IfG INSIGHT | FEBRUARY 2020

INSTITUTE FOR GOVERNMENT

Capital spending

Why governments fail to meet their spending plans

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Summary

Boris Johnson's government has promised to help poorer areas of the country to "level up". One way it plans to do this is by increasing investment in infrastructure. The Johnson government's fiscal rules are looser than May's, and it has committed to investing up to an additional £100bn over the next five years on areas such as transport, further education, and research and development (R&D).[1] The rules could be loosened further still when the new chancellor, Rishi Sunak, delivers his first budget in March.

But pledges do not complete projects. Previous governments have struggled to meet their investment plans, and there has been persistent underspending since at least the early 1990s.[2]

Problems with capital investment

Most departments do not spend as much as allocated

As part of its aim to reduce the deficit, the Cameron–Clegg coalition government cut capital spending in real terms. But even with this fall in capital spending, it had problems getting money "out of the door".[3] After Cameron secured a small Conservative majority in 2015 the government changed tack and planned a 16% real-terms increase in capital spending between 2015/16 and 2020/21.[4] But still it continued to underspend against those capital plans. The gap was consistently 3–6% each year

between 2011/12 and 2018/19, equating to £2.8bn of unspent funds in 2018/19. It may seem surprising that departments underspend on their budgets, but there are incentives to undershoot. The Treasury controls departmental spending tightly, and ministers and permanent secretaries face reputational costs if they overspend.

However, our analysis shows that several other factors (outside of prudent financial management) contribute to departments underspending on capital budgets. These factors, outlined here, may mean the new government finds it hard to achieve value from its capital spending pledges:

- **The Treasury has allowed departments to divert money from capital investment to day-to-day spending.** In 1998, the Labour government imposed a new framework for managing public spending, which created a distinction between investment (capital) spending and day-to-day spending (or resource spending – used for running costs such as civil service salaries and public services). This was prompted by a perception that the preceding Conservative government had cut capital spending inappropriately during the 1990s in its attempt to reduce public borrowing. Labour believed this was due to governments' tendency to focus scarce resources on day-to-day spending over investment, as this was more immediately noticeable to the public (through better-staffed public services like schools and hospitals).

  Departments have been formally prohibited from diverting funds allocated for capital spending to other purposes since 1998. In recent years, though, the Treasury has relaxed this rule. As public spending was cut back after 2010, departments responsible for public services have been allowed, or encouraged, to divert money intended for capital investment to meet day-to-day spending pressures instead.

- **Departments are over-optimistic about project timelines.** Over-optimism is a longstanding and pervasive problem in public sector projects. Spending has often been delayed by departments taking longer than expected to complete plans – particularly in housing and transport projects.

- **Departments lack the right staff.** Reductions in civil service staff numbers have meant that some departments lack enough, or the right, staff such as project delivery specialists to write business cases, commercial staff to manage capital projects, or economists to assess bids in grant-giving competitions.

- **The construction sector is under increasing pressure.** Departments have struggled to agree contracts with private construction companies because they have tried to transfer excessive risk to them. Construction companies have also stated that they do not have enough engineers, project managers and construction workers to complete all of the government's projects. As European Union (EU) migrants make up 10% of the UK's construction workforce, and 6% of its civil engineering workforce,[5] this lack of staff could become more pronounced if the government proceeds with its proposals for a points-based immigration system.

Underspending poses problems for Johnson's plan to increase capital investment

In the 2018 budget, the May government planned to increase capital spending substantially in order to increase public investment to its "highest sustained level in 40 years".[6] That budget promised a capital spending increase of 22% in real terms between 2018/19 and 2019/20,[7] with a further 11% rise between 2019/20 and 2023/24. The Johnson government has since adopted looser fiscal rules,[8] which would allow for a further £100bn of capital spending between 2020/21 and 2024/25. Of this potential additional £100bn, £22bn has already been committed to specific projects.[9]

But departments are already struggling to spend their budgets, so the recent increase brings both financial and political risk for the government. The result could be that the government selects poor-value projects or inflates construction costs, as the construction industry is stretched to meet the increased demand. But a failure to spend the money will mean the government will not match its promises.

How to fix the problems with capital investment

The government will stand a greater chance of setting capital budgets that will actually be spent – and spent well – if it addresses the problems that have caused persistent underspending.

Allocating investment should be based on realistic plans, rather than "a series of haggles"[10] and last-minute political announcements. It is encouraging that the Infrastructure and Projects Authority (IPA) has asked departments to prioritise "deliverability" when selecting projects.[11] But ministers' behaviour must also change.

Since 2010, governments have repeatedly changed capital spending plans outside of spending reviews. Those changes may have been sensible and defensible case by case, but together they undermined the supposedly "firm and fixed" plans set at each review. Departments will be able to invest more effectively if they have firmer long-term plans. The government accepted this argument – for economic infrastructure at least – when it created the National Infrastructure Commission.[12] But it has yet to adhere to this in practice.

Doing so will be crucial for a government that has set out ambitious plans for capital spending, and has made big promises – on de-carbonisation, transport and R&D – in its manifesto.

This paper recommends four things the government should do to improve its approach at the spending review expected this summer:

- Allocate enough day-to-day spending to meet its objectives, and minimise the risk of transfers away from investment.
- Reduce over-optimism when planning capital projects.
- Allocate risks appropriately between the public and private sectors.
- Ensure there are enough skilled people – in departments, arm's-length bodies and local authorities – to procure and manage capital projects.

To do this we analyse how capital spending has changed since 2010; how this compares to spending plans; and why governments consistently underspend. We then set out how the new government can learn from past failures to maximise its chances of turning its manifesto promises into reality.

Methodology

Public sector capital investment is money that government spends to build or maintain assets such as hospitals, schools and roads. Modern buildings and new equipment are essential to provide high-quality public services,[13] while energy and transport infrastructure can boost growth and productivity.[14] Public sector gross capital spending made up 10% of government spending last year, amounting to over £82bn.

In this paper, we only consider the portion of public sector capital spending known as Capital Departmental Expenditure Limits (CDEL). This makes up over four fifths of all public sector gross capital spending (83% in 2018/19). Departments' CDEL budgets are set at spending reviews, which typically lay out plans for spending over the next three-to-five years. We exclude what is known as Capital Annually Managed Expenditure (CAME). This is capital spending that the Treasury argues is harder to set a firm budget for in advance, and includes capital spending by local authorities and by public corporations such as the BBC or the Civil Aviation Authority.

To understand trends in capital spending over time, we analysed publicly available data for all central government departments. We then selected four departments to assess the causes of underspending. We focused on the Department for Transport (DfT), Department of Health and Social Care (DHSC), the Ministry of Housing, Communities and Local Government (MHCLG)[*] and the Ministry of Justice (MoJ). We chose to focus on these four departments because of the following:

- They include three of the five largest capital spending departments in MHCLG, DfT and DHSC.[**] Together with MoJ, they accounted for a third of total planned departmental capital spending in 2018/19 (11.9%, 13.2%, 9.5% and 0.7% respectively).
- Their capital spending has followed very different patterns from one another over the past ten years, since the government restricted growth in public spending: capital spending on transport is far higher now than it was in 2009/10; on health and social care and housing it is slightly lower than in 2009/10; for the MoJ it is a lot lower in the same period.

* We only cover "MHCLG – Housing and Communities", excluding capital spending by councils.

