

Public versus private

How to pick the best infrastructure finance option



About this report

How infrastructure projects are financed – whether the public sector or the private sector raises the money for the upfront costs, and on what terms – is important. Well-financed projects create the right incentives to design and deliver high-quality infrastructure; transfer risks to those best able to manage them; and reduce the costs for taxpayers and consumers. This report identifies three reasons why a bias towards private finance currently exists and how this can be addressed.

This report is the third in a series of reports on infrastructure. Previous reports explored what's currently wrong with major UK infrastructure decision making, and improving cost benefit analysis for major infrastructure projects.

Future reports will look at:

- how government can negotiate effective private finance deals for new infrastructure, if it decides that private finance provides better value
- how to reduce national infrastructure policy instability, develop better relationships between central and local government, and increase public engagement in decision making.

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Summary

How infrastructure projects are financed – whether the public sector or the private sector raises the money for the upfront costs, and on what terms – matters. Well-financed projects create the right incentives to design and deliver high-quality infrastructure; transfer risks to those best able to manage them; and reduce the costs for taxpayers and consumers.

Governments of all stripes have committed to financing infrastructure to deliver best value for taxpayers and consumers,¹ but they do not always succeed. There are examples of success, such as Crossrail,² but there are many examples of inappropriate finance choices leaving taxpayers and consumers locked into expensive, inflexible contracts. From private finance initiative (PFI) waste contracts,³ to regulated water companies,⁴ to megaprojects such as Hinkley Point C⁵ and Metronet,⁶ governments and the privatised industries they have created do not always appear to have made the best finance choices.

The crux of the issue is that government comparisons between public spending and private finance are biased in favour of the latter. This is particularly true of private finance that is off the public sector balance sheet – finance that is not recorded as public spending and therefore does not add to public sector debt. In this report, we identify three reasons why this bias towards private finance exists in government, and how to overcome them. We briefly summarise these below and put forward a set of recommendations for how government can choose the best finance option.

1. Arbitrary accounting rules and narrow fiscal targets have created perverse incentives to use private finance

Many private finance projects are not counted in public sector debt. Using private finance solely to change how spending is classified, and get projects off balance sheet, is not justifiable. We recommend:

- The Treasury should make public its assessments of comparisons between off balance sheet private finance and other public and private ways of financing a project.
- The Treasury should make public its assessments of private finance projects using wider measures of public sector debt and liabilities.
- Either the Treasury or public bodies themselves should assess the implications of private finance for the budget flexibility of specific government departments and agencies.
- The Chancellor should expand the fiscal remit of the National Infrastructure Commission to include private finance projects.

2. Departments can too easily game appraisal to get the results they want

If appraisal is to be useful, it must be an objective, evidence-based attempt to assess the merits of different options. The current process could be much improved. We recommend:

- The Infrastructure and Projects Authority should mandate that departments collect and collate evidence on the cost and quality of past private finance projects.
- Departments should plan how they will collect evidence and evaluate future projects delivered through both public spending and private finance at the time of approval.
- The public sector should write data disclosure clauses into contracts to ensure that data required for evaluation, and held by the private sector, are available to use.
- The Treasury should issue updated quantitative guidance for assessing private finance as soon as possible, using public borrowing costs and recognising that the cost of public borrowing can be spread over time.
- The appraisal of finance options should be moved to a body that has the incentive to provide objective advice on how to finance projects – either within departments, or within a separate team in the Infrastructure and Projects Authority.

3. The way the Treasury handles capital investment in budgets and Spending Reviews creates undue reasons for departments to prefer private finance

Budgets and Spending Reviews – the way the Treasury allocates money – can create undue reasons for departments to prefer private finance. Even where private finance will deliver poor value compared with public spending, the faster process for private finance sign-off, short Spending Review periods, and the allocation of capital and resource budgets, may make private finance look like the best bet. We recommend:

- The Treasury must continue planning capital budgets on a five-year cycle at Spending Reviews, with the additional assumption that the Government will spend 1–1.2% of GDP on infrastructure.
- The Treasury should ensure that some of the 1–1.2% of GDP committed to infrastructure is not committed to specific projects in order to maintain fiscal headroom for projects that emerge outside of the Spending Review cycle.
- Operational departments should improve long-term planning to bring projects, and their potential funding and financing requirements, to Treasury planners earlier.

One year ago, the Chancellor, Philip Hammond, argued that the Government would put “long-term economics, not short-term politics”⁷ at the heart of UK infrastructure investment. But the way infrastructure finance choices are currently made – and their bias towards private finance because of accounting, appraisal and budgeting factors – has not set up the Government to succeed. Taken together, our recommendations offer a blueprint to help the Government to put long-term economics at the heart of infrastructure finance choices.

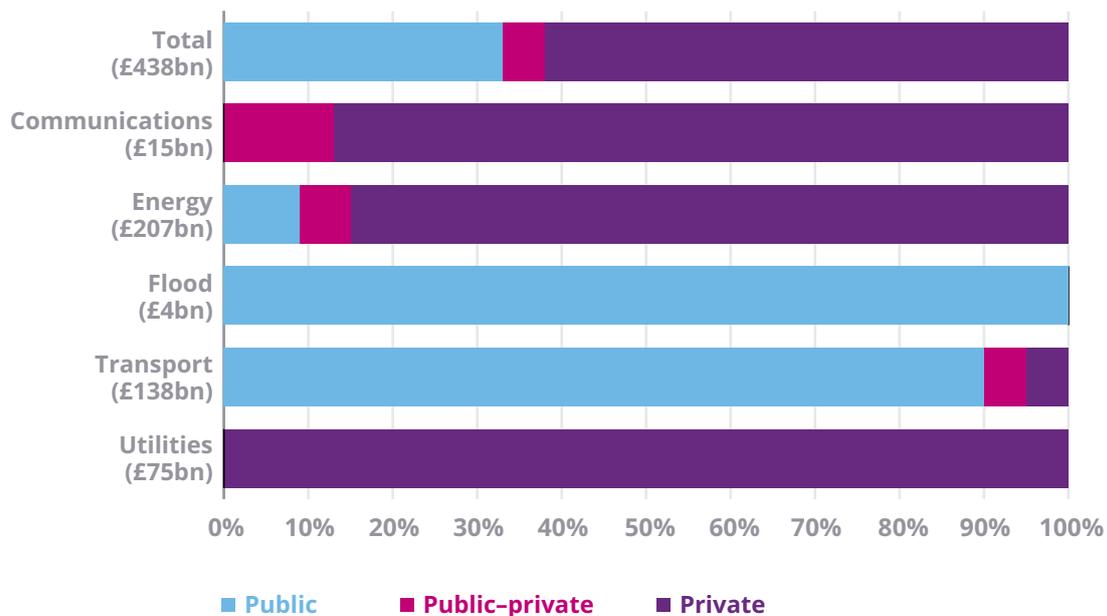
1. Introduction

The UK Government is planning to invest hundreds of billions of pounds in economic infrastructure – energy, transport, utilities, communications and flood defences – over the coming decade. But how will this infrastructure be financed? It is vital that the Government considers its options wisely. Public spending, private finance and privatisation all have benefits and drawbacks.⁸ Choosing the right option and transferring the appropriate risks are vital to ensure that the finance option chosen creates the right incentives to design and deliver high-quality infrastructure, minimising overall costs.

The UK faces a finance shortfall

The latest *National Infrastructure and Construction Pipeline* shows that the Government has planned for almost £440 billion (bn) of public and private investment in economic infrastructure from 2016/17 onwards (see Figure 1).⁹ Private investors are expected to raise just over 60% of the finance – mainly in energy, communications and utilities.

Figure 1: Investment in economic infrastructure sectors, by finance model, 2016/17 onwards



Source: Institute for Government analysis of Infrastructure and Projects Authority (2016) *National Infrastructure Delivery Plan: Funding and finance supplement*, Infrastructure and Projects Authority, p. 10

But the current pipeline suggests that there will be a future shortfall. Public spending is uncertain for some projects set to be publicly financed, and private finance is unlikely to have been finalised for the 52 'scoping' projects in the pipeline that are considering private or mixed finance. The projects where private finance is uncertain are collectively forecast to cost £112bn and include the planned Moorside and Wylfa B nuclear power plants and the link roads of the Silvertown Tunnel in London.¹⁰

Brexit adds to this pressure

Brexit adds a further pressure as the UK is unlikely to have the same relationship with the European Investment Bank (EIB) after leaving the European Union (EU). The EIB has

helped to crowd in additional private finance,¹¹ and has been an important lender to the UK. Between 1974 and 2016, the EIB lent over €77bn to UK energy, waste, communications, transport and water infrastructure projects.¹² Losing access to the EIB means losing one source of cheap finance, which could have helped to meet the shortfall.

