THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

The ‘make or buy’ decision: the UK’s ‘parastate’ after privatisation and outsourcing

LSE Research Online URL for this paper: http://eprints.lse.ac.uk/120723/

Version: Published Version

Book Section:

Bevan, Gwyn ORCID: 0000-0003-2123-3770 (2023) The ‘make or buy’ decision: the UK’s ‘parastate’ after privatisation and outsourcing. In: How Did Britain Come to This? A Century of Systemic Failures of Governance. LSE Press, London, UK, 139 - 172. ISBN 9781911712107

10.31389/lsepress.hdb.f

Reuse
This article is distributed under the terms of the Creative Commons Attribution-NonCommercial (CC BY-NC) licence. This licence allows you to remix, tweak, and build upon this work non-commercially, and any new works must also acknowledge the authors and be non-commercial. You don’t have to license any derivative works on the same terms. More information and the full terms of the licence here:
https://creativecommons.org/licenses/

lseresearchonline@lse.ac.uk
https://eprints.lse.ac.uk/

6. The ‘make or buy’ decision: the UK’s ‘parastate’ after privatisation and outsourcing

> In the last 20 years, governments in market economies throughout the world have privatized the very state firms in steel, energy, telecommunications and financial services that the Nobel laureates approvingly saw nationalized a few decades earlier. Communism has collapsed almost everywhere in the world, and reform governments throughout the formerly socialist world have embarked on massive privatization programs. The economic policies of developing countries turned squarely to private ownership. In market economies, government provision of such basic services as garbage collection and education has come into question, and has increasingly been replaced with private provision, though still paid for largely from tax revenues.
>
> Andrei Shleifer (1998)[1]

Neoliberal arguments over the role of the state in steering the economy were critical in the breaking of the Attlee settlement. Chapter 5 showed how the accidental logic of neoliberalism played out under the Thatcher settlement for financialisation, including in the housing market. Its initial promise, under the right to buy scheme in the 1980s, was when the market worked. It became dysfunctional with the further development of financialisation. In this chapter I explore the similar fates of privatisation and outsourcing after they were first introduced with the promise of effective use of these markets in the 1980s.

Robert Lucas’s theory of rational expectations justified and enabled the financialisation of the Thatcher settlement. It appealed to neoliberal economists for two reasons. First, it ‘proved’ that any government intervention in the economy would be counterproductive. Second, it healed the division that Keynes had introduced into economics between macroeconomics (steering the economy) and microeconomics (the theory of the firm).[2] But there is a puzzle: if markets are as efficient and effective as required by theory of rational expectations, why do firms exist? Furthermore, as Alfred Chandler

How to cite this book chapter:

Bevan, Gwyn (2023) *How Did Britain Come to This? A century of systemic failures of governance*, London: LSE Press, pp. 139–172.
https://doi.org/10.31389/lsepress.hdb.f License: CC BY-NC

argued in *The Visible Hand*, the economy of the US in the 20th century was shaped by large integrated firms that were run as hierarchies.[3] Why didn't they buy what they needed in 'spot' markets at the lowest obtainable prices? The way Ronald Coase resolved that puzzle enabled the development of the neoliberal approaches that reduced the role of the state through privatisation and outsourcing.

In the summer of 1932, when Coase was 21, he formulated the key ideas of his article on 'The Nature of the Firm', which was published five years later.[4] It laid the foundation of institutional economics, and was one of the two cited in Coase's award of the Nobel Prize in Economics in 1991.[5] In that paper Coase argued that the reason why firms exist is that there are transaction costs of using the market, which include:

- working out the price;
- writing a contract to specify what is to be delivered;
- sharing risks over future uncertainties; and
- monitoring contracts.

Markets work effectively when none of these seem to matter – that is, when these transaction costs are low, as in Adam Smith's famous observation in his *Wealth of Nations*, published in 1776: 'It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest'.[6] These simple commodities illustrate Coase's argument that it often makes sense to use a market for goods. Food is an exemplar of where markets work well. Although the production of food is often supported by government subsidies and subject to special public health regulations, there are some terrible lessons from when governments overreach and try to control its production and distribution. They include the horror of the Holodomor (famine) in 1930s Ukraine under Soviet control, with nearly four million deaths[7] (see Chapter 2), and, in China, about 30 million died between 1958 and 1962, during the 'Great Leap Forward' effort to collectivise farms under Chairman Mao.[8]

Bowles points out that the market works when it is possible to specify what is to be supplied in complete contracts.[9] That is easier to do for goods than for services; for example, a contract with a lawyer is inevitably incomplete. One of Oliver Hart's many papers on the subject of incomplete contracts can be summarised by this equation:

Incomplete contract + intense pressure on costs = quality problems.[10]

Coase's 1937 paper criticised the then extant microeconomic theories of the firm for considering costs of production only, which justified the existence of large firms in terms of the economies of scale of production. Hence his question 'why is not all production carried out in one big firm?'[11] to which

his answer was that such a firm would be unmanageable (as shown by the Soviet centrally planned economy – see Chapter 2). Coase argued that micro-economics had neglected the *transaction costs* of organising production of a good or delivery of a service in the 'make or buy' decision. For example, should BMW make the steel and run dealerships for its own cars, or should it buy steel from other firms and sell its cars to dealers on open markets? Most firms that make cars tend to contract for the steel they need in the market, but manage the service of selling cars through dealership networks.

