Cutting the cuts

How the public sector can play its part in ending the UK’s low-investment rut

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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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Summary

Britain is a low investment nation. Worse, it has now been one for decades. Total investment as a share of GDP has consistently been below the average of other rich countries for decades. This century, the UK has consistently (in all but two years) been in the bottom 10 per cent of countries in the Organisation for Economic Co-operation and Development (OECD) by investment levels. That is a country living off its past, not prioritising its future.

The majority of investment is by the private sector, but a substantial minority is public – around £1 in every £5 in the UK, slightly higher than the OECD average of about £1 in every £6 (16 per cent). Public investment dominates in some critical sectors – from transport infrastructure to health – and, far from ‘crowding out’ private investment, is often a complement to it.

This briefing note considers the role public investment plays in the weak investment rut the UK finds itself in, what part it should play in the country escaping from that rut, and the challenges that must be confronted if it is to do so. It complements Economy 2030 Inquiry reports that will follow later in 2023 on business and human capital investment.

In the UK, public investment is consistently too low...

On an internationally comparable basis, UK public investment has averaged 2.5 per cent of GDP this century. This is low compared to peer economies and estimated optimal levels; it is also visible in poor outcomes, and is ultimately unsustainable.

The average OECD advanced economy has seen public investment of 3.7 per cent of GDP a year since the turn of the century, nearly 50 per cent more than in the UK. As with total investment, this low public investment norm is persistent: we have been in the weakest third of OECD countries for three in every four years this century (14 out of 19 years). Had we seen OECD average levels of public investment over those two decades, we would have invested around £500 billion more (in 2022 prices). Our levels of public investment are not just lower than other countries, they are also lower than might be expected given the role that public investment has in boosting private-sector output. Based on cross-country studies of that effectiveness, governments should be investing around 4.5 per cent of GDP.

Public investment is for a purpose, and the lack of it has clear consequences. It has, for example, affected our health, with UK hospitals having fewer beds than all but one OECD countries, and fewer MRI machines than all but four. It has held back our economy, through poor transport links and significant congestion: UK workers spend more time commuting than those in all but two OECD countries. And it has affected how much
housing we can enjoy, and how much we pay for it: the stock of affordable homes relative to the number of families has fallen by around 40 per cent since the 1980s.

Such low investment is not sustainable. Combining low investment with fairly normal borrowing levels and repeated economic shocks has meant steep declines in public sector net worth – the most comprehensive measure of what governments own and owe – which has fallen by more than 50 per cent of GDP over the past two decades. Indeed, public sector net worth has not just fallen – it is actually negative with the Government’s liabilities larger than its assets (at around 90 per cent of GDP), with only one other country (Portugal) for which comparable data exists managing to do worse.

To meet the needs of the future, and not just avoid repeating the mistakes of the past, the UK will need a higher level of public investment. Chief among these needs is the net zero transition, with decarbonisation requiring significant upfront investment, public and private, to renew or replace our infrastructure. The OBR has estimated that will require new public investment of around £14 billion each year by the end of the decade.

...and too volatile

UK public investment is not just too low, it is far too volatile. The variation in UK public investment growth between 1960 and 2019 is the second highest among advanced economies; growth in investment spending by government departments has been six times as volatile as day-to-day spending.

This volatility is a problem in and of itself, but also compounds the problem of insufficient public investment levels. It limits the ability of those delivering public investment programmes to plan ahead (driving persistent underspends), and of supply chains to be built up (meaning higher costs when the Government does try to ramp up investment). Finance managers in the public sector, anticipating a high likelihood of future budget cuts, are often reticent to commit resources well ahead of time. It also takes time to ramp up spending as plans change. The result is consistent underspends: successive governments have on average failed to spend £1 in every £6 (17 per cent) in planned investment spending over the past seven spending reviews where increases have been planned, dating back to 1998.

Centralised control, fiscal frameworks and short-termism of politics drive volatility

A key reason public investment is so volatile is that it has been repeatedly cut when times get tight: public investment cuts have played a major role in every fiscal consolidation in recent decades, falling by an average of nearly 20 per cent during such episodes.
The Government has done exactly this in the very recent past. To the Government’s credit, public investment had been on the way up following the 2019 General Election, to levels not sustained since the 1970s. But they have not been sustained this time either, with investment spending cut in November 2022 in the aftermath of Liz Truss’ mini-budget. Public sector net investment is now set to be frozen in cash terms from 2025-26, a £15 billion real-terms cut relative to the previous plans by 2027-28. The result is public investment falling from 2.5 per cent of GDP this year to 2.2 per cent in 2027-28, undoing over 80 per cent of the increase planned just two years earlier. That is volatility in action, even if overall investment levels remain above the low levels averaged in the first two decades of this century (around 2 per cent). And this habit of cutting public investment persists despite widespread recognition that doing so provides an additional headwind to already weak growth. Cross-country analysis suggests that an unanticipated 1 percentage point fall in the public-investment-to-GDP ratio reduces GDP by around 1.5 per cent in five years’ time.

Fiscal frameworks and short-termism give the Treasury and politicians respectively strong incentives to opt for such cuts, while the extremely high level of Treasury control over public investment levels means those incentives are easily translated into action. The result is that the institutional framework for public investment drives, rather than leans against, volatility.

Politically, the reason for these cuts is simple: it easier to cut investment projects that people were never aware of than take unpopular decisions to reduce funding for core public services or increase taxes. Cancelling a bridge tomorrow is far easier than firing a nurse today.