The options available to government

In the context of an upcoming shortfall and the potential loss of an important lender, the Government faces a substantial challenge. It has four broad options for financing the upfront costs of new infrastructure,* depending on asset ownership and finance source (see Table 1).

Table 1: Options for financing publicly and privately owned infrastructure

		Finance	
		Public	Private
Ownership	Public	Public spending from tax or borrowing (for example, High Speed 2 – HS2)	Project finance vehicles (for example, road and waste PFI contracts)
	Private	Public sector financial support (for example, Thames Tideway Tunnel)	Privatisation and corporate finance (for example, regulated water companies)

The degree of private sector involvement in each option shown in Table 1 varies.

- **Public spending from tax or borrowing.** Government meets the upfront costs using existing revenues or borrowing (by issuing government bonds). This is how HS2 will be financed. It is recorded as public spending or borrowing on the public sector balance sheet in the National Accounts.
- **Project finance vehicles.** Specific companies (special purpose vehicles) are established, which are responsible for financing as well as some mix of design, build, operations and maintenance. These companies raise the finance required to meet upfront costs from private investors. This is how the M6 Toll road¹³ and other PFI projects were financed. Depending on the risks transferred, project finance may be recorded either as public spending or borrowing on the public sector balance sheet, or as a contingent liability.
- **Public sector financial support.** Government underwrites specific project risks, normally through guarantees¹⁴ but also through contingent support mechanisms.** This includes the Thames Tideway Tunnel, a private finance project underwritten with contingent public sector financial support.¹⁵ Depending on the risks the public sector underwrites, guarantees may be recorded either as public spending or borrowing on the public sector balance sheet, or as contingent liabilities.

* Where ownership is private, the privatised companies decide how to finance; but as governments decide ownership and can underwrite certain risks, we consider that governments can influence the choice of finance for privately owned infrastructure.

** Central government can also provide guarantees to projects financed by other parts of government. For example, the Northern Line Extension is financed by Transport for London borrowing and underwritten with a government standby loan facility. See Transport for London (2013) *Northern Line Extension Factsheet I: Funding and finance*, Transport for London, <http://content.tfl.gov.uk/nl-factsheet-i-web.pdf>.

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- **Privatisation and corporate finance.** Government transfers ownership of infrastructure assets from the public sector to private companies, which – normally overseen by a regulator – finance, design, build, operate and maintain those assets. These privatised companies raise the money required to meet upfront costs through corporate finance from private investors. This is the model in the water sector. Companies such as Thames Water are regulated by the Water Services Regulation Authority (Ofwat), charge consumers for drainage and sewerage services, and seek finance from investors. Investment in the privatised sectors is not recorded as public spending, borrowing or contingent liabilities.

Table 1 shows high-level options; it is not comprehensive. The difference between table categories is blurred and variation within categories is extensive. Infrastructure delivered through project finance overlaps with privatisation, as it is typically owned by private investors until ownership reverts to the public sector at the end of the contract. Within project finance contracts, risks can also be distributed in different ways. The public sector can choose which risks (such as availability, construction and demand) to transfer, and the private sector's special purpose vehicles can choose to allocate these risks to different parts of their supply chain (such as managers, investors and contractors), depending on the contracts involved.¹⁶

There is also substantial complexity within sectors. The rail sector in the UK offers one example.

The UK rail sector

The UK rail sector is often deemed 'privatised', but this is not quite right. Different parts of the sector are publicly or privately owned and financed:

- Train operating companies are privately owned and run rail services through the franchise system (operating concessions).¹⁷
- Trains are privately owned and financed by rolling-stock leasing companies, which lease them to train operating companies.¹⁸
- Rail infrastructure – the track and stations – is almost exclusively publicly owned and financed by Network Rail,¹⁹ with underlying funding from government grants and train operating companies.

Finance options are numerous and their full complexity is not captured here, but the benefits and drawbacks of each high-level option are discussed in a recent explainer from the Institute for Government.²⁰ There is no one-size-fits-all solution. As such, assessing finance options, and deciding who can best manage risks, are crucial.

The Government recognises this challenge, and has produced guidance to support assessment and decision making.²¹ But this guidance does not always result in choosing the best-value finance option. This report outlines the guidance and discusses three overarching factors that contribute to an undue bias towards private finance, before recommending how government can improve decisions on how to finance projects.

This report does not cover funding. Although the terms 'funding' and 'financing' are sometimes used interchangeably, they are distinct. Funding is how you ultimately pay

for something.²² Financing is how you pay upfront. This report focuses on finance because of concerns about the finance options that the Government has chosen,²³ and the scope for the Government to make better finance decisions.

Methodology

This report was produced on the basis of:

- a detailed review of the literature on financing infrastructure in the UK and internationally
- in-depth interviews with more than 20 individuals involved in financing infrastructure
- a roundtable, which brought together leading finance experts from government, academia and the private sector.

Our research draws on examples from both the UK and abroad.

This report is the third in a series of reports on infrastructure. The first two reports are entitled:

- *What's Wrong with Infrastructure Decision Making? Conclusions from six UK case studies*²⁴
- *How to Value Infrastructure: Improving cost benefit analysis*²⁵

Future reports will look at:

- how government can negotiate effective private finance deals for new infrastructure, should it decide that private finance provides better value
- how to ensure a stable, long-term, infrastructure evidence base; build a cross-government national strategy for infrastructure; and improve public engagement in decision making.

2. Context

Treasury guidance

The Treasury has produced guidance on how to appraise finance options. The following four documents constitute the key guidance, outlined here from high-level to specific.

Managing Public Money

Managing Public Money, the Treasury's guidance on handling public sector resources, states that private finance should only be used 'if [it] delivers better value for money for the Exchequer'. As non-government lenders face higher financing costs, it concludes that private finance should only be used if it creates efficiency gains in delivery.²⁶

The Green Book

The Green Book, the Treasury's guidance most recently updated in 2011, provides advice for public sector bodies on how to appraise proposals before committing money. It provides a basic framework for assessing affordability (whether proposals can be paid for with existing resources) and risk allocation (defining risks and who will manage them) in private finance.²⁷ It promotes optimal risk transfer – transferring risk to whichever party is best placed to manage it – rather than maximum risk transfer.

What is risk transfer?

Risk transfer entails defining who is responsible for particular risks if they materialise, usually in a contract. In infrastructure, this normally involves transferring to the private sector risks that the Government – and by extension taxpayers – would be expected to bear when something goes wrong. These risks typically include increasing costs and delays. This means that the private sector is responsible for meeting cost increases or ensuring on-time delivery. In response, they will demand a higher return.

Hinkley Point C provides a clear example. The 'Contract for Difference'^{*} that the Government signed with EDF Energy and China General Nuclear Power Group makes the French and Chinese companies responsible for construction risks. This means, for example, that they will bear the recent £1.5bn cost increase,²⁸ rather than the UK Government. The two companies are making an estimated 9% return on the project, which remains contested by commentators²⁹ and parliamentarians.³⁰

If the companies are better able to manage the construction risk than the Government, and their better management outweighs the higher cost of finance, then the risk transfer will benefit taxpayers and electricity consumers. But that depends on the negotiated risk allocation remaining as it is, which the National Audit Office has cast doubt on.³¹

* A Contract for Difference (CfD) involves the Government guaranteeing electricity-generating companies that they will receive a fixed, pre-agreed 'strike' price for the low-carbon electricity they produce for the duration of the contract. When the wholesale price is less than the strike price, electricity-generating companies receive a top-up from the consumer. When the wholesale price is greater than the strike price, the electricity-generating companies pay back the difference. CfDs are a specific kind of offtake agreement, where consumers agree to buy something at a set price from producers. See Low Carbon Contracts Company (no date) 'What is a CFD?', Low Carbon Contracts Company, retrieved 3 November 2017, <https://lowcarboncontracts.uk/what-cfd-0>.

Public Sector Business Cases Using the Five Case Model

Additional *Green Book* guidance³² incorporates specific financial and commercial advice. The financial case assesses overall funding and affordability,³³ and the commercial case requires an assessment of whether a proposed deal is actually possible, the 'charging mechanism' (funding mechanisms, and the incentives they create for those managing the project) and 'risk transfer' (allocation of risks).