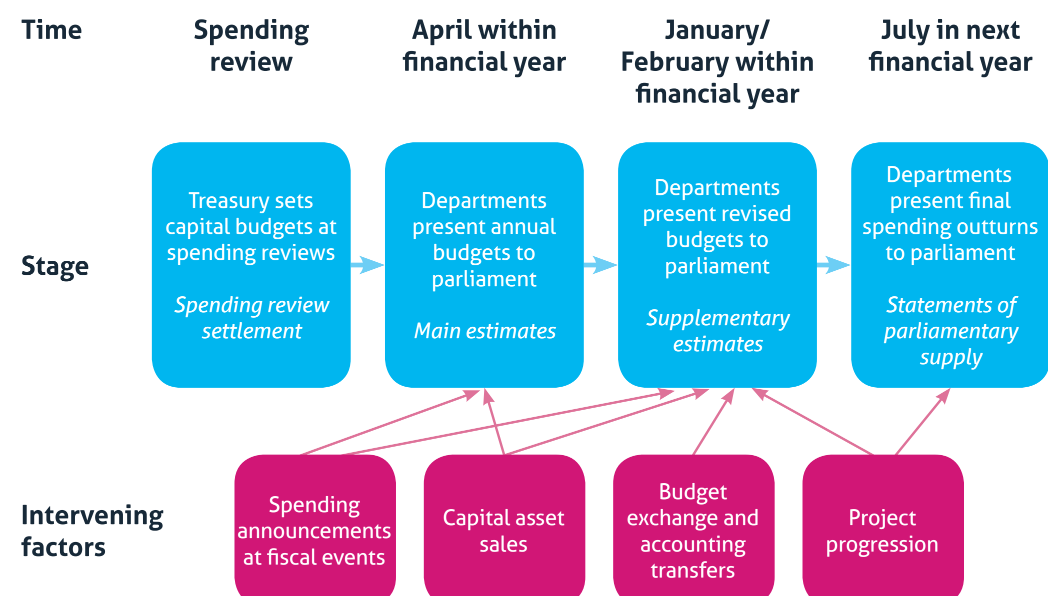
** The other two are the Ministry of Defence (MoD) and the Department for Business, Energy and Industrial Strategy (BEIS), which are the two largest and which accounted for 33.8% of CDEL in 2018/19. We do not analyse the MoD due to a lack of publicly available information on capital programmes – primarily military equipment. We do not analyse BEIS because most of its capital spending is for science and research programmes (74.8% in 2018/19). This is primarily funding for R&D, which does not pose the same challenges as spending on physical assets such as housing or transport.

How do governments allocate and spend capital budgets?

Government departments' capital spending, like their day-to-day spending, is subject to strict controls.[15] Departments are not supposed to exceed their CDEL budgets, set for them by the Treasury, but on rare occasions they do. They face consequences as a result: the following year's budget will be reduced and ministers may have to explain themselves to the House of Commons Public Accounts Committee (PAC).[16]

However, departmental capital spending in any one year rarely matches the agreement reached with the Treasury at the preceding spending review. This is due to a number of factors, outlined in Figure 1.

Figure 1 **Capital budgets to capital spending**



Source: Institute for Government analysis of House of Commons Library, Main Estimates: Government spending plans for 2017–18, p. 6; see Brien P, Main Estimates: Government spending plans for 2018-19, House of Commons Library, 2018.

First, the chancellor can alter departments' capital budgets after the spending review by making new announcements at subsequent budgets or spring statements (or, before 2017, at the autumn statement).

Second, departments themselves can adjust their capital budgets, in one of three ways:

- They can sell existing capital assets to raise money that is added to their capital budget.[17]
- They can switch money from capital to resource budgets by requesting parliamentary consent for an accounting transfer. Although formally prohibited by the Treasury,[18] this can be done when it presents 'supplementary estimates'[19] – that is, final in-year budget plans – for approval in January or February.[20]
- They can shift capital underspends from one financial year into the next using 'budget exchange'.[21] This allows departments to surrender an underspend before

the end of the financial year in return for a corresponding increase in the following year – if declared in advance. This might happen if a department knows a project is likely to be delayed until the following financial year. For major capital projects, underspends can be carried forward over several years.[22]

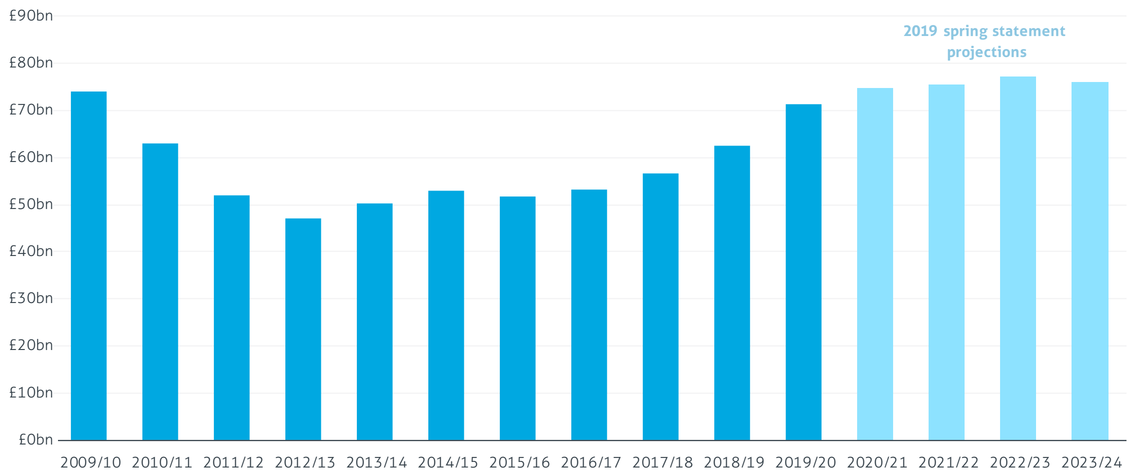
After rule changes in 2010,[23] any capital underspend that is not transferred to resource or shifted to the next year is 'surrendered' to the Treasury.

Departments' final in-year budgets are determined by a combination of spending reviews, announcements at fiscal events, asset sales and transfers. But what actually gets spent depends on what ***can*** be spent. Actual versus budgeted capital spending reflects how well departments, their associated public bodies and local providers – such as councils and hospitals – manage capital projects. Over-optimistic project timescales result in underspending; cost overruns result in overspending.

Capital spending under austerity

Capital spending gradually increased after 2012/13 following deep initial cuts

Figure 2 **Government CDEL spending (2018/19 prices)**



Source: Institute for Government analysis of Her Majesty's Treasury, PESA 2009–19; Her Majesty's Treasury, Spring Statement 2019.

Capital spending fell substantially in real terms after 2009/10, even when accounting for it being slightly inflated by the Labour government, which brought forward £3bn of capital spending planned for 2010/11 to help stimulate growth following the 2007/08 financial crisis.[24]

It was then cut particularly sharply as part of the coalition government's overall public spending cuts in its first spending review in 2010 – by 36.3% in real terms between 2009/10 and 2012/13. Since then, it has gradually returned approximately to 2009/10 levels.[*]

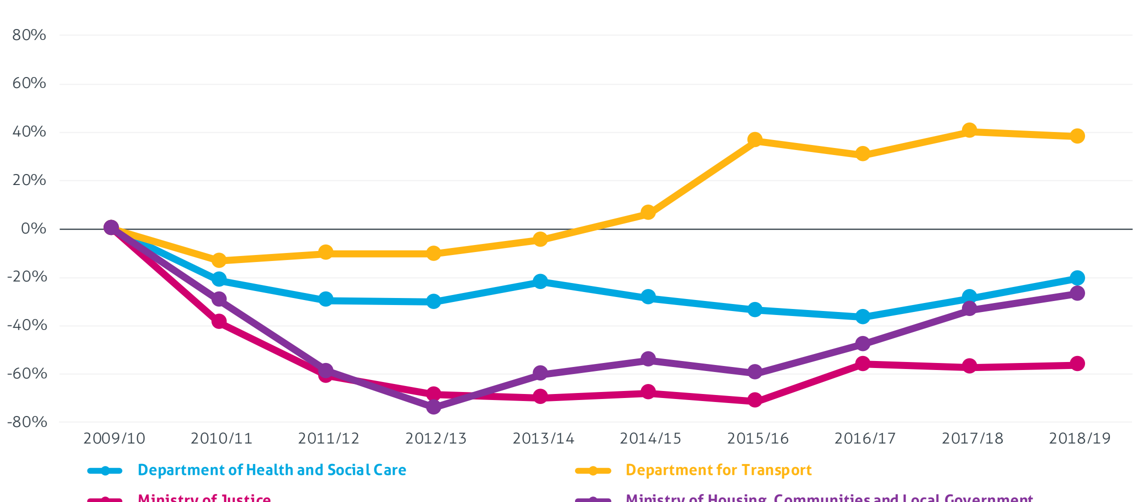
* New accounting guidance effective from September 2014 reclassified R&D spending from resource to capital. The Treasury provided capital spending figures including R&D back to 2011/12 in Public Expenditure Statistical Analyses (PESA) 2016. For 2009/10 and 2010/11 we estimate R&D capital spending by chain-linking from overlapping PESAs. We consistently exclude Network Rail, which was reclassified from CDEL to CAME in 2015/16 to provide a consistent time series.

