in the same corporation to act in unison. A firm is classified as controlled if its Shapely-Shubik power index is 75 per cent or greater.

SOURCE: G Aminadav & E Papaioannou, *Corporate control around the world*, Journal of Finance, 2020.

The role that governance has to play in improving the quality of corporate activity and investment is something that has become clearer as the Government has sought to arrest the declining importance of the UK equity market, with reforms aimed at improving the terms on which firms are able to raise equity on UK-listed exchanges.<sup>79</sup> The number of firms retreating from the public market to return to private ownership (19 deals in 2021) also suggests that issues of control and concentration are important, with several studies demonstrating that private firms are substantially more capital intensive, invest

<sup>77</sup> J Graham, C Harvey & S Rajgopal, *The Economic Implications of Corporate Financial Reporting*, Journal of Accounting and Economics, 2005.

<sup>78</sup> Aligning manager incentives to the long-term can boost firm investment levels; see: C Flammer and P Bansal, *Does a long-term orientation create value? Evidence from a regression discontinuity*, Strategic Management Journal, 2016. Returning capital to shareholders is often associated with less investments, as managers attempt to game expectations of earnings per share; see: H Almeida, V Fos & M Kronlund, *The real effects of share repurchases*, Journal of Financial Economics, 2016. C Mayer, *Inequality, firms, ownership and governance*, Institute for Fiscal Studies, Deaton Review, 2022, also argues that the increased internationalisation of shareholders has meant that engagements from shareholders have also been more focused on returns at the expense of the interests of wider stakeholders, something which has had adverse consequences for the diffusion of productivity gains across the economy.

<sup>79</sup> A recent review recommended reforms to improve the environment for companies to go public in London (Lord Hill, *UK Listing Review*, HM Treasury, March 2021), and the so-called *Edinburgh Reforms* also announced some reforms aimed at making UK markets more attractive and lower cost.

more, and are more responsive to investment opportunities than similar publicly-listed firms.<sup>80</sup> This increase in public-to-private acquisitions might spur higher investment, but we think improved ownership concentration on listed markets would be preferable: listed exchanges offer more liquidity to take advantage of large investment opportunities, and, importantly, they offer a better way of sharing the benefits of value creation across the population than private markets.

Recent reforms such as permitting dual-share classes have been offered as a means to revitalise the stock market and to re-concentrate control. However, these reforms only apply to new listings and have a 5-year sunset clause and so are unlikely to represent the large changes required to shift the UK out of its low investment equilibrium. Evidence also suggests that, if made more permanent, these reforms may have negative impacts on stewardship and value-creation, as privileged share classes are often held by management figures.<sup>81</sup> Instead, more radical reforms are needed to address how firms are run: this involves action both on who owns firms and who run firms.

## Reforming the pensions landscape will help concentrate firm ownership

Pensions are central to how households hold their wealth in the UK. Around £4.5 trillion was held in the form of pension entitlements and annuities at the end of 2021, 56 per cent of UK households' gross financial wealth, more than double the amount held in banks, and around four times the directly-held equities and mutual funds.<sup>82</sup> What is true for the stock of wealth is even starker in the flow of saving: as we will see in Section 6, UK households' pensions savings are the only major net flow of money from households to corporates. It is common for policy makers to think about pensions just as a personal source of saving for retirement, but any route to a higher investment economy has important implications for the pension system as a domestic source of capital.

In particular, as we showed in Figure 14, pension funds were once also a vehicle for concentrated domestic ownership of UK equities, but they hold few equities directly.<sup>83</sup> There is an active debate in the UK about how best to encourage pension funds to return to the UK market, but these are largely motivated by the idea that the provision of more

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<sup>80</sup> J Asker, J Farre-Mensa & A Ljungqvist, *Corporate Investment and Stock Market Listing: A Puzzle?*, Review of Financial Studies, 2015. S Bernstein, *Does Going Public Affect Innovation?*, Journal of Finance, 2015. R Davies et al., *Measuring the costs of short-termism*, Journal of Financial Stability, 2014. B Bennet, R M Stulz & Z Wang, *Does Greater Public Scrutiny Hurt a Firm's Performance?*, NBER Working Paper 30585, 2023. N Bloom, R Sadun & J Van Reenen, *Do Private Equity Owned Firms Have Better Management Practices?*, American Economic Review, 2015.

<sup>81</sup> Such reforms could exacerbate some of the agency problems by concentrating power with manager shareholders; see: R Masilus, C Wang & F Xie, *Agency Problems at Dual-Class Companies*, The Journal of Finance, 2009; and: K Borokovich et al., *Variation in the Monitoring of Incentives of Outside Stockholders*, Journal of Law and Economics, 2006.

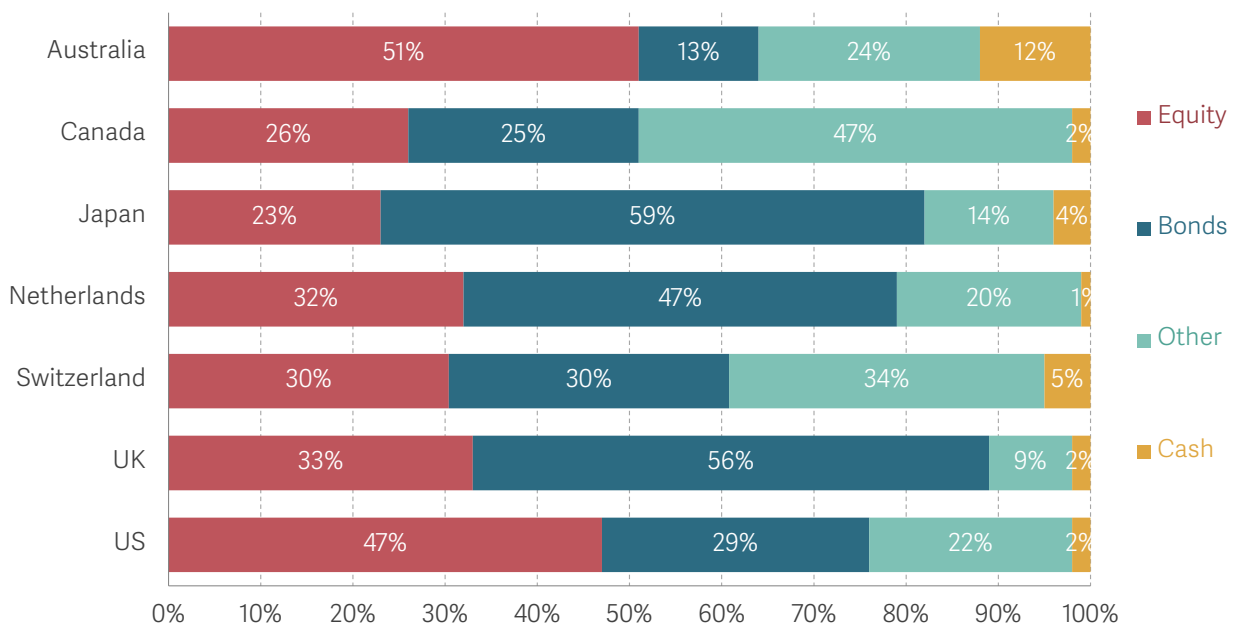
<sup>82</sup> This is the sum of pension entitlements and 'life insurance and annuity entitlements'. Focusing solely on pensions, this figure is closer to £2.2 trillion by the end of 2022, or 80 per cent of GDP

<sup>83</sup> W Wright, *Unlocking the capital in capital markets*, New Financial, 2023, points to UK equity allocations in UK pensions funds falling from 53 per cent in 1997 to 6 per cent in 2021, while the allocation to bonds has grown from around 10 per cent to over 50 per cent over the same period.

capital will drive higher investment. We instead support pension reform as a means to rebuild domestic blockholders, driving up investment rates through better corporate control.<sup>84</sup> Additionally, given the maturity structure of pension liabilities, they are also a potentially important source of capital for investment in (often illiquid) productive assets.<sup>85</sup>

**FIGURE 16: UK pensions allocate far more to bonds than in other economies**

Total pension asset allocation, by country: 2022



NOTES: Chosen countries represent the so-called P7 economies with the largest pension assets.

SOURCE: Thinking Ahead Institute, Global Pensions Asset Study 2023.

To illustrate the current problems, Figure 16 demonstrates that the UK allocates low levels of pension funds to equities and to productive asset classes found in the 'other' category (such as venture capital, real estate and infrastructure) relative to other countries. Instead, the majority (56 per cent) of UK pension assets are invested in bonds. By contrast, the majority of pension assets in Australia are invested in equities (51 per cent), and almost half of Canadian pension assets (47 per cent) are invested in productive alternative asset classes. Low levels of overall equity allocation in the UK also come with similarly low levels of domestic exposure in pension equity portfolios: in 2000, around 70 per cent of direct investment in equity was in UK-listed firms, but by 2022 this had fallen to 17 per cent.<sup>86</sup> Although cross-country comparisons can be difficult to interpret, due to differences in state pension provision, population age structures, and the balance

<sup>84</sup> Evidence suggests greater institutional ownership spurs more innovation from firms. See: P Aghion, J Van Reenen & L Zingales, *Innovation and Institutional Ownership*, American Economic Review, 2013.

<sup>85</sup> By 'productive assets', we refer to assets that expand the productive capacity of the economy, and this includes plant and equipment, research and development, infrastructure and unlisted equities in related sectors. See: *Working Group on facilitating investment in long-term assets: Terms of Reference*, Productive Finance Working Group, 2021.

<sup>86</sup> Analysis of ONS, Funded occupations pensions schemes in the UK and MQ5 Tables.

between DB and DC schemes all driving different investment risk profiles, this points to how differently constructed pension systems can result in more equity investment.

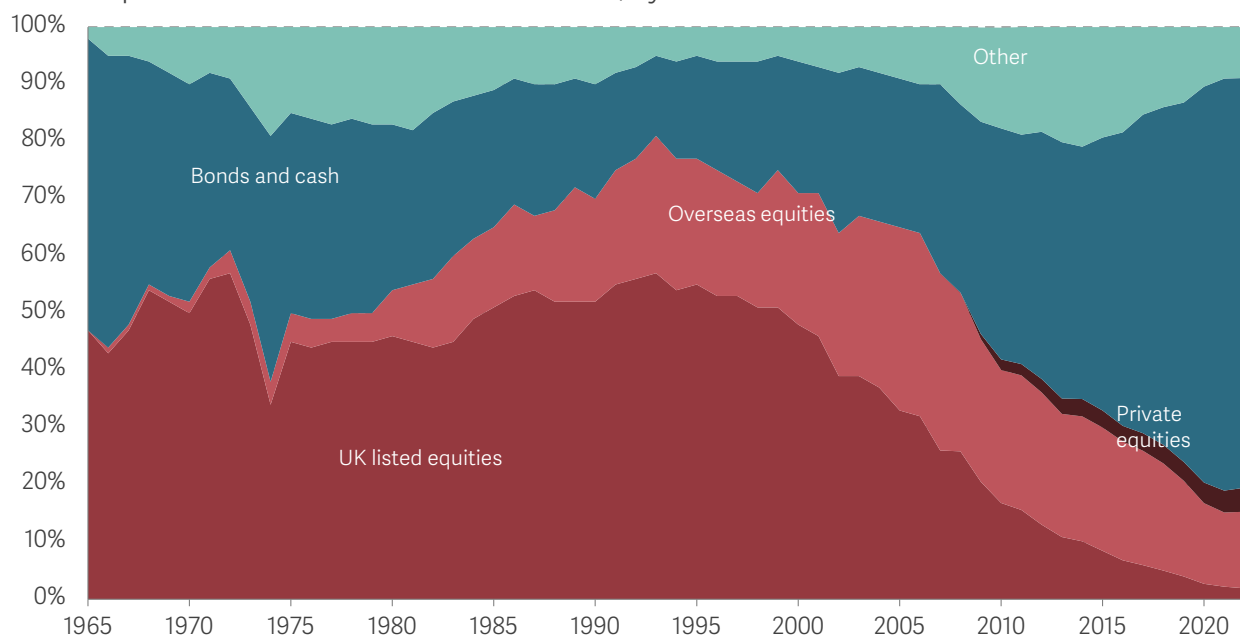
To re-concentrate ownership in the UK equity market, we propose reforms across three different strands of the pension landscape – DB, DC and Local Government Pension Schemes (LGPS) – with the common aim of producing a pension system which not only holds more equities but does so via larger funds that can provide concentrated and engaged ownership.

Offering Defined Benefit pensions alternatives to insurance buy-out is a route for greater allocation to equities

The bulk of pension assets are in Defined Benefit (DB) schemes, which pay workers a guaranteed amount each year in retirement. These assets total £1.7 trillion, or around 70 per cent of all pension assets.<sup>87</sup> As shown in Figure 17, these schemes have driven the reallocation to bonds, which have grown from around 30 per cent to 72 per cent of DB assets since the late 1970s.

**FIGURE 17: Defined Benefit pensions have driven the move away from UK equities**

Proportion of total Defined Benefit assets, by asset class: UK



NOTES: UBS Pension Fund indicators is used for data prior to 2008. Other includes investments in real estate and other alternative assets.

SOURCE: Analysis of UBS, Pension Fund Indicators and Pension Protection Fund, Purple Book 2022.

<sup>87</sup> These figures include both private and public sector pension schemes. Source: ONS, Funded occupational pensions schemes in the UK: July to September 2022.



The move of DB assets into low-risk bonds has resulted from a confluence of regulation and long-run structural factors. Because only 10 per cent of DB schemes are open to new members, overall scheme maturity has declined (i.e. funds have less time until pensions are paid), reducing funds' ability to bear risk. Additionally, changes in accounting standards in the late 1990s and early 2000s mean that employers had to present pension surpluses and deficits on their balance sheets, leading trustees and sponsors to take a different view on the risks they were taking in their DB funds. UK equity allocations have also fallen over this period, as funds have used investment in overseas equities to diversify risk, and gain exposures to sectors which are more prevalent in other international equity indexes - for example technology stocks.

The Pensions Act of 2004 requires trustees of DB schemes to value fund assets and liabilities every three years and, should funds be in deficit on the funding basis, employers are required to make recovery contributions to help close the deficit.<sup>88</sup> Since pension liabilities are often valued using government bond yields, the recent rise in bond yields has led aggregate funding levels to soar, with funds now believed to be holding around £325 billion more in assets than the value of their liabilities.<sup>89</sup> Given these high funding levels schemes are incentivised to invest in low-risk bonds which effectively lock-in these surpluses to prevent the need for recovery contributions in future, and to better match their portfolios to the assets insurers will prefer should buyout take place. These incentives and structural change mean that it is unlikely that legacy DB funds will re-enter the UK equities market as things stand, and, even if regulations were changed, incentives to allocate away from bonds do not exist.

However, since DB pension funds constitute such a large source of capital which could potentially concentrate ownership in the equity market and support productive assets, we should not unthinkingly allow the status quo to continue. With many legacy DB funds currently in surplus, the best point to intervene is likely to be when trustees are looking to secure their members' benefits. Currently, three main routes exist for well-funded schemes to discharge their liabilities: a buyout with an insurance firm (where an insurer undertakes the obligation to pay benefits to members and takes on the scheme's assets); consolidation in a so-called 'superfund'; or running on a self-sufficiency basis, which involves paying members directly from the fund without expectation of further contributions from the employer.

The first of these options, buyout, effectively involves transferring pension assets to the insurance sector. Given the security it provides to members, this is currently the most

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<sup>88</sup> Since 2010, almost £120 billion in special contributions have been paid into private DB schemes. Evidence suggests that firms that are required to make these contributions reduced their investment rates and dividends payouts as a result. See: P Bunn, P Mizen & P Smietanka, [Growing pension deficits and the expenditure decision of UK companies](#), Bank of England Working Paper 714, 2018.

<sup>89</sup> PWC, [Low Reliance Index and Buyout Index](#), June 2023

popular long-term strategy for trustees.<sup>90</sup> But the drawback is that the insurance sector faces more restrictions on its investment strategy than the DB sector, so funds that are intending to insure have a much lower capacity to invest in risky assets when they get close to being able to transact. Making changes to Solvency II regulations could help increase the extent to which some of these funds are invested in UK equities, but it is likely that any reformed insurance regulation regime will still be more stringent on risk-control and allowed assets than the one applying to DB funds. Moreover, the insurance sector currently lacks the capacity to absorb the majority of total DB assets, and, as more funds move into a position of being fully funded, the opportunity exists to keep these assets in vehicles which are better placed to invest in higher-returning productive assets than the insurance sector.

In order to boost allocations to equities and productive assets, it may therefore be more effective to provide routes to keep more assets within DB-type vehicles. The Pension Protection Fund (PPF) demonstrates how a large consolidated DB pension fund is able to retain exposure to equities and productive assets. The PPF is a public corporation created by the 2004 Pensions Act; funded partly through an industry levy, it takes on the DB schemes of insolvent employers, and currently manages £39 billion of assets. Importantly, it has avoided de-risking to the same extent as the wider DB universe, allocating roughly 40 per cent (rather than 72 per cent for the broader DB universe) of its total assets to government bonds and instead developing exposures to directly held infrastructure, farmland and private and public equities equity through the 'growth' bucket of the portfolio. The PPF has also insourced roughly 65 per cent of its investment capabilities, and allocates to other asset managers using segregated accounts, rather than pooled investments, thereby enabling it to actively engage with firms. The PPF also has a very long-term horizon – it needs to exist for as long as the DB market exists – and this plus its scale means the fund is able to invest for the long term, and bear more risk as a result.

In order to move more DB assets into productive assets, the Government is reportedly considering expanding the remit of the PPF to take on more schemes than just those that become insolvent. This approach has merits, but alternative models of consolidation may also provide additional incentives to trustees and sponsors.<sup>91</sup> For example, there have also been proposals that would enable consolidation within the

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<sup>90</sup> Following the recent rise in funding levels as gilt yields have risen, 47 per cent of DB funds are aiming for buyout as their long-term aim, more than are aiming for self-sufficiency. See: [Global Pensions Risks Survey 2021/22](#), AON, 2022.