Such short termism is reinforced by fiscal frameworks that focus on reducing net debt – which, while important, does not distinguish between capital (i.e. investment) and current spending, with zero weight placed on the assets side of the public-sector balance sheet. This, combined with successive Chancellors leaving far-too-small buffers against their fiscal objectives, has meant that in the face of even small adverse shocks it is all too inviting to use public investment as the margin of fiscal adjustment. This was the case once again in the Spring 2023 Budget, with the Government’s primary target of reducing the public-sector-debt-to-GDP ratio by the fifth year of the forecast driving the most recent significant reduction in investment plans.

These incentives matter particularly given the high degree of finance ministry control of public investment, relative both to subnational tiers of government or to Parliament. In 2021-22, central government capital spending accounted for £7 in every £10 spent. This is much higher than other major European economies, where between 50 and 75 per cent of public investment is done by subnational government. With Parliament’s role limited
to merely rubber-stamping decisions to change total investment levels, long after they have been made, the result of this highly-centralised system for setting public investment is that the Treasury uses it for something entirely inappropriate: fine-tuning fiscal policy. Very volatile and low public investment levels are the result.

The Treasury’s incentives around investment need rewiring

Given the scale and root cause of this problem it is worth considering the role of both policy and institutional change in fixing it. The goal is reform that materially shifts us away from the situation where Chancellors see changing future public investment plans as the path of least resistance for fiscal adjustment.

One way to achieve this could be to change the fiscal framework – setting fiscal objectives that explicitly treat investment spending differently from current spending, and building in more headroom against those targets. The easy bit of this is moving away from today’s overall deficit rule (currently set to 3 per cent) to a current budget target that excludes capital spending. Ideally, but less straightforwardly, the more binding target to see net debt falling would be replaced with a target to see net worth improving (a fiscal rule that would value the asset acquired by an investment rather than treating the cost of doing so identically to consumption). These changes would materially reduce the temptation for the Treasury to cut investment. They would also improve wider incentives, removing the current temptation to engage in fire sales of public assets to reduce debt even when doing so represents poor value for money for the taxpayer.

Moving to a net worth target would come with its own challenges, including the need to develop the data and institutional monitoring of net worth. In this context, it is welcome that the Office for Budget Responsibility (OBR) is now providing regular net worth forecasts. But more substantively, with both main parties presently committed to net debt as their primary fiscal anchor, it is worth considering how a move to a higher public investment norm might be consistent with debt falling. That can be done, but it requires taking a longer view of when net debt would be falling by. To illustrate this, we model a rise in public investment to an OECD average rate of 3 per cent of GDP from 2023-24. In isolation, the impact of higher investment spending would increase public sector net debt (excluding the Bank of England) by around £70 billion by 2027-28, pushing debt to nearly 100 per cent of GDP. However, it would also raise GDP and boost receipts. Although the extent of this is inherently uncertain, even based on the OBR’s relatively conservative long-run treatment of public investment, such a change would lead to a permanent increase in the size of the economy of around 0.8 per cent. This is enough to mean that, while debt would be falling on a slower trajectory than on current plans, it would be essentially flat by the fifth year of the forecast. Those arguing that such an approach is fiscally unsustainable should note that, unlike all our recent experiences of
increased borrowing and debt, it would put net worth on a gradual upward path for the first time in around half a century.

However, if a formal net debt target were to be retained, the incentive to cut investment spending in the face of a fiscal deterioration would remain. To lean against that further it is worth considering more institutional changes. Those could include taking decisions about the overall quantity of public investment out of the day-to-day hands of the Treasury, with investment levels instead being set by Parliament, on a parliament-by-parliament basis. This would ideally sit alongside greater fiscal devolution which would give lower tiers of government more agency in setting their own investment levels, a subject the Economy 2030 Inquiry will return to in future work.

Under current arrangements, Treasury ministers announce headline public investment plans for future years which are subject to no immediate parliamentary approval. Those announcements, such as the recent significant reduction, are in practice binding, with very low-key votes on overall budgets for individual departments taking place shortly after the start of each new financial year, when it is far too late to materially change investment plans. Instead of the Treasury largely deciding the aggregate public investment levels and parliament only being asked to approve short-term limits on investment spending for individual departments, this could be reversed. Parliament would set the overall level of investment spending to be done by departments on a multi-year basis, with the Treasury focused on how best to spend those resources rather than on fine-tuning their level.

To address this, we propose introducing a Public Investment Act at the start of each parliament, enshrining the headline levels of investment planned for a period running at least a year into the following parliament. While it would be for ministers to propose that level for the coming years, Parliament should receive independent advice from the National Infrastructure Commission (NIC), ideally on a statutory basis, about the implications of different choices. While over the longer term, investment levels are best thought of relative to the size of the economy (a 3 per cent of GDP level – the OECD average – would represent an achievable but significant rise in the level of public investment), the primary legislation would likely need to specify aggregate departmental investment plans in cash terms. This would provide a solid basis for operating public spending control and avoids pressures for (macroeconomically undesirable) major cuts to investment levels in a downturn.