The 2015 spending review marked a turning point, after which capital spending consistently increased each year. This was due to a change in government policy in 2013 to spend more on economic infrastructure – which took place in the context of low and falling borrowing costs. A 2013 white paper, *Investing in Britain's Future,* outlined a "pipeline of projects",[25] which were subsequently funded at the 2015 spending review. The creation of the National Productivity Investment Fund in the 2016 autumn statement[26] announced further additional spending on housing, R&D and economic infrastructure.

In practice, this meant higher spending on transport and housing schemes. In DfT, a large part of the increase was accounted for by High Speed 2 (HS2) – primarily in acquiring the land and property needed to build the line[27] – which reached almost £2.1bn in 2018/19.[28] In MHCLG, higher capital spending reflected the government's increased spending on schemes to support housebuilding and loans made under the Help to Buy scheme, as well as the introduction of devolution deals, which gave local authorities and local economic partnerships money to invest in transport and further education.

Capital spending was cut more sharply in some departments than others

Figure 3 **Change in real-terms government capital spending since 2009/10**



Source: Institute for Government analysis of Her Majesty's Treasury, PESA 2009–19.

Cuts to capital spending have not been equally distributed across departments. Of the four departments we focus on, MoJ and MHCLG have experienced the deepest spending cuts; DHSC capital investment has been cut less steeply; and DfT least of all – its capital spending is now higher in real terms than it was in 2009/10.[*] Outside of our study, the Home Office and Department for Education have also suffered heavy cuts over the past decade.[29]

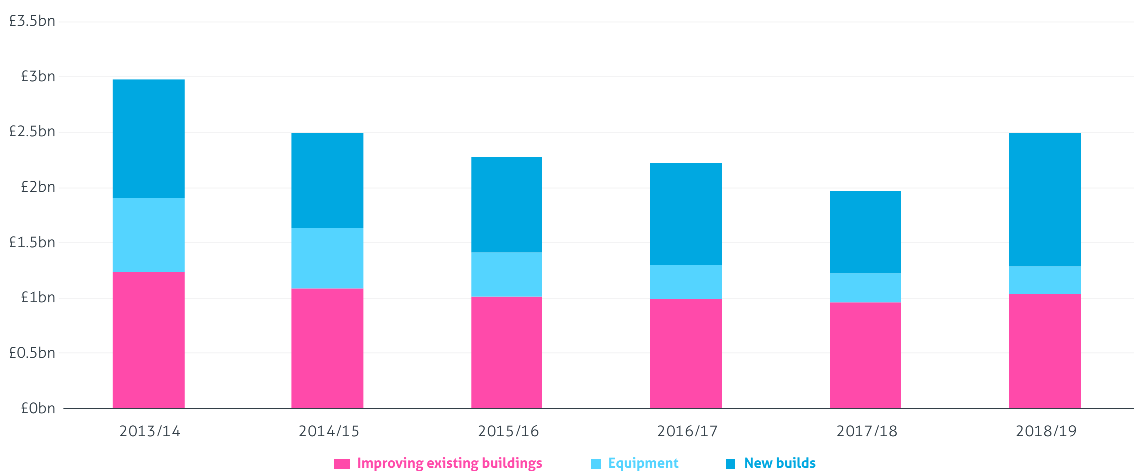
* We consistently include Network Rail in DfT capital spending. Between 2009/10 and 2014/15, Network Rail capital spending is included by incorporating grants paid by DfT to Network Rail. Between 2015/16 and 2018/19, all Network Rail spending is included following its reclassification to the public sector. A £6.45bn loan from DfT to Network Rail in 2014/15, just before reclassification, is excluded here to provide a more consistent trend in capital spending.

The reason for this disparity among departments is largely due to the coalition and subsequent Conservative governments' decision to protect or increase spending on capital projects they thought would produce the highest economic returns, while continuing to cut capital investment in the buildings and equipment used for delivering public services (although some, such as DHSC, have been relatively protected).

Departments prioritised maintenance over new projects

To deal with the cuts, most departments prioritised maintenance over new projects. NHS providers – that is, organisations that provide acute, ambulance, community, mental health and specialist care – are responsible for most of DHSC's capital spending.* In the years for which data are available, they prioritised spending on existing assets over new ones.

Figure 4 **NHS provider capital spending by investment type (2018/19 prices)**



Source: Institute for Government analysis of NHS Digital, ERICs 2013/14–2018/19, trust-level data.

Between 2013/14 and 2018/19, NHS providers cut spending on equipment such as MRI scanners most sharply (by 62.6%) in real terms. Spending to improve existing buildings – upgrades, redevelopments and refurbishments – was comparatively protected, falling by just 16.3%. Spending on new buildings fell each year from 2013/14 to 2017/18, but rose substantially in 2018/19, mirroring the overall increase in the DHSC capital budget in that year.

This recent uptick in spending has not been enough to prevent the size of the maintenance backlog increasing from £4.0bn in 2013/14 to £6.5bn in 2018/19, a real-terms increase of 47.2%. This backlog means that should DHSC receive a larger capital budget at the next spending review, NHS providers are likely to prioritise repairs to the existing estate before building new facilities.

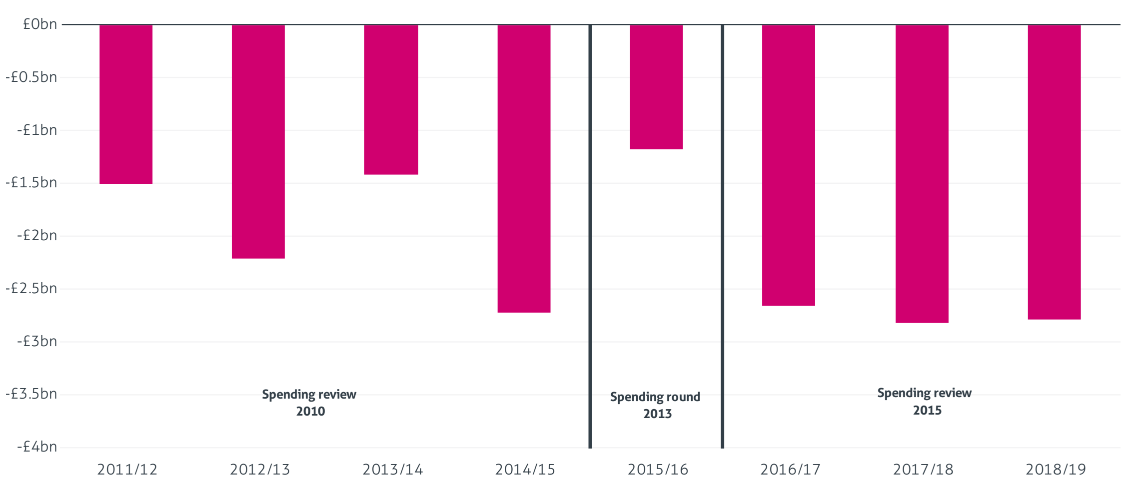
Similarly, capital spending on prisons has focused on "improving statutory compliance and addressing issues such as fire safety, water hygiene and asbestos".[30] On average, the May government spent £78m on maintenance each year between 2016/17 and 2018/19 – even though it estimated that £194m was needed on maintenance every year for the next 25 years to maintain the current state of prisons.[31]

* NHS providers made up 62% of the department's capital spending in 2018/19; see Department of Health and Social Care, *Consolidated Annual Report and Accounts 2018–19*, Common Core Tables.

Successive governments consistently underspent

Following the pattern of government capital spending since the early 1990s, the coalition, Cameron and May governments underspent on their capital budgets every year from 2011/12 to 2018/19 (the latest year for which data is available). That financial year, the last of May's premiership, underspending reached £2.8bn – meaning just over 4% of the capital budget went unspent.

Figure 5 **Government CDEL spending compared to in-year plans**



Source: Institute for Government analysis of Her Majesty's Treasury, PESA 2013–19.

Some level of underspend is to be expected. Treasury settlements cap departments' budgets, and departments face sanctions if they overspend. This incentivises ministers and senior civil servants, including permanent secretaries, to come in below budget rather than risk overspending.