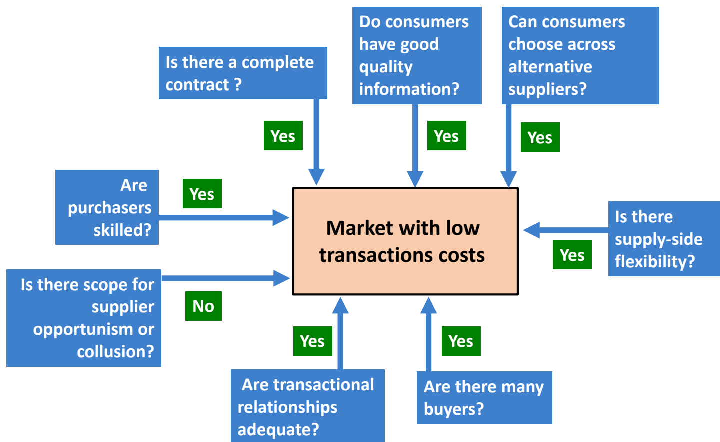
In 1937 Coase was disappointed that his 'elders and betters' at LSE, including the leading protagonists of neoliberalism in the UK, Lionel Robbins and Friedrich von Hayek, showed 'a complete lack of interest' in the publication of his article.[12] Chandler argued, in 1977, that 'until economists analyze the function of administrative coordination, the theory of the firm will remain essentially a theory of production'.[13] In 1988, Coase observed that his article 'had little or no influence for thirty or forty years after it was published'.[14] In the years of the Attlee government, and its 1950s successors, the experience of wartime planning still predominated and was seen as critical in modernising and refounding industries of strategic national importance. One of the perceived advantages of nationalising coal, and later steel, was the promise of economies of scale. Yet gradually the importance of transaction costs was recognised in the development of institutional economics, with profound implications for public ownership.

An influential later framework for analysing the transaction cost economics of 'make or buy' decisions was developed by Oliver Williamson, for which he was awarded the Nobel Prize in Economics in 2009.[15] Figure 6.1 is derived from Williamson's analysis of transaction costs and shows where transaction costs are low and indicates where markets are expected to work well (for example for food, meat and beer).[16]

Working out the implications of the Coasian approach for public sector organisations took time. The 'make or buy' decision of private firms was translated via the influence of US privatisation exponents (like Shleifer quoted at the start of this chapter) and neoliberal think tanks into a 'new public management (NPM)' approach for governments.[17] This doctrine asked of every state activity whether the government should be 'rowing or steering' – where rowing meant directly producing services with its own staff, and steering meant allocating contracts to other suppliers (such as firms or perhaps non-governmental organisations).

This chapter applies the economics of transaction costs to explore the implementation of new public management in the UK. The first two sections look at the privatisation of state-owned enterprises and consider the more problematic privatisation of vital services. The third section illustrates how some general problems of government outsourcing contributed to the catastrophic failure of NASA with the *Challenger* tragedy – notably, the 'fundamental transformation' from there being competition in bidding for a contract, but a bilateral monopoly after the contract has been awarded, plus the pressure to

Figure 6.1: A market with low transaction costs



Source: Author.

economise on an incomplete contract. The final section identifies some key problems of the UK's 'parastate' as government has become so dependent on outsourcing to contractors.

6.1 Privatising industries – coal and steel

Figure 6.1 indicates that for industries like coal or steel there would be low transaction costs from using the market to supply what the country needs. So was the Attlee government mistaken in deciding on nationalisation because they were vital as 'the commanding heights of the economy'? My first job, in the late 1960s, was working for the National Coal Board (NCB). I had huge admiration for the exceptional individuals who had risen to be managers of collieries and of the West Wales area. I remember Ron Walker, who had left his elementary school at age 14, and, as the general manager of Wyndham Western colliery in Ogmore Vale, turned round its performance from losing £0.5 million a year to making a profit of £0.5 million a year. I learnt that the NCB served three vital functions for the UK that are omitted from analysis of the transaction costs of the 'make or buy' decision.

First, the reason I joined the NCB was that its Operational Research Executive offered one of the best training schemes in mathematical modelling. Alf Robens, the then chairman of the NCB, argued that it was quite appropriate for a *nationalised* industry to produce not only coal but also skilled manpower for other industries in Britain through its apprenticeships. That ended with privatisation.