This approach would represent a more radical departure from our current fiscal framework, but it would more materially raise the political bar for cutting investment. In most cases, it would take decisions about the long-term path of public investment out of the twice-yearly fiscal event cycle that has proved so damaging. Although there are many
reasons to be sceptical of attempts to legislate for desired objectives, this approach is about the specifics of setting departmental capital spending totals, and so has more in common with legislating for the 0.7 per cent of Gross National Income target for overseas aid spending (which saw that spending significantly protected during austerity) rather than with more distant and hard-to-control objectives such as reducing child poverty. One critique of this approach is that hard rules can lead to manipulation, and even perverse policy outcomes, as governments struggle to meet these commitments. Our view is that such outcomes can be mitigated by having parliament-by-parliament cash limits rather than percentages of GDP; and set by governments in the aftermath of an election, rather than a once-and-for-all commitment to spend a certain amount on investment. While such a legislative approach is not a panacea – the Government would still be able to overrule those pre-announced plans as part of the normal budget-setting process – it would make it much harder for governments to change plans on a whim.

The Treasury’s primary focus should be on improving the quality of investment

Consistently higher levels of public investment put an onus on it being done well, which should be a key focus for the Treasury looking to reassure markets that this approach represents a prudent way forward. Here there are three priorities, alongside reinforcing the key institutional roles of the OBR and NIC.

First, there should be more long-term budgets reflecting the longer-term plans set by Parliament. This will improve planning and give managers the certainty they need to commit to projects – avoiding ‘feast and famine’ cycles that drive both underspends and higher costs. In recent years, steps have been taken to improve certainty about longer-term capital allocations beyond the horizon of a spending review – for example, at the Spending Review in 2021 five-year settlements were given to Gigabit Broadband and some net-zero investment programmes – but this remains ad hoc. All departments should have capital budgets lasting the duration of the total spending plans approved by Parliament. In addition, strategic infrastructure projects (such as HS2) should also have voted-on independent budgets for their total spending. The latter would provide greater transparency and discipline, while also giving project managers more flexibility over when spending takes place, and protection from annual budget debates with departments.

Second, local and regional tiers of government need greater certainty over their capital budgets and more flexibility to decide what their priorities are for capital spending. This means moving away from bidding for myriad small pots and ringfencing of capital budgets at the local level. Here, the new ‘trailblazer’ devolution deals announced along with the Budget may provide a model for how this might operate, with local policy makers issued with capital budgets and agreed priorities, and becoming full participants in future spending reviews.
Third, the Treasury could play a greater role in improving the quality and transparency over the business cases for projects, raising the pressure on policy makers proceeding with schemes that do not have a strong business case. Unlike in other countries, business and strategic cases for major projects are not published as a matter of course, making it easier for these decisions to be driven by politics. Requiring departments to publish these would not only improve the transparency of investment decision-making but would encourage Treasury to strengthen its capability to undertake such assessments. This would be improved further by requiring the independent NIC to certify business cases.

There are trade-offs from moving to a higher investment norm, but the current ‘low investment status quo’ is not working for Britain

Moving to a higher – and more consistent – investment norm is not easy. But it is essential and eminently possible. Despite the claims of some, higher public investment is not a sufficient condition for ending the UK’s recent period of relative economic decline, but it is certainly a necessary one.

Weak public investment has played its part in Britain becoming a low investment country

Looking back, it’s clear that the UK has become a low-investment nation. As shown in Figure 1, total investment spending – including both private and public spending – as a share of the size of the economy, has been consistently below that of other rich countries for decades. Indeed, the UK has been in the weakest tenth of countries for total investment in all but two years this century.1 This accounts for a significant proportion of the UK’s overall stagnation in recent years, with weaker investment contributing around 9 percentage points of the roughly 20 per cent fall in GDP per capita from its long-run trend since the financial crisis.2 It is clear that Britain is living off its past rather than investing for the future.

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1 In this briefing note, we compare the UK to OECD countries that are also classified as ‘advanced economies’ by the International Monetary Fund, subject to data constraints.

2 Source: J Smith, As good as it gets?: The forces driving economic stagnation and what they mean for the decade ahead. The Resolution Foundation, July 2022. A number of studies have linked low investment in the UK to weak growth – see, for example: J S Chadha & I Samiri, Macroeconomic Perspectives on Productivity, Productivity Institute Working Paper No. 30, The Productivity Institute, December 2022.
This weakness is for the most part about private investment, but public investment has also played a role. At around £80 billion, public investment accounts for around £1 in every £5 spent on investment in the UK in 2021 – slightly higher than the OECD average of around 16 per cent – and it dominates investment spending in some key areas, including transport infrastructure and health. And, far from ‘crowding out’ private investment, public investment is a key complement to it.3

This briefing note considers the role that public investment plays in the weak-investment rut the UK finds itself in and what part it should play in faster investment growth in the future that the country so desperately needs. We focus on the challenges in how such policy is made if it is to do so, but not the specifics of what governments should be investing in.4 In doing so, this this briefing note complements wider papers for the Economy 2030 Inquiry on business and human capital investment that will follow in due course.

3 Economists find strong evidence that increasing public investment does also boost private investment. For a meta-study on the size of those effects, see: P R D Bom & J Ligthart, What have we learned from three decades of research on the productivity of public capital?, Journal of Economic Surveys, 28, December 2014.

4 For more on Britain’s public investment needs, see our previous work, for example: Resolution Foundation & Centre for Economic Performance, LSE, Stagnation nation: Navigating a route to a fairer and more prosperous Britain, Resolution Foundation, July 2022; and A Bailey et al, Euston, we have a problem: Is Britain ready for an infrastructure revolution?, Resolution Foundation, March 2020. See also, National Infrastructure Commission, Infrastructure Progress Review 2023, March 2023.