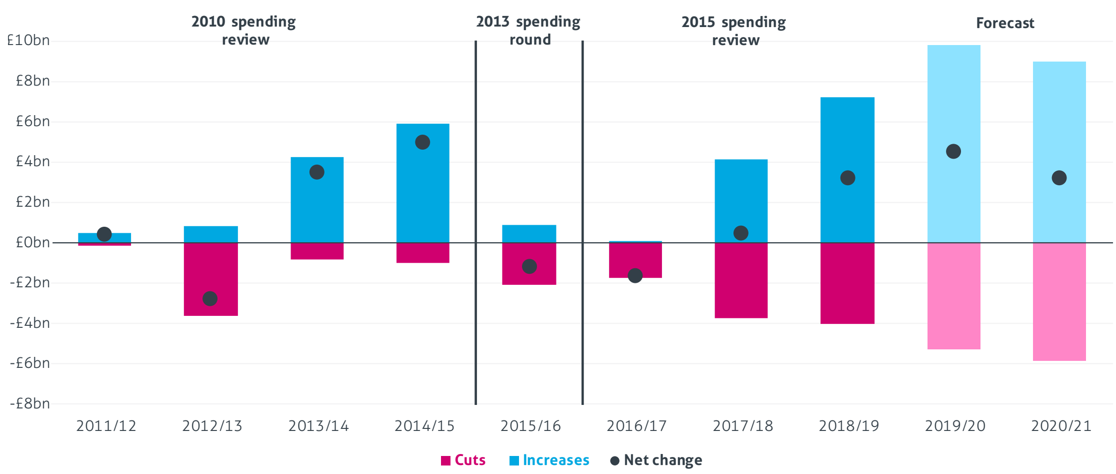
However, some of the underspend has been due to factors within governments' control – including inadequate planning, transfers between capital and resource budgets, and staff reductions. Departments still tend to be over-optimistic in project planning[32,33] (although some parts of government, such as Highways England, have made improvements)[34] and independent fiscal watchdog the Office for Budget Responsibility (OBR) now assumes that departments will underspend their allocated budgets in each year in its forecasts for public spending.

When the May government increased capital spending at the 2016 autumn statement for example, the OBR assumed that 20% of each year's increased spending would actually be spent a year later, and that £1.5bn (21% of the planned increase) would not be spent in 2020/21.[35]

The size of the underspends suggests that departments are struggling to spend money on projects. DfT delayed awarding HS2's civil engineering contracts in 2019, for example.

The coalition, Cameron and May governments topped up capital budgets...

Figure 6 **Effect of policy announcements at fiscal events on capital spending**



Source: Institute for Government analysis of Office for Budget Responsibility, Policy Measures database.

The coalition government, as well as those of Cameron and May, all increased capital budgets outside of spending reviews, at budgets and other fiscal events. The last three spending reviews (2010, 2013 and 2015) covered 10 years; in five of the eight so far, the government spent more than it said it would at the reviews – but went on to *underspend* on subsequently revised budgets each year.

The 2010 spending review set out plans to cut capital investment every year between 2010/11 and 2013/14,[36] but the government spent more than expected in 2013/14 and 2014/15. This was explained by the coalition as a decision to prioritise "long-term plans for capital investment".[37]

As Figure 6 shows, the overall effect of announcements made at budgets and autumn statements after the 2010 spending review was to increase capital budgets at the end of the period, in 2013/14 and 2014/15. For example, the 2011 autumn statement injected an additional £3.8bn between 2012/13 and 2014/15,[38] primarily for roads, schools and the Regional Growth Fund[39] – a scheme that gave grants, loans and guarantees to projects designed to create jobs.[40] The 2012 autumn statement then injected a further £5.3bn[41] for capital projects between 2012/13 and 2014/15.[42]

These decisions were partly driven by the low and falling cost of borrowing after the 2007/08 global financial crisis – which changed government calculations about which debt-funded projects would return a net profit for future taxpayers.

People we interviewed when researching this paper, however, told us that the increase after 2012/13 was as much due to political direction from the Treasury as any objective assessment of the state of public assets. The Treasury was deemed to consider resource spending as "bad" and capital spending as "good", and several interviewees thought spending announcements were "driven by the desire for eye-catching announcements".

The May government continued the habit of changing plans outside of spending reviews. Spending on housing, for example, rose faster than the 2015 spending review plans after the government expanded funding for Help to Buy and other housing schemes in the 2016 autumn statement and in both 2017 budgets.

In total, the coalition and subsequent Conservative governments revised capital spending plans by £70.7bn between 2011/12 and 2018/19* – £42.4bn in increases and £28.3bn in cuts.** This is not an effective way to allocate money.

Topping up or cutting budgets outside of spending reviews creates uncertainty that makes it harder for public service leaders – including council and hospital chief executives – to plan and invest effectively. But this approach persists. While she was still in office, May's government radically changed the plans set out in the 2015 spending review for 2019/20, and over the past four years the total capital budget has been subject to a series of cuts, increases and then further cuts.

Figure 7 **Increases and cuts to planned capital spending for 2019/20 at successive fiscal events**

£7bn
£6bn
£5bn
£4bn
£3bn
£2bn
£1bn
£0bn
-£1bn
-£2bn
Budget 2016
Autumn 2016
Budget 2017
Autumn budget 2017
Spring statement 2018
Budget 2018
Spring statement 2019

Source: Institute for Government analysis of Office for Budget Responsibility, Policy Measures database.

These changes have forced public service leaders, including council and hospital chief executives, to scale back or cancel projects. NHS finance directors, for example, have cut back on planned capital projects and prioritised urgent short-term schemes[43] in response to the DHSC's in-year reductions in capital budgets. Construction companies contracted for capital projects told us that late changes to plans made it difficult to hire staff or invest in equipment such as offsite manufacturing technologies.[44]

* Taken between the 2011 budget and the 2019 spring statement.
** This figure is the total effect of policies cutting and increasing CDEL, excluding announcements at spending reviews and announcements which covered years outside the spending review they took place under.

The coalition, Cameron and May governments attempted to reduce uncertainty for private investors and construction firms by publishing their planned infrastructure and construction projects.[45] But interviewees told us this 'pipeline' was unhelpful, as it contained too many uncertain projects and those already under construction, and lacked necessary information – such as the stage that a project had reached in the approvals process and whether contractors had already been appointed.[46]

Spending decisions taken at budgets are also not subject to the same level of scrutiny as other policy measures (which are subject to review/challenge from cabinet or regulatory policy committees).[47] This means they risk being poorer value than spending programmes initiated by departments. Capital projects initiated outside of spending reviews are also not subject to the same scrutiny that takes place at spending reviews – where, in 2010, 2013 and 2015, a cross-government panel of economists reviewed all capital projects at the same time and set out which should take priority.[48]

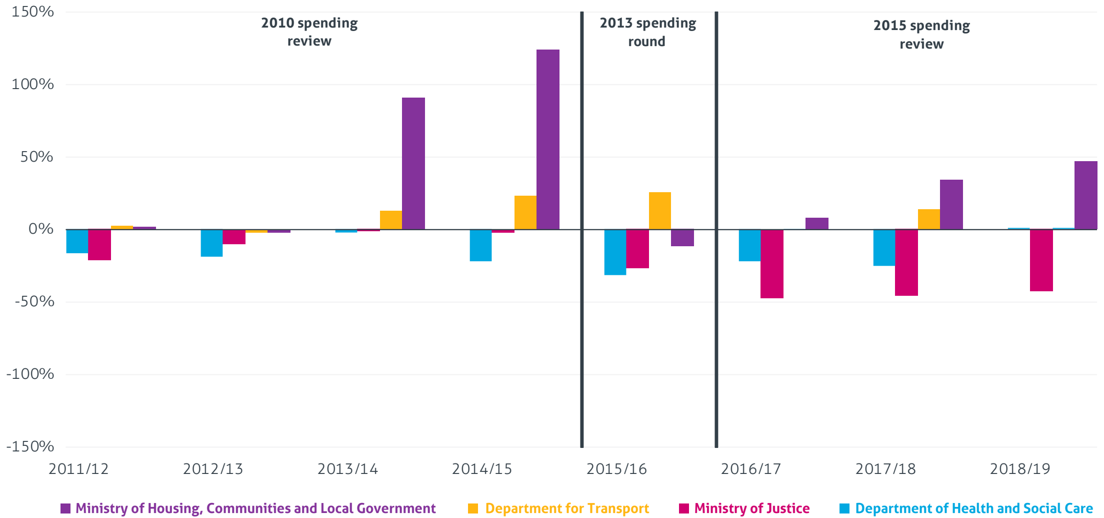
One interviewee told us that their department had been notified of an increase in capital spending very close to a budget and felt pressured to accept the increase – even though they did not think it could be put to good use within the timetable suggested by the Treasury. As a result, the department deferred spending the money, leading to further underspending.