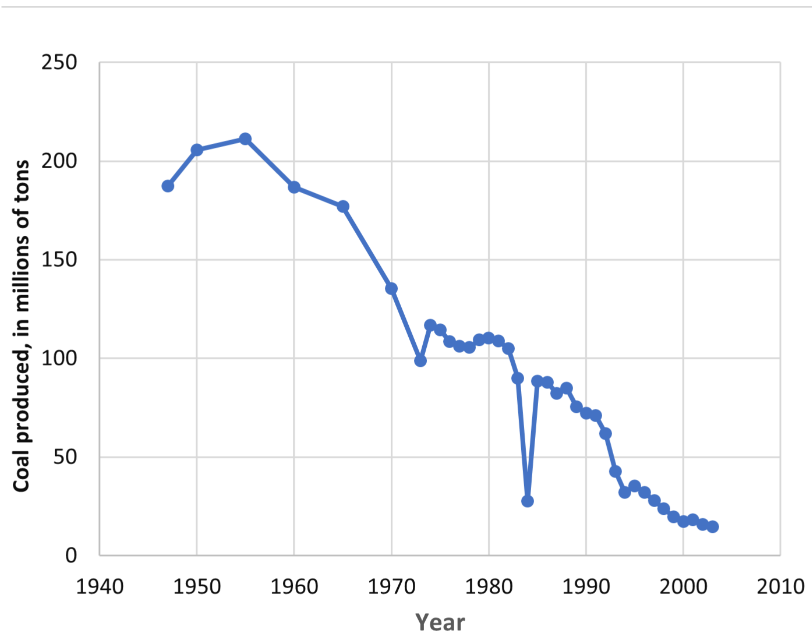
Second, the NCB was required to operate in the 'public interest' by meeting the nation's need for coal and breaking even financially over good and bad years. The NCB was established on 1 January 1947, at a time when there was no alternative of oil or gas. In its early years the NCB was required to import coal

and sell it at a loss. In planning its production to meet the future need for coal in the 1960s, it made good forecasts of the total demand for energy but underestimated the growth in the supply of oil. The excess investment in the coal industry can be seen as a cost of making the UK resilient to an uncertain future. Whether planned investments turn out to be 'economic' depends on unforeseeable developments, as we have been forcefully reminded after Russia invaded Ukraine in February 2022 and put at risk the gas supplies to Europe.

Third, in the planning of colliery closures, the NCB tried to maintain employment in the economically vulnerable areas of Britain: Scotland, the North East and North West of England, and Wales. These areas were where successive post-war governments had failed to diversify industry, as recommended by the 1944 White Paper (see Chapter 3). Unfortunately, because of the geology of Britain, they were also where the uneconomic collieries were concentrated. The most economic UK mines were in the Midlands (Nottinghamshire and Derbyshire), where the coal seams were thicker and had few geological faults. In the older coal seams in the rest of Britain, geological faults meant mechanised coal faces had to stop whenever the coal seam suddenly disappeared. The colliers would then be unable to produce coal until the seam was refound, new underground roadways developed and the machinery to cut coal and take it away had been reinstalled.

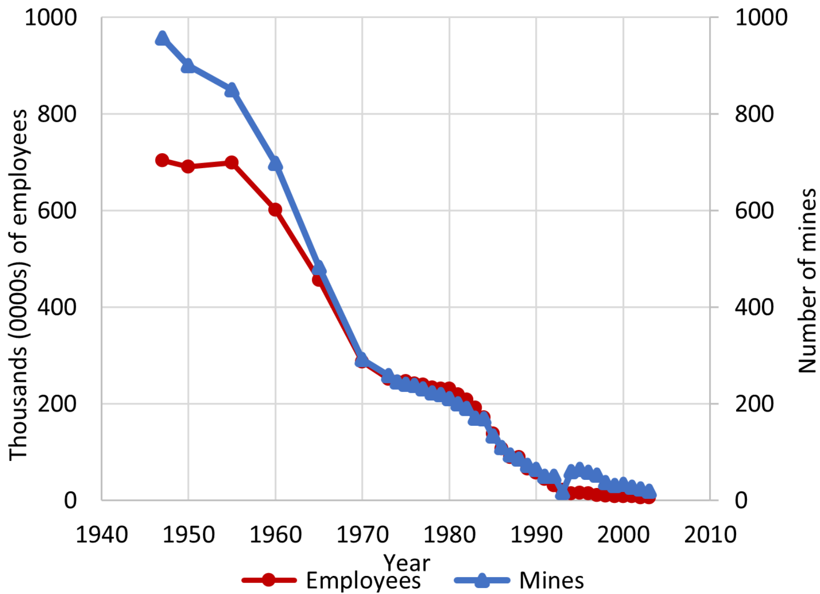
Figure 6.2 shows that the NCB's output peaked at 211 million tons of coal in 1955, and then was reduced to around 100 million tons by the start of

Figure 6.2: UK coal production (in millions of tons), from 1945 to 2003



Source: Access to Mineral Heritage.[18]

Figure 6.3: The numbers of coal mines and thousands of mining employees, from 1945 to 2003



Source: Access to Mineral Heritage.[19]

the 1970s. Figure 6.3 shows how the decline in production was accompanied by much greater reductions in the numbers of collieries and employees, with sharp reductions in the 1960s. The average outputs per mine and employee in 1947 were 196,000 and 266 tons, and in 1970 were 475,000 and 463 tons. The NCB had managed the decline of employment in the coal industry from over 700,000 in 1948 to around 200,000 in the early 1980s without devastating mining communities. The nationalised Central Electricity Generating Board had bought 40 per cent of the NCB's coal in long-run contracts.