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UK public investment has been too low for years

The UK Government has underinvested for years. On an internationally comparable basis, general government gross fixed capital formation has averaged just over 2.5 per cent of GDP since the turn of the century (Figure 2). The OECD average is around 50 per cent higher, at 3.7 per cent. And the UK has consistently been in the weakest third of countries in three out of every four years over that period (14 of the 19 years). Had the UK been investing at the OECD average, we would have invested around £500 billion more this century (in 2022 prices).

FIGURE 2: The UK Government has under-invested relative to other countries
General government gross fixed capital formation as a proportion of GDP: selected advanced economies

NOTES: Swathe includes: Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong SAR, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Macao, Malta, Netherlands, New Zealand, Norway, Portugal, Puerto Rico, San Marino, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan, China, United Kingdom and United States.

Our levels of public investment aren’t just lower than other countries, they are also lower than might be expected given the role public investment plays in complementing private investment. In the long run, we might expect governments to invest a share of national income that depends on how effective public-sector capital is in boosting private-sector investment.

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5 The chart shows general government (that is central government plus local government) gross fixed capital formation (i.e. spending on durable capital goods). This is the largest and most important component of public sector net investment, which is net of depreciation, but also includes net capital grants from the public sector. For a more detailed discussion of how different concepts compare, see: Office for Budget Responsibility, Public sector net investment, Box 4.1, Economic and fiscal outlook, March 2020.

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output. Based on cross-country studies of that effectiveness,\(^6\) governments should be investing around 4.5 per cent of GDP.\(^7\)

Years of underinvestment by the Government has clear consequences

The impact of years of low public investment can be seen in a number of areas in which UK public-sector capital looks alarmingly thin compared to its peers. In this section we provide a brief summary of some of those areas, with a more granular assessment of how the UK’s infrastructure compares to that in other rich countries provided in our previous work.\(^8\)

FIGURE 3: **UK hospital equipment looks low in a number**

Hospital beds (left-hand chart) and MRI units (right-hand chart) per million: selected OECD economies

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<th>Hospital beds, per million</th>
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SOURCE: Analysis of Health Care Resources, OECD.

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\(^7\) For a discussion of how public investment should evolve in the longer run, see: V A Ramey, *The Macroeconomic Consequences of Infrastructure Investment*, NBER Chapters, in: Economic Analysis and Infrastructure Investment, 2020.

Low public investment is affecting our health. As shown in Figure 3, relative to the size of the population, UK hospitals have fewer beds than all but one of the OECD advanced economies, and fewer MRI machines than all but five. While it is clearly possible for health systems to overinvest in equipment for hospitals – maintaining and staffing them will increase the day-to-day costs – the UK’s recent experience suggests we are a long way from that point, with shortages contributing to the longer backlogs and numbers on waiting lists in the aftermath of the pandemic.

Weak public infrastructure has held back our economy, with poor transport links and significant congestion. UK workers spend more time commuting than those in all but two OECD countries, as shown in in Figure 4. The nine minutes longer that UK workers are spending each day commuting translates into nearly 36 hours each year for a typical full-time worker on the statutory minimum amount of holiday. A particular issue in this context is transport links in cities outside London, making it harder for those cities to take advantage of agglomeration benefits – such as accessing a larger pool of potential workers.

**FIGURE 4: UK commuting times are longer than in comparable countries**

Average daily commuting times across OECD countries

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SOURCE: OECD Family Database.

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9 Based on 233 working days in the UK once weekends, bank holiday and statutory minimum amount of leave is accounted for.

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And low investment affects how much we pay for core services, like housing. It is striking that the stock of affordable homes relative to the number of families has fallen by around 40 per cent since the 1980s (as shown in Figure 5). This means many more families are reliant on the private-rented sector where housing costs to income ratio are very high – 33.1 per cent on average in 2021-22.10

![FIGURE 5: The UK has stopped building new social housing](image)

Number of sub-market homes per 1,000 family units aged 20+: England

NOTES: A family unit is a single adult or couple, and any dependent children.

Such low investment is not sustainable

With levels of government borrowing that are similar to other countries, and repeated economic shocks, the UK’s low level of public investment has contributed to a decline in public sector net worth of more than 50 per cent of GDP since the turn of the century. This is a key measure of the strength of the government’s overall balance sheet, taking into account a range of assets, as well as debt. As shown in Figure 6, public sector net worth peaked in the 1970s and has been on a downward trajectory ever since.11 The dwindling in the UK’s stock of public capital has left it now lower than all but six OECD countries; even more starkly, the UK now has a negative net worth position, of around 90 per cent of GDP. Only Portugal, among comparable rich countries with such data, performs worse (see Figure 7). This is worrying not only because a small capital stock means lower output, but because countries with higher net worth are found to recover faster in the aftermath of recessions and experience shallower economic downturns.12

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10 Source: Analysis of Department for Work and Pensions, Family Resources Survey.
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Figure 6: UK public-sector net worth has been falling since the 1970s

Measures of public sector net worth as a proportion of GDP: UK

NOTES: The key difference between the National Accounts measure (based on the European System of Accounts, 1995) and the IMF measure is the latter includes an estimate of the liabilities from public-sector pensions.


Figure 7: And the UK’s public-sector net worth is very low by international standards

Net Worth as a proportion of GDP: selected countries, 2018

NOTES: These figures were compiled as part of the Fiscal Transparency Evaluation.