… but some departments still spend less than their spending review plans

Several departments continue to spend less than originally budgeted at the preceding spending review – even when their capital budgets are topped up.

This matters. The budgets set out at spending reviews are the longest planning periods in the public sector, and they are supposed to be 'firm and fixed'. When these change (increase or decrease) public service leaders find it harder to plan and invest effectively.

Figure 8 **Departmental capital spending compared to spending review plans**



Source: Institute for Government analysis of Her Majesty's Treasury, PESA 2011–19; Her Majesty's Treasury, spending review 2010, spending round 2013, spending review 2015.

DHSC and MoJ, whose capital spending consists primarily of buildings and equipment for public services, have spent less than the plans set out by the government in the 2015 spending review. In both cases, this has largely been due to policy decisions rather than in-year underspends that might simply have resulted from prudent financial management.

In DHSC, for example, this is mainly due to a joint decision from the department and the Treasury to transfer money from its capital to resource budget,[49] which has happened yearly from 2014/15.

In contrast, both MHCLG and DfT spent more than was planned in the 2015 spending review, following top-ups to their budgets announced after the review. For example, the May government increased capital grants and loans for housing schemes – such as Help to Buy and the Housing Infrastructure Fund – in the 2016 autumn statement and 2017 budget (all of which falls within MHCLG's purview). But both still spent less than the full amount they were eventually allocated.

Why do governments underspend?

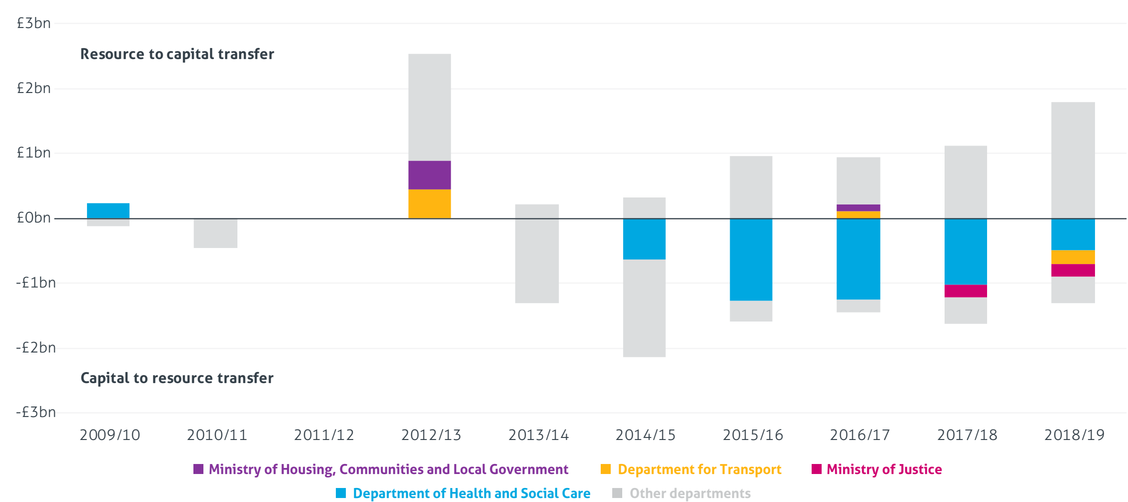
Governments underspend for two main reasons. In some cases, capital budgets are reduced because money intended for investment is moved to meet day-to-day spending pressures. In others, departments and public bodies struggle to spend the remaining smaller budgets, even after money was moved. This is because of:

- persistent over-optimism about how long it will take to complete projects
- growing pressures on construction companies
- cuts to administrative resources.

Some departments have transferred money intended for investment to meet day-to-day spending pressures

Treasury rules prohibit departments from transferring money earmarked for investment to spend on day-to-day costs unless departments can persuade it that they face exceptional circumstances. Such transfers were rare before 2013/14, but several departments have repeatedly carried out such transfers in recent years.

Figure 9 **Annual budget transfers by department (2018/19 prices)**



Source: Institute for Government analysis of Her Majesty's Treasury, PESA 2011–19.

Between 2013/14 and 2017/18, the amount of money transferred from capital to resource exceeded the value of transfers from resource to capital.* This was driven primarily by DHSC, which repeatedly transferred money intended for capital investment to "meet spending pressures".[50]

This is concerning. The separation of resource and capital budgets was introduced in 1998 to address a perceived bias against capital investment,[51] and because spending cuts earlier in the decade fell disproportionately on capital.[52] The past five years suggest that the rules separating the two lose effectiveness when departments' resource budgets are squeezed.

Transferring money from capital to resource budgets has both a real-world and political impact. If departments continue to face pressure to spend more than their day-to-day budgets allow, ministers are stuck with the unappealing choice between allowing the scope of public services to deteriorate or failing to deliver on promised capital spending plans. Neither serves the public well.

Such transfers also hinder planning. Heads of finance outside Whitehall – such as hospital and council chief financial officers – can be left with less to spend than they originally expected late in the budgeting process.

DHSC, for example, transferred money from capital to resource late in the 2014/15 and 2015/16 financial years, in February 2015 and February 2016 respectively. The Treasury then gave the department flexibility to make multi-year transfers from capital to revenue between 2016/17 and 2019/20, which the department used up in its entirety.[53] Exactly how much money to transfer in any given year was only decided in February each year – when the in-year supplementary estimates were produced.

* The amount of money transferred from resource to capital exceeded the amount of money transferred from capital to resource in 2009/10, 2012/13 and 2018/19. In the latter two cases, this was because the MoD moved large parts of its capital budget to its resource budget.

The MoJ made similar transfers in 2017/18 and 2018/19, due to increased pressure to spend more on services[54] – ranging from unexpected refunds for overcharging legal fees to additional payments to probation providers. This fits into a wider pattern of the department generally spending less than expected on capital and more than expected on day-to-day spending. Between 2015/16 and 2017/18, the MoJ consistently increased resource spending and cut capital spending at supplementary estimates, reducing capital budgets relative to the original 2015 spending review plans.[55]

Departments are still over-optimistic about project timelines

Even after determining final budgets, departments still often struggle to spend them. One longstanding reason for this is over-optimism about how quickly projects can be completed. This is a problem the Institute for Government has analysed before, in *How to Value Infrastructure*.[56]

Interviewees told us that they experienced delays when attempting to gain planning permission or in running procurements, and that agreeing business cases with the Treasury often took longer than expected.

The in-year underspends at the MoJ in 2016/17, 2017/18 and 2018/19 were partly a result of delays to a new prison-building programme,[57] for example. The ministry took longer than expected to agree the business case for new prisons with the Treasury, and changes to the way the projects were to be funded were also partly responsible; the MoJ initially expected to finance some of the prisons through private finance initiative (PFI) contracts but ultimately had to use public spending after Philip Hammond, then chancellor, banned the use of such contracts in the 2018 budget.[58]

The funding model for new prisons changed four times between October 2016 and December 2018, and the scope of the programme was revised downwards at each business case. At the 2015 spending review, the government expected to create around 10,000 new prison places by 2020; as of 2019, it has only built 206. The government has spent only 13% of the original capital budget for the project.[59]

The recent MHCLG Starter Homes programme – which would build 'affordable' homes for first-time buyers – offers another example. Homes England, the public body that allocates grants to local authorities and the private sector to help build new housing, faced "difficulties identifying sites for purchase within the time available".[60] This was made harder still when the government introduced geographical targeting – investing where housing is least affordable – for its main housing funds in October 2018,[61] so adding an extra criterion for selecting sites. As a result, Homes England only spent £16.2m of a £25m grant to buy and develop land for new houses.

The Treasury says that the 2020 spending review will focus on projects' "deliverability" and include representatives from the Infrastructure and Projects Authority (IPA) on an assessment panel advising ministers – but whether this will reduce optimism bias is still yet to be seen. Over-optimism has been as much of a problem in the Treasury as it has been within other departments.