<sup>91</sup> The Tony Blair Institute has also pointed to an expanded role for the Pension Protection Fund as a solution to delivering pension consolidation, recommending its conversion into 'GB Savings One'. See: J Kakkad, M Madsen & M Tory, [Investing in the Future: Boosting Savings and Prosperity for the UK](#), Tony Blair Institute for Global Change, May 2023.

private sector. In 2018, the Government put forward proposals for so-called ‘superfunds’.<sup>92</sup> These superfunds could purchase and consolidate existing DB funds, and replace the sponsoring employer with a capital buffer. The proposals envisaged The Pensions Regulator (TPR) assessing the business model and viability of a superfund, and setting up a regulatory gateway that schemes would need to pass before joining a superfund. The Government has yet to announce its next steps, despite the consultation closing over 4 years ago, but the TPR has used an interim regulatory regime based on existing powers to assess the two superfunds that have since been set up. This interim regime prioritises two principles: that members’ benefits are likely to be paid in full, and that it reflects the direction of travel outlined by the Government in its 2018 consultation.<sup>93</sup>

Of the two existing superfunds, the Pension SuperFund (PSF) offers a model for DB consolidation could increase the flow of funds to UK equities.<sup>94</sup> PSF aims to purchase solvent DB funds, pooling together fund assets and liabilities which are then backed by loss absorbing contingent capital raised from the selling fund sponsors and external investors. The providers of the capital buffer in the PSF are able to receive a pay out of profits from the fund above a combined funding level of 115 per cent, with a third of these excess profits also returned to members.<sup>95</sup> Transfers into the PSF involve more risk to members than a buyout, but will be cheaper for a sponsor, with the potential for members to benefit from upside returns too. All transactions must be cleared by the Pensions Regulator. As envisaged by the Government’s original consultation, TPR guidance is that schemes with a prospect of reaching buyout in the short term should not be commercially consolidated – so as to avoid regulatory arbitrage of the insurance industry.

However, despite the creation of superfunds, many trustees and employers remain uncertain about the benefits of consolidation. Figure 18 shows that about one-in-five trustees and employers believed that consolidation was an attractive option at the start of 2022.

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<sup>92</sup> [Consolidation of defined benefit pensions schemes](#), Department of Work and Pensions, 2018. This followed recommendations from the Work and Pensions Select Committee and the Pension and Lifetime Savings Association. See: [Defined benefit pensions schemes](#), Work and Pensions Committee, December 2016; and: DB Taskforce, [The Case for Consolidation](#), Pension and Lifetime Savings Association, 2017.

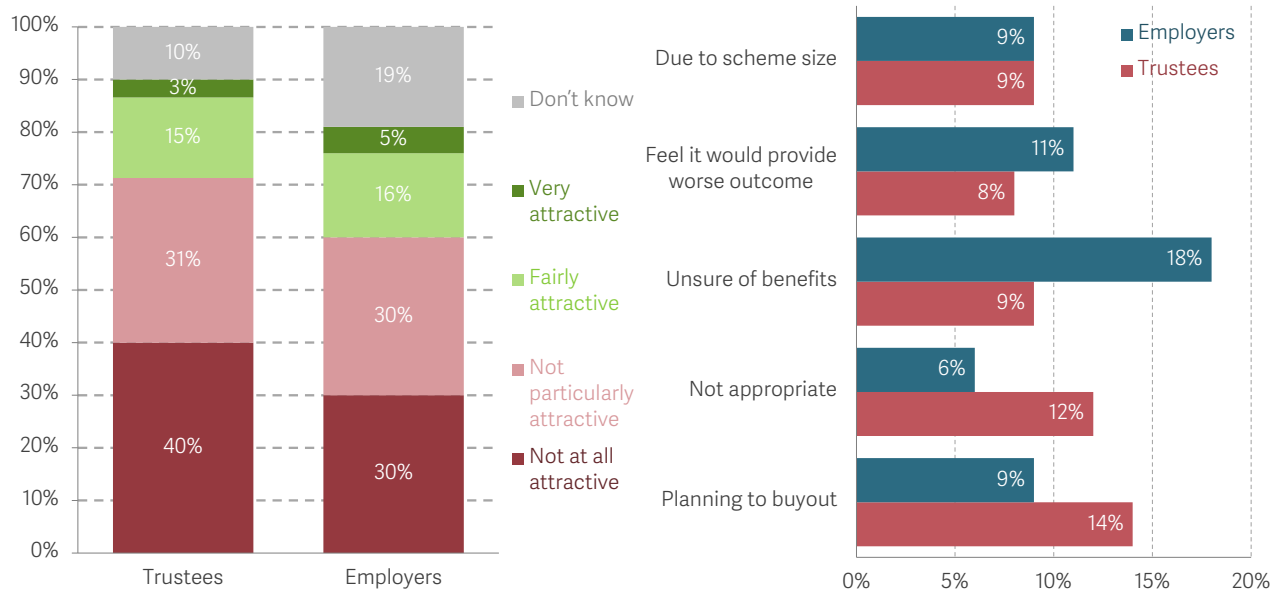
<sup>93</sup> [DB superfunds consultation response](#), the Pensions Regulator, June 2020,

<sup>94</sup> The two superfunds are The Pension SuperFund and Clara. Clara position itself as a bridge to an insurance buyout while The Pension SuperFund is intended as a long-term run-off vehicle, paying pension benefits as and when they are due.

<sup>95</sup> [A closer look at the Pension SuperFund](#), Hymans Robertson, 2019. The Superfund guidance of 2020 only allows profit extraction at buyout, but it allowed for review to this rule after 3 years (i.e. in 2023) which is currently underway.

**FIGURE 18: Sponsors and trustees of DB scheme are reluctant to consolidate**

Proportion of trustees and employers that see consolidation as an attractive option (left panel) and reported reasons for not being attracted to consolidation (right panel): UK, November 2021 – February 2022



NOTES: Telephone interviews conducted between November 2021 and February 2022. Trustees base = 265, Employer base = 138.

SOURCE: OMB Research, Defined Benefit trust-based pension schemes research: Report of findings from the 2021 survey, prepared for The Pensions Regulator.

**With four years having elapsed since its initial consultation, we recommend the Government sets up a specific legislative regime for superfunds.** This will provide the certainty needed for more superfunds to enter the market. We suggest that superfunds should be structured in a way that ensures that existing sponsors, providers of risk capital and members can extract and split surpluses above a minimum combined funding level of 115 per cent, thereby offering members improved benefits. Transfers to a superfund should continue to be cleared by the TPR's regulatory gateway, but we recommend scrapping the condition that funds with a prospect of reaching buyout should not be commercially consolidated. Instead, consolidation should be seen as an alternative to buyout, with trustees having the obligation to weigh up the potential upside benefits of these structures against the guarantee of payment that an insurance buyout offers.

**Second, legislation should be put in place to expand the remit of the PPF allowing it to act as a non-profit consolidator.** Funds which choose to transfer to the PPF would not have the ability to access surpluses, as they would do in the superfund, but could be more certain that member benefits will be paid, given the PPF's status as a public body. Unlike funds transferring in after insolvency, funds entering in this way would see member benefits fully maintained. The benefit of creating this route to consolidation

alongside superfunds is that the PPF is a more familiar institution to many trustees and employers, and therefore offers a route to consolidation for trustees who do not see superfunds as an attractive opportunity, and for smaller funds or those with more complex liability structures that may be poorly served by superfunds. Additionally, expanding the remit of this established organisation could offer a more rapid route to consolidation than waiting for more private sector superfunds to emerge.

Together, we consider that these innovations have the potential to develop the UK's DB pensions market into four or five large funds, each with over £200 billion in assets, with the incentives and capability to invest actively across a suite of risk assets.

### Consolidation is also the key to unlocking active investment from Defined Contribution pensions and Local Government Pension Schemes

While 70 per cent of pension assets are located in DB funds, future private pension wealth is largely being accumulated in Defined Contribution (DC) accounts. There are 18 million active members in DC schemes, compared to fewer than 1 million in DB funds, and DC assets are forecast to double to more than £1 trillion by 2030.<sup>96</sup> DC funds tend to be well exposed to equities, with 70 per cent of assets allocated to equities 20 years before a member's retirement – and with roughly a fifth of the equity holding being allocated to UK equities (significantly higher than the 4 per cent of total global market value that the UK-listed market represents).<sup>97</sup> However, these allocations are often made through pooled vehicles or passive funds, in line with the focus that DC funds have on keeping costs and charges low, which limits the extent to which pension funds can act as engaged owners of the firms whose shares they are (in effect) buying. Additionally, DC funds have much lower exposures to high-growth potential or productive assets (such as unlisted equity and infrastructure) than their international comparators.<sup>98</sup> Moreover, the UK DC market is fragmented with almost 27,000 schemes in existence, 25,000 of which are micro funds with fewer than 12 members (though these only amount to 10 per cent of total assets).<sup>99</sup> These problems are linked: small funds lack the scale and skills needed to invest directly in listed and unlisted assets.

It is widely recognised that consolidation is important in this market, partly to deliver cost savings (as has been the focus to date), but also to overcome difficulties that limit the sophistication of fund offerings and the active approach of a fund. Moreover, some funds that offer investments to members via an insurance platform model have had difficulties accessing investments in infrastructure and real assets – difficulties

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<sup>96</sup> Productive Finance Working Group, [Investing in Less Liquid Assets – Key Considerations](#), November 2022.

<sup>97</sup> [The DC Future Book 2022](#), Pensions Policy Institute,

<sup>98</sup> Australian pension funds, which are largely DC funds, invested almost 20 per cent of assets in unlisted equity, infrastructure and unlisted property. See: [Superannuation Statistics](#), ASFA, March 2023.

<sup>99</sup> [DC trust scheme return data, 2022-23](#), The Pensions Regulator, 2023.

overcome by large funds, such as National Employment Savings Trust (Nest), whose size allows direct investment in productive assets via a joint venture structure.<sup>100</sup> Nest has also set up a regulated investment subsidiary which will allow the fund to insource more of its investment capabilities as it grows in the future, potentially opening the route to the creation of a significant active and engaged domestic investor as the fund scales.<sup>101</sup>

The issue of DC consolidation has received much policy attention, with the Productive Finance Working Group, delivering a set of recommendations that are in the process of being implemented.<sup>102</sup> The outcomes of their work have included a consultation on a new Value For Money (VFM) assessment framework to encourage trustees to invest in higher-returning assets and strategies, rather than focusing exclusively on cost, and to consolidate where appropriate, if unable to provide a good offering when it comes to service quality, costs and returns.<sup>103</sup> These policies, together with previous actions, such as the authorisation of 'Master Trusts' – large multi-employer trusts, which currently control £105.3 billion in assets across 36 providers – are likely to increase the pace of consolidation as the DC market matures, but policy makers need to go further to create a DC environment which is geared towards consolidation.<sup>104</sup>

**As well as the holistic annual VFM assessments, which should be crafted with the aim of greatly increasing the pace of consolidation, the Government and The Pensions Regulator should designate several Master Trusts (including Nest) as DC consolidators to whom trustees of pensions funds which fail to meet the VFM assessments for two years in a row would be mandated to transfer DC funds.** These consolidators would effectively act as funds which have been cleared by regulators as offering high-quality governance, investment performance and customer service. Having multiple consolidators reduces the risk that the speed of consolidation is limited by the capacity of individual funds to absorb new assets. The Government should be ambitious in its consolidation aims: by 2030, DC assets are set to reach £1 trillion in the UK, and we suggest it aims to have fewer than 250 non-micro pension schemes operating at this point, just over 10 per cent the of number of schemes that exist today. By comparison, the Australian superannuation system is a majority DC system and it currently invests the equivalent of £1.2 trillion of asset across just 126 funds.

To complement this process of consolidation, we also recommend a change to how employer-provided pensions operate. Instead of the current approach whereby

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<sup>100</sup> Infrastructure becomes key building block in Nest's portfolio, Press Release, April 2021.

<sup>101</sup> Nest Invest receives FCA authorisation, Press Release, January 2020.

<sup>102</sup> A Roadmap for Increasing Productive Finance Investment, Productive Finance Working Group, September 2021.

<sup>103</sup> Value for Money: A framework on metrics, standards and disclosures, Department for Work & Pensions, 2023. The Government is considering new powers to enforce wind up on schemes which fail this assessment.

<sup>104</sup> The current pace of consolidation would lead to 1,000 non-micro DC funds existing in five years' time, a number the Government considers too large. See: [Future of the defined contribution pension market: the case for greater consolidation](#), Department for Work & Pensions, 2022



an employer chooses a pension provider for their employees, **we recommend that individuals have a single DC fund that employers pay into and which contracts their pension directly with a provider selected from a list of authorised Master Trusts.**<sup>105</sup>

This should substantially reduce the situation where employees are enrolled into a new pension provider every time they change employers, potentially leading to a large number of small pots. Doing so will bring the DC system more in line with the superannuation system in Australia where members are only provided with a new pot if they request one, and should help to deliver scale in the long term.

As well as making significant changes to the private sector pension landscape, there is also scope and need for reform of public sector pensions. The Local Government Pension Scheme (LGPS) is one of the few public sector pension schemes which is funded by contributions rather than directly by taxes, and its assets were together worth £342 billion in 2021-22.<sup>106</sup> But this pension scheme in England and Wales is administered by 86 separate local pension funds, each with its own pension board, while LGPS Scotland is made up of 11 separate funds.

Previous governments have realised that such a fragmented structure prevents LGPS from benefiting from economies of scale, and regulations were put in place in 2016 that required these funds to be pooled to achieve these benefits. This legislation envisaged that funds invest through 6 pools, each with at least £25 billion of assets, and that local authorities would collaborate on establishing and designing these pools.<sup>107</sup> Instead, 8 pools have developed, with the smallest being just £13 billion. In the Spring 2023 Budget, the Government said it wanted this consolidation to go “further and faster”, having proposed a deadline for all listed assets to be transferred to pools by March 2025 and that it intended to set a future direction for the process.<sup>108</sup> Mooted options include driving towards a smaller number of pools (each with in excess of £50 billion) or requirements on considering exposure to certain types of illiquid assets such as venture and growth capital.

Pooling, so far, has been enacted very variably with some local authorities choosing to retain all of their assets outside of these pools or pooling just their passive exposures; as a result, the benefits of pooling have been fairly modest. Additionally, local authority level pension boards continue to set the strategic asset allocation of their funds individually, with pools then implementing these allocations. However, the lack of guidance as to what constitutes “strategic allocation” means that in practice many pension funds are

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<sup>105</sup> [DC trust scheme return data, 2022-23](#), The Pensions Regulator, 2023. This proposal is similar to the “stapling” reforms in Australia which means a pension pot follows a worker unless they opt out.

<sup>106</sup> [Scheme Annual Report 2021](#), Local Government Pension Scheme Advisory Board, England and Wales

<sup>107</sup> [Local Government Pensions Scheme: Investment Reform Criteria and Guidance](#), Department for Communities and Local Government, November 2015.

<sup>108</sup> HM Treasury, [Spring Budget 2023](#), March 2023.

retaining allocation powers that can often make it difficult to realise the benefits of pooling.

We think the plan for pooling the LGPS should be more ambitious, and learn from international examples of large funded public pension schemes, such as the Canadian Pension Plan, the Ontario Teachers' Pension Plan and PFZW and ABP in the Netherlands.<sup>109</sup> **The ultimate goal should be further consolidation into a single local government pension fund. This fund would be of the size where it is able to insource investment expertise across multiple asset classes, acting as a source of capital which can engage actively with firms as an informed shareholder, and invest in productive assets particularly those located in the UK.** We would replace local authority pension boards with regional-level boards that have the job of identifying local infrastructure projects which the centralised LGPS fund could take direct stakes in. This plan would create a single, large and active investor in the UK with the potential to help improve firm governance, shape markets and level up the country regionally.<sup>110</sup>

### [Worker representation on corporate boards will make investment opportunities more salient and boost productivity](#)

Improving on levels of active engagement from owners is not, however, the only change needed to improve investment rates: raising the profile of workers in the governance of UK firms is important too.

Corporate governance legislation differs across advanced economies. The UK, like the US, follows a corporate governance system referred to as 'shareholder primacy': the shareholders elect the corporate board, which directly or indirectly manages the company on behalf of the shareholders. This system has faced criticism, particularly after the financial crisis, for promoting short-termism.<sup>111</sup> In contrast, many European countries have adopted a two-tier board system, with an executive and a supervisory board.<sup>112</sup> This structure of corporate governance grants workers some formal authority in corporate decision-making, often in the form of worker representation on company boards, and indeed half of EU Member States (plus Norway) have mandatory employee board-level

<sup>109</sup> These more centralised funds are significantly more invested in private assets and infrastructure than the LGPS. The Canadian Pension Plan, for example, had 32 per cent invested in private equities, 9 per cent in real estate and 9 per cent in infrastructure, and the Canadian Public Sector Pension Investment Board has 15 per cent in private equities, 13 per cent in real estate and 10 per cent in infrastructure (all data taken from pension annual reports). The only LGPS pools with a significant allocation to these sorts of assets are LGPS Northern and LGPS Border to Coast, but these still have only 5 per cent in private equities and less than 9 per cent in infrastructure.

<sup>110</sup> Devolution means that the Scottish LGPS, LGPS for Northern Ireland, and Wales Pension Fund will likely remain separate.

<sup>111</sup> See: J Kay, *The Kay review of UK equity markets and long-term decision making*, Final Report. 2012; S Holmberg, *Fighting Short-Termism with Worker Power*, The Roosevelt Institute, 2017. The LSE Growth Commission also concluded that financiers take an excessively short-term outlook when weighing up investment opportunities, with investor impatience and a hyper-active mergers and acquisitions market discouraging long-term investment, see Aghion et al., *Investing for Prosperity: Skills, infrastructure and Innovation*, LSE, 2012.

<sup>112</sup> The executive board is the managing body and is responsible for day-to-day business. The supervisory board – composed of representatives of shareholders and, in many cases, workers – is responsible for the selection, monitoring, auditing, compensation structuring, and dismissal of the executive board.



representation in private companies once they reach a certain size (See Table 3 for an overview of the legislation on board-level worker representation in private companies across European countries<sup>113</sup>).

This lack of a formal mechanism for encouraging worker voice at the company level in the UK is accompanied by fewer workers reporting that they have a say in workplace changes than in the past, and, indeed, fewer workers now believing that they should be involved in such changes.<sup>114</sup>

In principle, the impact of having board-level worker representation on management quality and firm performance is unclear. Worker representation might result in increases in workers' wages rise at the expense of investment. Alternatively, repeated interactions between workers and those who own the company could facilitate cooperation, institutionalise communication, and build trust, all of which might improve long-termism in corporate decision-making, thereby raising investment and productivity in the long run.

The empirical evidence supports the latter view. Worker representation on boards in Germany has been shown to have a positive effect on capital stock, the capital-labour ratio, and the capital share, and does not raise wage premia or rent sharing.<sup>115</sup> A study from Finland also finds small positive impacts of worker representation on firm survival, productivity, and capital intensity, and on measures of job quality.<sup>116</sup> Overall, these papers and others find little evidence that board-level worker representation increases workers' wages.<sup>117</sup> It is important to note that the subjects of these studies —Germany, Finland and Norway—have higher unionisation rates than the UK. Thus, we might expect the impact of having workers on board to be stronger in the UK context, helping to institutionalise capital-labour cooperation and governance where fewer alternative mechanisms exist.

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<sup>113</sup> Additionally, there is also board-level representation in some state and municipally-owned (or privatised) companies in the Czech Republic, Greece, Ireland, Poland, Portugal and Spain.

<sup>114</sup> K Shah & D Tomlinson, *Work experiences: Changes in the subjective experience of work*, Resolution Foundation, September 2021.

<sup>115</sup> S Jäger, B Schoefer & J Heining, *Labor in the Boardroom*, The Quarterly Journal of Economics, 2021.