We heard from public sector interviewees that expanded commercial guidance and involving commercial staff at an earlier stage helped to raise commercial and financial concerns sooner. But there remain issues with difficult-to-incorporate but important elements, such as:

- the cost of running the bidding for private finance contracts
- the cost of building in contract flexibility to account for uncertain future demand
- working out when to commit budgets to infrastructure and when to maintain budget flexibility.

The first two of these can be estimated and included within a quantitative comparison; but government needs to monitor the effects of private finance on the last of these, as we discuss in Chapter 3 in relation to the implications of off balance sheet finance for public sector organisations with large numbers of private finance projects.

Value for Money Assessment Guidance for using private finance

The Treasury has produced specific advice on comparing public spending and private finance. When it was first published in 2006,³⁴ this included a quantitative public–private comparison and a qualitative assessment of whether it would be possible to secure private finance. Owing to concerns that it was treated too uncritically as a pass/fail test, the Treasury withdrew the quantitative comparator in 2012,³⁵ but the qualitative assessment remains. The guidance prioritises value over accounting. At every stage, the key question is whether private finance will bring benefits that outweigh expected higher finance costs. The guidance boils down to whether using capital from departmental budgets is better or worse value than using private finance for a particular project.

Process undermines the guidance

The Treasury guidance is sensible and, if followed, should result in better value-for-money decisions. However, our research suggests that the guidance has weaknesses and is not always implemented properly.

This is not a novel observation. The Government's choice of finance option, especially the PFI,³⁶ has been much-commented on in the past.^{37, 38, 39} The Treasury reassessed PFI contracts in 2012, which led to the creation of Private Finance 2 (PF2).^{*40} This was a positive development but there remain significant accounting, appraisal and budgeting factors, which bias the Government's financial decision making. We outline these factors in the next three chapters.

* PFI was a standardised project finance contract used to procure social and economic infrastructure. PF2 is its replacement, designed to address some of the shortcomings of PFIs. See Booth L and Starodubtseva V (2015) *PFI: Costs and benefits*, House of Commons Library, retrieved 3 November 2017, <http://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN06007>.

3. Accounting

The accounting and statistical standards that the UK follows, and the way that the Office for National Statistics has interpreted them, mean that most private finance projects do not appear on the public sector balance sheet and therefore do not add to public sector debt. Given the political salience of public borrowing,* we heard from almost all interviewees that ministers and the Treasury instinctively prefer private finance to ensure that projects do not contribute to public sector debt. If projects are financed solely with the intention of getting them off balance sheet, they are unlikely to be best value. Ultimately, this means that infrastructure costs will be higher than they need to be, and there will be less money available for infrastructure.

Ninety per cent of private finance does not count towards public sector debt

Private finance projects do not add to public sector debt if the Office for National Statistics agrees that the private sector bears most project risks and rewards. This criterion is drawn from the European System of Accounts, which is overseen by Eurostat.^{41, 42} The specific risks and rewards that the Office for National Statistics considers are:

- construction (cost and time overruns)
- availability (responsibility for ensuring that the asset is available to use)
- demand (forecast and actual demand diverging).⁴³

Projects do not add to public sector debt if the private sector bears the construction risk and at least one of either availability risk or demand risk.

In the UK, approximately 90% of privately financed capital investment is not counted as public sector debt accordingly.⁴⁴ If all capital investment under off balance sheet PFIs were reclassified as conventional public spending, public sector debt would have been 1.7% of Gross Domestic Product (GDP) higher in March 2015.⁴⁵

Accounting for private finance: are there alternatives?

As the National Accounts are easily gamed with private finance, some interviewees argued that there are better ways to account for private finance and it is certainly true that there are alternatives.

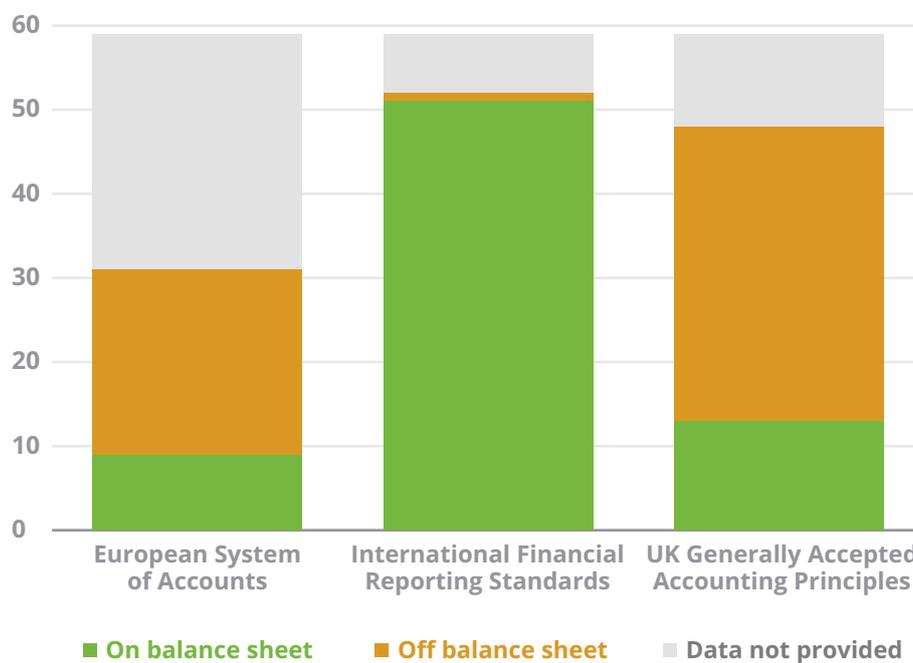
After 2009, public sector organisations switched from Generally Accepted Accounting Principles to International Financial Reporting Standards for their financial accounts. Unlike the generally accepted principles, international standards use a stricter criterion of ultimate control, rather than risks/rewards, to determine whose balance sheet a private finance project lies on. The change to international standards for departments' and public bodies' financial accounts reduced the incentive to design projects solely to avoid inclusion in their financial accounts.

* Public sector net debt, and the debt to Gross Domestic Product (GDP) ratio, are used by politicians to set fiscal targets, and by the European Union, Treasury and other public bodies to monitor public finances.

In contrast, due to Eurostat rules, in the National Accounts the Government still uses risk/reward criteria to determine whose balance sheet a private finance project lies on. As illustrated in Figure 2, this means that far fewer private finance projects are classified on the Government's balance sheet in the National Accounts.

Departmental budgets are allocated on the basis of National Accounts criteria, so there remains an incentive to use private finance to keep spending out of departmental capital budgets and exclude it from public sector debt.⁴⁶ But the Government still needs to record spending figures in accordance with Eurostat rules. Even if the Treasury allocated budgets on the basis of international standards, using the Whole of Government Accounts,⁴⁷ it would still have to separately record National Accounts figures for Eurostat reporting.

Figure 2: Private finance projects' balance sheet classification, by capital value, 2016 (£ billion)



Source: Institute for Government analysis of HM Treasury and Infrastructure and Projects Authority (2016) *Private Finance Initiative and Private Finance 2 Projects: 2016 summary data*, GOV.UK, retrieved 3 November 2017, www.gov.uk/government/publications/private-finance-initiative-and-private-finance-2-projects-2016-summary-data

The Institute of Chartered Accountants in England and Wales notes that the way a government pays back private finance is not different from the way a government pays back public borrowing: '[A] stream of payments for the use of an asset [private finance] does not look that dissimilar to a stream of payments to repay a loan used to purchase it [borrowing to allow public spending].'⁴⁸

Be that as it may, there is little that can be done to change these rules. The way the Office for National Statistics categorises private finance projects is defined by Eurostat, the EU statisticians. Private finance categorisation impacts the UK's National Accounts, and these are used to inform the European Commission about the UK's position against EU debt and deficit targets.⁴⁹ The UK cannot change classification because changing

the rules to make sure that the capital costs of private finance contribute to public sector debt⁵⁰ would bring the UK into conflict with Eurostat regulations.*

Impact on public sector debt shouldn't, however, impact government decision making as most private finance projects are classified as contingent liabilities in the Whole of Government Accounts, which are prepared in accordance with the International Financial Reporting Standards.⁵¹ The problem is that ministers and the Treasury tend to focus on the headline measure of public sector debt instead. This can lead to poor decisions.