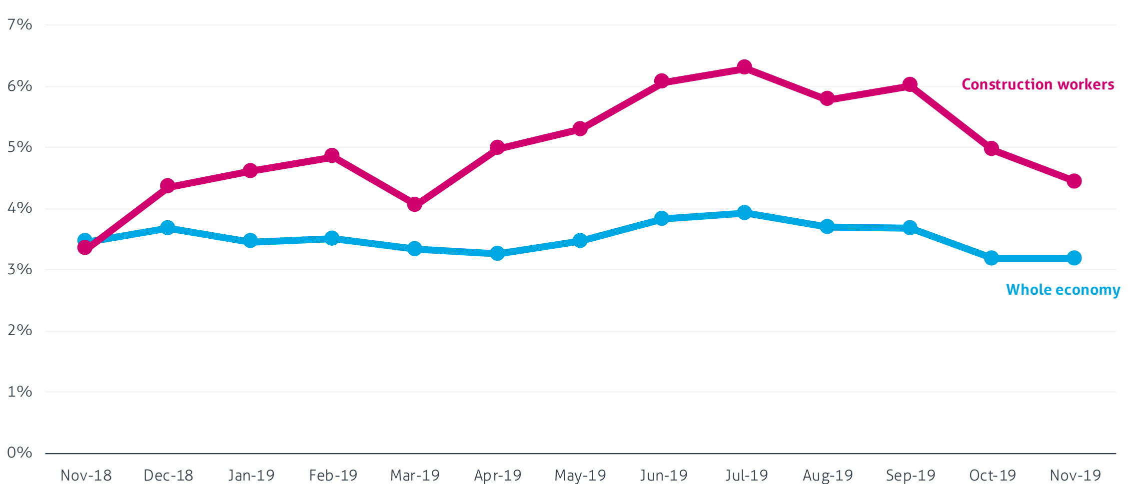
The construction sector is under increasing pressure

Almost all construction projects are carried out by private companies. Any constraints they face therefore also affect how quickly government can increase capital spending (without inflating costs). Departments struggling to agree contracts with construction companies cause delays, meaning they spend less than planned.

The construction sector faces two problems in meeting the government's capital plans. First, the sector already has staff shortages – so there is a risk that increasing spending rapidly will simply drive up prices. There is some evidence this may already be happening.

Wages for construction workers grew faster than for the whole economy over the past year. As of November 2019, construction workers' three-monthly average weekly earnings were growing by 4.4%, compared with 3.2% in the economy overall.

Figure 10 **Annual change in weekly earnings, three-month average**



Source: Institute for Government analysis of Office for National Statistics, Average Weekly Earnings, Table 1.

This situation could get worse if the government proceeds with its proposals for a points-based immigration system. The vacancy rate in the construction sector is low (at 2%) but has been slowly rising since 2010.[62] EU migrants account for 10% of the UK's building construction workforce and 6% of the UK's civil engineering workforce.[63]

Interviewees told us that they were concerned about shortages of skilled workers – particularly supervisors, project managers and engineers. They also worried that the current rules of the Tier 2 visa system (for workers coming from outside the European Economic Area, EEA)[64] could reduce the number of construction labourers from the EU because many are self-employed. The pressures are already being felt: in January this year, the Migration Advisory Committee placed architects and engineers on the shortage occupation list.[65]

Government also appears to lack an understanding of construction sector capacity – what kinds of risks companies can manage and their financial sustainability. This means that it has often under-priced contracts or tried to transfer excessive risk to construction companies.[66] The result of this is either that contracts are not agreed, or they end up more expensive than they otherwise would have been.

The clearest examples are in transport, where DfT and its public bodies contract directly with construction companies. In July 2018, HS2 Ltd – the government-owned company managing the construction of the high-speed rail line between London, Birmingham, Leeds and Manchester – announced that the start date for the civil engineering contracts would be pushed back from April to June 2019.[67] Contracts for station construction were similarly delayed, from December 2018 to the first quarter of 2019.[68]

DfT has said that the delays in awarding the civil engineering contracts are "to provide suppliers with additional time to optimise their designs".[69] But interviewees from construction firms told us that the delays were because construction companies had been unwilling to bid for contracts on the original terms, leading HS2 Ltd to rethink how it constructs contracts and, specifically, which risks it transfers to the private sector.

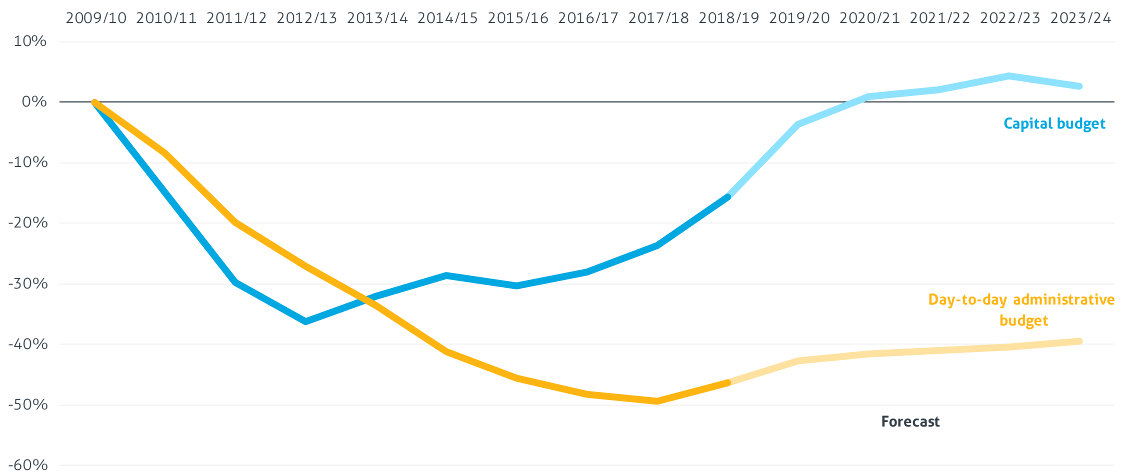
In April 2019, *The Telegraph* revealed that the start date for the contracts had been delayed further – until December – because ministers were concerned that the project risked going over budget.[70] A later review by the HS2 chairman, Allan Cook, in August 2019 found that construction companies' bids had risen because HS2 Ltd asked them to submit bids before assessing ground conditions, which turned out to be poorer than expected.[71]

After Johnson became prime minister in July 2019, the government commissioned Lord Oakervee to undertake an independent review of HS2. The review projected HS2's eventual costs to be between £72bn and £78bn; considerably more than the £55.7bn budgeted at the 2015 spending review.[72] HS2's contracting methods – which initially placed all the risk with construction companies – were partly to blame, as they caused construction companies to price risks conservatively,[73] inflating prices above the government's expectations.[74]

Interviewees told us that the delay HS2 has experienced in awarding contracts is not an isolated case – and represents a trend that has got worse during austerity, as DfT has sought to reduce costs.

Cuts to departmental administration have impeded some capital projects

Figure 11 **Change in real-terms capital and administrative spending since 2009/10**



Source: Institute for Government analysis of Her Majesty's Treasury, Public Expenditure Statistical Analyses.

In 2009/10, capital budgets were initially cut much faster than day-to-day administrative budgets – that is, money that covers civil servants' salaries and goods and services such as IT systems and consultancy. This changed after 2012/13, when the government started to increase capital budgets while continuing to cut administrative budgets. This created problems. Without sufficient administrative staff, there is an inevitable trade-off between spending money quickly and spending it well.

Some capital spending requires significant input from civil servants – writing business cases, managing procurement, assessing bids, managing projects on a day-to-day basis – who are paid from administrative budgets. Interviewees told us that cuts to administrative budgets meant some departments have struggled to complete capital projects. Civil servants we interviewed told us that this problem is particularly acute when departments allocate funding via competitions (which require civil servants' time to solicit and review bids, as with the Housing Infrastructure or Transforming Cities funds, say), though is less severe where departments grant money to other agencies to spend (as DfT does with Highways England or Network Rail).