In the 1980s, the privatised distributors of electricity were troubled about the security of supplies of coal. Krugman describes how the privatised gas industry enjoyed 'very lax control over prices'. So the privatised electricity companies, 'in a dash for gas', developed their own supplies, which rang the death knell of the coal industry.[20] Figures 6.2 and 6.3 show its demise after the strike in 1984 to its privatisation in 1994.

In the early 1970s, the coal and steel industries employed 320,000 and 250,000. By 2020, each employed 44,000.[21] That chaotic reduction ripped the hearts out of communities that became known much later as 'left behind', in Scotland, Wales and the North West and North East of England. The Thatcher government's combination of a high exchange value for pound sterling and privatisation increased unemployment to its peak in the mid-1980s. The South East, East Anglia and the South West were the regions with unemployment

rates lower than the national average. John Muellbauer and David Soskice highlight the way in the 1980s that job losses were geographically concentrated, with 12 local authorities losing over 20 per cent of their jobs.[22]

In 2021, Aaron Atteridge and Claudia Strambo, for the Stockholm Environment Institute, looked back at the long and steady decline of the steel industry across the UK. They argued that replacing well-paid, highly skilled jobs with low-paid, unskilled jobs (for example, call centres and distribution centres) showed no change in unemployment statistics. But the communities lost their engines of prosperity and the workers their identity. Atteridge and Strambo were bewildered that, after the closures of steelworks at Corby in 1979 and Consett in 1980, there was no development of the railway infrastructure needed to take advantage of Corby's proximity to London, and Consett lost its railway line when male unemployment was almost 100 per cent.[23]

Yet Atteridge and Strambo argued that in the 2020s Western governments would be mistaken to try to stem the further decline of the steel industry. In 2019, John Collingridge pointed out in *The Times* that the metals tycoon Sanjeev Gupta was now the main owner of UK steel manufacturing. He was born in India. In the early 1990s, he began studying economics at Cambridge but switched to economics and business management to free up time to work on starting up his company selling chemical products to Nigeria, making £1 million a day.[24] In 2019, Collingridge described Gupta's steel empire as built on:

> a fragile and interdependent ecosystem: politicians desperate to save jobs in tired industries, companies keen to shed problematic assets, financiers eager to package and sell government subsidies, and investors hunting for yield in the ultra-low rates environment.[25]

In April 2021, the Scottish government took a £161 million provision against a guarantee of £586 million in December 2016 that 'allowed Gupta's family business to acquire the smelter in Lochaber, near Fort William, and two nearby hydropower plants from Rio Tinto'. (The total size of that guarantee only emerged after a nearly two-year freedom of information campaign by the *Financial Times*.[26]) In July 2022, the *Sunday Times* pointed out that Gupta's business empire had 'contributed less than £5 towards the £330 million purchase of a smelting plant in the Highlands'.[27] On 30 June 2021, Liz Truss (then international trade secretary), under pressure from Kwasi Kwarteng (then business secretary), overruled the recommendation made two weeks earlier by the Trade Remedies Authority and introduced emergency legislation to protect privatised domestic steel producers from a flood of cheap imports.[28] In January 2023, the *Financial Times* reported that the government was:

> poised to sign off a support package for British Steel and Tata Steel UK worth over half a billion pounds in a move that will be tied to Britain's two biggest steel manufacturers switching to green technology.[29]

There have been a number of issues with Gupta's GFG Alliance companies. Its long-time auditor, King & King, 'resigned from its role at his UK steelworks after it was blocked from stating there was insufficient information to complete its work', and King & King was 'under investigation for previous audits of Gupta's companies'.[30] The UK's Serious Fraud Office and French police were 'investigating over suspected fraud and money laundering. GFG has consistently denied any wrongdoing.'[31]

6.2 Privatising key service industries

Williamson's framework (see Figure 6.1) suggests that privatising coal and steel is straightforward compared with privatising *public service industries*, where there were either small numbers of competitors (for example, electricity, gas, railways) or a natural monopoly (only one enterprise can deliver water to any given house or enterprise). In these and other industries there are strong network effects or economies of scale. The Thatcher governments believed that, as the privatisation proponent Shleifer had argued, these potential market failures could all be handled by careful design of contracts and regulation. And, in the 1980s, the privatisation of electricity, gas and water seemed to be working. But two problems developed from financialisation of the providers. First, the focus on making profits and increasing shareholder value encouraged opportunism and mergers and acquisitions that reduced competition. Second, there were weaknesses from 'light-touch' regulation. In agrarian societies it paid poachers to turn gamekeepers, but the remuneration packages offered to senior executives in privatised public services far outstripped the salaries paid to the regulators.