<sup>116</sup> J Harju, S Jäger & B Schoefer, *Voice at work*, National Bureau of Economic Research, 2021

<sup>117</sup> See also a study that focuses on worker outcomes in Norway: C Blandhol et al., *Do employees benefit from worker representation on corporate boards?*, *Do employees benefit from worker representation on corporate boards?*, National Bureau of Economic Research, WP 28269, 2020.

**TABLE 2: Many European economies have mandatory board-level worker representation for larger companies**

Board-level worker representation in private companies in the European Union (2020)

Country	Private companies covered	Extent of representation
Austria	Limited-liability companies with 300 or more employees All public limited companies	A third of supervisory board
Croatia	Limited-liability companies with 200 or more employees All public limited companies	One member of the board (also in supervisory board for public limited companies with two-tier board system)
Denmark	Companies with 35 or more employees	One third of the board (supervisory board in public limited companies)
Finland	Companies with 150 or more employees	Defined by agreement, otherwise, a fifth of members of executive board or other decision making body
France	Private companies with 1,000 or more employees in France (5,000 worldwide)	At least one or two board members (if more than 8 board members) of board (supervisory if two-tier board system)
Germany	Companies with 500 or more employees	A third of supervisory board in companies with more than 500; half in companies with more than 2,000
Hungary	Companies with 200 or more employees with two-tier board system	A third of members on supervisory board
Luxembourg	Companies with 1000 or more employees	A third of executive board (or board of directors, depending on the corporate governance structure chosen by the company)
Netherlands	Companies with 100 or more employees	Up to a third of supervisory board
Norway	Companies with 30 or more employees	One director in companies with 30 to 50 employees; one third of the seats in companies with more than 50, with the possibility of an extra seat in companies with more than 200
Slovakia	Companies with 50 or more employees	A third of supervisory board (can be increased to half voluntarily)
Slovenia	Companies with single tier board with 50 or more employees, Companies with supervisory board	Between a third and a half of seats in companies with supervisory board plus management board member if more than 500 employees; at least a quarter in companies with single tier board
Sweden	Companies with 25 or more employees	Between a quarter and a third of board

NOTES: C Worker board-level participation in private companies of the European Economic Area countries  
 SOURCE: <https://www.worker-participation.eu/National-Industrial-Relations/Countries>, Accessed: June 2023.

These ideas have already been discussed in the UK, with supporters from across the political spectrum. For example, the 2016 Conservative government headed by Theresa May proposed that companies would include a worker representative on the board,<sup>118</sup> and the Labour Party's platform in 2018 included a proposal for companies with more than 250 workers to have at least a third of the board representing workers.<sup>119</sup>

So far, however, policy has stopped short of mandatory requirements for worker representation. The 2019 UK Corporate Governance Code—which applies to companies listed on the London Stock Exchange—introduced new measures which require boards to engage more with the workforce via the appointment of a director from the workforce, the establishment of a formal workforce advisory panel, or the creation of a designated non-executive director role with a focus on the workforce. If a company's directors have not chosen one or more of these methods, they must explain the 'alternative arrangements' they have put in place.<sup>120</sup> However, research found that only five out of a sample of 350 listed companies had any worker representatives on the corporate board. Most companies (68 per cent) had adopted at least one of the suggested measures, but the remainder – nearly a third of the sample – had not introduced any new measures.<sup>121</sup>

**We propose strengthening the requirements for board-level worker representation, by introducing the legal requirement that workers make up one fifth of the boards of both publicly listed companies and limited liability companies with more than 200 employees.**

Given that the average board size of listed companies in the UK is ten, this implies having two directors coming from the workforce. These representatives would be voted in by the workforce and could be chosen from union representatives (although this would be optional). Such reforms would represent a material change for UK firms, and it would be necessary to get the details right. Nevertheless, as we have seen, mandatory board-level representation is common by European standards, and was the stated policy of a Conservative government just a few years ago.

## [A renewed voice for owners and workers](#)

The aim of our proposals on pensions and corporate boards is to improve the monitoring of and long-term focus of the management of firms. Adding workers to corporate boards gives a greater role to stakeholders from within those firms in providing a strategic steer to organisations, and brings to strategic decision-making those who often operationalise the initiatives of management, and embody the intangible investments in skills and processes which are of increasing importance in the modern economy.

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<sup>118</sup> Department for Business Energy and Industrial Strategy, [Corporate governance reform, Green Paper](#), 2016

<sup>119</sup> Reuters, [UK opposition Labour plans to give workers a third of seats on company boards](#), September 2018.

<sup>120</sup> Financial Reporting Council, [The UK Corporate Governance Code](#), 2018.

<sup>121</sup> C Rees & P Bri  ne, [Workforce engagement and the UK Corporate Governance Code: a review of company reporting and practice](#), The Financial Reporting Council Limited, 2021.

Meanwhile, action on pension funds aims to change the ownership of large UK corporate firms, creating a set of domestically based blockholders who are actively engaged in scrutinising corporate investment plans and developing more productive firms. Pension consolidation also offers the ability to unlock more capital which can be directly invested in productive assets, such as infrastructure and property, as well as creating an ecosystem in which unlisted firms are able to grow by raising funds through initial public offering (IPO) or from a larger growth capital sector.

This Section has described how corporate governance and the tax system have been holding back firms' willingness to invest, and set out major reforms to address this. However, being willing to invest is only half the story – firms must also have the ability to invest. The next Section discusses what barriers might lie in their way.

## Section 4

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### Improving firms' ability to invest

Even if firms have the finance and the desire to invest, they then need to be physically able to deliver it. Around half of business investment is in structures, and much of the rest of it needs a structure to house it. And, although the UK has relatively liberal product and labour markets, the same is not true for land: construction is made costlier in the UK by the stringency and unpredictability of the planning system. The UK planning system is largely discretionary, which can mean that developments are refused even if they meet the specification of a local plan. As well as direct restrictions on commercial developments, restrictions on housing and infrastructure combine to prevent local economic development in areas where there is demand for it, including in high-tech clusters that are key for the UK's growth prospects. Planning restrictions are also preventing much-needed net zero infrastructure investments from being made.

We propose a series of reforms to the UK planning system, such that local areas are required to have plans and stick to them, plans are agreed at the appropriate geographic level, and local government faces better financial incentives for allowing development. Central government coordination of planning objectives should also be strengthened, such that barriers, including those creating delays for net zero infrastructure, are addressed. Such a radical reform to the planning system might be politically difficult, and so some of these principles can be explored in specific local or combined authorities. The result would be a significantly more pro-investment planning policy.

## The UK planning system holds back investment and growth

UK firms that might be willing or able to invest face a range of obstacles that prevent them delivering on that investment. In the case of physical capital in the form of structures, construction is slow and expensive, and there is a large body of evidence that suggests this is in large part due to restrictions, complexity, opacity and uncertainty in the planning system. Reports such as the Barker reviews, analysis from the OECD, and a large academic literature point to the limitations of the current system.<sup>122</sup> In 2020, the Department for Levelling up, Housing and Communities (then Ministry of Housing) published a White Paper that drew similar conclusions, and suggested a legal reform of the planning system in England (see Box 5), although its most ambitious proposals have since been abandoned.<sup>123</sup> Finally, research suggests that housing as well as office prices in the UK are among the most expensive in the world and have been growing faster than in other OECD countries.<sup>124</sup>

Two aspects of the UK planning system are particularly problematic when it comes to business investment. First, planning decisions are discretionary and focused on case-by-case applications. Such a system is often called ‘development control’. It translates into local communities engaging more on specific planning applications than on the creation of local strategies. In this system, public views are sought more on specific ex post decisions than on setting general ex ante rules. Although local plans are a statutory obligation, their role is limited in practice. On one side, they appear complex and costly to establish.<sup>125</sup> On the other side, the presumption in favour of the plan does not imply its primacy on planning permissions.<sup>126</sup> As a result, in 2022, only 39 per cent of local planning authorities in England had made a plan in the past five years.<sup>127</sup> This result is a system with large variations in how restrictive local authorities can be. This is because the absence of binding local plans creates an opportunity for political capture of the decision-making process, and this is reinforced by little regard for prices in how land allocation targets are designed. In practice, simple demographic projections carry

<sup>122</sup> K Barker, Review of housing supply, [Delivering Stability: Securing our Future Housing Needs](#), HM Treasury, 2004; and K Barker, [Barker review of land use planning: Final report](#), HM Treasury, 2006.; OECD, [Brick by Brick: Building Better Housing Policies](#), OECD Publishing, Paris, 2021 and, P Cheshire, [Broken market or broken policy? The unintended consequences of restrictive planning](#), National Institute Economic Review, 245, 2018.

<sup>123</sup> It is important to note that although planning in the devolved nations have a separate legal basis to the planning system in England, they are technically close to the existing system in England. See: A Breach, [Why English planning reform should encourage changes in the devolved nations](#), Centre for Cities, August 2020.

<sup>124</sup> See: P Cheshire & C Hilber, [Office space supply restrictions in Britain: the political economy of market revenge](#), The Economic Journal, 118(529), 2008; and: C Hilber & W Vermeulen, [The impact of supply constraints on house prices in England](#), The Economic Journal, 126(591), 2016.

<sup>125</sup> The 2020 White Paper discusses this at length, noting that it takes seven years on average to produce a local plan.

<sup>126</sup> This follows most notably from the [House of Lords decision](#) on the “City of Edinburgh Council v Secretary of State for Scotland and Others”, 1997. On this aspect, the new Section 38 (of the Planning and Compulsory Purchase Act, 2004) that the Levelling-up bill proposes will not bring any significant changes.

<sup>127</sup> Department for Levelling Up, Housing and Communities, [Levelling Up the United Kingdom](#), February 2022, section 3.4.2.

more weight than actual demand (which instead responds to local attractiveness and productivity and other factors).<sup>128</sup>

The second aspect relates to the way we finance local government, which in effect penalises local decision-makers that accept new developments. Under our current system, although local communities can expect to face many of the costs associated with local developments (for example, congestion due to increased demand for public services, traffic, and pollution), they are unlikely to feel much fiscal benefit. This is because tax revenues are largely collected nationally before being redistributed to local authorities on the basis of need. This is especially true for business properties, which are taxed through the Uniform Business Rate (UBR). Until very recently, the UBR was entirely collected by central government before reallocation.<sup>129</sup> Recent changes, such as the introduction of retention schemes, are moving in the right direction; but they remain limited in scope and are subject to chopping and changing. In this system, the only visible gain to local authorities when allowing new permits is employment, much of which may accrue to people living outside that local authority (especially where the authority is small).<sup>130</sup> This system makes it very difficult for local authorities to take steps to ensure that the benefits of local development can be felt by local people, for example by making required investments in local skills or providing other public services for residents.<sup>131</sup>

#### BOX 4: The 2020 White Paper: Planning for the Future

The Planning for the Future consultation proposed reforms of the planning system in England which sought to “streamline and modernise the planning process, bring a new focus to design and sustainability, improve the system of developer contributions to infrastructure, and ensure more land is available for development where it is needed.”

This White Paper sets out various measures that sought to operationalise a move from ex-post development control to ex ante strategic planning. A key objective was to make local plans less costly to produce and more effective once in place. To reduce their cost, the White Paper refocused the plans around a simple zone-based approach (which involved designating

<sup>128</sup> P Cheshire, [Broken market or broken policy? The unintended consequences of restrictive planning](#), National Institute Economic Review, 245, 2018.

<sup>129</sup> See: P Cheshire and C Hilber, [Office space supply restrictions in Britain: the political economy of market revenge](#), Economic Journal, 118(529), 2008; and P Cheshire and C Hilber, [Home Truths: options for reforming residential property taxes in England](#), Bright Blue report, 2021.

<sup>130</sup> Research shows that the local unemployment rate is positively associated with more lenient granting of planning permission. See: P Cheshire & C Hilber, [Office space supply restrictions in Britain: the political economy of market revenge](#), Economic Journal, 118(529), 2008.

<sup>131</sup> National Audit Office, [Planning for New Homes](#), 2019.

growth areas) as well as a reduction of content to simple rules. This also shifted community engagement toward this ex ante phase of planning, and offered many tools to facilitate it (e.g., a digital and mapped approach). To make plans more effective, it created a presumption in favour of the plan in designated growth areas (“where outline approval for development would be automatically secured for forms and types of development specified in the plan”). It also created a statutory timetable for Local Authorities to have plans, and sanctions from the government in case of failing to do so. Finally, it made the case for “nationally-determined, binding housing requirements that local planning authorities would have to deliver”.

The White Paper also contained a proposal for an “Infrastructure Levy” (a locally-set, mandatory charge levied on the final value of completed development), to replace the current system of developer contributions. Such mechanisms seek to enable local authorities to provide infrastructure and affordable housing for communities. However, the current system is mostly based on voluntary agreements (“section 106”), which creates uncertainty for developers, and causes delay and negotiation costs for both developers and planning

authorities. Previous policy has tried to reduce this uncertainty by introducing a complementary, non-negotiable and flat-rate “Community Infrastructure Levy”, a fixed charge levied on floorspace of a new development. But the latter remains optional for local authorities and is inflexible to changing market conditions. The proposal from the White Paper was to simplify the system, make it compulsory and set nationally.<sup>132</sup> A technical consultation on the Infrastructure Levy closed in March 2023, and this concluded with the intention to phase it in gradually.<sup>133</sup>

The Government set out its proposed approach to planning reform, in light of responses to the White Paper, in The Levelling-up and Regeneration Bill (LURB) which is still in Parliament as we write. This does not contain any of the ambitious reform of the planning system that the White Paper suggested, with current amendments in general weakening the scope of what little change was proposed. The zoning approach has been abandoned, and the current absence of presumption in favour of the plan is barely amended. More generally, the Government has dropped mandatory housing targets, and green belt exceptions will remain. In fact, most of the potentially effective change will come from the creation of

<sup>132</sup> Moreover, charging the levy on the value of completed development would make it more responsive to market conditions.

<sup>133</sup> DLUHC, [Technical Consultation on the Infrastructure Levy](#), March 2023.



National Development Management Policies (or NDMP). According to the LURB, these would give the Secretary of State the power to set general rules applying to all local authorities. The idea

is to limit the number of details required in local plans and avoid replication. But there remains much uncertainty about what exactly those future NDMP will contain in practice.<sup>134</sup>

The UK's planning system hinders business investment by affecting firms' decisions, both directly and indirectly. There are three direct effects on the feasibility and cost of investment. First, a restrictive system means firms may not be granted the permission to make desired investments at all, or in the preferred location. This point is illustrated well by barriers to net zero infrastructure investment. In England, for example, national planning policy has de facto banned onshore wind farms since 2015.<sup>135</sup> More broadly, restrictions in the planning system may cause investments to be made in suboptimal (from a productivity perspective) locations. For example, in the case of retail, research estimated that the "Town Centre First" policy caused a 32 per cent loss of output to new supermarkets.<sup>136</sup> Second, planning restrictions translate into higher capital costs, due to an unresponsive supply of land and buildings.<sup>137</sup> Third, the opacity and unpredictability of the system creates uncertainty, which also deters investments.<sup>138</sup>

Beyond those direct effects, the planning system also has indirect effects on investment mostly through its impact on housing. Since the same restrictiveness (and the associated lack of responsiveness to price signals) slows the supply of housing in places where there is demand for it, firms need to compensate workers for higher housing costs or longer commutes. This increase in labour cost will reduce firms' capacity to invest (all else equal). Firms also suffer loss in productivity from workers being unable to move to better opportunities.<sup>139</sup> These indirect effects caused by restrictive planning can have very large aggregate consequences.<sup>140</sup> We discuss this type of effects in the case of the region than spans from Oxford to Cambridge in Box 5.

<sup>134</sup> There is a more detailed discussion of the LURB proposals in: IPPR, "[Planning for net zero and nature: A better, greener planning system that empowers local places](#)", 2023.

<sup>135</sup> See footnote 54 in the National Planning Policy Framework. Despite a wide consensus on the importance of lifting this ban, planning reforms on that aspect remain uncertain at the time of writing. See, C Skidmore, [Mission Zero](#). Independent Review of Net Zero. 2022. Also see: National Infrastructure Commission, [Infrastructure Progress Review](#), 2023.

<sup>136</sup> P Cheshire, C Hilber & I Kaplanis, [Land use regulation and productivity—land matters: evidence from a UK supermarket chain](#). Journal of Economic Geography, 15(1), 2015.

<sup>137</sup> See: P Cheshire & C Hilber, [Office space supply restrictions in Britain: the political economy of market revenge](#), The Economic Journal, 118, 2008; and: C Hilber and W Vermeulen, [The impact of supply constraints on house prices in England](#), The Economic Journal, 126, 2016.

<sup>138</sup> P Cheshire, [Broken market or broken policy? The unintended consequences of restrictive planning](#). National Institute Economic Review, 245, 2018.

<sup>139</sup> P Cheshire, C Hilber & H Koster, [Empty homes, longer commutes: the unintended consequences of more restrictive local planning](#). Journal of Public Economics, 158, 2018.

<sup>140</sup> C Hsieh & E Moretti, [Housing constraints and spatial misallocation](#), American Economic Journal: Macroeconomics, 11(2), 2019.

## BOX 5: Planning for growth: the case of the Oxford-Milton Keynes-Cambridge region (or “arc”)

The geographic area which spans across Oxfordshire, Buckinghamshire, Northamptonshire, Bedfordshire and Cambridgeshire is both highly productive and growing fast. In fact, it has seen some of the fastest growth in productivity in the UK outside London in recent years.<sup>141</sup> This region contains Oxford and Cambridge (home of two world-leading universities and high-tech clusters of firms) and Milton Keynes (one of the most productive cities in the UK). This high-growth area benefits the UK as a whole. It drives national productivity up and creates innovation that spills over to other areas. It also attracts investments and workers, including from overseas. In principle, the reallocation of workers from lower productivity areas toward this type of fast-growth place is a key mechanism through which national economies grow. But this can only work if those high-growth cities are able to adapt to accommodate further population growth. Evidence suggests that the planning restrictions in New York, San Jose and San Francisco alone had cost the US a third of its growth rate between 1964 and 2009, or an average of \$300 a month to each American in 2009.<sup>142</sup> In the case of the Oxford-

Milton Keynes-Cambridge arc, the National Infrastructure Commission (NIC) estimated that removing the constraints in planning and delivery of new houses could double its contribution to UK growth by 2050, and triple the creation of new local jobs (from 335,000 to 1.1 million).

In many aspects, issues relating to the Oxford-Milton Keynes-Cambridge region help to illustrate broader aspects of the UK planning system. The area is fragmented into 23 local planning authorities and 8 transport authorities, which limits strategic planning at the arc level, and means local authorities are unlikely to coordinate at the right level. Even though some already have taken a more coordinated approach (for example, within the Greater Cambridge Shared Planning service, which unites two councils<sup>143</sup>) those initiatives exist on a voluntary basis and remain small scale (there are four other district councils in the Cambridgeshire and Peterborough Mayoral Combined Authority, and another twelve in the broader region). It also means analyses and needs assessments are based on very local considerations only, instead of more ambitious visions for the region. One of the initial NIC recommendations was

<sup>141</sup> National Infrastructure Commission, *Partnering for prosperity: A new deal for the Cambridge-Milton Keynes-Oxford Arc*, 2018.