MHCLG, for example, delayed spending money through the Housing Infrastructure Fund – money councils could bid for to build infrastructure designed to "unlock new homes in the areas of greatest housing demand" – because it took longer than expected to assess and select projects to receive grants.[75] The result was that the department shifted £43m of spending planned for 2017/18 into 2018/19, and £218m of spending planned for 2018/19 into 2020/21.[76]

Similarly, the Charging Infrastructure Fund – a joint public–private fund announced in 2017 to increase access to finance for companies who manufacture and install electric charging infrastructure – took two years to select a fund manager.[77] As of early 2020, it has only just begun selecting which projects to make loans to.

These are not isolated cases. Deferrals at MHCLG have been consistently high (where the department gave up an underspend ahead of the end of the financial year in return for a corresponding increase in the following year). Alongside surrenders – where unused funds are returned to the Treasury – MHCLG did not spend £1.3bn of its capital funds in 2018/19,[78] or 14% of its planned budget for that year. While the proportions of planned budget used vary (the 2017/18 underspend was a larger percentage of that year's budget, at 17%; 2015/16's figure was 13%), the amounts consistently remaining unspent represent a concerning trend.[*]

Delaying spending to future years is not necessarily bad[79] – if, for example, the extra time enables departments to work out how to spend that money more effectively. But this is not often the first choice of many larger capital spending departments. Local enterprise partnerships – local panels of councillors and business leaders given grants to spend on economic development – told the National Audit Office (NAO) that a central government preference for quickly completed projects meant that they selected "'shovel ready' projects that could be delivered quickly over others that would have... represented better value for money".[80]

Conclusion: objectives for the 2020 spending review

The Johnson government has ambitious plans to increase capital spending. But the habit of departments over the past decade to persistently underspend suggests these plans will be difficult to implement. Four key objectives will help it turn this trend around and make a success of its capital spending aims.

Allocate enough day-to-day spending, and minimise the risk of transfers away from investment

Pressure to spend more on the day-to-day running of public services has pushed ministers to break Treasury rules governing the separation and protection of capital spending. This has been particularly damaging in the past five years. If the government wants departments to spend larger capital budgets on their intended projects, it must ensure that ministers are not put in a position where they are forced to transfer funds to the delivery of services instead. This means allocating enough funds, across departments' budgets.

Reduce over-optimism when planning capital projects

Capital spending continues to be delayed because of over-optimism about the time it will take to complete projects. The government should make greater use of reference class forecasting – that is, comparing time and cost projections against similar past projects – when planning, as the Institute for Government argued in *How to Value Infrastructure*.[81] Changing the 'profile' of spending would also help: planning to spend more in later years will give departments more time to plan.

* Some of this is because of underspends on Help to Buy, a demand-led financial support scheme to promote home-ownership, which is classified as capital spending. The Treasury typically allocates the highest estimate for the scheme, so the department typically 'underspends' its Help to Buy budget.

Allocate risks appropriately between the public and private sectors

Departments have struggled to agree contracts with construction companies because they have tried to transfer substantial risks to private contractors ill-placed to bear them. This has resulted in quotes being unaffordable. Construction companies now also face labour shortages, which could be exacerbated by changes to immigration policy after Brexit. The government could – and should – better allocate risk in contracts, following the recommendations in the *Outsourcing Playbook*, published by the Cabinet Office in 2019.[82]

Ensure departments have appropriately qualified staff

Some projects have been delayed because there have not been enough appropriately qualified staff to manage them. The government should ensure that departments, their delivery arms and local government have enough resources to manage higher capital spending.

The Johnson government's fiscal rules permit it ramp up capital investment. This could provide genuine benefits to the UK economy and help address persistently low productivity growth. But the money alone will not guarantee this. Government will stand a greater chance of setting capital budgets that will actually be spent – and spent well – if it addresses the problems that have caused departments to persistently underspend.

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References

1 Wilkes G, 'Manifesto plans for infrastructure are built on big numbers and little evidence', blog, Institute for Government, 3 December 2019, retrieved 5 February 2020, www.instituteforgovernment.org.uk/blog/manifesto-plans-infrastructure-built-big-numbers-little-evidence

2 Crawford R, Johnson P, Zaranko B, *The Planning and Control of UK Public Expenditure, 1993–2015*, Institute for Fiscal Studies, 2018, p. 51

3 House of Commons Treasury Committee, 'Oral evidence: The Budget Autumn 2017, HC 600', House of Commons, (no date), p. 19

4 HM Treasury, *Spending Review and Autumn Statement 2015*, Cm 9162, The Stationery Office, 2015, p. 79

5 Coates S, 'Migrant labour force within the UK's construction industry: August 2018', blog, Office for National Statistics, 23 August 2018, retrieved 5 February 2020, www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/articles/migrantlabourforcewithintheconstructionindustry/august2018

6 Hammond P, 'Budget 2018: Philip Hammond's speech', speech at the House of Commons, 29 October 2018

7 HM Treasury, *Budget 2018*, HC 1629, The Stationery Office, 2018, p. 22

8 Pope T, 'Conservative and Labour fiscal rules would shake off the spending straitjacket', blog, Institute for Government, 25 November 2019, retrieved 5 February 2020, www.instituteforgovernment.org.uk/blog/new-conservative-and-labour-fiscal-rules-shake-spending-straitjacket

9 Conservative and Unionist Party, *Costings Document*, Conservative and Unionist Party, 2019, p. 8

10 Wheatley M, Maddox B, Kidney Bishop T, *The 2019 Spending Review: How to run it well*, Institute for Government, 2019, p. 16

11 Vickerstaff M, 'Keeping government's major projects on track', speech at the Institute for Government, 14 March 2019

12 National Infrastructure Commission, 'Chancellor announces major plan to get Britain building', press release, 5 October 2015

13 Kraindler J, Firth Z, Charlesworth A, *False Economy: An analysis of NHS funding pressures*, The Health Foundation, 2018, p. 38

14 Atkins G, Davies N, Kidney Bishop T, *How to Value Infrastructure: Improving cost benefit analysis*, Institute for Government, 2017, p. 11

15 Institute for Government, 'Departmental budgets', Institute for Government, (no date) retrieved 5 February 2020, www.instituteforgovernment.org.uk/explainers/departmental-budgets

16 Interview transcript, Chris Huhne, 21 July 2015, Ministers Reflect archive, Institute for Government, www.instituteforgovernment.org.uk/ministers-reflect/person/chris-huhne

17 HM Treasury, *Consolidated Budgeting Guidance 2016 to 2017*, The Stationery Office, 2016, p. 65

18 *Ibid.*, p. 9

19 House of Commons Scrutiny Unit, *2017/18 Supplementary Estimates: Overview of in-year budget revisions: Guide to all departments*, House of Commons, 2017, p. 2

20 HM Treasury, *Central Government Supply Estimates 2017-18: Main supply estimates, HC 1127*, The Stationery Office, 2017, p. 12

21 House of Commons, 'Departmental budgets', House of Commons, (no date) retrieved 5 February 2020, www.instituteforgovernment.org.uk/explainers/departmental-budgets

22 HM Treasury, *Consolidated Budgeting Guidance 2019 to 2020*, The Stationery Office, 2019, p. 33

23 Crawford R, Johnson P, Zaranko B, *The Planning and Control of UK Public Expenditure, 1993–2015*, Institute for Fiscal Studies, 2018, p. 58

24 HM Treasury, *Pre-Budget Report: Facing global challenges – supporting people through difficult times*, Cm 7484, The Stationery Office, 2008, p. 10

25 HM Treasury, *Investing in Britain's Future*, Cm 8669, The Stationery Office, 2013, pp. 6–7

26 HM Treasury, *Autumn Statement 2016*, Cm 9362, The Stationery Office, 2016, p. 25

27 Comptroller and Auditor General, *Investigation into Land and Property Acquisition for Phase One (London – West Midlands) of the High Speed 2 programme*, Session 2017-19, HC 1531, National Audit Office, 2018

28 Department for Transport, *Annual Report and Accounts 2018-19*, HC 2392, The Stationery Office, 2019, p. 160

29 Crawford R, Zaranko B, *Spending Round 2019: Keeping perspective*, Institute for Fiscal Studies, 2019, p. 10

30 Comptroller and Auditor General, *Improving the Prison Estate*, Session 2019–20, HC 41, National Audit Office, 2020, p. 7

31 *Ibid.*, pp. 21–2

32 Atkins G, Davies N, Kidney Bishop T, *How to Value Infrastructure: Improving cost benefit analysis*, Institute for Government, 2017, p. 17