SOURCE: IMF staff estimates.
Even those who don’t believe that this legacy of weak investment suggests a case for higher public investment should recognise that the demands on public capital are set to increase in the coming years. These will come from plans to increase spending to boost growth and productivity outside London and the South East (the ‘levelling up’ agenda); as well as from higher defence spending, much of which would be capital spending, as the UK navigates heightened geopolitical tensions. But the most significant in scale is the need to use public capital spending to catalyse a rapid transition to net zero carbon emissions. As part of the ‘carbon budget’ process, the Climate Change Committee has estimated that £30 billion of investment will be needed each year between 2023-2027, rising to closer to £50 billion a year in the 2030s.\textsuperscript{13} Here the OBR estimates that around £14 billion each year of this will need to public investment by the end of the decade.\textsuperscript{14} If we are to respond to the new demands on public investment in the coming years – and not just avoid repeating the mistakes of the past – then the case for investing more is even more compelling.

\textbf{Britain’s public investment is also too volatile}

UK public investment is not just too low, it is too volatile relative to other countries and other forms of government spending. The coefficient of variation – a scaled measure of variation to allow comparability – for annual growth in UK public investment between 1960 and 2019 is the second highest among advanced economies.\textsuperscript{15} Moreover, growth in investment spending by government departments has been six times more volatile than day-to-day spending since the 1980s.\textsuperscript{16}

This volatility means money is not spent, because planning for the long term becomes difficult. Finance managers, charged with delivering public investment programmes to individual departments, will anticipate a high likelihood of future budget cuts, and so be reticent to commit resources well ahead of time. It also takes time to put plans in place following a decision to ramp up investment.\textsuperscript{17}

\textsuperscript{13} Climate Change Committee, \textit{Sixth Carbon Budget}, December 2020.
\textsuperscript{16} Source: HM Treasury, Public Expenditure Statistical Analyses.
\textsuperscript{17} A sense of some of time it takes to increase investment can taken from National Audit Office review of major projects. For example, see: National Audit Office, \textit{High Speed Two: Euston}, Report, 27 March 2023.
A sense of the scale of changes in the level of public investment can be seen by looking at successive OBR forecasts for investment (Figure 8). The result is consistent underspends: since 1998, the government has on average failed to spend £1 in every £6 (17 per cent) of planned investment over the past seven spending reviews where increases have been planned.18

**FIGURE 8: OBR forecasts for public investment have moved considerably over time**

Public sector net investment as a proportion of GDP, outturns and OBR forecasts: UK

Big changes in public investment plans also militate against achieving value for money. As shown in Figure 9, we find that large changes in public investment of around 50 per cent over a five-year period – a threshold that has been met eight times for the UK since 1960 – are associated with large increases in the implied price deflator.

This shouldn’t come as a surprise: massively ramping up investment or cutting it back sharply is likely to be associated in big increases in the costs of doing such investment, through changes in the number of people working on those projects and establishing supply chains and sourcing materials.

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18 Source: Capital spending plans: how much will actually be spent? Box 3.2 in OBR, Economic and fiscal outlook, March 2020.

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FIGURE 9: There seems to be a link between big changes in public investment and its cost

Estimates of the relationship between increases in the price of public investment and the level (left-hand chart) and five-year change in (right-hand chart) general government gross capital formation: advanced economies, 1980-2020

5-year average annual chance in the public investment deflator

NOTES: Non-parametric estimates of the mean annual percentage change in the general government gross fixed capital formation deflator conditional on the change in public investment over five years. Epanechnikov kernel, bandwidth = 8.7. Estimates include data for: Australia, Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong SAR, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Macao, Malta, Netherlands, New Zealand, Norway, Portugal, Puerto Rico, San Marino, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan, China, United Kingdom and United States.

Public investment volatility reflects repeated cuts, a policy mistake that has been repeated once again

The key reason for such strikingly high levels of volatility is that public investment has been cut repeatedly when fiscal times get tight. Figure 10 shows the level of public investment in periods of fiscal consolidation (when the cyclically-adjusted primary balance has been falling). During these episodes, public investment has been cut sharply – falling by more than half in the aftermath of the 1990s recession, for example. Public investment cuts have played a major role in every fiscal consolidation in recent decades with the public sector net investment-to-GDP ratio falling by an average of around 20 per cent during these episodes.
FIGURE 10: The latest bout of public investment cuts looks similar to that in past periods of fiscal tightening

Changes in public sector net investment during periods of fiscal tightening since the 1970s: UK

NOTES: Year = 0 is defined as the first year in which the cyclically adjusted primary deficit starts to fall for all episodes. The exception to this is the 2020s where it is defined as the fall from the public investment peak (2023-24).


Public investment had been on the way up following the 2019 General Election, with Boris Johnson’s Government announcing around £100 billion of new investment over a five-year period in the 2020 Budget, a plan that would have raised investment to levels not sustained since the 1970s. As shown in Figure 11, the plan was to boost the capital budgets of almost all departments, with notable increases in defence, research and development (included in Business, Energy and Industrial Strategy departmental budget) and transport. These new priorities were enshrined in a number of new published strategies – including the National Infrastructure Strategy, The Growth Plan, Net Zero Strategy and the Levelling Up White Paper.19


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FIGURE 11: As Chancellor, Rishi Sunak announced a broad-based ramping up of public investment

Capital Budgets in Spending review 2021, by department: UK, 2021-2024

But those higher investment plans have not been sustained, as cuts were announced at the 2022 Autumn Statement, in the aftermath of Liz Truss’ mini-budget. A weaker economic outlook and higher interest rates added around £75 billion to the deficit in 2026-27, prompting the Government to announce measures to tighten its belt.\(^{20}\) As well as increasing taxes, the decision was taken to achieve this through lower public investment, with plans frozen in cash terms from 2025-26, a £15 billion real-terms cut by 2027-28 relative to the previous planning assumption – see Figure 12.