Politicians and the Treasury encourage private finance to keep spending off balance sheet

Accounting rules and an excessive focus on the headline measure of public sector debt can unduly influence decisions about whether to use private finance, and how to structure a private finance contract. This is not a new concern. The Office for Budget Responsibility notes that excluding PFI capital costs from public sector debt implies that 'PFI has been used as a way to hold down official estimates of public sector indebtedness for a given amount of overall capital spending, rather than to achieve value for money'.⁵²

Mixed evidence about private finance, discussed in the next chapter, suggests that this concern has weight.⁵³ In some cases, alternative finance options are not assessed. As part of a 2011 inquiry, public authorities told the Treasury Select Committee that rather than assessing different options, the Treasury effectively told them that private finance is 'the only game in town'⁵⁴ for major capital investments in the early 2000s.⁵⁵ For example, the Department for Transport did not assess different options for meeting the upfront costs of new Thameslink trains as it had been informed by the Treasury that no additional public money would be provided and that the deals 'should remain off balance sheet'.⁵⁶

In our interviews, we were told by many public sector interviewees that the Treasury encourages them to push as much infrastructure – and other spending – off balance sheet as possible. This view was corroborated by private sector interviewees who agreed that reducing "balance sheet implications" was a big selling point of private finance for government.⁵⁷ We heard, for example, that local authorities are usually willing to discuss private finance unless "they would have to take some risk onto their balance sheets".⁵⁸

This pressure does not just come from the Treasury. In the case of Hinkley Point C, Coalition Government promises of no public subsidy for new nuclear⁵⁹ meant that – whatever their merits – alternative finance options were not formally considered.** Stephen Lovegrove, the former Department of Energy and Climate Change (DECC)

* We heard from interviewees that after the UK leaves the EU it might be possible for the UK to stop following Eurostat's accounting standards. However, this is likely to send a negative market signal to investors and create additional accounting divergence problems.

** A recent House of Commons Public Accounts Committee hearing established, however, that Department of Energy and Climate Change (DECC) and Treasury civil servants did "some internal work" on alternative options, and that they felt that ministers at the time were aware of different finance options. See House of Commons Public Accounts Committee (2017) *Oral Evidence: Hinkley Point C*, HC 393, The Stationery Office, pp. 6, 38, <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/public-accounts-committee/hinkley-point-c/oral/71001.pdf>.

Permanent Secretary, recently stated that:

“[T]he deal was dictated and limited by... policy positions that were held by the Government of the day... the private sector was to finance the deal. It was to be kept off the Government’s balance sheet for reasons to do with fiscal consolidation... it was very clear government policy, coming from a number of different ways, to structure the deal as we did.”⁶⁰

However, since the Treasury launched its report *A New Approach to Public Private Partnerships* in December 2012,⁶¹ only five projects have been financed using PF2.⁶² The strength of this accounting pressure is therefore questionable. One senior government official suggested that the use of PF2 has been low because many non-Treasury permanent secretaries are sceptical of private finance and have had little need to use it due to relatively generous capital allocations in the past few years. Regardless, almost all public sector interviewees said that they still felt pressured to structure projects so that they would not count in public sector debt.

Beyond the choice of whether to use private finance or public borrowing, an excessive focus on the headline measure of public sector debt can influence how private finance projects are structured. In 2009, the National Audit Office observed that some contracts appeared to have been designed to secure off balance sheet treatment rather than best value for money. Prominent examples included:

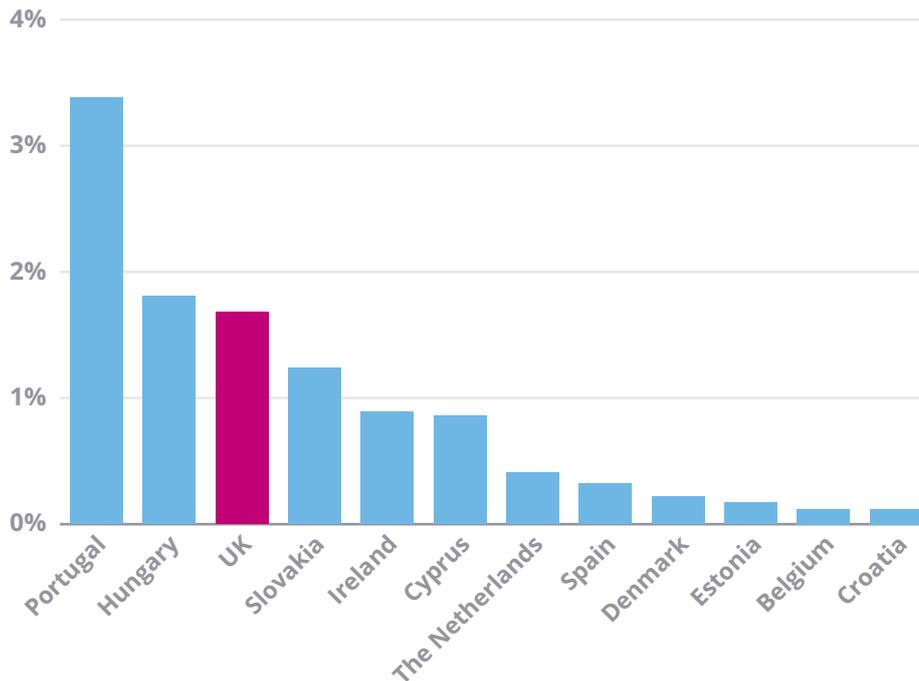
- ensuring that public stakes in joint ventures did not exceed 49% (49:51)
- keeping debt finance below 90%
- not including market tests for maintenance costs
- transferring inflation risks.⁶³

In our interviews we were told that this kind of behaviour still occurs. We heard, for example, that one reason why the Government has yet to publish a new model PF2 contract is the difficulty in reconciling the Government’s aim to be a minority equity co-investor in future projects,⁶⁴ with ensuring that PF2 projects are off balance sheet.⁶⁵ This is concerning: if projects are financed solely with the intention of getting them off balance sheet, they are unlikely to be best value.

Partly as a result of these incentives, and partly due to the early adoption of private finance contracts, the UK has more off balance sheet private finance projects than most other European countries.* Data collated by Eurostat⁶⁶ show that, among EU member states, the UK has the third highest proportion (1.8%) of off balance sheet private finance projects as a percentage of GDP, behind only Portugal and Hungary (see Figure 3). For over half of member states, the figure is under 0.1% – due to fewer off balance sheet private finance projects, fewer private finance projects overall, or a lack of reported data.

* Data are scarce, however: it is hard to compare consistently across states and there are coverage concerns. See European Commission (2015) *Report from the Commission to the European Parliament and the Council on Implicit Liabilities with Potential Impact on Public Budgets*, European Commission, p. 8, retrieved 3 November 2017, <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015DC0314&from=EN>.

Figure 3: Off balance sheet public–private partnerships as a percentage of GDP in the top 12 EU member states, 2015



Source: Institute for Government analysis of Eurostat, Liabilities related to private–public partnerships (PPPs) recorded off balance sheet of government, January 2017

Although harder to estimate, public–private partnerships (PPPs) constitute a significant proportion of the UK’s economic infrastructure spending.* In 2013, the McKinsey Global Institute estimated that 23% of planned investment in UK economic infrastructure between 2011 and 2015 would come from PPPs, mainly in transport and waste.⁶⁷

Getting spending off balance sheet should not justify private finance

There are arguments for keeping spending off balance sheet. We heard from interviewees that keeping spending off the books has helped successive governments to achieve their fiscal targets.⁶⁸ If ratings agencies and investors judge the UK on its public debt (specifically, the ratio of unadjusted public sector debt to GDP), hitting these targets and maintaining a low ratio may encourage greater foreign investment, both in infrastructure and in general.**

Private finance may also have enabled projects to be delivered that would not have been financed through public spending due to the politics of the time.⁶⁹ Infrastructure academics Graeme Hodge and Carsten Greve note that this may have been the case for

* It is harder to estimate because we do not know how much the UK spends on infrastructure. See O’Brien R and Martin J (2017) ‘Developing new measures of infrastructure investment: July 2017’, Office for National Statistics, retrieved 3 November 2017, <https://www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/articles/developingnewmeasuresofinfrastructureinvestment/july2017#main-points>.