<sup>142</sup> C Hsieh & E Moretti, *Housing constraints and spatial misallocation*, American Economic Journal: Macroeconomics, 11(2), 2019. See also: D Puga & G Duranton, *Urban Growth and its Aggregate Implications*, NBER Working Paper, December 2019.

<sup>143</sup> [greatercambridgeplanning.org](http://greatercambridgeplanning.org)

to increase connectivity within the arc, in order to effectively increase its size without putting too much pressure on single authorities, but this also implies coordination at a higher geographic level. Finally, greenbelts have been very constraining for cities like Oxford and Cambridge. In 2020, the Government committed to developing a “Oxford-Cambridge Spatial Arc Framework”, and a policy paper was published in 2021.<sup>144</sup> This aims to give the arc a status of National Planning Policy, which would serve to coordinate local plans. This welcome involvement from the national government offers a potential route towards a more efficient planning system.

However, the planning reform for the arc remains incomplete at the time of writing. First, despite its initial engagement, the Government has been wavering about the future of the

spatial arc framework, and it remains unclear whether the process toward a regional strategy will continue.<sup>145</sup>

Second, the planning reform suggested in the 2020 White Paper seems in large part dismissed from the reform under preparation. This represents a limitation of the role of local plans, as well as a constraint in the ability of a regional strategy such as the arc to actually bite locally.

More fundamentally, most of the arguments in favour of the arc also apply elsewhere in the country: renewing local plans and community engagement, insisting on strategic planning, providing better data and evidence, making local constraints more adaptable, and ensuring regional and national coordination are tools that should be made prevalent, not an exception.

Figure 19 illustrates the implications of our restrictive planning system. Since 2000, the UK has had the second-smallest increase in built-up land in the OECD, and is one of the few OECD countries where the built-up area per capita has fallen.<sup>146</sup> It is sometimes argued that physical constraints explain this slow growth of built-up land in the UK, which is already one of the highest density countries in the OECD.<sup>147</sup> But, as can be seen in Figure 19, denser countries such as the Netherlands and Japan were still able to build more (per capita) over this period. Similarly, these patterns cannot be explained by the UK protecting more of its land from development: countries like Germany and the Netherlands have at least as much protected areas as the UK.<sup>148</sup> Moreover, UK inner

<sup>144</sup> Ministry of Housing, Communities & Local Government, [Planning for Sustainable Growth in the Oxford-Cambridge arc: spatial framework](#), 2021.

<sup>145</sup> National Infrastructure Commission, [Infrastructure Progress Review](#), March 2023.

<sup>146</sup> See: A Florczyk et al., [GHSL Data Package](#), 2019.

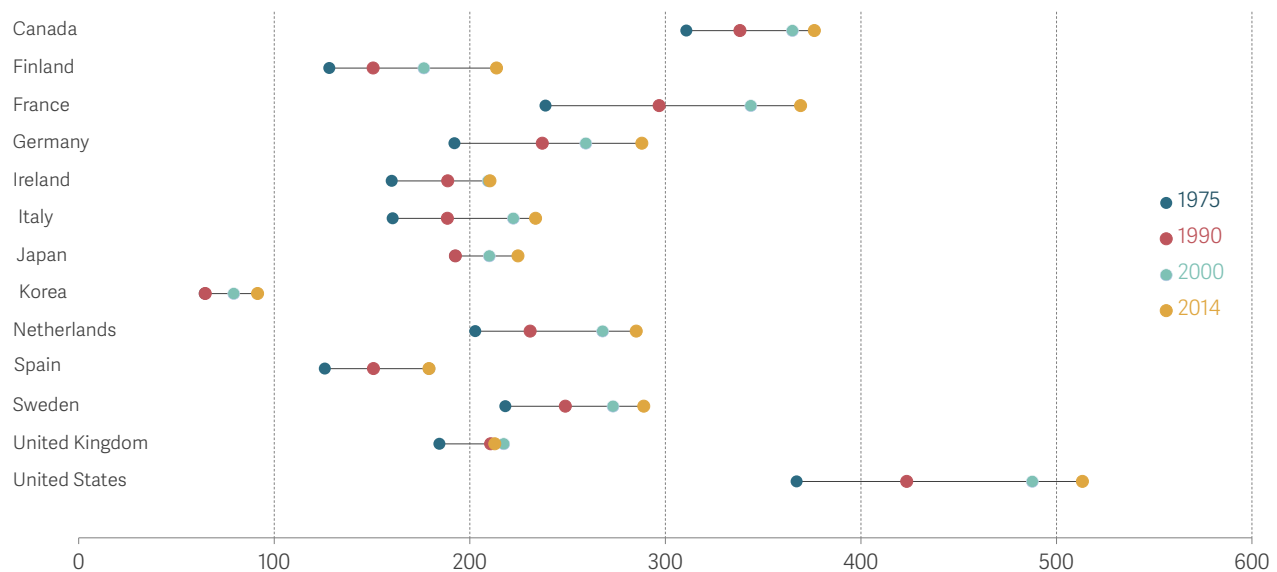
<sup>147</sup> The UK ranks sixth in population per square km (after South Korea, the Netherlands, Israel, Belgium, and Japan) and fifth in the share of land being already built-up (behind the Netherlands, Belgium, Germany and Japan).

<sup>148</sup> According to OECD statistics on protected areas, 35 per cent of the UK's land is protected, compared with 48 per cent in Germany and 45 per cent in the Netherlands. See: OECD (2023), [Protected areas \(indicator\)](#).

cities are low density by international standards which suggests that more home and commercial space could be made available within already built-up areas. In fact, the academic literature has estimated that planning restrictiveness has a much greater explanatory power than physical constraints when measuring the impacts of supply constraints on house prices across England's local areas.<sup>149</sup>

**FIGURE 19: The amount of build-up land per capita has fallen in the UK**

Built-up land per capita in square metres, by country: various years



SOURCE: Analysis of OECD, Built-up area and built-up area change in countries and regions.

Figure 20 relates this slow change in built-up land per capita to the change in the real house price index over a similar period. As the figure shows, the UK saw a large growth in real house prices at the same time as a small increase in built-up land, suggestive of an unresponsive housing supply. A large empirical literature supports this conclusion.<sup>150</sup> These features are also present in Australia and New Zealand, where built-up land accumulation also appears slower than population growth. Interestingly, those two countries shared some of the discretionary aspect of the British 'development control' system.<sup>151</sup> More generally, the negative association between price and quantities across countries suggest that more elastic housing supply can curb real house price growth (and this negative relationship appears stronger if we consider all OECD countries).<sup>152</sup>

<sup>149</sup> Strictly speaking, the authors estimate the house price response to a local increase in earnings. They show that, given a local earnings increase, restrictive planning policy translates into a greater increase of house prices than do physical constraints. See: C Hilber & W Vermeulen, *The impact of supply constraints on house prices in England*. The Economic Journal, 126, 2016.

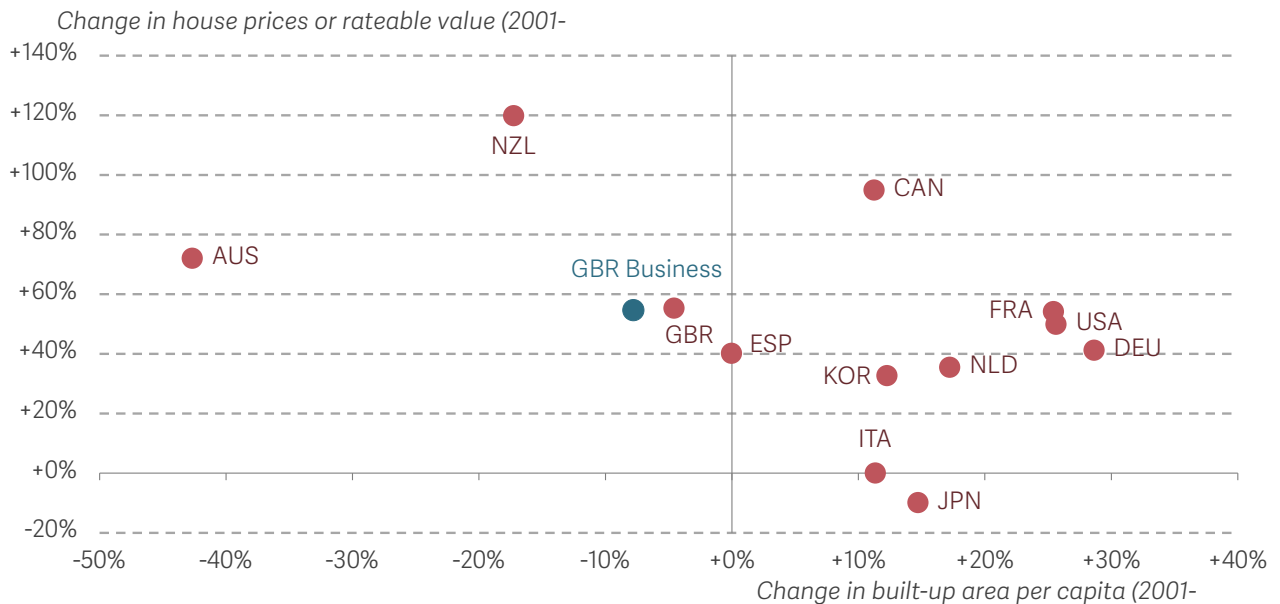
<sup>150</sup> For the UK, see the work of Paul Cheshire and Christian Hilber, referenced throughout this section. The 2020 White Paper also contains references.

<sup>151</sup> See Box 3.3 in: OECD, *The Governance of Land Use in OECD Countries: Policy Analysis and Recommendations*, 2017.

<sup>152</sup> OECD, *Brick by Brick: Building Better Housing Policies*, OECD Publishing, Paris, 2021.

### FIGURE 20: Slow quantities adjustment and fast price growth is suggestive of an unresponsive housing supply

Change in house price (or business rateable value), 2001-2021, and change in built-up (or business floorspace), 2001-2014



NOTES: Quantities measured as change in total built up area per capita 2000-2014. For GBR Business: change in total floorspace 2001-2014. Prices measured as change in house price index 2001-2021. For GBR Business: change in rateable values 2001-2021.

SOURCE: Analysis of OECD, Built up area statistics and Valuation Office Agency, Business rates statistics.

Figure 20 also considers the case of businesses in the UK by plotting the change in total commercial and business floorspace (i.e., quantities) and associated rateable values (i.e., prices) on the same figure. Comparable data for other OECD countries are hard to find. But the exercise remains instructive: in both dimensions, businesses have followed very similar trends as the total built-up land and housing prices.) Over a 20-year period, the total floorspace of commercial and businesses has been very stable in total. This hides important conversion across use (i.e., the reduction in industrial floorspace was compensated by the increase in office, retail, and other structures), which does not appear as the main limitation factor from the UK planning system. Commercial building prices, however, have increased at a very similar rate as residential buildings. This is not surprising, given that the case-by-case or 'development control' system creates similar issues for dwellings and productive structures.

## Improvements in the planning system are needed to balance competing land demands, protect the environment and foster the net zero transition

Investment and economic growth should not be the only objective of the planning system. Planning regulation is also the main policy tool that ensures urban and built-up developments do not take place at the expense of the needs of current residents, society – including future generations – or nature. An effective planning system should balance the different demands for land use and provide the best allocation of land across the country. This is not an easy task. As the House of Lords noted: the Government itself has set the objectives of ensuring 60 per cent food self-sufficiency, increasing woodland by one million acres, increasing biodiversity habitat by one million acres, enlarging the area of National Parks and Areas of Outstanding Natural Beauty by three percentage points, and building 300,000 new houses each and every year, without any assessment of whether these are all collectively attainable.<sup>153</sup> These also must be balanced against broader growth objectives.

However, today's overly restrictive and unpredictable planning system underachieves in every dimension. As we have already intimated, this is because the current planning system gives too much weight to locally concentrated interests at the expense of wider society. The result is that, instead of balancing demands, it promotes the status quo. In such a system, rising prices for land or buildings do not guide the efficient allocation of people across places. On the contrary, they foster rent-value capture by local owners who seek to maintain the scarcity of the capital they own (i.e. land and buildings). In this context, even ecological arguments are hijacked in order to create, maintain and grow undue rents.

Although the problem is widespread, the case of Stockport sets an interesting example. In 2020, Stockport withdrew from the 'Greater Manchester spatial framework' that was being created with nine other Local Authorities. The decision to withdraw was taken by councillors who were opposed to "concret[ing] over the countryside".<sup>154</sup> Stockport, which represents about 3.5 per cent of the population in Greater Manchester, is the second richest local authority within Greater Manchester (in terms of gross disposable household income), and the spatial framework considered just 1.2 per cent of its local greenbelt for (potential) development. This story illustrates the three important facts we mentioned: locally concentrated interests have disproportional powers in the current planning system; they often rely on seemingly ecological arguments; there is currently no tool for the wider community to reshape the planning system locally. Embedding land use planning in wider development strategies is not only key for fast growing areas (see Box

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<sup>153</sup> House of Lords, Land Use in England Committee. [Making the most out of England's land](#). 2022.

<sup>154</sup> BBC, [Stockport votes against Greater Manchester Spatial Framework plan](#), December 2020.



2) but also for areas that have suffered economic decline. A recent Economy 2030 essay describes the key role of strategic land use planning for cities around the world that were able to overcome economic decline and emphasises getting the institutional system right, at the functional area (or meso-) level.<sup>155</sup>

Moreover, there is ample evidence that the current planning system has adverse effects on the environment, in particular by holding back the net zero transition by slowing the development of crucial infrastructure. Beyond planning restrictions that hold back investment in onshore wind turbines and solar farms in England, planning bottlenecks also hold back investment in offshore wind and grid connection.<sup>156</sup> This issue applies despite the specificity of planning rules that apply to Nationally Significant Infrastructure Projects (NSIP). In fact, National Grid suggests that streamlining the NSIP process is one of five priorities for meeting net zero targets.<sup>157</sup> The Government has recognised many of those issues in its “Powering Up Britain” policy paper.<sup>158</sup> But, it also refers to current consultations and future changes to legislation. For example, it remains unclear whether the government intends to address the de facto ban on onshore wind developments.

Perverse effects of the current system also matter beyond infrastructure when, for example, conservation rules limit investment in energy efficiency.<sup>159</sup> More broadly, planning restrictions also slow the densification of cities. As Figure 21 shows, this lower density is associated with longer commutes in the UK than in other OECD countries, with the associated emissions of carbon and other pollutants.<sup>160</sup> Similarly, where greenbelts act as barriers to growth in areas with high demand, they cause leapfrogging and the associated negative environmental impact.<sup>161</sup> Even though limiting sprawl has always been their purpose (and not protecting areas of outstanding beauty or ecological interest, as is sometimes claimed) greenbelts result in a mere displacement of housing supply into areas with lower density and accessibility.<sup>162</sup> Such issues are particularly acute given height restrictions that prevent cities from growing tall instead.<sup>163</sup> In fact, as the Independent Review of Net Zero points out, “more compact and resource-efficient [cities] could reduce greenhouse gas emission by between 23-26 per cent by 2050”.<sup>164</sup>

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<sup>155</sup> S Frick et al., [Lessons from Successful ‘Turnaround’ Cities for the UK](#), Resolution Foundation, May 2023.

<sup>156</sup> These points were emphasised in the Independent Review of Net Zero, and the Government has committed to streamlining and speeding up consenting for nationally significant projects; see: HMG, [Powering Up Britain: The Net Zero Growth Plan](#), March 2023. Also see: R Millard, [Reform planning rules to boost clean energy. National Grid boss urges](#), FT, May 2023.

<sup>157</sup> National Grid, [Investing in the future](#), May 2023

<sup>158</sup> Department for Energy Security and Net Zero, [Powering Up Britain](#), 2023

<sup>159</sup> See: C Hilber, C Palmer & E Pinchbeck, [The Energy Costs of Historic Preservation](#), Journal of Urban Economics, 114, 2019; and: T Fetzner, [Regulatory barriers to climate action: evidence from conservation areas in England](#), CAGE, 2023.

<sup>160</sup> OECD, [Brick by Brick: Building Better Housing Policies](#), OECD Publishing, Paris, 2021.

<sup>161</sup> See Chapter 8 of: K Barker, [Barker review of land use planning: Final report](#). HM Treasury, 2006. IPPR, [“Planning for net zero and nature: A better, greener planning system that empowers local places”](#), 2023.

<sup>162</sup> P Cheshire & B Buyuklieva, [A plan to build more than two million new homes close to major cities](#), Centre for Cities, October 2019.

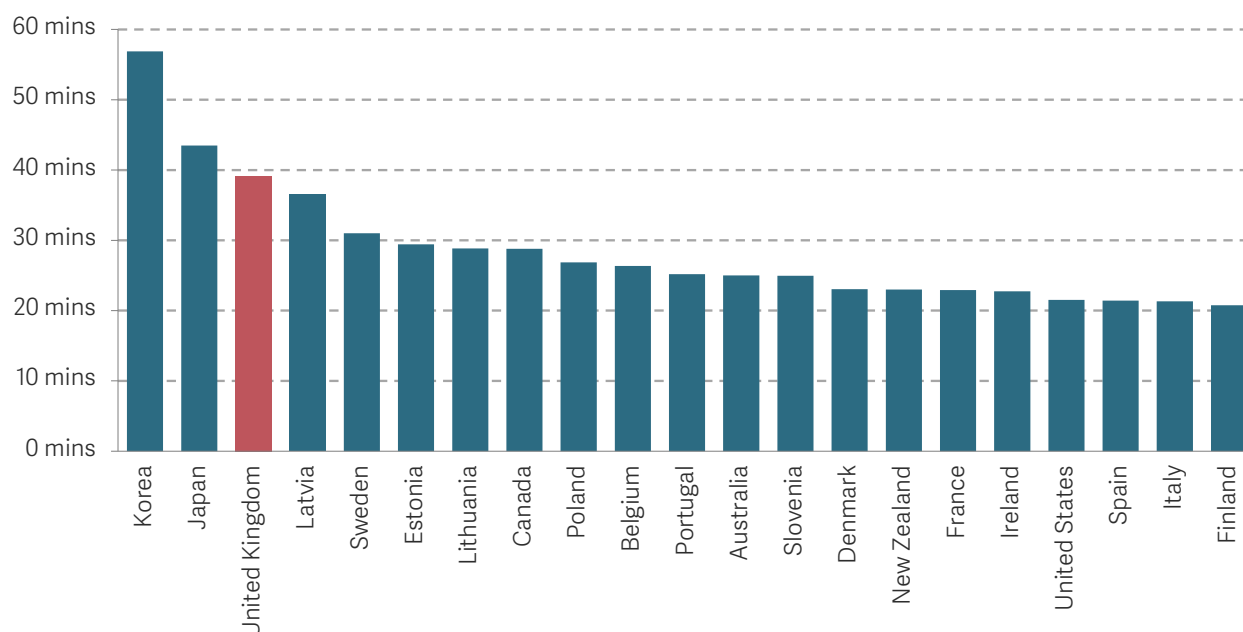
<sup>163</sup> P Cheshire & G Dericks, [Trophy Architects and Design as Rent-seeking: Quantifying Deadweight Losses in a Tightly Regulated Office Market](#), *Economica*, 87, 2020.