33 House of Commons Public Accounts Committee, 'Oral evidence: Performance of the Department of Health and Social Care, HC 1515', House of Commons, (17 October 2018) retrieved 5 February 2020, http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/treasury-committee/the-budget-autumn-2017/oral/74856.pdfl

34 Atkins G, Wajzer C, Hogarth R, Davies N, Norris E, *What's Wrong with Infrastructure Decision Making? Conclusions from six UK case studies*, Institute for Government, 2017, pp. 28–31

35 Office for Budget Responsibility, *Economic and Fiscal Outlook: November 2016*, Cm 9346, The Stationery Office, 2016, pp. 144–6

36 HM Treasury, *Spending Review 2010*, Cm 7942, The Stationery Office, 2010, p. 82

37 HM Treasury, *Spending Round 2013*, Cm 8639, The Stationery Office, 2013, p. 19

38 HM Treasury, *Autumn Statement 2011*, Cm 8231, The Stationery Office, 2013, p. 46

39 *Ibid.*, p. 49

40 Ward M, *Regional Growth Fund*, House of Commons Library, 2016

41 HM Treasury, *Autumn Statement 2012*, Cm 8480, The Stationery Office, 2012, p. 63

42 *Ibid.*

43 Williams I, Allen K, Plahe G, *Restricted Capital Spending in the English NHS: A qualitative enquiry and analysis of implications*, University of Birmingham Health Services Management Centre, 2019, pp. 7, 14

44 Smith R, 'Off-site and modular construction explained', *Whole Building Design Guide*, 8 September 2016 (retrieved 5 February 2020), www.wbdg.org/resources/site-and-modular-construction-explained

45 Infrastructure and Projects Authority, *National Infrastructure and Construction Pipeline 2018*, 27 February 2019 (retrieved 5 February 2020), www.gov.uk/government/publications/national-infrastructure-and-construction-pipeline-2018

46 Atkins G, Davies N, Kidney Bishop T, *How to Get Better Private Finance Deals for Infrastructure*, Institute for Government, 2018

47 Rutter J, Dodwell B, Johnson P, Crozier G, Cullinane J, Lilly A, McCarthy E, *Better Budgets: Making tax policy better*, Institute for Government, 2017, p. 29

48 Comptroller and Auditor General, *Spending Review 2015*, Session 2016–17, HC 571, National Audit Office, 2016, p. 31

49 Kraindler J, Firth Z, Charlesworth A, *False Economy: An analysis of NHS funding pressures*, The Health Foundation, 2018, p. 4

50 HM Treasury, *Public Expenditure: Statistical analyses 2018*, Cm 9648, 2018, p. 49

51 Crawford R, Johnson P, Zaranko B, *The Planning and Control of UK Public Expenditure, 1993–2015*, Institute for Fiscal Studies, 2018, p. 63

52 MacPherson N, 'Election 2019: should the Treasury change its economic thinking?', comment at the Institute for Government, 11 December 2019

53 Comptroller and Auditor General, *Review of Capital Expenditure in the NHS*, Session 2019–20, HC 43, National Audit Office, 2020, p. 20

54 Comptroller and Auditor General, *Departmental Overview, October 2018: Ministry of Justice*, Session 2017–19, National Audit Office, 2018, p. 9

55 House of Commons Library, *Estimates Day: Ministry of Justice spending*, 2018, p. 4

56 Atkins G, Davies N, Kidney Bishop T, *How to Value Infrastructure: Improving cost benefit analysis*, Institute for Government, 2017

57 Shaw D, 'Women's prisons: Fresh doubts over government plans', BBC News, 11 May 2018 (retrieved 5 February 2020), www.bbc.co.uk/news/uk-44080719

58 Stewart R, 'Glen Parva Prison: written question – 185685', House of Commons, 5 November 2018 (retrieved 5 February 2020), www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2018-10-30/185685

59 Comptroller and Auditor General, *Improving the Prison Estate*, Session 2019-20, HC 41, National Audit Office, 2020, p. 35

60 Comptroller and Auditor General, *Investigation into Starter Homes*, Session 2019, National Audit Office, 2019, p. 15

61 Ministry of Housing, Communities and Local Government, 'Geographical targeting across 5 housing programme funds', press release, 30 October 2018

62 Migration Advisory Committee, 'Full review of the Shortage Occupation List', The Stationery Office, 2019, p. 319

63 Coates S, 'Migrant labour force within the UK's construction industry: August 2018', blog, Office for National Statistics, 23 August 2018, retrieved 5 February 2020, www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/articles/migrantlabourforcewithintheconstructionindustry/august2018

64 GOV.UK, 'General work visa (Tier 2)', GOV.UK, (no date) retrieved 5 February 2020, www.gov.uk/tier-2-general

65 Home Office, 'Immigration Rules Appendix K: shortage occupation list', GOV.UK, 2 January 2020, retrieved 5 February 2020, www.gov.uk/guidance/immigration-rules/immigration-rules-appendix-k-shortage-occupation-list

66 Sasse T, Guerin B, Nickson S, O'Brien M, Pope T, Davies N, *Government Outsourcing: What has worked and what needs reform?*, Institute for Government, 2019, p. 52

67 New Civil Engineer, 'DfT confirms HS2 civils delay', *New Civil Engineer*, 19 July 2018, retrieved 5 February 2020, www.newcivilengineer.com/latest/dft-confirms-hs2-civils-delay-19-07-2018

68 New Civil Engineer, 'HS2 delays London stations contract award', *New Civil Engineer*, 17 January 2019, retrieved 5 February 2020, www.newcivilengineer.com/latest/hs2-delays-london-stations-contract-award-17-01-2019

69 Baroness Sugg, 'High Speed 2 Railway Line: Written question - HL8762', (19 June 2018) retrieved 5 February 2020, www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Lords/2018-06-19/HL8762

70 Malnick E, 'Ministers delay signing off first half of spending for HS2 by six months', *The Telegraph*, 31 March 2019, retrieved 5 February 2020, www.telegraph.co.uk/politics/2019/03/31/ministers-have-delayed-signing-first-half-spending-hs2-six-months

71 HS2 Ltd, *HS2 Chairman's Stocktake*, HS2 Ltd, 2019, p. 13

72 Institute for Government, 'High Speed 2 costs', Institute for Government, explainer, www.instituteforgovernment.org.uk/explainers/high-speed-2-costs

73 Lord Oakervee, *Oakervee Review*, 2020, pp. 67–8

74 Comptroller and Auditor General, *High Speed Two: A progress update*, Session 2019–20, National Audit Office, 2020, p. 48

75 Ministry of Housing, Communities and Local Government, *Explanatory Memorandum: Supplementary estimate 2017/18*, (no date), retrieved 5 February 2020, www.parliament.uk/documents/commons-committees/communities-and-local-government/Correspondence/Supplementary-estimates-explanatory-memorandum-2017-18.pdf, p. 7

76 Ministry of Housing, Communities and Local Government, *Supplementary Estimate 2018/19: Estimates Memorandum*, (no date), retrieved 5 February 2020, www.parliament.uk/documents/commons-committees/communities-and-local-government/MHCLG%202018-19%20Supplementary%20Estimates%20Explanatory%20Memorandum.pdf, p. 21

77 Wilkes G, 'Manifesto plans for infrastructure are built on big numbers and little evidence', blog, Institute for Government, 3 December 2019, retrieved 5 February 2020, www.instituteforgovernment.org.uk/blog/manifesto-plans-infrastructure-built-big-numbers-little-evidence

78 Ministry of Housing, Communities and Local Government, *Supplementary Estimate 2018/19: Estimates Memorandum* (no date), retrieved 5 February 2020, www.parliament.uk/documents/commons-committees/communities-and-local-government/MHCLG%202018-19%20Supplementary%20Estimates%20Explanatory%20Memorandum.pdf, p. 20

79 *Ibid.*

80 Comptroller and Auditor General, *Local Enterprise Partnerships*, Session 2015–16, National Audit Office, 2016, p. 26

81 Atkins G, Davies N, Kidney Bishop T, *How to Value Infrastructure: Improving cost benefit analysis*, Institute for Government, 2017

82 Sasse T, Guerin B, Nickson S, O'Brien M, Pope T, Davies N, *Government Outsourcing: What has worked and what needs reform?*, Institute for Government, 2019, p. 60

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February 2020

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