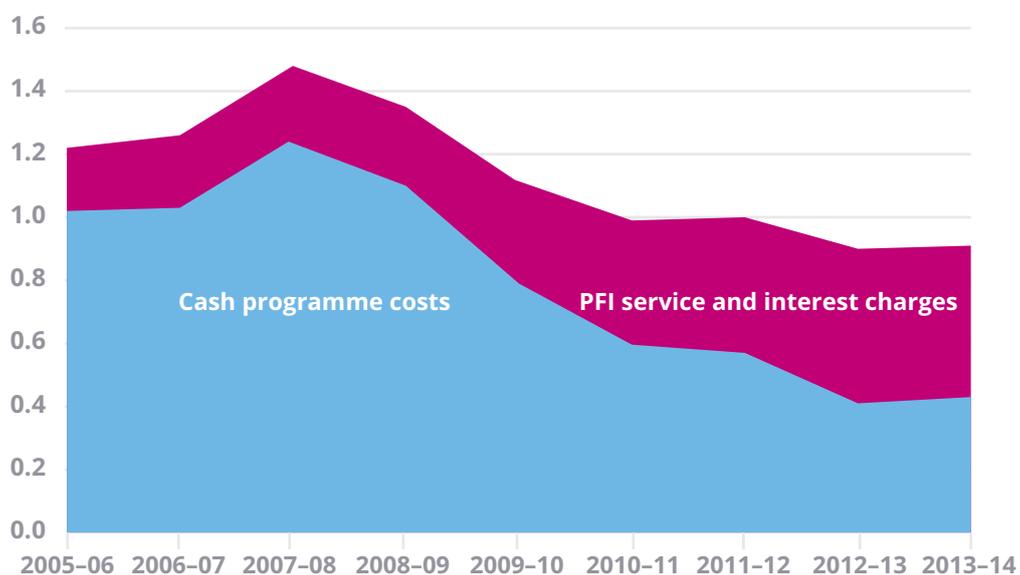
** Philip Hammond recently made a version of this argument to the Confederation of British Industry (CBI): “To demonstrate commitment to restoring the public finances to maintain our credibility with markets and international investors, we... have to take difficult long-term decisions for our country.” See Hammond P (2017) Speech at the CBI President’s dinner, 3 July, retrieved 3 November 2017, <https://www.gov.uk/government/speeches/chancellor-at-the-cbi-presidents-dinner>.

UK projects in the early 2000s.⁷⁰ In essence, private finance may genuinely have been the only game in town. Without it, projects simply would not have been built.

But helping governments to achieve their fiscal targets, if they are based on arbitrary accounting rules, should not be seen as a positive.⁷¹ The benefits of minimising balance sheet impact are speculative and short-term. While the debt to GDP ratio may have political salience, ratings agencies are aware that some projects are artificially kept off balance sheet and account for this when determining countries' credit-worthiness – they are contingent liabilities, even if not included in standard public sector debt measures.⁷² Weakening public finances, partly due to PPPs, led Standard & Poor's Ratings Services to lower Portugal's and Hungary's sovereign credit ratings in 2005 and 2006 respectively – the only EU member states with more off balance sheet private finance projects than the UK.⁷³

While the benefits are speculative, there are clear downsides to basing decisions on their public debt implications. Most critically, it may result in poor value for money,⁷⁴ but it can also ultimately restrict future budget flexibility through an 'affordability illusion'⁷⁵ – deferring spending into the future. We heard repeatedly from interviewees that if private finance is used primarily to defer spending, it will only help in the short term. Some parts of the public sector with a large number of private finance projects have found themselves with limited budget flexibility. Analysis of the Highways Agency's road programme spending – spending on operating, managing, maintaining and improving the motorway and trunk road network – shows how private finance deals can become a major budget commitment (see Figure 4).

Figure 4: Highways Agency road programme spending (excluding non-cash items), 2005/06 to 2013/14 (billion)



Source: Adapted from National Audit Office analysis of Highways Agency annual accounts in National Audit Office (2015) *The Choice of Finance for Capital Investment*, National Audit Office, Figure 11

Basing decisions on their public debt implications can also weaken the hand of government negotiators. If investors know that the Government has tied its hands with policies that give it a strong preference for new infrastructure that doesn't add to public sector debt, they will have the upper hand in negotiations and be able to demand more favourable deals. The Government will not be able to credibly threaten

to 'walk away' (use public spending), which ultimately means that consumers or taxpayers end up paying more.

Accounting and negotiations: Metronet

Metronet, a private finance contract designed to maintain and renew the London Underground's track, rolling stock and stations,⁷⁶ offers a clear example of the perverse incentives that the desire to keep projects off balance sheet can create.

As Anthony King and Ivor Crewe observe, public sector negotiators on the Metronet project were stuck in a bind. Under instruction from Treasury and transport ministers to keep the costs of major new infrastructure projects off the Government's balance sheet, they were pressured to agree a particular kind of private finance contract to get the project off balance sheet,⁷⁷ as per the risk/reward accounting criteria outlined at the start of this chapter.

Given the complexity of the project, private sector bidders made it clear that they would only bid if their risks were kept to a minimum. The outcome was perverse but predictable. In order to get the private sector to bid (and nominally take the risks), the Government capitulated to the bidders, agreeing to underwrite 95% of the debt finance that successful bidders would raise.⁷⁸ The Government got the project off balance sheet; but at the expense of transferring substantial risk, which is where any increase in value would have come from.

Ultimately, spiralling maintenance costs and governance failures left Metronet unable to meet its financial obligations; it went bankrupt, and Transport for London, backed by the Government, had to pick up the costs.⁷⁹

The argument that fiscal targets mean that new investment can only take place using off balance sheet finance misses the point that governments will always have alternatives, even if it takes political capital to cut spending elsewhere or justify additional borrowing in the short term.

In order to avoid an excessive focus on whether projects count towards public sector debt and allow this to drive decisions, politicians and the Treasury need to:

- compare the value of private finance that gets projects off balance sheet with other public and private ways of financing a project, and make this assessment public
- assess the impact of private finance projects using wider measures of public sector debt and liabilities, and make this assessment public
- assess, or ensure that public bodies themselves assess, the implications of private finance for the budget flexibility of specific government departments and agencies.

As well as recommending that the Treasury undertakes wider assessments and makes them public, we also recommend that the National Infrastructure Commission's fiscal remit should be reviewed to avoid unfair preference for private finance.

The National Infrastructure Commission's fiscal remit: implications for finance

The National Infrastructure Commission has a fiscal remit, which requires it to demonstrate that its recommendations are consistent with, and can be accommodated within, gross public investment in economic infrastructure of 1–1.2% of GDP between 2020 and 2050.⁸⁰ The remit covers only public sector capital expenditure; it does not cover resource (day-to-day) spending⁸¹ such as that on PFI unitary charges – how the public sector pays back PFI contracts.

In its interim National Infrastructure Assessment, the Commission noted that 'access to private finance will continue to be key to serving the UK's infrastructure needs'⁸² – both in the privately owned sector where almost all infrastructure is entirely privately financed, and in the publicly owned sector where the fiscal remit means that public finance could be constrained. While there may well be a place for more private finance in UK infrastructure, it should be because private finance offers better value, not because it offers a way of excluding spending from fiscal targets.

The Commission is required to follow the fiscal remit. However, when publishing its National Infrastructure Assessment in 2018, the Commission should identify alternative finance options that could be adopted were the remit to be loosened, where it considers that would provide better overall value. In future, the Government should change the remit so that publicly owned, privately financed projects are also included, which may entail increasing the remit as well.

4. Appraisal

The appraisal of different finance options is not as robust as it should be.* The evidence for the benefits of different finance options, the conflicting responsibilities of teams undertaking appraisals, and the lack of quantitative guidance, mean that appraisals are not always up to scratch. They can be too easily gamed to give appraisers the results they want to see.

The evidence on private finance is not strong

The evidence on the benefits of private finance is not as strong as it should be in order to help governments make an informed decision about whether to borrow more or use private finance to meet the upfront costs of a project. Even where private finance is selected to meet the upfront costs, there is a lack of evidence to assess what risks are best borne by the public and private sectors.

Contemporary political debate on private finance,⁸³ and the growing consensus on the high costs of PFI contracts specifically,⁸⁴ have not been informed by the evidence that is available. As with the debate over nationalisation and privatisation, commentators tend to ignore variations between sectors and dismiss projects where private companies appear to have improved management.⁸⁵ Without better use of evidence in appraisals, we risk shifting from having inappropriately used private finance for some projects, to dismissing it entirely, ignoring lessons about where using it might lead to cheaper and better infrastructure projects.

Delivery to time and budget

Some research suggests that once a contract has been signed, private finance projects generally outperform publicly financed projects for delivery to time and budget. The National Audit Office and the Allen Consulting Group found that private finance projects outperformed projects financed through public spending on these metrics in the UK⁸⁶ and Australia⁸⁷ respectively. In 2009, the National Audit Office found that 69% of private finance projects between 2003 and 2008 delivered to time, with 65% on budget.**⁸⁸ But both our interviewees and researchers from the Organisation for Economic Co-operation and Development (OECD)⁸⁹ have disputed the significance of these findings.