<sup>164</sup> C Skidmore, [Mission Zero](#). Independent Review of Net Zero, 2022.



**FIGURE 21: Average commuting times are long in the UK relative to OECD countries**

Average daily commuting times in minutes, by country



NOTES: Average time spent travelling to and from work or study for all 15-to-64-year-olds (in minutes per day), except for Australia (15+ year olds), Lithuania (20-64 year olds) and China (15-74 year olds). The reference year for the countries are: Australia: 2006; Austria: 2008-09; Belgium: 2013; Canada: 2015; China: 2008; Denmark: 2001; Estonia: 2009-10; Finland: 2009-10; France: 2009-10; Germany: 2012-13; Greece: 2013; Hungary: 2010; India: 1998-99; Italy: 2013-14; Ireland: 2005; Japan: 2016; Korea: 2014; Latvia: 2003; Lithuania: 2003; Luxembourg: 2013; Mexico: 2014; Netherlands: 2016; New Zealand: 2009-10; Norway: 2010-11; Poland: 2013; Portugal: 1999; Slovenia: 2000-01; South Africa: 2010; Spain: 2009-10; Sweden: 2010; Turkey: 2014-15; United Kingdom: 2014-15; and United States: 2019.

SOURCE: Figure 4.2 of OECD, *Brick by Brick: Building Better Housing Policies*.

Recent place-focused policies have sought to address planning restrictions – in particular, via “investment zones” – but these have been watered down in the most recent iteration of the policy (see Box 8). While planning is still a focus, suggesting that the Government has a similar diagnosis about the UK planning system as us, the current measures seem limited in scope. A more ambitious and nationwide approach to planning reform is required, and this should also recognise the importance of adequately resourcing the planning system itself.<sup>165</sup>

<sup>165</sup> The (then) Housing, Communities and Local Government Committee stated that two themes emerged in evidence on resourcing in the planning system: “First, that LPA do not have enough resources. Second, that the Government’s proposed reforms would increase the needs for particular skills that in turn would need further funding.” See: Housing, Communities and Local Government Committee, *The future of the planning system in England*, First Report of the Session, 2021-22; May 2021.

## BOX 8: Investment Zones

The Government recently proposed a renewed Investment Zone strategy to boost growth. This proposition scales back the Liz Truss Government's strategy by focusing on fewer areas (12 in total, including eight in England) and proposing limited changes to the planning system within those areas. In its current form, it is first and foremost a tax policy, with the specificity of only affecting specific areas (i.e. being place-based). The current policy offer contains:

- a Stamp Duty (SDLT) relief for land and buildings bought for (direct or development of) commercial use;
- 100 per cent business rates relief on newly occupied business premises (and certain existing businesses where they expand tax sites within zone);
- enhanced capital allowance on plant and machinery within the zone;
- enhanced structures and buildings allowance, reducing taxable profits by 10 per cent of the cost of qualifying non-residential investment per year); and,
- employer National Insurance Contributions relief of 36 months

zero rate Employer NICs on new employees working within the zone up to the first £25,000 of the annual wage).

If implemented, the Investment Zone policy would become the third national policy to fall under that definition, after the initiatives announced by Margaret Thatcher (1981-1983) and David Cameron, which targeted 23 and 24 areas, respectively. Evaluations of those two previous policies concluded that the policies had disappointing impacts on employment (in terms of both cost and total job creation).<sup>166</sup> One important limitation to such place-based policies is that they distort the initial market conditions to make some areas more attractive relative to others.<sup>167</sup> The extent to which this can create growth net of mere displacement effects is a priori unclear. It depends in part on which areas are selected, and whether those areas can foster positive, self-reinforcing, agglomeration effects. In that respect, the focus of the new zones on some large cities, and the explicit link to universities or research institutes seems promising, as evidence suggests building on university-industry links in this way can promote growth in places with absorptive capacity.<sup>168</sup>

<sup>166</sup> See: [Final Evaluation of Enterprise Zones](#), HMSO, 1995, and: P Swinney, [In the zone: Have enterprise zones delivered the jobs they promised?](#), Centre for Cities, 2019.

<sup>167</sup> [Evidence Review: Area Based Initiatives](#), What works centre for local economic growth, January 2016.

<sup>168</sup> For a summary of evidence on the economic impact of universities and implications for local growth policy, see A Valero, [University Challenge – Bridging the Local and the Global](#), OECD Cogito, May 2022.

Interestingly, the new proposal also scales back the proposed changes to the planning system. Some of this scaling back from Truss's plans – for example, on removing environmental protections – is welcome. The current iteration of investment zones opens the possibility for local areas to use some new resources in planning or for

forming a development corporation, it recognises the need for government support and coordination with local authorities, and calls for “credible and ambitious plans to accelerate development”. But it could be more ambitious in terms of removing some of the planning barriers to local growth outlined in this report.

## Towards an efficient and well-balanced planning system

We make four main proposals which, together, would better enable firms to deliver investment. We think that the planning system should become plan-led, where each area has a plan, where the plan is designed at the right scale, where local authorities have fiscal incentives to allow development, and where the acceleration towards net-zero is accounted for.

First, **every area should have a plan, and the local plan should lead the decision process.** As we discussed in Box 4, there were many proposals in the 2020 White Paper “Planning for the Future” that the Government has since decided against. But we consider that the planning system has to move from one of ex post development control to ex ante strategic planning. In particular, adopting a zone-based approach with designated growth areas, a shift of community engagement to the ex-ante phase of planning, and improved tools to facilitate the planning process, together with statutory requirements for Local Authorities to have plans, and nationally determined housing requirements. Such an overhaul of the planning system could be politically difficult and take too much time. Hence, an alternative route toward a better system could focus on the government providing better secondary legislation and guidance to local authorities. These new policies would aim at reducing the number of details found in local plans, at making sure they focus on allocating space rather than setting general policies. The government would set standards and help digitalisation, for instance by providing open-access data to draw local maps from. The current shape of the Levelling-up and Regeneration bill (LURB) could allow this alternative path (if it becomes law), but much would rest on the actual shape that the proposed National Development Management Policies would take. Without a clear effort toward compulsory, effective and simplified plans, the English planning system will remain very restrictive by international standards.

Second, **plans and decision-making relating to commercial and business developments should be at the right level**, which will almost always be at a higher level than the current local planning authorities. The aim here is to reduce the likelihood that the wider benefits of more economic activity are felt outside the relevant planning authorities. There exist government initiatives in favour of strategic regions, such as the Cambridge – Oxford - Milton Keynes region, or via combined authorities, but, as we discussed, recent examples illustrate how the current framework hinders local initiatives. To align decision making with costs and benefits analysis, this new level of decision making should be at least at the functional economic area level, that is, encompassing workers' commute. The exact level could be defined in national legislation, or by a National Growth Board (which we discuss below). In the context of planning at the Combined Authority level, it seems sensible that planning and decision-making should take place at the level of the elected Mayor, and so a system that works for London, should also be explored in other places in the UK

Third, **local authorities should have greater financial incentives for development, both commercial and residential**. As we briefly explained earlier, the issue under the current system is that planning authorities have little incentive to accept new construction, especially in the case of businesses. In other words, while local authorities bear the costs of new developments, they do not reap much tax benefit. To address these issues, more progress on fiscal devolution is needed, . We will discuss these issues in more detail in a future report on fiscal devolution.

There are of course significant political constraints to planning reform. If national progress remains elusive, then as a second best route, we consider that **some of these principles can be feasibly explored for specific local or combined authorities**.

The Economy 2030 Inquiry research on cities will explore this route further. Finally, national level coordination will be key in setting up a long-run strategy for new developments and the timely removal of barriers to development including net zero infrastructure. Land is a finite, non-renewable resource. Conflicting demands for land will increase pressure on this resource, calling for both a more efficient planning system and better national-level coordination. A dedicated institution could contribute to two objectives related to land-use planning: gathering and consulting with key actors (from local to national level), and preparing a land-use framework, monitoring, evaluating, and reporting. The House of Lords recently called for the creation of a national Land Use Commission with those missions, and Scotland already has its own Land Commission.<sup>169</sup> We propose instead that a broader 'National Growth Board' manages this coordination and its interaction with other areas of a sustainable growth strategy. Such a statutory body would not change the planning system by itself, but it would ensure that national

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<sup>169</sup> House of Lords, Land Use in England Committee, [Making the most out of England's land](#), 2022.

policies are coherent across growth and net zero, it could clarify the priorities in specific areas, and it could raise issues created by conflicting policies and objectives. The need for coordination should not add to the complexity of the current system, but rather ensure coherence across policy objectives.

This Section has shown that planning is a major constraint on business investment in the UK, and set out reforms to relax this constraint in a politically and environmentally sustainable manner, increasing all firms' ability to invest. The next Section describes further measures tailored to supporting smaller, high-growth businesses that want to invest.

## Section 5

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### Supporting smaller firms to innovate and grow

Smaller firms tend to face different barriers to investment and growth from their larger counterparts. Younger, innovative and high-growth-potential firms drive the dynamics of reallocation that characterise growth in advanced economies, and there is evidence that such firms in the UK suffer from a lack of access to finance to enable them to invest and scale up. Moreover, this problem has a regional angle, with firms outside of London and the South East receiving a smaller proportion of venture and growth equity funding than the prevalence of high-growth companies would suggest.

While improvements to overall dynamism are important, when considering how to raise productivity in the UK, it is also necessary to look at improvements within the firm, and how modern technologies and management practices can spread through the population of smaller businesses. A range of barriers – such as a lack of managerial information or skills – can prevent smaller firms from investing in productivity-enhancing change even when they might be willing to do so.

To address these concerns, we propose reforms that build upon and strengthen existing structures to increase the availability of finance and support to SMEs. First, we propose expanding the British Business Bank to increase the scale and reach of its programmes which have demonstrated good outcomes since its inception in 2014. Second, we consider that the Government should build on the existing £500m Help to Grow framework – a national programme which is being delivered by business schools across the country – expanding experimentation and evaluation within the programme to be able generate robust evidence on the types of intervention that work.

## High growth potential SMEs lack access to long-term finance, particularly in the regions outside of the South East and London

Smaller firms (defined as those with fewer than 250 employees) make up over 99 per cent of businesses, 60 per cent of employment and 50 per cent of sales in the UK.<sup>170</sup> Of particular concern from a growth perspective are barriers that prevent innovative young firms from scaling up. While many start-ups stay small or go out of business after a few years, a small fraction become high-growth firms, or ‘gazelles’. Such firms are key drivers of job creation and productivity growth, and are part of the dynamics of reallocation that characterise growth in advanced economies.<sup>171</sup> The ONS estimates that there were 13,000 ‘high growth’ firms in 2019, but broader attempts to analyse the ‘high growth’ economy, taking into account other signs of growth potential and intention, estimate that there are over 40,000 such firms in the UK.<sup>172</sup>

Financial constraints are often a key rationale for focusing innovation policies on smaller firms.<sup>173</sup> Because innovation is intangible and difficult to collateralise, it can be hard for firms to access bank loans to finance innovative projects, and there can be difficulties for those firms working with particularly risky or unproven technologies in accessing equity finance. While this is a general problem for innovative smaller firms, evidence from the UK Small Business Survey suggests that such difficulties increased since the onset of the financial crisis.<sup>174</sup> Consistent with this, the UK Innovation Survey shows how the lack of availability of finance is a key problem for firms looking to innovate (see Figure 22). It shows that amongst innovating firms, smaller firms are more likely to report that availability of finance is a highly important barrier to innovation, and that this problem is more widely reported in later periods.<sup>175</sup>

<sup>170</sup> Table 1, UK Private Sector, in [Business Population Estimates for the UK and regions: detailed tables](#), BEIS, October 2022.

<sup>171</sup> L Foster, J Haltiwanger & C Syverson, [Reallocation, Firm Turnover, and Efficiency: Selection on Productivity or Profitability?](#), *American Economic Review*, 2008.

<sup>172</sup> The ONS definition (as applied in the dataset: ONS, [High growth enterprises by region and section](#), October 2021) is a VAT- or PAYE-registered, enterprise exhibiting an average annual growth in employment of 20 per cent a year over a three-year period (2016-2019), and that had at least 10 employees in 2016. Beauhurst, a start-up and scale-up data platform, tracks companies that hit any of a number of ‘triggers’ in addition to standard growth/scale-up metrics (securing equity or venture debt finance, undergoing a management buyout or buy-in, attending a selected accelerator programme, being an academic spinout, featuring in a selected high-growth list, receiving a large innovation grant). Companies are not tracked following IPO/acquisition or exit. As at January 2023, Beauhurst was tracking 45,000 such firms (see [The Fastest-Growing Companies in Every UK Nation | Beauhurst](#)).

<sup>173</sup> N Bloom et al., [A toolkit of policies to promote innovation](#), *Journal of Economic Perspectives*, 2019.

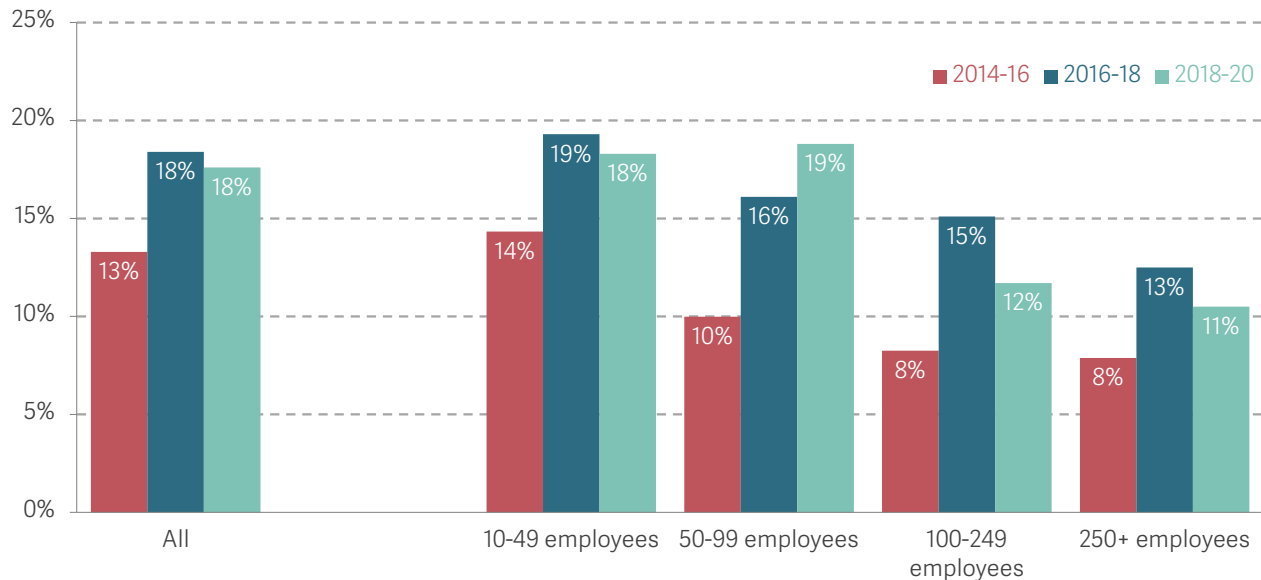
<sup>174</sup> N Lee et al., [Access to finance for innovative SMEs since the financial crisis](#), *Research Policy* 2015.

<sup>175</sup> Innovation here is defined as engaging in any of the following activities: introducing new/improved products, engaging in incomplete innovation projects, new/improved forms of organisation/practices, or investment in R&D, training, acquisition of knowledge or equipment linked to innovation activities.



**FIGURE 22: Small firms are more likely to report that finance is a barrier to innovation**

Proportion of innovative firms reporting that availability of finance is a “highly important” barrier to innovation, by firm size: UK



NOTES: Relates to businesses that are “broad innovators” which includes any of the following activities: introducing new/improved products, engaging in incomplete innovation projects, new/improved forms of organisation/practices, or investment in R&D, training, acquisition of knowledge or equipment linked to innovation activities.

SOURCE: Analysis of BEIS, UK Innovation Survey.

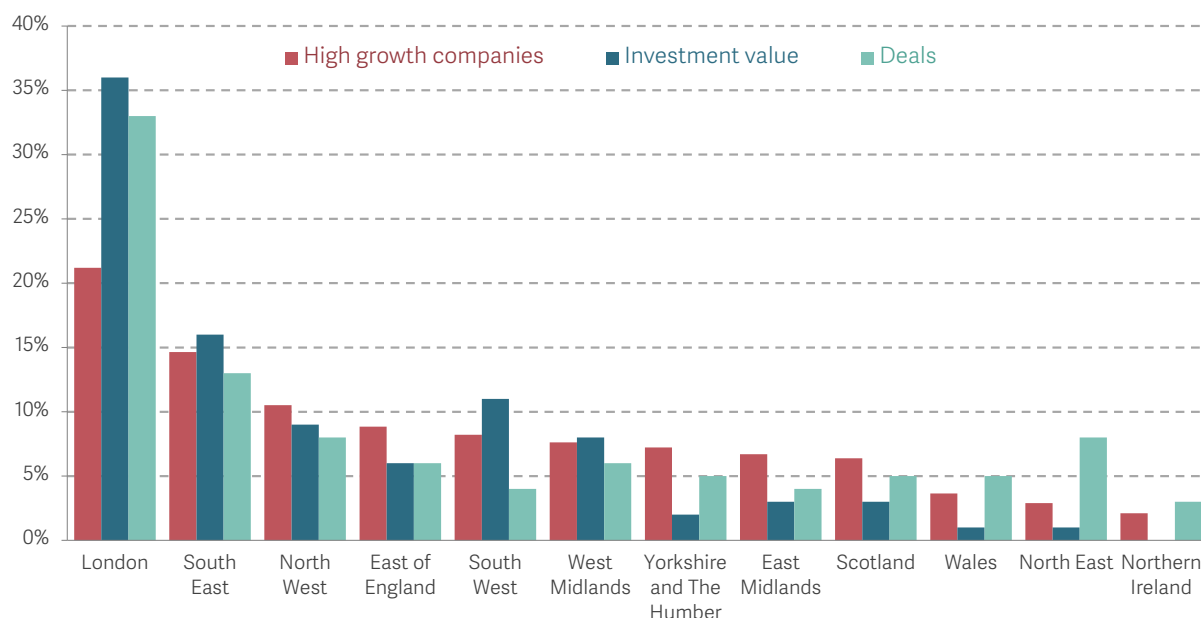
There is also a regional dimension to this issue, particularly when it comes to equity financing – a source of patient long-term capital which can support investments with a long horizon to returns, or in intangible assets (which have smaller recovery values). Figure 23 demonstrates how venture capital and growth investment is concentrated in London, with the proportion of deals significantly outstripping the proportion of high-growth firms found in the region. More recent analysis from Beauhurst suggests that the regional distribution of equity funding has worsened, with London receiving the highest proportion of announced equity deals on record.<sup>176</sup> Other analyses have found evidence in support of constraints in raising growth finance in non-London firms.<sup>177</sup> These patterns are problematic for overall levels of investment and productivity as it suggests that high-growth firms located in other regions may lack access to the forms of finance best suited to them, with implications for achieving more regionally balanced growth too.