Privatisation of energy. The regulator, OFGEM, aimed to enable competition and to drive down prices and develop new products and services for consumers by encouraging new entrants into the delivery of electricity to users.[32] Unfortunately, OFGEM neglected the importance of supplier resilience. OFGEM's strategy to increase the number of competitors resulted in 26 small and medium-sized operators going bankrupt, by February 2022, from the energy price spike during the Russo-Ukraine war.[33] The cost to the taxpayer for finding alternative suppliers to take on customers from just one of these firms (Bulb) was estimated by the Office for Budget Responsibility, in November 2022, to be *£6.5 billion*.[34] OFGEM's chief executive, Jonathan Brearley, recognised that they should have been 'more careful' about the financial resilience of new entrants, and that 'with hindsight we would have done something differently'.[35]

In 2018 and 2019, Toshiba and Hitachi decided to abandon construction of new nuclear plants in Cumbria and North Wales.[36] In April 2022, the government published a policy paper, *British Energy Security Strategy*.[37] Michael Grubb's expert commentary in the *Financial Times* highlighted its failures in meeting the challenges of the short-term crisis over the supply of

gas and the longer-term reconciliation of meeting the nation's energy needs and reducing greenhouse gas emissions.[38] Gas accounts for a large amount of electricity generation in the UK. In 2017, Centrica, the privatised UK energy group owning British Gas, decided to close Rough, its large gas storage facility off the Yorkshire coast, because failures in its ageing wells meant that it could no longer be operated safely. This facility accounted for 70 per cent of UK's gas storage capacity. That year, Andrew Ward reported in the *Financial Times* that:

> officials at the Department for Business, Energy and Industrial Strategy said they were neither surprised nor worried by the loss of Rough, arguing that the market had coped well without it over the past year,

and that:

> National Grid, which operates the UK gas transmission system, said in its annual winter outlook last week that it was confident there would be adequate gas supplies this winter despite the absence of Rough.[39]

In November 2022, Nathalie Thomas noted in the *Financial Times* that Rough had been reopened, but could operate only at about a fifth of its previous capacity. Prior to that change, the UK's total storage capacity could meet five days of gas demand, compared with 112 days for France, 111 in Germany and 97 in Italy.[40]

Privatisation of the rail industry. In 1996, the two objectives of the Major government when privatising rail were, according to Michael Moran's *The British Regulatory State*: to extract maximum short-term revenue, and to head off public ownership by a Labour government in anticipation of the 1997 general election.[41] The first reason is why the country has its current system of rail operators.[42] The second reason explains the haste with which privatisation was enacted in 1996, and 'the sketchiness of the preparation with which complex institutional changes were implemented'.[43] Richard Wellings pointed out that:

> In terms of transactions cost economics, the UK railway experiment suggests that integration is indeed superior to fragmentation as a mode of railway operation, and that it was no accident that railways developed as vertically integrated entities under market conditions. The key transaction costs of opportunism (in this case, reducing inputs by the seller), bounded rationality (limited awareness of this reduction on the part of the buyer), and the dissipation of asset-specific (i.e. railway) skills actually increased rather than decreased under the new approach.[44]

In 2003, Moran described the 'catastrophic condition' of the British railway system: the lack of a reliably timed railway network, the highest rail fares in Western Europe, railways more deeply in debt than the old nationalised British Rail, and a bankrupt manager of the rail network infrastructure (Railtrack, which had to be renationalised as Network Rail). The 2021 review of the privatised railway system stated that 'Around half of trains in northern England and a third of trains nationally were late in 2019/20. This has barely improved in the past five years'.[45] The current regulator, the Office of Rail and Road (ORR), aims to make the rail industry competitive and fair.[46] Helen Pidd reported in *The Guardian* that, under the rules of the ORR, when a rail company pre-emptively cancelled trains up to 10pm the night before, these were excluded from the company's reported performance.

> Figures obtained by the Guardian show that during the October half-term holiday, TransPennine Express (TPE) cancelled 30 per cent of all trains, and at least 20 per cent each subsequent week until 20 November … Yet when it submits its performance statistics to the [ORR], TPE will report cancellations of between 5.6 per cent and 11.8 per cent for the same period.[47]

On 27 October 2022, the Mayors of West Yorkshire, Greater Manchester, South Yorkshire, North of Tyne, and the Liverpool City Region issued a joint statement on the parlous state of the privatised railway services in their areas:

> Thousands of last-minute cancellations continue to make life miserable for people in the North, and cause serious damage to the economy … We need an urgent meeting with Ministers to agree a long-term plan for the future. Our transport network has been starved of support for years. This is derailing our plans for a strong Northern economy. We need to explore potential for more devolved and local control of our railways so they can be integrated into public transport systems within city-regions. If 'levelling up' is to be more than a slogan under the new Prime Minister, then he must give us the rail funding and powers we need to deliver.[48]

Privatisation of water and sewage. On 8 August 1989, on his appointment as director general of water services (Ofwat), Ian Byatt explained that his primary duty was:

> to ensure that the functions of water and sewage undertakers are properly carried out and that Appointees can finance them. Subject to that I must protect customers, facilitate competition and promote economy and efficiency. … But, because of the limitations on direct competition, consumers cannot look to market mechanisms

> to protect them from unnecessarily high charges or a poor service or both. My objective will be to achieve through regulation the same balance as would otherwise be achieved by competitive markets.[49]

On 30 June 2023, a leader in the *Financial Times* observed that:

> Running a water utility — a natural monopoly selling a basic necessity to a captive market — ought not to be difficult. The terms of England's experiment with privatising former publicly-owned regional water companies, where they started out with zero debt, seemed especially propitious.[50]

When 10 English regional water companies were privatised, in 1989, they were listed on the London Stock Exchange. In May 2023, *The Guardian* reported that, in 2002, Chris Goodall had highlighted the regulatory risks from the takeover of Southern Water by private equity (PE) shareholders and that, although that report would normally have been released under the 20-year rule, it was being kept secret. Goodall had predicted that:

> Large external private equity shareholders would load the company with debt and Ofwat inevitably would lose any regulatory control. For example, it would prove extremely difficult to ensure that water companies invested enough in sewage control.[51]

In his review of Byatt's book in the *Financial Times*, in 2020, Max Wilkinson points out that takeovers by private equity and sovereign wealth funds:

> resulted in opaque and labyrinthine ownership structures, blurred lines of responsibility, subsidiaries in the Cayman Islands, a delisting of most companies and a sense that financial engineering had become more important than providing a service.[52]

Chapter 1 showed that regulatory failure over the neglect of patients at Mid Staffordshire NHS Foundation Trust was in part a result of two regulators established at different times with different remits working independently of each other. This chapter has also identified regulatory failure in the privatised energy industries to secure the UK's future supply. Both kinds of failure apply to regulation of the financialised water industry by Ofwat and the Environment Agency. Dieter Helm described the 'spectacular failure' of the:

> belief in light-touch regulation. So, regulators decided that the balance sheets were a matter best left to the companies, and, even worse, positively incentivised them to borrow by mortgaging the assets and paying out the proceeds to investors.[53]

Oliver Bullough, writing in *The Guardian*, in August 2022, on 'Sewage sleuths: the men who revealed the slow, dirty death of Welsh and English rivers', observed:

> I mainly write about corruption and kleptocracy, but what's extraordinary is how similar the situation around environmental enforcement is to that around financial crime. On paper, the laws are perfectly acceptable and regularly updated. The problem is that they are rarely, if ever, enforced. The result is government by press release; Potemkin enforcement; regulatory theatre; decriminalisation by underresourcing.[54]

Ofwat's statutory duties include: protecting the interests of consumers; promoting effective competition; ensuring the supply of water and disposal of sewage is properly carried out and that their systems are resilient to long-term needs.[55] Evidence to the House of Lords Industry and Regulators Committee highlighted the problem of ambiguity over resilience given the pressure to keep prices low: these have been falling in real terms for 25 years.[56] The outcome has been that 'Under present plans, the UK will not have built a single new major reservoir between 1991 and 2029'.[57] The Environment Agency was established in 1996 from the staff of Her Majesty's Inspectorate of Pollution, National Rivers Authority and 83 Waste Regulation Authorities from local authorities. There is ambiguity over its primary role as a 'champion' of sustainable development or the environment.[58] The report from the House of Lords Industry and Regulators Committee, in 2022, concluded that there has been 'a clear lack of effective co-ordination on issues such as Environment Agency outputs not aligning with what Ofwat deems financeable, and ineffective information-sharing'.[59] The development of a reservoir now recognised 'as important strategic water resource for water security in the south-west of England' (Cheddar) was refused by Ofwat, after its development had been approved by the Environment Agency in 2014.[60]

In his evidence to the House of Lords Industry and Regulators Committee, Professor Ian Barker stated that 'there has progressively been a reduction in the grant in aid given to the Environment Agency', which means that it 'does not have adequate resources to monitor and enforce'.[61] The House of Lords Report identified the problem of over-reliance by Environment Agency on self-monitoring by water companies.[62] The report showed that Ofwat and the Environment Agency have been playing catch-up for past failures to tackle growing problems:

> In 2019 Ofwat fined Southern Water £126 million after concluding that it had underinvested in a number of its works, leading to equipment failures and sewage spills. The company had also 'manipulated its wastewater sampling process' to avoid revealing the sites' performance and so avoid penalties under Ofwat's incentive scheme.