First, the National Audit Office and Allen Consulting Group studies used the point at which a private finance contract was signed as the reference point. Although the point at which a contract is signed is straightforward to measure, this is not a fair comparison because there is no equivalent for publicly financed projects. Signing a private finance contract usually happens relatively late in the planning process. Rather than managing risks more effectively, it may be that investors are simply pricing the risks at a later stage, when the project is better defined and the risks are clearer, then delivering to a more realistic budget. There is limited research that uses an appropriate reference

* A full project appraisal is broader than just appraising finance options (the Government's commercial case). It also considers economic, social, environmental, political and other risks. A comprehensive and well-analysed full appraisal can provide reassurance to investors, widening the pool of potential investors willing to provide finance for a project.

** The National Audit Office report does not provide comparable figures for projects financed through public spending.

point, but that which is available suggests that on-budget and on-time delivery is achieved by transferring any and all construction risks to construction contractors.⁹⁰ Such contracts can also be used for projects financed through public spending so this is not a benefit unique to private finance. Furthermore, transferring all risks to contractors, normally through fixed-price turnkey contracts,* is likely to come at considerable cost because contractors will charge a premium for construction contingencies to cover the risks and uncertainties they have taken on.

Second, the lengthy procurement process for private finance may mean that a 'PFI [project] will take longer to deliver, if the length of the whole process is considered'.⁹¹ In 2015, the National Audit Office found that the average time taken to finalise a private finance deal was more than three years.⁹² Future private finance contracts should not take as long, however: the revised PF2 policy guidance stipulates an 18-month deadline for competitive tendering, to streamline procurement.⁹³

Whether publicly or privately financed projects perform better on time and delivery matters because assumptions about performance were built into the Government's quantitative appraisal model. If key assumptions were incorrect or misleading, different finance options will have looked better or worse than they really were.

The Treasury's quantitative guidance⁹⁴ only applied an optimism bias adjustment** to publicly financed projects, not privately financed ones. This was justified on the basis that public sector contracts have a tendency 'to overrun in time and cost', whereas 'the PFI cost is fixed [after financial close]'.⁹⁵ Given past examples of private finance projects where the private sector renegotiated after financial close and governments took on more risk because of private sector misjudgements about cost, demand or time,⁹⁶ this assumption was dubious.*** The quantitative guidance was withdrawn in 2012 but has not been replaced; it is discussed in more detail below.

Data about the performance of projects financed in different ways need updating. In 2013, the National Audit Office found that none of the departments it audited compiled the data necessary to enable them to measure how far, and how often, projects financed in different ways delivered on time and within budget.⁹⁷ Given that these data underlie the measurement of risk transfer benefits – whether a particular project will be better value if financed publicly or privately – this needs to change.

Whether investors are better placed than the public sector to manage time and budget risks needs to be assessed on a case-by-case basis, informed by the most up-to-date data for comparable projects. As one public sector interviewee noted, it is possible that in the past, investors may have been able to manage construction risks and contractors

* Fixed-price contracts transfer construction risks to contractors by forcing them to quote and stick to a pre-agreed price for a project, regardless of changes during construction. The turnkey element refers to the fact that contractors must complete a project so that it is fully operational.

** Optimism bias adjustments are uplifts applied to project cost estimates to account for project appraisers' 'systematic tendency to underestimate the time and costs of a project'. See Atkins G, Davies N and Kidney Bishop T (2017) *How to Value Infrastructure: Improving cost benefit analysis*, Institute for Government, p. 17, retrieved 3 November 2017, www.instituteforgovernment.org.uk/publications/value-infrastructure-september-2017.

*** This is not to say that previous UK governments have always covered private sector misjudgements. Debt and equity investors have absorbed losses in some cases where project costs rose above expectations, although losses have more often been absorbed by construction firms. See Finlay D, Reddaway J, Hogarth E, Hutchings K, Midgley H, Ratcliffe C, Wade R and Wysocki T (2012) *Equity Investment in Privately Financed Projects*, National Audit Office, p. 18, www.nao.org.uk/wp-content/uploads/2012/02/10121792.pdf; Goodley S (2017) 'Carillion has "no future without rights issue of at least £500m"', *The Guardian*, 13 July, retrieved 7 November 2017, www.theguardian.com/business/2017/jul/13/carillion-has-no-future-without-rights-issue-of-at-least-500m.

more effectively than the public sector. But, given the increase in government's commercial capability,⁹⁸ this may no longer be the case. The data should be collated and examined.

Whole-life costs

Beyond delivery on time and to budget, appraisal needs to account for quality and whole-life costs – the total costs of owning an infrastructure asset (the sum of construction, operations, maintenance and finance expenditure).

We heard from some interviewees that one major weakness in the appraisal process is the difficulty of appraising and comparing whole-life costs.⁹⁹ This is largely because there is currently no comparable data on the whole-life costs of historic projects that have been financed publicly or privately. Unfortunately, these data cannot be produced retrospectively. The Government must incorporate a thorough approach to evaluation – of overall costs, delivery to time and budget and the extent to which projects achieved the forecast benefits – into future contracts. The Infrastructure and Projects Authority, given its role at the heart of the civil service's project finance specialism, should mandate departments to collect such data.

Where the data required to evaluate projects will be held by either investors or construction contractors, the Government should write data disclosure into the terms of private finance (and standard public) contracts, to ensure that the public sector has access to the data to evaluate, and compare, performance on publicly and privately financed projects.

Past project data

Collecting, collating and evaluating publicly and privately financed project performance should be part of a broader change in infrastructure policy making: routinely learning from past successes and failures. As the Institute for Government has argued before,¹⁰⁰ it is not clear that data from previous projects are taken into account when appraising projects, despite Treasury guidance that 'data should be collected on all projects and used to aid future assessment... the evidence base will need to be continually refreshed by the incorporation of new information from projects at all stages of procurement and operation'.¹⁰¹

In the case of comparing public and private finance, refreshing the evidence is particularly important now as many studies that concluded that delivering projects through private finance was better value than public borrowing came before the 2008 financial crisis, and so may no longer hold in an era of lower government borrowing costs.

On top of the better use of standard data, evaluation should look at whole-life costs and whether publicly and privately financed projects better identified and realised project benefits.

Quantitative guidance

As noted above, in 2012 the Treasury withdrew its quantitative guidance for comparing public and private finance.¹⁰² This followed criticism that it did not provide a fair comparison.¹⁰³ At the time, the Treasury said that a new version would be published in updated value-for-money guidance but this has not happened. If the weaknesses in

the earlier approach identified above and below can be addressed, then publishing updated quantitative guidance would be beneficial.

The previous guidance¹⁰⁴ compared the costs of private borrowing to the *Green Book* discount rate, set at 3.5%, rather than the cost of government borrowing, which is at present significantly less.* It also assumed that the cost of government borrowing would fall entirely during a project's early stages, whereas the cost of private finance would be spread over the course of the PFI deal, typically 25 or more years.

The National Audit Office reanalysed the financial case for six projects approved in 2010, based on the actual rate of government borrowing (based on 25-year gilt rates), with adjusted cash flows to spread payments over time. This changed five of the six projects it looked at to showing private finance as more expensive than public borrowing.¹⁰⁵

The Treasury disputes that using government borrowing costs is appropriate because tax, spend and borrowing levels are set at annual budgets and these are outside the scope of individual spending proposals. It argues that the comparison should be between using private finance or using existing budget allocation to deliver a project.¹⁰⁶ As individual public authorities cannot spread payments out through borrowing, the relevant question for them is whether using private finance or existing budget allocation is better value.

This is logical but it is not a sensible way of comparing finance options for government as a whole, which does spread payments out through borrowing. In other countries, including France, Germany¹⁰⁷ and the United States,¹⁰⁸ the public sector uses the cost of government borrowing to compare private finance and public spending options.

Both ministers and the Treasury should be interested in whether public borrowing is better value than private finance, because this comparison can help to inform decisions on what future tax, spend and borrowing levels should be. The withdrawn guidance did not answer that question. Better comparison would mean that when borrowing levels are set at annual budgets, it would be possible to set budgets for departments after deciding on their upcoming project portfolios.

New guidance should compare private finance with additional public borrowing, with assumptions that are based on time, budget and whole-life costs from past projects.

Appraisers often have conflicting responsibilities

While lack of evidence is an important problem, the public sector also needs people with the right incentives to objectively appraise finance options. This is particularly important where the assessment uses a quantitative model that is heavily reliant on starting assumptions, because these kinds of models are easy to game.