These new plans imply that public investment will fall from 2.5 per cent of GDP this year to 2.2 per cent in 2027-28, undoing over 80 per cent of the increase in public investment that had previously been planned over that period. And it is important to keep in mind that a substantial minority of that investment reflects write-offs for nonrepayment of student loans (£7 billion by 2027-28) which does not add directly to the productive public-sector capital stock.\(^{21}\)

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Governments continue to cut public investment when the public finances come under pressure, despite widespread recognition that doing so provides an additional headwind to already weak growth. Indeed, as shown in Figure 13, our cross-country econometric estimates, building on work by the IMF, imply that an unanticipated 1 percentage point fall in the public-investment-to-GDP ratio reduces GDP by around 1.5 per cent in five years’ time. They also imply that private investment will fall roughly in line with lower GDP. While these estimates are somewhat higher than the OBR’s, there is an overwhelming consensus that that public investment will lead to long-lasting increases in the size of the economy.


23 The key paper that informs the OBR’s treatment of public investment is: P R D Bom & J Ligthart, What have we learned from three decades of research on the productivity of public capital?, Journal of Economic Surveys, 28, December 2014. Some have highlighted that the cross-country nature of this study could mean that the OBR’s treatment is too conservative; see, for example: J S Chadha, The Missing Link: Modelling Potential Output at the OBR, NIESR Topical Briefing, 14 March 2023.
Centralised control, fiscal frameworks and short-termism of politics drive the cuts

So why has public investment been repeatedly cut? Our view is that political short termism, debt-focused fiscal rules and a lack of buffers against those rules interact to give politicians and the Treasury strong incentives to opt for cuts, while highly centralised control of public investment means those incentives are easily actioned.

Starting with the politics, here the forces are clear: it's easier to cut investment projects that people were never aware of than to take unpopular decisions to reduce funding for core public services or increase taxes. Cancelling a bridge tomorrow is far easier than firing a nurse today. Such short-termism gives politicians an incentive to deprioritise future growth. This has been repeated over at least the past half a century, and by governments of all political parties (see Figure 10).

A key reason for having fiscal rules is to combat political short-termism, but a focus on net debt as a central fiscal objective has unfortunately reinforced the tendency to deprioritise future growth. As we've previously argued, a narrow focus on public sector
debt as the key target for fiscal policy makers does nothing to distinguish between
capital spending (i.e. investment) and current spending, and pays no heed to the assets
created by investing (or, indeed, the real value of assets being disposed of).24 This is the
case once again with the current set of fiscal rules, with Jeremy Hunt adopting a primary
target of reducing the public-sector-debt-to-GDP ratio by the fifth year of the forecast.25

On top of that, Chancellors sail too close to the wind against their fiscal rules meaning
that belt tightening is required even in the face of relatively minor public finance shocks.
For example, when the current rules were introduced at Autumn Statement 2022, there
was ‘headroom’ of just £9 billion against the (binding) rule for debt to fall. This margin for
error was just 0.3 per cent of GDP, the lowest such buffer since 2010.26 Since then, this
headroom has fallen further, reflecting decisions taken at the Budget, to just £6.5 billion.
These are tiny amounts of headroom relative to the uncertainty over public finance
forecasts: the OBR’s median absolute error on borrowing over a five-year horizon is eight
times larger, at 2.5 per cent of GDP.27 This narrow room for manoeuvre means Chancellors
are often left scrambling to meet their own fiscal rules, and, in that situation, cutting
public investment often looks like the easiest option.

The highly centralised system for setting public investment levels, relative both to sub-
national tiers of government or to Parliament, also means that it is a lever that is all too
easy to pull. Indeed, in 2021-22, central government capital spending accounted for £7
in every £10 spent.28 This is much higher than other major European economies, where
– according to the IMF – between 50 and 75 per cent of public investment is done by
subnational government.29 This high level of centralisation means the Treasury can – and
does – use public investment for the purpose of fiscal fine tuning, playing a key role in low
and volatile public investment levels.

Reform is needed to allow public investment to play its part in a high
investment decade

So how can we make sure that public investment plays an effective role in boosting
overall investment? Given the scale of the problem, we should consider how both policy

24 R Hughes et al., Totally (net) worth it: The next generation of UK fiscal rules, Resolution Foundation, October 2019.
25 HM Treasury, Charter for Budget Responsibility Autumn 2022 update, January 2023. For a discussion of the how the current set of
fiscal rules compares to previous incarnations, see: T Bell et al., We’re going on a growth Hunt: Putting the 2023 Spring Budget in
26 T Bell et al., Help today, squeeze tomorrow | Putting the 2022 Autumn Statement in context, Resolution Foundation, November
2022.
Government policy, see, for example: A Breach & S Bridgett, Centralisation Nation: Britain’s system of local government and its
impact on the national economy, Centre for Cities, September 2022.
29 C Renteria et al., United Kingdom: Technical Assistance Report-Public Investment Management Assessment, International
Monetary Fund, September 2022.