> Separately, in 2021 the Environment Agency prosecuted Southern Water for breaches of the conditions of its permits which had resulted in the dumping of *billions of litres of raw sewage* into the sea over several years. The company admitted *6,971 unpermitted spills* from 17 sites in Hampshire, Kent and West Sussex between 2010 and 2015. The £90 million fine for the spills was the highest ever awarded by a court for a sewage discharge permit breach.[63] (emphasis added)

In July 2022, the Environment Agency's report for 2021 gave this damning assessment of the environmental performance of England's water and sewerage companies:

> In 2021, the environmental performance of England's 9 water and sewerage companies was the worst we have seen for years. Measured against our four-star rating, most of them went the wrong way: down. Four companies (Anglian, Thames, Wessex, Yorkshire Water) were rated only 2 stars, which means they require significant improvement. Two (Southern and South West Water) fell to 1 star, the bottom of our star ratings, meaning their performance was terrible across the board.[64]

Numerous press reports in 2022 highlighted the issue of sewage dumping in places like Cornwall.[65] The Environment Agency called for a major strengthening of its enforcement powers, including:

- Courts should be able to impose much higher fines for serious and deliberate pollution incidents – although the amount a company can be fined for environmental crimes is unlimited, the fines currently handed down by the courts often amount to less than a chief executive's salary.
- Prison sentences should apply for chief executives and board members whose companies are responsible for the most serious incidents.
- After illegal environmental damage, company directors should be struck off so they cannot simply move on in their careers.[66]

In June 2023, Thames Water, which featured prominently in Oliver Bullough's article, was described by a leader in the *Financial Times* as:

> a specially problematic case. Years of poor performance have combined with the rising costs of servicing its £16bn debt – in part a legacy of its previous ownership by Australia's Macquarie, which extracted supersized returns to leave it unable to fund all of its projected spending in coming years ... News this week that the government is on standby to take Thames Water into temporary

> public ownership in case of its potential collapse is another sign that the great experiment has failed.[67]

Gill Plimmer and Nic Fildes, in the *Financial Times*, described how Macquarie had had 'extracted supersized returns' from owning Thames Water from 2006 to 2017. Over that period, it took £2.7 billion in dividends and £2.2 billion in loans, increased the pension deficit from £18 million to £380 million in 2017, and increased Thames Water's debt from £3.4 billion to £10.8 billion.[68] They also pointed out that:

> Macquarie's decision to take over Southern Water — another UK water utility facing huge investment challenges — as it teetered on the brink of bankruptcy in 2021 was *welcomed by the water regulator Ofwat*. (emphasis added)

6.3 The makings of the Challenger tragedy

In the 1930s, Coase considered the 'make or buy' decision from the perspective of a firm, as detailed at the start of this chapter. Writing 50 years later, Andrei Shleifer argued that the same questions were just as relevant for government:

> Suppose that the government wants to have a good or service delivered to some consumers. The product can be food or shelter, steel or phone service, education, health care or incarceration. The government might wish to pay for some of this good and service out of its budget, or it may have views on the characteristics of this good, such as the price, even though the consumers buy it on their own. Should the government hire its own employees to deliver the service, or should it relinquish the provision to a (possibly regulated) private supplier? Does the mode of provision matter even when the government pays?[69]

Shleifer developed three arguments. First, public finance does not entail public ownership. Moving from public to private ownership in delivering public services brings a drive to seek economy, which Shleifer recognises also brings the risk of this being done at the expense of unacceptable reductions in quality. Second, in principle, governments can ensure private firms deliver on social goals through the design of their outsourcing contracts. Third, private ownership 'is the source of capitalist incentives to innovate'.[70] Schleifer concluded that government ought to restrict managing the delivery of a good or service only to those where the alternative of using a market would be clearly expected to fail. To illustrate the limited scope of that residual category he gives an example where innovation is unimportant – Air Force One, the aeroplane used by the president of the US.

Although Shleifer envisaged the private sector to have a monopoly on innovation, Mazzucato has argued on the contrary that many transformational innovations originate from substantial investment by government, including the technology that underpinned the iPhone, the internet, GPS navigation systems, touchscreens, pharmaceuticals, energy (nuclear, solar and fracking), battery storage, and Google's algorithm. In all these areas the private sector has been good at exploiting government-funded breakthroughs in technology for private gain and taking the credit.[71] The NASA space programme has resulted in an impressive set of technological innovations.[72]

On 12 September 1962, John F Kennedy declared 'We choose to go to the Moon in this decade and do the other things, not because they are easy, but because they are hard'.[73] And, with five months to spare, NASA delivered: its Apollo programme succeeded in putting a man on the Moon on 20 July 1969, relying on multiple different private contractors work across multiple aspects.