* It should, of course, be noted that financing projects via government borrowing is subject to greater volatility because governments, unlike project-specific companies, do not hedge against future changes to borrowing costs. If this risk is not incorporated into appraisal, government borrowing may look artificially cheaper over time. Overall, though, government borrowing is still likely to be at a lower rate unless the UK's public finances seriously deteriorate.

At present, the multiple responsibilities of those conducting the finance options appraisal can prejudice the assessment process. This is because the teams who undertake these appraisals in departments are often intimately involved in the project, and may have an interest in ensuring that it goes ahead as either a privately or publicly financed project. This should not be a problem because of the extensive guidance. But in practice, difficulties comparing options, a lack of data, a decline in departmental expertise as the flow of private finance deals has reduced¹⁰⁹ and the multiple roles of appraisers, have become an issue.

Due to a lack of data, the National Audit Office found that project teams and their financial consultants sometimes relied on their own experience and understanding to predict the likelihood of certain risks.¹¹⁰ This is not good practice. Relying on the perceptions of people closely involved with a specific project is likely to lead them to underestimate the costs, times and risks of their favoured options.¹¹¹ By not collecting sufficient data, the Treasury has effectively left project teams to create bespoke, hard-to-audit assessments, where key assumptions are underpinned by estimates made by project promoters.

There is a better way of appraising options – by separating the teams that assess finance options and those that promote the project. This separation can occur within departments – the Department for Transport’s corporate finance team appraises finance options for transport projects, for example – or it can take place within a separate body, typically a PPP unit, as occurs internationally.

The second separation model is less frequent, but international examples of PPP units (public bodies that support government agencies to appraise and procure private finance projects) show that there is at least one example – in South Korea – where finance options appraisal is undertaken independently within the PPP unit (see Table 2).

Table 2: Selected international public–private partnership units

	UK	Australia	Canada	South Korea	United States
	Infrastructure and Projects Authority (IPA)	Infrastructure Australia	PPP Canada (P3 Canada)	Public and Private Infrastructure Investment Management Center (PIMAC)	Office of Innovative Program Delivery
Created:	2016	2008	2008	2005	2008
Reports to:	Cabinet Office and Treasury	Department of Infrastructure and Regional Development; Council of Australian Governments	Ministry of Finance	Ministry of Strategy and Finance	Federal Highway Administration, Department of Transportation
Private finance responsibilities:	Policy; quality control; technical assistance; standardisation; PPP promotion	Policy; quality control; standardisation; PPP promotion	Policy; quality control; technical assistance; standardisation; PPP promotion	Quality control; technical assistance; standardisation; PPP promotion	Quality control; technical assistance; PPP promotion
Independence from day-to-day politics?	Ministerial department	Independent statutory body	Federal Crown Corporation	Affiliated body of Korea Development Institute	Federal Highway Administration
Assesses finance options?	Procuring authorities assess; IPA can provide early support	Procuring authorities assess alongside regional PPP bodies	Works with procuring authorities on options analysis	PIMAC undertakes options analysis	Procuring authorities assess
Reviews/supports finance options appraisal?	IPA supports through gateway reviews and advice	Responsible for PPP policy and guidance; may offer additional support	P3 Canada 'own' gateway criteria for finance options analysis	Undertakes initial appraisal	Federal Highway Administration reviews

Key No Somewhat Largely

Note: This table only considers PPPs at the national or federal level. It does not include bodies such as Partnerships Victoria or Infrastructure Ontario.

Source: Institute for Government analysis of public information on public–private partnership units

South Korea’s Public and Private Infrastructure Investment Management Center (PIMAC) is one of the only PPP units that undertakes finance options appraisal, and appears to have been effective. From its creation in 1999* to 2006, PIMAC rejected 46% of projects submitted to it, compared with 3% that were rejected before. In the same time period, cost overruns on approved major infrastructure projects declined by over 80%.¹¹² Although only indicative, the data suggest that PIMAC is both independent from the South Korean Government and effective at weeding out poor-value projects.

Currently, the UK Infrastructure and Projects Authority is similar to PPP units in Australia, Canada and the United States. If it were to undertake finance options appraisals, it would need to ensure that the appraisal team was clearly separated from its other teams (such as those responsible for encouraging private investment in UK

* PIMAC has only been around in its current form since 2005; but a predecessor body with the same remit was created in 1999.

infrastructure) in order to mitigate concerns that the options appraisal would be tilted in favour of private finance. In PIMAC, there is a clear separation of appraisal and promotion teams.¹¹³

Interviewees raised this concern about the way the Infrastructure and Projects Authority is currently set up. As the Infrastructure and Projects Authority is likely to be involved in the follow-on commercial negotiations if private finance is chosen, interviewees questioned whether it would have the right incentives to provide objective advice to departments on how to finance projects.

5. Budgeting

In addition to appraisal flaws and the combination of accounting and fiscal rules, the way that the Treasury allocates departmental budgets can unduly incentivise departments to use private finance over public spending. Private finance can help departments to accelerate spending approval, provide earlier certainty on project cash flow, and be easier to use when capital budgets are constrained. But these are second-order advantages. They should not be reasons to use private finance unless it offers better value than public borrowing.

Private finance can get a faster sign-off from the Treasury

Capital budgets allocated at Spending Reviews will not always cover all the investments that a department wants to make. In these circumstances, the department has three choices. First, it can try to renegotiate with the Treasury. However, while the Treasury has made adjustments to departmental capital budgets in the past, they are rare and usually small in comparison with overall budgets.¹¹⁴ Second, it can wait until the next Spending Review but this may be two or more years away. Third, it can seek sign-off for private finance through the Infrastructure and Projects Authority PPP team, which is normally a quicker option.¹¹⁵

Private finance can provide more certainty than public funding

In most circumstances, departments must decide how to finance projects before the money for construction is required, and before resource and capital budgets are agreed with the Treasury in Spending Reviews. Yet the planning and preparation time for infrastructure projects will often be longer than a Spending Review period (typically three years,¹¹⁶ although most recently five¹¹⁷) and, as such, a department may not know what its capital budget will be by the time the money for a project is actually required. Departments may therefore prefer private finance in so far as it means, once agreed, they can be sure that money will be available when a project has reached construction stage.

The Institute for Government has previously highlighted the problems that relatively short Spending Reviews create, and called for an extension of both Spending Reviews and the preparation time that departments have.¹¹⁸ That departments have seen private finance as providing more certainty than public finance reflects the limitations of short Spending Reviews. The Coalition Government introduced six-year forward-looking plans for capital spending in some areas,¹¹⁹ and the *National Infrastructure and Construction Pipeline* has provided greater certainty about the upcoming pipeline of potential projects,¹²⁰ but there is still room for improvement.

The way the Treasury allocates resource and capital budgets influences decisions

Finally, the way that the Treasury allocates departmental budgets – either as resources (day-to-day running costs) or capital (investment in and maintenance of assets) – influences departmental decision making. Higher capital budgets make public

spending on infrastructure easier; higher resource budgets make private finance easier. This is because private finance, as noted above, requires a commitment to make regular payments from a resource budget* and spreads payments over time.¹²¹ As well as creating incentives for public spending or private finance respectively, an important second-order consequence of financing infrastructure projects through resource budgets is that it becomes harder for departments and their auditors to calculate the distribution of departmental operational (day-to-day) and capital (investment) spend, and evaluate whether that is suitable.

Above all, the three factors highlighted in this chapter conspire to make private finance look more attractive from a departmental perspective, without good reason. To resolve this, the Treasury needs to treat capital spending, and in particular infrastructure investment, differently.

Infrastructure investment involves managing a portfolio of projects, rather than annual resource spending, and as such requires longer-term planning. Infrastructure projects and contracts span multiple Parliaments. Longer-term planning could give operational departments more certainty on public funding, mitigating the incentive to prefer private finance solely on the basis of certainty.

There is a precedent for this. Capital budgets were planned to 2020–21 in the 2015 Spending Review, whereas resource budgets were planned to 2019–20.¹²² To build on this, the Government should consistently plan capital budgets on a five-year cycle in Spending Reviews. Within capital budgets, the Government should assume that it will spend 1–1.2% of GDP on infrastructure annually between 2020 and 2050, consistent with the fiscal remit it has given the National Infrastructure Commission. This assumption will provide greater certainty to departments about the overall fiscal envelope for infrastructure investment and a clearer indication of their future budgets.