<sup>176</sup> Beauhurst, *The Deal 2022: Equity investment market update*, 2022. In other research in progress using Beauhurst data on start-ups firms that have received some level of growth funding (i.e. the intensive margin), the authors find that there is a positive and significant effect of having an HQ in London on total funding, which survives controlling for basic firm characteristics such as sectors (defined by Beauhurst to reflect key technology areas in the high growth economy, or using SIC codes), and which is stronger when financing at all stages of evolution is included as the dependent variable, compared to seed-stage funding only (drawing on analysis from M Draca et al., *Economic Growth Goes Fractal: The Changing Structure of the UK's High-Growth Economy*, LSE-Warwick Mimeo).

<sup>177</sup> A Stansbury, D Turner & E Balls, *Tackling the UK's regional economic inequality: Binding constraints and avenues for policy intervention*, M-RCBG Associate Working Paper, March 2023.

### FIGURE 23: Venture and growth finance does not follow the same regional pattern as the population of high-growth firms

Proportion of total high-growth firms, venture capital and growth investment volumes and deals, by region: UK, 2019



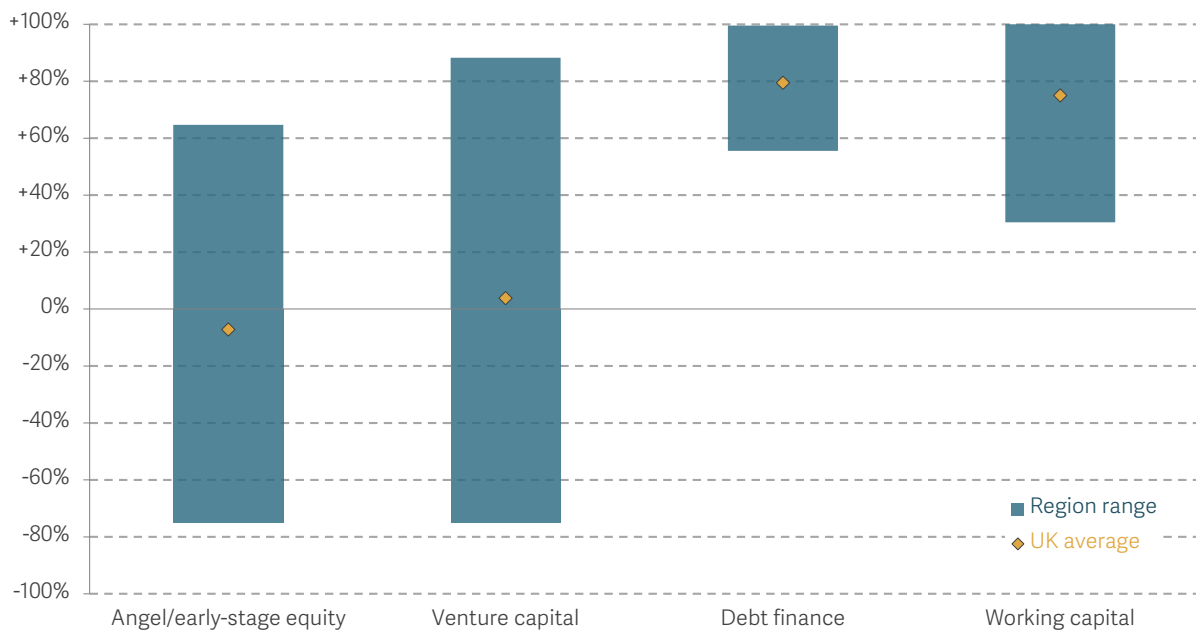
NOTES: High-growth firms are defined as firms which have seen annual growth in employment of greater than 20 per cent per annum for the three-year period 2016-2019, and that had at least 10 employees in 2016.  
SOURCE: Analysis of ONS and BBVA.

While there is some evidence that low levels of equity financing to SMEs reflects low levels of willingness to take on external finance and low awareness of non-bank sources of finance, it is not clear that this regional picture reflects a lack of demand for equity finance.<sup>178</sup> Figure 24, provided by the British Business Banks's Network Intermediary Survey, plots the view of intermediaries as to the extent that local firms finance needs are being met by the market and the range of these views the across regions. It shows that while demand for debt financing and working capital provision (i.e. overdrafts and revolvers) are largely being met across the UK, when it comes to venture capital and early stage capital, there is a much less consistent supply.

<sup>178</sup> 30 per cent of SMEs reported being happy to use external finance to grow and develop in Q4 2022, while only 50 per cent were aware of venture capital as a source of finance; both figures are similar to those found in 2019 pre-pandemic (from our analysis of BVA BDRC SME Finance Monitor dataset).

**FIGURE 24: Availability of equity finance is not meeting regional demand**

Balance of intermediaries' views on extent to which the local finance market is meeting the financing needs of firms, by form of finance: UK, December 2021



SOURCE: BBB, UK Network Intermediary Survey, n=281.

There appears, therefore, to be a problem with capital not flowing to small businesses across the country.

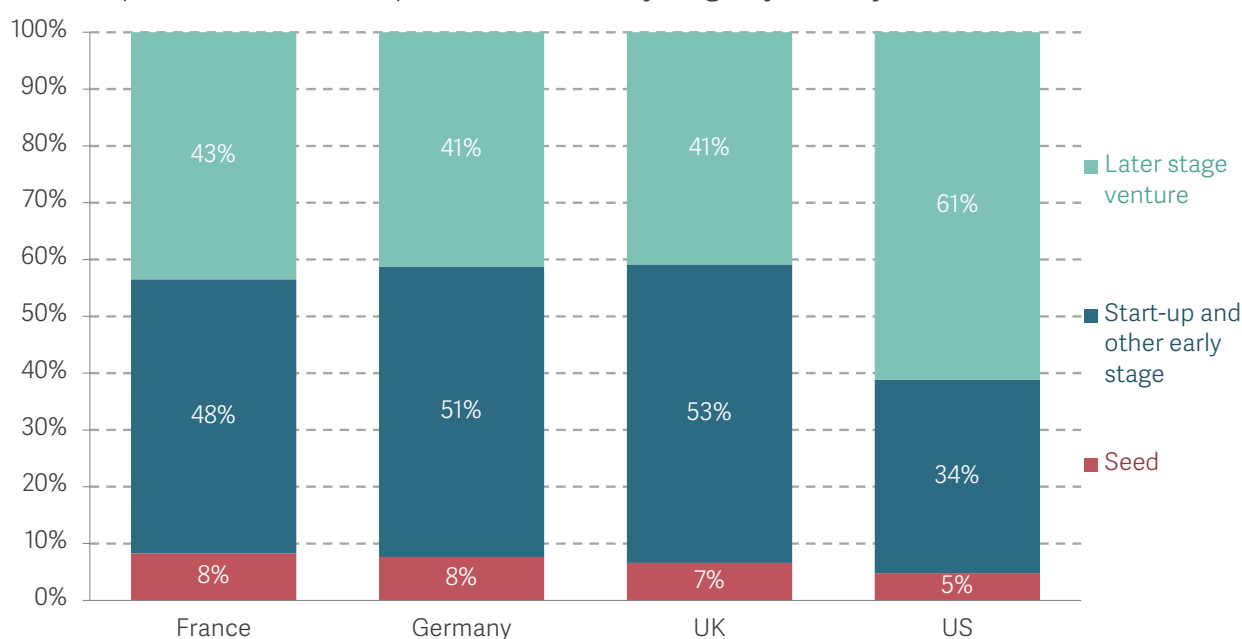
There are also issues with the overall composition of growth finance. In particular, the UK faces a well-documented problem in the provision of 'scale-up' capital relative to other leading economies, such as the US.<sup>179</sup> This reflects a lack of patient capital which can enable start-ups to grow into large businesses. Although the UK attracts the highest amount of venture capital amongst European countries in volume terms, Figure 25 shows that the UK's venture capital industry lacks the focus on later stage finance that the US market demonstrates.<sup>180</sup> France and Germany have similar proportions of venture investments at each stage, but they also have banking sectors which are more involved in provision of capital to small and young companies than the UK, so the lack of capital in late-stage venture is more concerning for the UK. In order to support a business environment in which firms with profitable opportunities can invest regardless of size, it is important that a diversity of funding options exist from vibrant public markets to angel investors in pre-seed companies.

<sup>179</sup> The Patient Capital Review was set up partly to suggest solutions to this problem, see [Patient Capital Review, Industry Panel Response](#), October 2017.

<sup>180</sup> According to OECD data, in volume terms the UK ranks fourth in of total venture capital investments amongst OECD economies after the US, Israel and Canada. Normalising by GDP, the UK ranks seventh with Korea, Estonia and Finland all having slightly higher shares. Source: OECD, Venture Capital Investments, Entrepreneurship Financing Database.

**FIGURE 25: The UK has less later stage venture funding to help start-ups grow into mature companies than the US, and France and Germany have other sources of patient capital**

Proportion of venture capital investments by stage, by country: 2019



Source: Analysis of OECD, Venture Capital Investments, Entrepreneurship Financing Database.

The British Business Bank (BBB) was founded by the government in 2014 with the strategic objectives of increasing the supply of finance available in the UK to SMEs and small mid-cap businesses by operating in underserved regions of the UK and helping to reduce informational frictions through crowding in a wider pool of private investors. The BBB has since developed a range of funding schemes for businesses of varying maturity across both debt and equity products. This includes the Enterprise Capital Fund (ECF) programme which seeks to reduce the barriers to entry for venture funds by offering cornerstone investment alongside other limited partners; the ENABLE programme which provides guarantees on a portfolio of loans to smaller businesses to facilitate securitisation; and British Patient Capital, which focuses on the late-stage funding gap and co-invests alongside other venture and growth funds. The 2021 Spending Review also saw the Government commit over £1.6 billion for the BBB to expand its regional fund offering into the North East and South West of England and into Scotland and Wales (funds already existed for the Midlands, North West, Cornwall and Isles of Scilly and Northern Ireland). Impact evaluations so far have been positive. Those evaluating existing regional funds suggest they have played an important role in securing SMEs finance as well as strengthening wider networks of finance in the regions on both the demand and supply side, although more needs to be done to assess additionality and the

extent of any displacement.<sup>181</sup> Positive impacts of the ECF are also documented in terms of increasing the availability of early stage equity finance.<sup>182</sup> As of 2021-22, the BBB has supported a stock of £12.2 billion across its core programmes, delivering a return of 18.2 per cent on capital employed.<sup>183</sup>

Local sources of capital and investment monitoring historically played an important role in driving corporate investment and increasing the capital intensity of firms during the industrial revolution, and recent work has shown that improved transport access to portfolio firms enables venture capital investors to help drive higher levels of innovation and value creation.<sup>184</sup> In helping to crowd-in local sources of equity finance in regions outside of London, the BBB is an important tool in boosting investment – especially in intangible intensive firms, where equity investment is a critical source of funding.

Other countries have also developed state-backed institutions to address gaps in the supply of capital. Germany's Kreditanstalt für Wiederaufbau (KfW) acts as a development bank providing loans to major infrastructure projects, promoting the energy transition, as well as using a local banks and cooperatives to support SMEs and start-ups to invest and scale. While the wider scope of KfW makes it difficult to compare directly with the BBB, its commitments to start-ups and SMEs amounted to almost €20 billion in 2021. In the US, the Small Business Administration (SBA) supports SMEs largely through loan guarantees, but is constituted as a federal agency, mandating its functions in law. Both of these models highlight lessons that are important to maximising the impact of the BBB: ensuring it has both the scale and the permanence to drive change in the corporate lending market.

If the BBB were to match the deployment of KfW as a proportion of GDP, it would need to invest around £12 billion per year – equal to the total capital it has supported to date.<sup>185</sup> While equivalent investment flows may be not be necessary given the bank's focus on delivering additionality, it is clear that the amount of funds it deploys should be substantially larger. Moreover, while the BBB enjoys operational independence from government, its sole reliance on government funding and participation in the spending review process creates uncertainty, and the fact that much of its funding is allocated in ring-fenced pots prevents recycling of funds between programmes.

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<sup>181</sup> British Business Bank, [Midlands Engine Investment Fund – Interim Evaluation Report](#), January 2023 and British Business Bank, [Cornwall and Isles of Scilly Investment Fund – Interim Evaluation Report](#), January 2023. The National Audit Office also reports effectiveness in crowding-in private investment across BBB's programs with £5.60 of private investment being attracted by every £1 of BBB capital (see National Audit Office, [British Business Bank](#), January 2020).

<sup>182</sup> The 2021 interim evaluation of the Enterprise Capital Fund finds evidence of its effectiveness in increased availability of early stage equity finance to high potential UK companies: British Business Bank: [Enterprise Capital Fund: Interim Evaluation](#), November 2021.

<sup>183</sup> British Business Bank, [Annual Report and Accounts 2022](#), September 2022.

<sup>184</sup> J Franks, C Mayer & S Rossi, [Ownership: Evolution and Regulation](#), Review of Financial Studies, 2009; and: S Bernstein, X Giroud & R Townsend, [The Impact of Venture Capital Monitoring](#), Journal of Finance, 2015.

<sup>185</sup> 'Supported capital' includes capital crowded in from the private sector to invest alongside the BBB. Total assets of the British Business Bank stood at £3.5 billion in March 2022.

Our suggestion is to power up the BBB, allowing it to borrow capital from the market through the issuance of government-guaranteed bonds in the same way that KfW is able to. This would not only increase the scale of the bank without large upfront impacts on government, but would also help shift funding away from the Spending Review process, making it a more permanent part of the financing landscape and allowing it to prioritise areas of funding where there are proven results. But this type of change would require legislation and take time. Fiscal rules might need to be adjusted, depending on how the BBB's borrowing was accounted for. In the meantime, the BBB's strategic goals could be expanded to emphasise the necessity of it taking a larger convening role across regional business communities, bringing together and diffusing best practices and helping to ensure that more SMEs are investment ready, and aware of sources of external capital.

The BBB can also take a more active role in channelling investment from pension funds. As we describe in Section 3, there are strong arguments for helping to facilitate pensions to directly invest in less liquid but productive assets such as private equity, venture capital and infrastructure projects. Changes recommended by the Productive Finance Working Group (along with the recommendations on pension fund scale that we made earlier in this report) may help to remove the liquidity, regulatory and cost-related barriers to pensions investing in these asset classes, but it is also important for trustees to have the expertise in these asset classes. As a method for achieving this, we recommend that the BBB offers a co-investment fund which allows pension funds to invest as a limited partner alongside it, piggy-backing on its expertise. This vehicle could be created by adapting and extending the life of British Patient Capital, a subsidiary of the BBB which is focused on closing the late-stage funding gap, and which is mandated to make investments until 2033. The vehicle could also be constructed so as to reduce the fees that pension funds face in entering the asset class, so as to encourage more capital to be invested in the UK.

### [Targeted business support programmes can overcome internal barriers to investment in innovation and growth in willing firms](#)

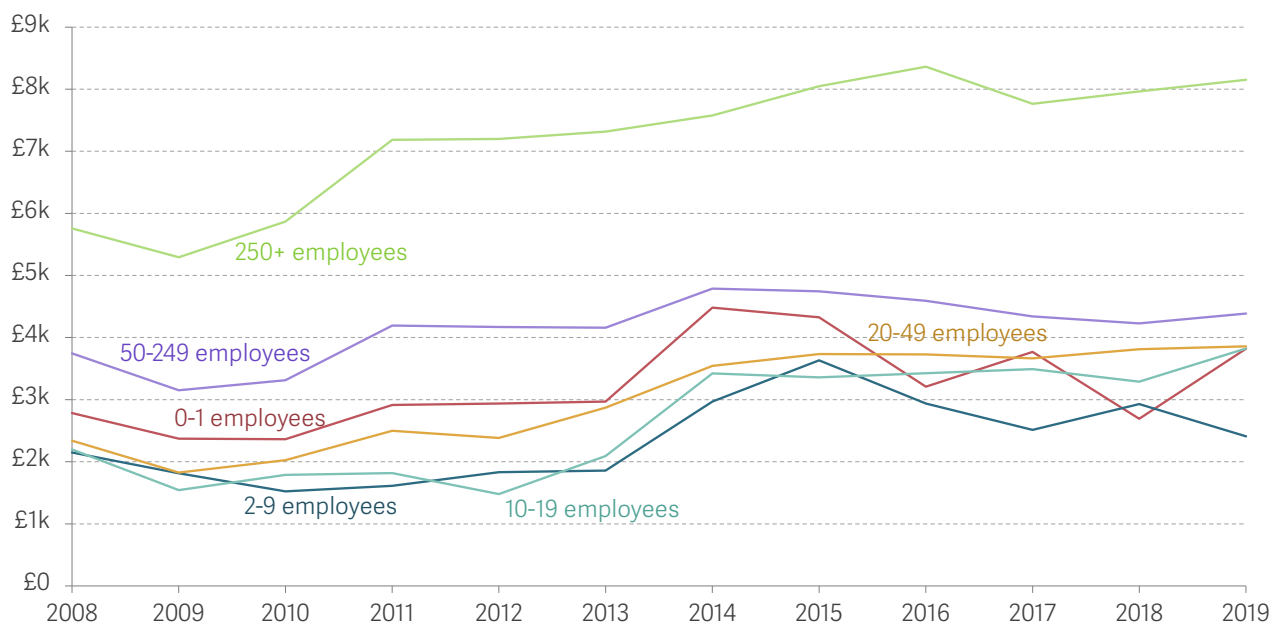
There are large gaps in productivity between the most and the least-productive firms, and in previous work, we argued that raising productivity in the long left tail of the productivity distribution would not have an especially large impact on aggregate productivity, because it accounts for a small share of total output.<sup>186</sup> Instead, if the sole objective were to raise aggregate productivity, then it might be more promising to pursue policies that enable the reallocation of workers from the bottom end of the productivity distribution to the top. Indeed, a healthy level of business dynamism is important for

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<sup>186</sup> J Oliveira-Cunha et al., [Business Time: How ready are UK firms for this decisive decade?](#), Resolution Foundation, November 2021.

aggregate investment and productivity.<sup>187</sup> However, a focus on improving ‘within firm’ outcomes, in particular via investment in productivity-enhancing technologies and management practices, is also needed given that there seem to be barriers to investment and innovation within firms that policy levers can address. In particular, smaller firms tend to invest less per worker (see Figure 26), tend to engage less in ‘process innovation’ (broadly, the introduction of new technologies or management practices into the business, as shown in Figure 27), and accordingly are less digitised, and have weaker management practices, than their larger counterparts.<sup>188</sup>

**FIGURE 26: Smaller firms invest less per worker than their larger counterparts**  
Average investment per worker by employment size bands: UK



NOTES: Estimates are current price (CP), not seasonally adjusted (NSA)

SOURCE: ONS, Annual business survey estimates of investment by employment, company age and country of ultimate owner.