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and institutional change can help fix it. Here, the aim should be a substantial shift away from the situation where Chancellors see changing future public investment plans as the path of least resistance for fiscal adjustment.

One option is to amend the fiscal rules to reduce incentives to use public investment for fiscal fine tuning

The most obvious way to reform policy to achieve this is to change the fiscal framework. By updating the rules that constrain Chancellors’ spending and taxation decisions, it is possible to make public investment less attractive as a fiscal ‘makeweight’. This can be done by choosing fiscal targets that cannot be met by simply cutting investment. The easy bit of this is to revert to a current budget balance target – a target that simply disregards investment spending – rather than an overall deficit rule (currently set to 3 per cent).

A more difficult question is what to do about the stock target for the public finances. Here, as we have previously argued, having a net worth target – rather than one for debt – is desirable because it accounts explicitly for the assets created by investment. It would also remove the incentive for governments to engage in asset sales to bring down debt, even where they represent poor value for money. This was the case, for example, when the UK Government sold a portion of its student loans portfolio in 2017 and 2018. It would also be important for the Chancellor to increase headroom against the new rules – building in a larger buffer for when the outlook inevitably deteriorates – which would reduce the need for fiscal fine tuning.

Adopting such a fiscal framework would come with challenges

Such an approach would come with practical challenges. Net worth targeting is a novel approach, and it would require new data and institutional monitoring of net worth. In that context, it is welcome that the OBR is now providing regular forecasts and that the ONS is providing much more comprehensive data on the Government’s balance sheet.31

But a more substantive challenge comes from both main parties currently being committed to falling net debt being the primary fiscal target (and the reality than many assessing the UK’s fiscal sustainability would monitor the evolution of net debt whatever the government’s fiscal objective). Sustainably moving to a higher investment norm is consistent with the objective of seeing net debt falling, but it would require a slightly longer time horizon.

To assess the scale of this challenge, we model a rise in public investment to 3 per cent of GDP, around the OECD average for this century, but lower than the plans announced

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30 R Hughes et al., Totally (net) worth it: The next generation of UK fiscal rules, Resolution Foundation, October 2019.

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in the Spring 2020 Budget. On its own, such a policy would increase public sector net borrowing by around £70 billion by 2027-28, pushing public sector net debt (excluding the Bank of England) to nearly 100 per cent of GDP (Figure 14). ‘Borrowing to invest’ should come with an offsetting boost to the economy, however, which will lead to an increase in tax revenues. The size of that boost is uncertain, but the red line in Figure 14 calculates that boost in a similar way to the OBR’s relatively conservative approach to assessing the long-run impact of public investment: the impact is still sizeable enough to boost GDP by around 0.8 per cent in the longer-term. Indeed, the impact of the extra investment on the size of the economy (the denominator effect) and higher tax revenues that follow is enough to mean that debt-to-GDP is essentially flat by the fifth year of the forecast, albeit at a slightly higher level than if the investment hadn’t happened (98.3 per cent, compared with 97.3 per cent in the OBR’s Spring Budget projection). Higher borrowing for this additional investment, in marked contrast to other increases in borrowing in recent decades, would however help put net worth on an upward path for the first time in around half a century, as shown in Figure 15.

FIGURE 14: Higher public investment may come with higher debt...

Public sector net debt as a proportion of GDP, excluding Bank of England, if public sector net investment is raised to 3 per cent of GDP: UK

NOTES: The solid red line shows the impact of adding higher investment to the stock of debt. The dotted red line shows the impact of higher GDP on the denominator using a roughly similar approach to the OBR’s long-run treatment of public investment (i.e. abstracting from fiscal multiplier effects), as well as a simple modelling of higher tax receipts and debt-interest spending on debt. The orange line shows the same thought experiment but includes a larger GDP impact taken from cross country estimation.


32 Comparable international data on public investment is for general government gross fixed capital formation, but we have converted this average into UK public sector net investment by adjusting for the average difference between UK PSNI and general government gross fixed capital formation over the same period.

33 Office for Budget Responsibility, Forecasting potential output – the supply side of the economy, Briefing paper No. 8, November 2022. Note that we have abstracted from the short-term boost to the economy from spending – the so-called fiscal-multiplier effect – as this has no lasting impact on the economy and so will not affect debt sustainability.
It may be that changing the fiscal rules is not sufficient to remove incentives to cut investment

While debt falling on a longer timeline can be consistent with higher investment levels this is uncertain, and the retention of a debt target would mean that the path of least resistance for policy makers facing a fiscal deterioration would remain to cut investment. To lean against that temptation further more radical institutional change may be necessary, such as taking decisions about the quantity of public investment out of the day-to-day hands of the Treasury and instead having them be set by Parliament.

Under current arrangements, Treasury Ministers announce or revise headline public investment plans for future years with no immediate parliamentary approval. Those announcements, such as the recent significant reduction, in practice end up becoming concrete plans. And, although they are eventually voted on, these votes are for each year at a time and are taken shortly after the start of each new financial year. These votes come far too late for big changes in investment plans to be made.34

Instead of the Treasury effectively driving decisions on overall investment levels and being able to change them very materially with almost no oversight, we propose a new


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approach in which Parliament plays a lead role. Specifically, Parliament could take long-
term decisions on setting the overall capital spending envelope via legislation. This would 
materially raise the bar for investment levels to be the adjustment tool for fiscal fine 
tuning.