Within the 1–1.2% of GDP committed to infrastructure, the Government should ensure that some of that money is not committed to specific projects – particularly towards the end of the five years – in order to maintain the fiscal headroom to accommodate projects that emerge outside of the Spending Review cycle. Without fiscal headroom, departments may default to private finance for a faster sign-off for projects that emerge outside of Spending Reviews, even where private finance does not provide good value.

Finally, departments should also improve long-term planning. As infrastructure projects have long lead-in times, departments could do more to bring projects, and their potential funding and financing requirements, to Treasury planners earlier.

* The only exception is where project funding comes from consumers, rather than taxpayers.

6. Recommendations

The current UK Government has stated its intention to introduce more private investment into infrastructure.¹²³ It should only do this if private finance for projects provides good value for money. We recommend that the Government takes six concrete steps to ensure that it learns from past shortcomings and assesses options properly.

1. Do not let accounting rules drive poor-value financing decisions

An excessive focus on accounting rules and narrow fiscal targets have created incentives to use private finance where it may not be best value, because many private finance projects are not included in public sector debt. Eurostat rules mean that the Government is unable to include private finance projects within public sector debt.

But the Government could still take steps to ensure that arbitrary accounting and targets do not drive decision making. This will involve the Treasury, the Chancellor and the National Infrastructure Commission making the following changes.

The Treasury should make public both its assessments of comparisons between off balance sheet private finance and other public and private ways of financing a project, and its assessments of the impact of private finance projects using wider measures of public sector debt and liabilities. Then the Treasury – or public bodies themselves – should assess the implications of private finance for the budget flexibility of specific government departments and agencies.

There are also signs that the National Infrastructure Commission's fiscal remit could create a bias for private finance. In order to avoid that, the Chancellor should expand the fiscal remit of the National Infrastructure Commission to include private finance projects, and the National Infrastructure Commission should identify any instances where its recommendations have been informed by the remit, rather than overall value, and the alternatives that could be adopted were the remit to be loosened.

2. Build the evidence on private finance to improve appraisal

The decision on how to finance infrastructure should be evidence-based. Currently, departments are not always collecting, and no single body is collating, data on the construction, operation and management of past publicly and privately financed projects. Appraisal could be improved if they did and if the data were used to update assumptions in value-for-money comparisons. This should not be controversial. Existing Treasury guidance already stipulates that evaluation should routinely feed back into appraisal,¹²⁴ it is a case of making sure that this happens in practice.

For past projects, government needs to collect and collate evidence on cost and quality. Given its role at the centre of the civil service's project finance specialism, the Infrastructure and Projects Authority should mandate that the departments that used private finance to deliver infrastructure in the 1990s measure the whole-life costs and

quality of privately financed assets when they return to public sector ownership. Project X, the Infrastructure and Projects Authority's collaboration with academia to research programme and project delivery,¹²⁵ may be better placed to analyse the data, given existing demands on the Authority.

For future projects, government needs to embed a thorough approach to evaluation at the start of contracts. This will involve planning how it will collect evidence and evaluate future projects at the time of approval. Some departments – including the Department for Education for its Priority School Building Programme – are already starting to do this. By financing similar projects publicly and privately, and systematically collecting data, it will be possible to compare the whole-life costs and quality of each finance option.

Where the data required to evaluate projects will be held by the private sector (investors or construction contractors), the public sector should write data disclosure into contracts. Evaluation should be routine for all departments using private finance to build and deliver infrastructure.

3. Publish new quantitative guidance to improve appraisal

The Treasury's previous quantitative guidance for comparing public borrowing and private finance did not provide a fair comparison. Withdrawing the guidance in 2012 was the right decision given its bias towards private finance, but it needs to be replaced.

As in other countries,¹²⁶ the new guidance should use public borrowing costs to ensure a fair comparison between private finance and public borrowing. It should also recognise that the cost of public borrowing, like private finance, can be spread over time. This will help ministers to understand the actual costs of public spending in comparison with private finance to deliver a project, and could be used to inform decisions on the overall level of government borrowing.

4. Separate financial appraisal from project teams to improve objectivity

Currently, those who assess finance options – staff on project teams – are often heavily involved with project promotion as well. As such, through no fault of their own, they may not be entirely objective.

When compounded with lack of data and guidance, project teams and their financial consultants can end up relying on their personal experiences to predict the likelihood of certain risks. This is far from best practice. In the UK, some departments, such as the Department for Transport, already separate financial appraisal teams from project teams. Some other countries separate their financial appraisal and project teams in PPP units, as South Korea does with PIMAC.

In the UK, this role could either sit within a separated departmental team, or within a separated team in the Infrastructure and Projects Authority.

Whatever the precise format, moving finance options appraisal to a body that has the incentive to provide objective advice on how to finance projects would bring more rigour to appraisal and ensure that the most appropriate option is chosen.

5. Change budgeting to avoid unduly incentivising private finance

Treasury budgeting for capital investment (including infrastructure) – the way that the Treasury allocates money to departments – currently creates undue reasons for departments to use private finance. Even where private finance will deliver poor value for money compared with public spending, it may still look like the best bet to departments: when Spending Review capital budgets are not sufficient, where a department needs to decide how to finance infrastructure before the money for construction is required, and where a department has more resource than capital budget. In these cases, departments look to private finance for accelerated Treasury sign-off, for greater certainty and to spread project capital costs.

To resolve this, the Treasury needs to treat infrastructure investment differently. Infrastructure requires longer-term planning to give operational departments more certainty on public funding, mitigating the incentive to prefer private finance solely on the basis of certainty. The Treasury should continue to plan capital budgets on a five-year cycle at Spending Reviews, operating on the assumption that the Government will spend 1–1.2% of GDP on infrastructure, in order to provide greater certainty to departments about the overall fiscal envelope for infrastructure investment and a clearer indication of their future budgets.

The Treasury should also ensure that some of the 1–1.2% of GDP committed to infrastructure is not committed to specific projects in order to maintain fiscal headroom for projects that emerge outside of the Spending Review cycle, to prevent departments defaulting to private finance for a faster sign-off for projects.

Finally, operational departments should also improve long-term planning. As infrastructure projects have long lead-in times, departments could do more to bring projects, and their potential funding and financing requirements, to Treasury planners earlier.

6. Strengthen civil service commercial expertise

In order to implement the above changes, future governments will need a civil service with greater in-house commercial expertise to evaluate different finance options. To avoid relying on advice from investors and consultants with mixed incentives,¹²⁷ it is essential that senior civil servants understand the implications of different finance options.

Significant progress has already been made in the commercial profession.* As identified in previous Institute for Government research,¹²⁸ successive governments since 2010 have recognised commercial shortcomings and stepped up efforts to improve performance.

In the finance profession, significant progress has been made in establishing clear leadership, establishing a vision and building capability. To date, the focus has been on accounting and financial management, rather than project finance, a recently created specialism, but there are signs that project finance is becoming more integrated within the overall finance profession.

In general, there remains a lack of awareness of the commercial and finance specialisms among departmental executive teams. This restricts their ability to have an input into top-level decision making,¹²⁹ and contributes to a lack of engagement in some contractual and financial issues at the top.¹³⁰

Overall commercial and financial reforms are positive but do not fully address the biggest challenge that the Government faces in picking the best finance option: having the right staff in-house who understand the implications of different options, and who can communicate these to decision makers. To address this challenge, we believe that more could be done to strengthen the civil service's commercial skills, specifically negotiating and managing private finance contracts.

Our research suggests that departments with high capital spend have benefited from greater in-house corporate finance expertise, akin to the corporate finance team at the Department for Transport. How best to enhance civil service commercial capabilities, particularly for private finance, is an issue we will return to in an upcoming report on how to get the best private finance deal for infrastructure.

* The commercial profession is one of the civil service's specialisms, which are 'areas of expertise that provide the professional support and services which enable departments to deliver government policies and programmes'. See Institute for Government (2017) 'Specialisms in the civil service', Institute for Government, retrieved 3 November 2017, www.instituteforgovernment.org.uk/publication/whitehall-monitor/whitehall-explained/specialisms-civil-service.

7. Conclusion

Choosing the right finance option matters, both to create the right incentives to design and deliver high-quality infrastructure and to reduce the overall costs of infrastructure for consumers and taxpayers. The Government is taking this seriously. The creation of the Infrastructure and Projects Authority has strengthened commercial and corporate finance expertise, and it is encouraging to see that 'financing infrastructure in efficient ways [and] getting the right balance between the public and private sectors'¹³¹ is one of the National Infrastructure Commission's seven priorities. But to truly select the best options, the way the Government approaches accounting, appraisal and budgeting needs to change.

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