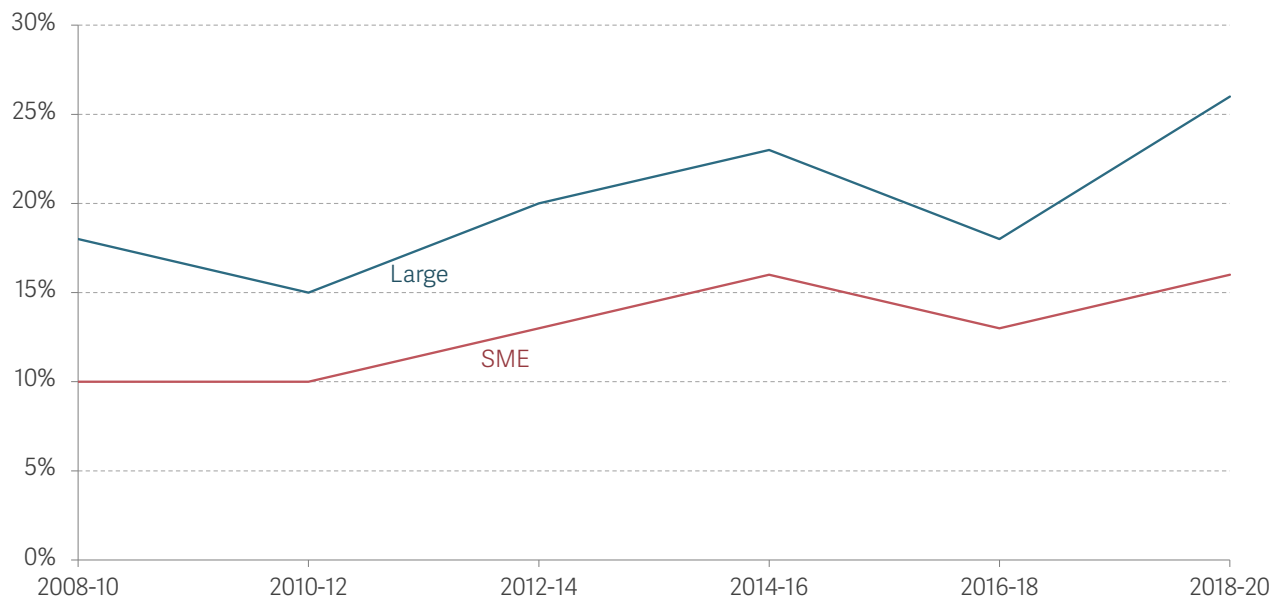
<sup>187</sup> Across different analyses, the evidence suggests that the job reallocation rate (job creation plus destruction as a proportion of the total workforce) has been stagnant or in decline in the UK, for discussion, see: J De Loecker, T Obermeier & J Van Reenen, *Firms and Inequality*, IFS Deaton Review of Inequalities, March 2022. Analysis of firm level microdata (R Davies, Declining responsiveness and reallocation- micro data and the UK productivity puzzle, Mimeo, 2022) also shows evidence of a decline in job reallocation since the financial crisis, and this will be covered in depth in forthcoming work for the Economy 2030 Inquiry.

<sup>188</sup> Smaller firms are generally less digitised than larger ones in the UK and in EU countries; see Figure 26 in: J Oliveira-Cunha et al., *Business Time: How ready are UK firms for this decisive decade?*, Resolution Foundation, November 2021. And smaller firms generally have worse management practices as shown in UK data from the Management and Expectations Survey, although there is a sign of catch-up among the smallest firms since 2016; see: Figure 3 in J Schneebacher, *Management practices in Great Britain: 2016 to 2020*, ONS, May 2021.



**FIGURE 27: Larger firms are more likely to engage in process innovation, and had a stronger response to the pandemic**

Percentage of businesses engaging in 'process innovation' by size: UK



NOTES: 'Process innovation' defined as significant changes in the way that goods or services are produced or provided, differentiating between processes new to the business only or also new to the industry.

SOURCE: Table 2.1: Percentage of businesses engaging in innovation by activity and size, 2008- 2010 to 2018-2020, UK Innovation Survey 2021 report, May 2022.

The trend in Figure 27 shows that process innovation was increasing after the financial crisis, took a hit around the time of the Brexit vote (consistent with the business investment data shown earlier in Section 2) and increased following Covid (the 2018-2020 survey captures this). But the Covid response was larger in bigger firms, a finding consistent with other post-pandemic business surveys on technology adoption.<sup>189</sup> This heightens concerns about a growing divide between more digitised (and productive) firms and the rest, to which improving diffusion of innovation across the economy is a key part of the answer.<sup>190</sup>

SME-focused business support programmes seek to address a range of barriers that can prevent investment in innovation. In addition to financial constraints, businesses also tend to report that insufficient skills amongst managers and workers or a lack of information – particularly in fast-moving technological areas such as AI – can hold back innovation.<sup>191</sup> Figure 22 earlier showed that financial constraints tend to be

<sup>189</sup> See, for example, J Oliveira-Cunha et al., *The business response to Covid-19 one year on: findings from the second wave of the CEP-CBI survey on technology adoption*, November 2021.

<sup>190</sup> J De Loecker, T Obermeier & J Van Reenen, *Firms and Inequality*, IFS Deaton Review of Inequalities, March 2022.

<sup>191</sup> For example, in the latest wave of the UK Innovation Survey, 13 per cent of SME broader innovators report a lack of qualified personnel to be a highly important barrier to innovation (compared with 9 per cent of larger businesses). See: BEIS, *UK Innovation Survey 2021*: Statistical Annex, Table 10a (Table 10a: Broader innovators regarding potential barriers to innovation as "highly important", 2018 to 2020).

more frequently cited as barriers to innovation by smaller firms. And, as with financial constraints, skills constraints are reported more often by smaller firms where, overall innovation rates are lower than in their larger counterparts. More specifically, on investment in digital technologies, internal barriers also include a lack of skills (or more broadly, absorptive capacity), uncertainty about the benefits of investment, lack of trust in external advice, lack of complementary assets including tangible assets (e.g. computing equipment).<sup>192</sup>

In response to these issues, SME support policies adopted by governments typically seek to address both financial barriers (for example, with grants or vouchers to be used for purchasing a new technology), and non-financial barriers (for example, with managerial training, consultancy or information provision). There is a relatively small evidence base that evaluates the effectiveness of business-support policies. A causal evaluation of the effects on UK firms of an EU programme which gave grants to manufacturing firms in disadvantaged areas found positive effects on investment in smaller firms only – consistent with financial constraints being more binding for such firms.<sup>193</sup> An increasing number of studies make use of randomised control trials to understand how well business support interventions can help firms to invest, innovate, and ultimately improve productivity.<sup>194</sup> In fact, a recent UK Government programme sought to fund experimentation of this type in order to contribute to that evidence base and inform policy.<sup>195</sup>

Some common themes emerge from the evidence and experience of business-support programs in the UK and internationally. First, while structural policies such as strengthening competition, openness to trade and FDI, education, appropriate regulation and governance are all key for improving management practices in firms across the economy, there is evidence that training, consulting and information provision interventions can have positive impacts in the short and medium term and are relatively easy (politically) to implement – though there are differences in impacts depending on programme design and intensity.<sup>196</sup> Second, it can be challenging recruiting and retaining businesses in support programmes in order that they can have an impact, and be robustly evaluated. Designing programmes that clearly meet business needs,

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<sup>192</sup> J Phipps & R Fuller, [Developing policies to promote SME digital adoption: a rapid evidence review](#), IGL Working Paper, November 2022.

<sup>193</sup> The authors consider that this can be explained by “larger firms being more able to ‘game’ the system and take the subsidy without changing their investment and employment levels, possibly combined with financial constraints for smaller firms”, see: C Criscuolo et al., [Some causal effects of an industrial policy](#), American Economic Review, 2019.

<sup>194</sup> For discussion of the evidence on interventions that seek to improve management practices, see: D Scur et al., [The World Management Survey at 18: lessons and the way forward](#), Oxford Review of Economic Policy, 2021; and for evidence on digital adoption, see J Phipps & R Fuller, [Developing policies to promote SME digital adoption: a rapid evidence review](#), IGL Working Paper, November 2022. A slightly older review of business advice policies conducted in 2016 by the What Works Centre for Local Economic Growth considered 700 studies, of which only 23 met its minimum standards, see [Evidence topic: Business advice - What Works Growth](#).

<sup>195</sup> BEIS, [Business Basics Programme](#), 2019.

<sup>196</sup> See: D Scur et al., [The World Management Survey at 18: lessons and the way forward](#), Oxford Review of Economic Policy, 2021.

and communicating this to businesses is crucial, as well as devising strategies to make participation feasible for time-poor business managers. Third, the UK business support landscape is challenging for firms to navigate, and, like other areas of business policy, has been subject to a lot of change.<sup>197</sup> Finally, where the objective is improving productivity, business support policies should avoid situations where any positive effects on particular firms or places simply reflect a displacement of activity: this implies focusing more on the diffusion of management practices, technology or driving exports (where applicable) rather than, say, providing advice on marketing strategies in non-traded sectors.

The most recent large-scale UK business support programme is the £500 million “Help to Grow” programme launched by then Chancellor Rishi Sunak in the 2021 Plan for Growth.<sup>198</sup> This originally consisted of two parts: “Help to Grow: Digital” which provided online support and targeted vouchers for SMEs. This has since been cut due to low take-up along with the larger scale “Help to Grow: Management” programme. Help to Grow: Management aims to improve managerial and leadership skills and productivity in SMEs (with between 5 and 249 employees), and consists of 50 hours of structured learning, one-to-one business mentoring, peer-learning and access to an alumni network. It is a national programme, but is being delivered by business schools across the country. In common with the experience in other business support programmes, uptake has been lower than expected. However, early evaluations based on self-reported outcomes have found positive impacts of the programme on participants, with business schools delivering the programme considering that stronger and more consistent national marketing of the programme itself could have helped to raise awareness and recruitment.<sup>199</sup>

As we have set out, business support is another area of frequent policy change, which hinders evaluation and business understanding of what is on offer. We propose that Government should build on the existing £500m Help to Grow framework, strengthening its brand and reach, expanding experimentation and evaluation within the programme in order to be able to draw robust conclusions on the types of intervention that can have a positive impact on businesses. Randomisation provides a good route to robust programme evaluation, but it is not always politically feasible for policy makers to randomly allocate support to firms. We suggest that randomisation can be used within the programme: for example, to build evidence on the most effective mode of reaching firms, or how to best deliver support. Such evidence can then help to improve the cost-effectiveness of policy in this area.

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<sup>197</sup> See, for example: F Greene & P Patel, [Enterprise 2050: Getting UK enterprise policy right](#), FSB, February 2013.

<sup>198</sup> HM Treasury, [Build Back Better: Our plan for growth](#), March 2021.

<sup>199</sup> The authors of the evaluation of the first year state the “findings are based on self-reported data and should be treated as indicative, without any causal inference”, see: BEIS, [Evaluation of Help to Grow: Management, end of year one evaluation report](#), February 2023.

This section has set out reforms that build on existing structures to address financial constraints for high growth potential SMEs, and broader constraints which prevent the investment in productivity enhancing technologies and practices across the broader set of SMEs. Scale, more permanence and robust evaluation will maximise the chances that business support policies can help to improve growth and productivity in the UK's smaller firms. In the next section we turn to how the UK can sustain a high investment economy.

## Section 6

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### Sustaining a high investment economy

The previous sections have argued that the coming decade must be a high-investment one and outlined some policy reforms that will help to bring this about. However, our desire for higher investment needs to be matched by finance, and reforms such as these need longevity and stability to have full effect. This section sets out how we can achieve both of goals.

The resources for increased investment can either come from domestic savings or foreign savings, but there are three broad reasons to want to boost domestic savings, rather than rely on foreign investors. First, the UK's savings rate is currently very low. Second, countries with high investment generally finance some of this through higher savings, perhaps in part because capital is not fully internationally mobile. And third, relying on foreign investors would push up the UK's already large current account deficit, potentially creating macroeconomic and macroprudential risks.

A key source of domestic saving is household pensions, but pension saving overall is set to fall as DB schemes mature and return to solvency. The most direct route to higher saving would be to push up the auto-enrolment contribution rates which would have the welcome side-effect of reducing the number of people with insufficient pensions saving. We recommend a phased increase in the minimum savings rate within auto-enrolment, specifically by levelling up the minimum contributions by both employers and employees to 6 percentage points, a 50 per cent increase in the total and meaning that many more workers would be saving at rates estimated to be sufficient to finance a 'Living Pension' (if done throughout their working lives).

Greater stability in economic policy will improve the investment climate, and our proposed and future policy reforms will have greatest effect if they are expected to stick. A new National Growth Board, put on a statutory basis with a Growth Act and reporting to the Cabinet Office, would have powers analogous to the CCC or OBR.

The Growth Board would be mandated to advise government on a multi-year growth strategy, evaluate other government policies for their effects on growth, and review or co-ordinate the growth-affecting work of other public bodies such as the research councils, regulators and government-sponsored banks.

## Policy must ensure that there are enough domestic savings to deliver high rates of investment

In order to finance more investment in a broadly fully-employed economy, either domestic saving or the current account deficit must increase. This is true as a matter of accounting, as national investment is equal to national savings plus the current account deficit. Intuitively, the extra resources that go into producing investment goods cannot be produced from currently unemployed resources (because by assumption there are none), so either consumption must fall to free up resources, or the goods must be imported from abroad.

So, if the UK's next decade is to be one of higher investment, either the current account deficit must increase, or the national saving rate must rise. But there are two broad reasons to favour at least some contribution from the latter, higher savings, route, which we set out below. First, the UK starts from a position of extremely low national saving and a large current account deficit.

### The UK's saving rate is extremely low

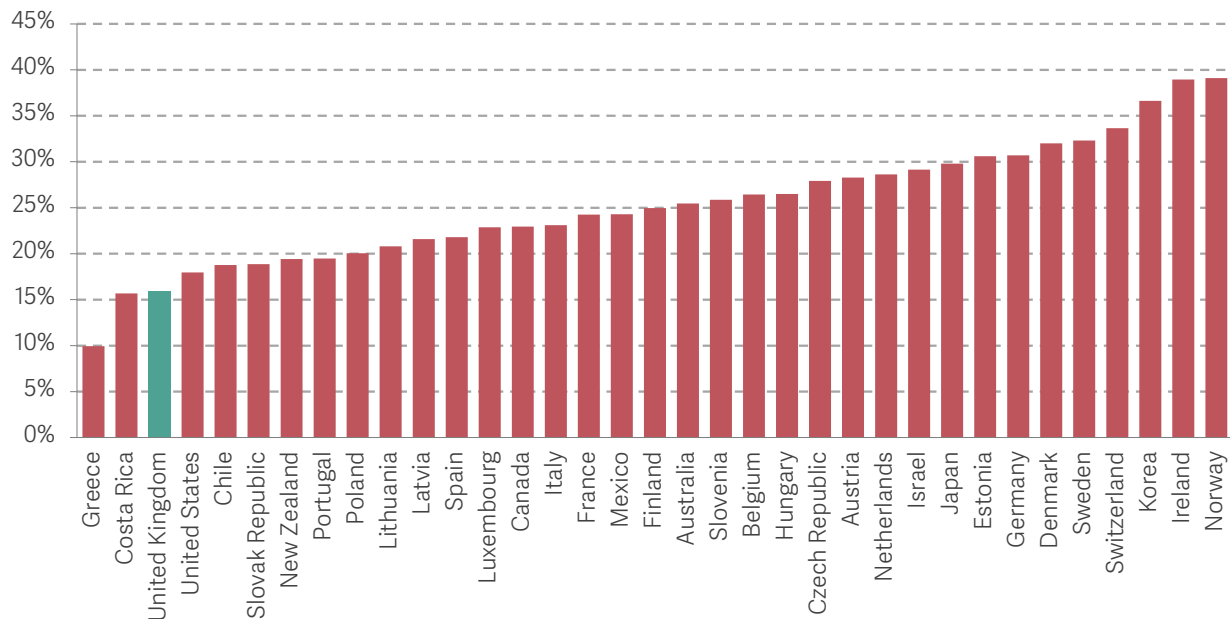
First, the UK starts from a position of extremely low national saving. Figure 28 shows that the UK's national saving rate was the third-lowest in the OECD in 2021, and around two-thirds of the median national saving rate across OECD countries.<sup>200</sup> Net national saving – i.e. the saving that is left after the wear and tear on existing physical assets has been paid for – was a mere 0.6 per cent of GDP in 2019, less than one-tenth of the OECD median.

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<sup>200</sup> Saving patterns in 2020 were heavily distorted by the Covid-19 pandemic.

**FIGURE 28: UK national saving is extremely low**

National savings as a share of GDP, by country: 2021



NOTES: Gross savings calculated as net savings plus capital consumption. Countries are all OECD members.

SOURCE: Analysis of OECD, Disposable income and net lending – net borrowing.

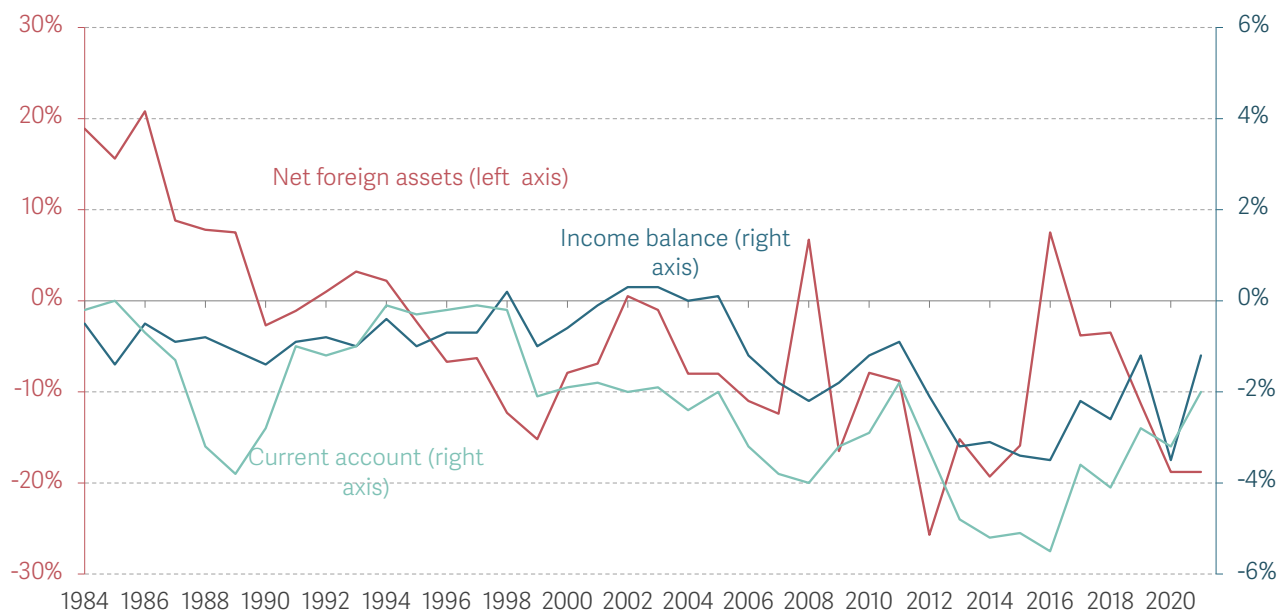
As a result, domestic saving has not even covered the meagre needs of UK investment: one-sixth of domestic investment has been financed by foreign savings in the past 25 years. This is reflected in a large current account deficit. On the eve of World War 1, the UK was the world's largest net creditor, but our current account balance has moved steadily into deficit (see Figure 29), and in 2021 the UK had the world's second largest current account deficit. This deficit is not explained by economic fundamentals – taking the average of the past 5 years, the IMF found that the UK's 'excess' current account deficit relative to fundamentals was the second largest among the 49 countries for which it was calculated.<sup>201</sup>

<sup>201</sup> IMF, [External Balance Assessment \(EBA\): Data and Estimates](#), August 2022.