Our proposal is that a Public Investment Act should be passed at the start of each 
new parliament setting out the headline levels investment at least until the first year of 
the next parliament. While it would be for a new Government to propose those levels, 
parliament should receive independent advice from the NIC about the implications of 
different choices (and such an approach would be supported by putting the NIC on a 
statutory basis). The primary legislation is likely to need to specify aggregate investment 
plans in cash terms (providing the total capital departmental expenditure limits, or CDEL, 
envelope for such spending), even though it normally makes more sense to think about 
public investment in reference to the size of the economy. Alongside being necessary 
to operationalise effective spending control, one advantage of cash totals is that it 
would avoid pressures for macroeconomically undesirable cuts to investment levels in 
a downturn. A sensible initial target for public sector net investment would be one that 
is broadly equivalent to 3 per cent of GDP – the OECD average for this century when 
internationally data are put on a comparable basis to public sector net investment space 
– would represent an achievable but significant rise in the level of public investment.

This approach would be a more radical departure from our current fiscal framework, 
but it would materially raise the political bar for cutting investment and reinforce 
the consensus of all main parties that higher levels of public investment need to be 
maintained. There is rightly scepticism about legislating for desirable objectives, but 
note this approach is about concrete decision taking on the appropriate levels of 
departmental spending rather than legislating for broader, and harder for government to 
directly control, objectives such as child poverty. One critique of this approach is that it 
can lead to bad policy, either to try and meet the rule, or to manipulate the rule itself. This 
is a key reason for setting plans on a parliament-by-parliament basis, as that allows some 
room for manoeuvre as economic conditions change.

Instead of micro-managing the quantity of investment, the Treasury should 
focus on the quality of public investment

Investing well – in the right things and the right way – is even more important if we raise 
the level of investment. This should be the focus of the Treasury, reinforcing perceptions 
of fiscal sustainability and reassuring markets that a higher investment approach is the 
prudent one.
In this context, in addition to the key roles played by the OBR and NIC, there are three elements needed to address the shortcomings identified above.35

First, to combat short termism, more long-term budgets are needed to reinforce the plans set by Parliament. The aim here would be to give managers certainty, allowing them to commit to long-term projects, thus avoiding ‘feast and famine’ cycles that drive both underspends and higher costs. This should involve longer-term capital allocations for all departments that match the duration of the total spending plans approved by Parliament rather than the horizon of the spending review process for day-to-day departmental spending. This would build on recent moves in that direction, for example, at the Spending Review in 2021, five-year settlements were given to Gigabit Broadband and some net-zero investment programmes. Large-scale strategic infrastructure projects (such as high-speed rail) would also benefit from separate total budgets being voted by Parliament. This would provide greater transparency and discipline over the management of overall project costs, while also giving project managers more flexibility over when spending takes place in, and protection from annual budget debates with departments.

Second, to reduce centralisation, local and regional tiers of government need greater certainty over their capital budgets and flexibility to spend these on their own priorities. The emphasis should be on aligning public investment to the Government’s overall economic strategy, without Whitehall driving all decisions. This means moving away from a model where local governments bid for sums from myriad small pots and where capital budgets at the local level are ringfenced. There is a debate about at what geographical level these budgets should be set, but the new ‘trailblazer’ devolution deals announced along with the Spring 2023 Budget provide a sense of how a more successful model might operate. These deals involve money and powers being handed directly to the authorities led by the Mayors of the West Midlands and Greater Manchester. This holds out the possibility of treating these authorities in the same way as government departments for the purposes of the next Spending Review. This model has much to recommend it.

Third, the Treasury should be playing a greater role in ensuring quality and transparency over the business cases for projects, raising the pressure on policy makers who proceed with projects that do not have a strong business case. Unlike in other countries, business and strategic cases for major projects are not published as a matter of course, making it easier for these decisions to be driven by politics. Requiring departments to publish these would improve not only the transparency of investment decision-making but would

35 The key references here are: A Bailey et al., Euston, we have a problem: Is Britain ready for an infrastructure revolution?, Resolution Foundation, March 2020, and: C Renteria et al., United Kingdom: Technical Assistance Report—Public Investment Management Assessment, International Monetary Fund, September 2022.

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encourage Treasury to build its capability to undertake such assessments. This would be strengthened further by requiring an independent NIC to certify the business cases.

Conclusion

Britain’s history of low public investment should not be its future. After decades in which total investment in the UK has been lower than in other comparable countries, it is clear that we need a high investment decade ahead if we are turnaround the stagnation of recent years. Public investment is one lever that the Government can pull directly. Such a policy should have a powerful effect, with a strong consensus that public investment boosts growth and ‘crowds in’ private investment. Repeated cuts make it difficult for investment funds to be spent, and makes future investment more expensive.

Moving to a sustained higher investment norm is not easy, but the current low investment status quo is not working for Britain. Here, the volatility of public investment points to an institutional tendency towards ‘boom and bust’ in such spending – or at least spending plans. Overly centralised decision making and a fiscal framework that ignores the benefits of investing have been the root cause of policy failings in this area. Addressing these requires radical and decisive reform: reforming the fiscal framework to reduce the incentives to use investment levels as the path of least resistance for fiscal adjustment, taking decisions on investment out of the hands of the Treasury, and beefing up its powers to improve the overall quality of investment. This will come with risks, but, then again, we shouldn’t expect the path out of low growth and high inequality to be easy. And while it would be dangerous to think higher public investment is enough to end the UK’s recent period of relative economic decline, it should certainly be viewed as an important and necessary step boosting the UK’s dismal growth performance.
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.

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