**FIGURE 29: The UK's current account deficit has grown markedly**

Current account, income balance and net foreign asset position as a proportion of GDP: UK



SOURCE: Analysis of ONS, External Wealth of Nations Dataset.

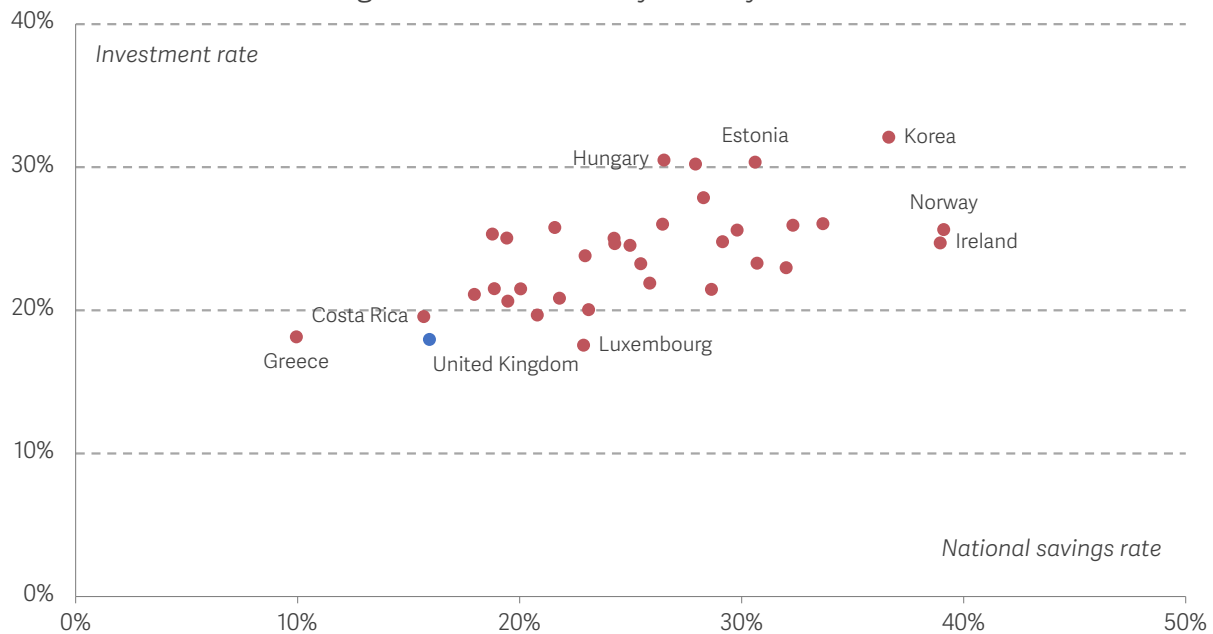
Current account deficits cumulate into net foreign liabilities, which in turn give rise to payments of interest and dividends abroad, placing further pressure on domestic incomes and the balance of payments. The situation is more likely to be unsustainable if, as in the UK case, the current account deficits reflect low saving rather than reflecting large investments from abroad which raise GDP and make external liabilities more sustainable. In some circumstances, a large current account deficit can present macroeconomic risks, and the UK's would get even larger if investment were to rise but not savings.

Second, savings and investment are positively correlated across countries (Figure 30). There are many reasons why this might be the case, among which are the existence of 'home bias' in financial markets whereby households and firms are more likely to deploy savings in, or finance investment from, domestic rather than international counterparts.<sup>202</sup> Home bias would mean that a larger portion of increased UK saving would go to finance UK investment, and also that a rise in desired investment in the UK would be choked off in part by higher interest rates unless it was met with higher domestic saving.

<sup>202</sup> N Apergis and C Tsoumas, *A survey of the Feldstein-Horioka puzzle: What has been done and where we stand*, Research in Economics, June 2009.

**FIGURE 30: Low saving tends to go along with low investment**

Investment and saving as a share of GDP, by country: 2021



NOTES: Gross savings calculated as net savings plus capital consumption.

SOURCE: Analysis of OECD, Disposable income and net lending – net borrowing.

## Pensions are an important source of domestic savings

Any discussion of how to raise the UK's saving rate must start from an understanding of the present. It is easy to imagine that most of the savings that finance business investment come from households putting money into banks, ISAs and pension funds, who then pass it on to businesses to invest. But while it is true that, in a stock sense, the corporate sector is largely owned by the household sector, this account is wrong.<sup>203</sup>

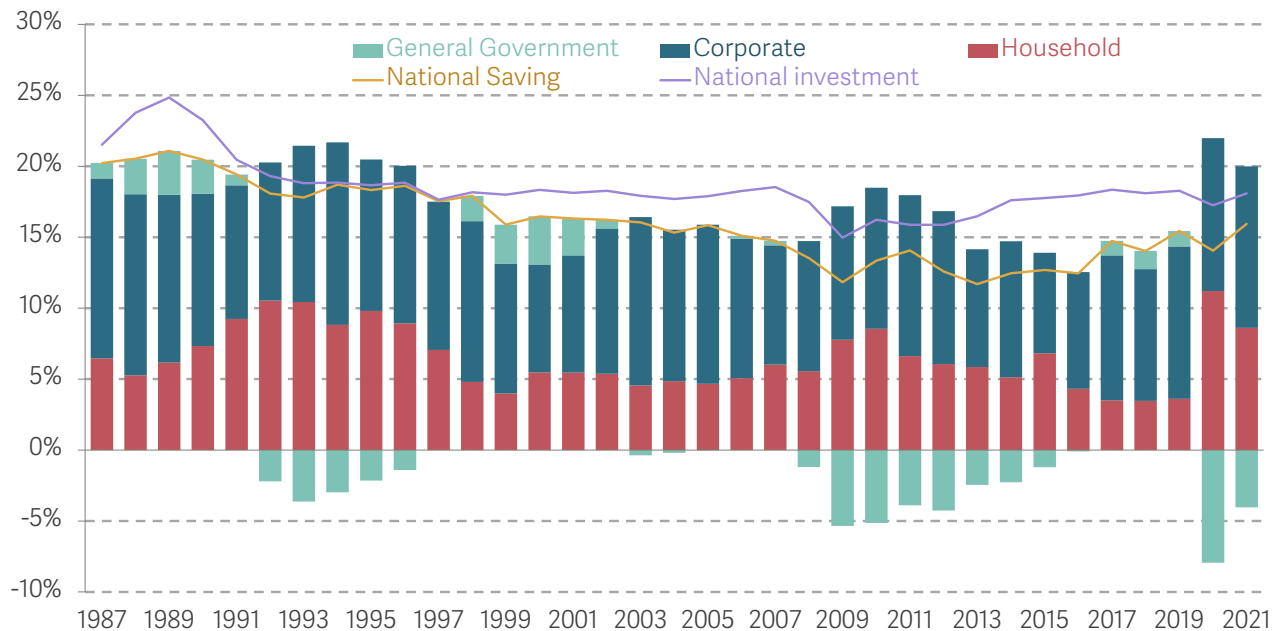
Domestic saving can be done by government, households and firms. Government saving (basically the current budget surplus) has averaged roughly zero over the cycle although, encouragingly from the perspective of national saving, it is set to increase by about £70bn from minus £58bn in 2023-24 to plus £13bn - around 0.5 per cent of GDP – in 2027-28.<sup>204</sup> On average over the cycle, households provide around a third of national saving, and businesses provide the remaining two-thirds, largely in the form of retained profits, as shown in Figure 31.

<sup>203</sup> As well as not describing the broad picture of the flow of funds in the UK economy ex post, this account omits the important ex ante role of the extension of bank credit in the creation of liquidity to make investment outlays.

<sup>204</sup> Source: OBR, Economic and Fiscal Outlook, March 2023.

**FIGURE 31: Firms do roughly two-thirds of saving in the UK**

Shares in GDP of total saving done by households, corporations and government: UK



SOURCE: Analysis of ONS, National Accounts.

Given that government saving is approximately equal to the current budget balance, which most policymakers agree should be roughly zero over the cycle, there are two remaining routes to increase the UK saving rate: increase saving by firms, or by households. It is useful to think about how either of those could be achieved, and what wider impacts they might cause.

Saving by firms is basically retaining their profits, so the two routes to increased corporate saving are higher profits and lower dividends. At an aggregate level, a higher profit share would reduce wages, other things equal, increasing an already powerful squeeze on UK wages. Profits might increase if sales are reallocated to more profitable firms, but it does not seem sensible for the governments to try to reduce the labour share of income in the hope that firms invest some of their additional profits.

In normal times, UK households typically only save enough to finance their own investment in housing and other physical assets. The sum that remains, and is available to finance investment by other sectors, is very small, averaging around 0.4 per cent of GDP during 1997-2019.<sup>205</sup>

The biggest component of household savings is pensions and, given the available set of policy levels, it seems likely that any policy to increase UK private sector saving will

<sup>205</sup> Once one subtracts imputed (i.e. unpaid) pension contributions from firms - money that employers will owe to their workers by virtue of the pensions promises they have made, but which has not been put aside.

need to consider increases in pension saving.<sup>206</sup> Indeed, pensions saving may be pushed down in coming years by two structural changes in the pensions system. First, pension inflows have been boosted in recent years by firms making extraordinary payments to cover deficits on previously accrued pensions rights. These payments amounted to £14 billion in 2021, and were substantially higher in previous years. As explained earlier, following several years of these contributions and the rise in market interest rates, the value of DB schemes' deficits has plummeted, pushing many schemes into surplus, and so these extraordinary payments – which count as saving – will stop. Second, the private sector has largely closed entry to DB pension schemes, replacing them with DC schemes that tend to have lower contribution rates: contributions for the 800,000 members of private DB schemes averaged £10k per head in 2021, compared to around £2k per head for DC schemes.<sup>207</sup> Taken together, these two changes could reduce pension saving by £20 billion per year – enough to wipe out the entirety of the UK's £19 billion net national saving in 2021 once both have taken effect.

The most direct policy level affecting pension saving is the auto-enrolment regime, and specifically the minimum contribution rates for employers and employees. We therefore recommend a phased increase in the minimum savings rate within auto-enrolment, specifically by increasing the minimum contributions by both employers and employees to 6 percentage points, a 50 per cent increase in the total

Increasing default contributions would help to raise aggregate pension savings, but needs to be set against the risk of causing some households to opt out entirely, and others to oversave. And this rise would also need to be phased in, given the pressure on household incomes from years of low growth and the cost of living crisis.

Total pension contributions within current autoenrollment bands are worth £74 billion a year, so a 50 per cent increase in all contributions would be £37 billion, a substantial fraction of the UK's higher investment needs. However, our proposed increase in contribution rates would raise saving by substantially less than this, given that some workers and some employers already contribute more than the minimum rates.

Combined with the reforms to the allocation of the stock of existing pensions savings set out above, a rise in the flow of domestic saving available for UK firms will limit a potentially dangerous rise in the current account deficit, and help to ensure a degree of local ownership, and hence improved oversight, of UK corporates.

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<sup>206</sup> In calendar 2019 households increased claims on pension funds by around £60 billion a year, offset by net borrowing and sales of directly-held equity claims, both of around £30 billion.

<sup>207</sup> Source: ONS (2022), [Funded occupational pension schemes in the UK](#). For illustration, if all DB scheme members contributed at DC scheme rates, aggregate contributions would be £6.4 billion lower.

## Policy stability can be improved with a new institutional framework

There is agreement among policy makers on many broad principles, such as the need for increased investment in capital, ideas and skills, the desirability of openness to trade, and the need to capture growth opportunities in the UK during the transition to net zero. But growth policy is politicised, contested and unmoored. And where disagreements exist, they are often as much within as between parties. Recent examples within Conservative-led governments include differences in opinion on the merits of an activist ‘industrial strategy’, land use, trade policy, taxation and whether or not certain renewable energy technologies should be supported at scale – in particular, onshore wind and solar.

We have already discussed that policy volatility is bad for investment. Investment, particularly in new business processes, products or large-scale projects, tends to pay back over many years, so policies that seek to encourage investment need to have – and be perceived to have – some staying power. One way of trying to achieve greater policy stability is through institutions. A number of key areas of economic policy in the UK have strong institutional frameworks, with independent or quasi-independent institutions either setting policy or advising government, and monitoring progress against stated objectives; examples include monetary, fiscal, competition and climate policy. Positive steps were taken in this direction with the establishment of the Industrial Strategy Council (ISC), which was actively collecting data and conducting analysis to monitor progress against the objectives set out in the 2017 Industrial Strategy.<sup>208</sup> But the ISC was abruptly disbanded in 2021 by a subsequent government of the same party, while the Labour Party have in fact suggested reviving and strengthening it in their Green Industrial Strategy.<sup>209</sup> A recent review of productivity-related institutions in ten other advanced economies highlights how the UK stands out as having weaker productivity institutions in government.<sup>210</sup>

**We propose a new Growth Act to establish an independent statutory body, the National Growth Board, that would report to the Cabinet Office and, where appropriate, the devolved administrations.** This body could be established on a provisional basis pending legislation, and would build upon the previous Industrial Strategy Council, but be broader in scope and more permanent in its nature. Its powers would be analogous to the Climate Change Committee – advising government on a multi-year growth strategy and reporting on progress with legislative and budgetary recommendations to meet growth ambitions. Given that so many areas of government policy, across different departments and agencies, impact on growth, this body would also play a crucial coordinating role

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<sup>208</sup> BEIS, [Industrial Strategy: building a Britain fit for the future](#), 2017. This had been recommended by the LSE Growth Commission; see: [UK Growth: A New Chapter](#), LSE, 2017.

<sup>209</sup> Labour Party, [Prosperity through Partnership: Labour's Industrial Strategy](#), 2022.

<sup>210</sup> D Pilat, [The Rise of Pro-Productivity Institutions: A Review of Analysis and Policy Recommendations](#), The Productivity Institute, March 2023.

at the centre of government, helping to remove barriers that prevent investment in firms. It would co-ordinate the work of different growth, financing and investment arms of UK government which currently sit under Treasury, and the Business, Science, Energy and 'Levelling Up' departments by issuing 'comply or explain' recommendations to their respective government departments. It could house central government planning activities, consistent with proposals for a Land Use Commission recommended by the House of Lords. This would enable the more purposeful design of complementary policies with an explicit consideration of the growth imperative (e.g. driving the deployment of new green technologies while explicitly considering how to build UK supply chain capabilities – something that was not achieved during the large-scale deployment of wind energy in the past).<sup>211</sup>

As well as helping to secure policies that increase the amount of investment in the UK, this institution would play a key role in determining the nature of that investment via its shaping of a strategic approach to growth and business policies. We have previously argued that a growth strategy for the UK must acknowledge and build on its strengths and specialisation in services, certain areas of high value manufacturing – including green technologies – that are underpinned by excellence in its research and innovation system, and areas where supply chain capabilities in the UK are of strategic importance.<sup>212</sup> These reports include analyses of where the UK has export or innovation strengths in areas that are large, or growing globally. The need for a strategic approach to growth in the UK is strengthened by the large-scale and long-term subsidies on offer in the Inflation Reduction and CHIPS Acts in the US, and the EU's response. A targeted response will be necessary in order to retain and build on UK specialisms or areas of strategic importance, such as energy security and net zero. Mainstreaming net zero in a new growth strategy will minimise risks that the UK misses out on growth opportunities as the global transition picks up pace.

## There is no route to sustained growth and higher living standards for UK households without higher investment

A growth boom is badly needed by UK workers, who are currently earning wages no higher than in 2005. And low business investment is a core part of that dismal story: if UK business investment had matched the average of France, Germany and the US since 2008 – something that would have required just over 2 per cent of GDP additional

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<sup>211</sup> B Curran et al., [Growing Clean: Identifying and investing in sustainable growth opportunities across the UK](#), Resolution Foundation, May 2022.

<sup>212</sup> J De Lyon et al., [Enduring Strengths: Analysing the UK's current and potential economic strengths, and what they mean for its economic strategy at the start of the decisive decade](#), Resolution Foundation, April 2022; and B Curran et al., [Growing Clean: Identifying and investing in sustainable growth opportunities across the UK](#), Resolution Foundation, May 2022.

investment each year – our GDP would be nearly 4 per cent higher today, enough to raise average wages by around £1,250 a year.

And wider objectives, from levelling up to net zero, also require large scale private investment in the years ahead if they are to be achieved. Reviving the UK's economic performance means the UK's future must involve higher investment levels from both government and businesses than in its recent past. Transforming the ecosystem for business investment in the United Kingdom will be as arduous and complex as it is necessary to return the UK to sustainable growth in living standards. The reforms set out above will not be the end of the story, and must be enacted along with the overall strategic change that the Economy 2030 Inquiry recommends. But, taken together, they will move the UK from living off the past to investing for the future.



## Annex

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### Corporation Tax model

To access the full Annex for this report, please visit: <https://economy2030.resolutionfoundation.org/wp-content/uploads/2023/06/Annex-1-Corporation-Tax-model.pdf>

The UK is on the brink of a decade of huge economic change – from the Covid-19 recovery, to exiting the EU and transitioning towards a Net Zero future. The Economy 2030 Inquiry will examine this decisive decade for Britain, and set out a plan for how we can successfully navigate it.

The Inquiry is a collaboration between the Resolution Foundation and the Centre for Economic Performance at the London School of Economics. It is funded by the Nuffield Foundation.

**For more information on The Economy 2030 Inquiry, visit**  
[economy2030.resolutionfoundation.org](https://economy2030.resolutionfoundation.org).

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