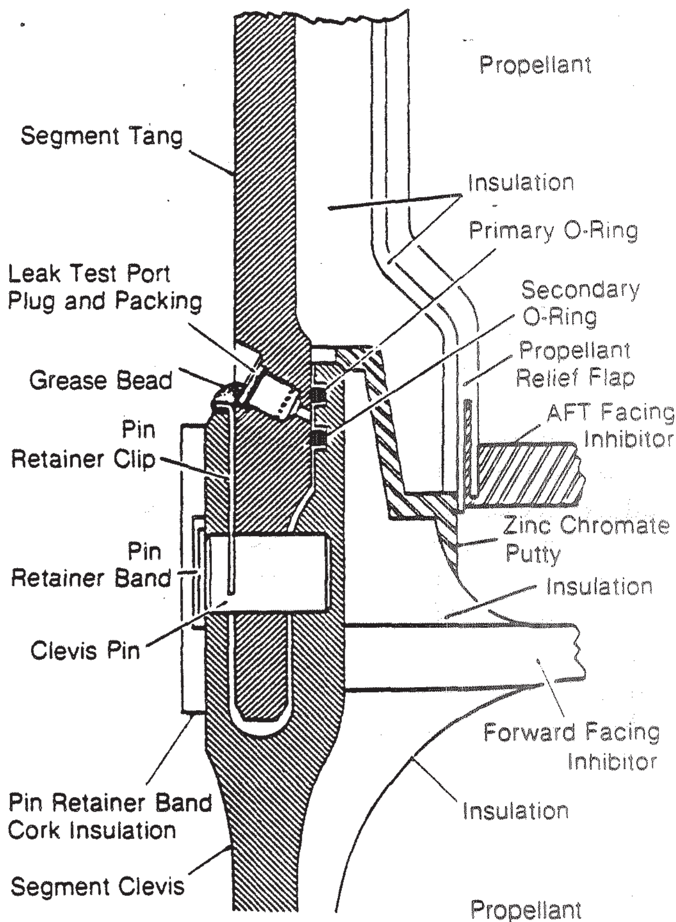
Richard Feynman describes how, paradoxically, that stunning success of the Apollo programme created a problem: the federal government could justify neither firing the people working for NASA nor maintaining its continuing astronomic claim on taxpayers' money. The new political settlement that the president and Congress reached with NASA required it to demonstrate economy and regularly put astronauts into space in earth orbits. The space shuttle was the logical outcome of that new settlement: its vehicle (but not its booster rockets) could be reused to enable a schedule of regular launches. Feynman argued that to convince Congress of the programme's viability NASA needed to exaggerate the economy and safety of the shuttle and how often it could fly.[74]

NASA decided that the best way to ease its severe budgetary constraints was to win political support for increasing its funding by putting a teacher in space. After President Ronald Reagan announced that to be NASA's objective, in his State of the Union address of 28 January 1985, the clock started ticking for the agency.[75] Failing to meet that objective before the next year's address would raise questions about its capability. NASA's ploy certainly captured the public's imagination: 11,000 people applied to be the teacher in space.[76] Christa McAuliffe, who was chosen for *Challenger* flight 51-L, was going to conduct experiments and teach two lessons from the space shuttle. NASA gained publicity to dream about: pupils in schools across the nation would watch the launch live on television.

The shuttle's launch rockets were designed and built by the major system integrator company Morton Thiokol. They employed a two-piece design for fixing two booster rockets to the main rocket bearing the shuttle. This 'Tang and Clevis' equipment moved apart during the launch and its two rubber O-rings needed to be flexible to seal off the gap between them and its fuel tanks from the hot gases emitted by the rocket (see Figure 6.4). However, Thiokol found that for launches at cooler temperatures, because the rubber O-rings were less flexible, they eroded, increasing the risk of explosion. To fix

that problem would incur costs and cause delays, which conflicted with the overriding objectives of NASA's top management. Hence these problems were ignored in what Diane Vaughan memorably described as the 'normalisation of deviance'.[77] Although erosion of O-rings was not allowed for as part of the original design, this came to be 'normalised'. The company's stance continued even after it was discovered in April 1985 that the primary O-ring seal had been so eroded that it did not seal and this had caused the secondary O-ring to begin to erode.[78]

Figure 6.4: NASA diagram showing tang, clevis and O-rings in its *Challenger* booster rocket



Source: Presidential Commission on the Space Shuttle Challenger Accident. Public domain.[79]
Note the tang is labelled 'segment tang', the O-rings are 'primary O-ring' and 'secondary O-ring' and the clevis 'segment clevis'

Challenger flight 51-L was originally scheduled for July 1985. It was postponed to November 1985, and then five more times to January 1986. On 27 January, the day before President Reagan's planned State of the Union address, events unfolded as follows (all at Eastern Standard Time):

2pm: NASA decided to postpone the *Challenger* launch *yet again* to the following morning.

2.30pm: NASA asked Morton Thiokol to review the risks given the forecast of an overnight low of 18°F (−8°C). Their engineers believed this could mean that the O-rings would be too stiff to be effective.

8.45pm: At the teleconference between NASA and Morton Thiokol, the company's vice president for the shuttle boosters, Joe Kilminster, said that he could not recommend a launch at any temperature below the limit of their experience (i.e. below 53°F). NASA responses were 'appalled': 'The eve of a launch is a hell of a time to be inventing new criteria'; 'My God, Thiokol, when do you want me to launch, next April?' Kilminster asked for a five-minute offline caucus for the Thiokol personnel, which lasted for half an hour, in which one of them was told he had to 'Take off his engineer's hat and put on his manager's hat'.[80]

10.30pm: Thiokol decided to recommend the launch.[81]

So, on the morning of 28 January, children in schools across the US watched *Challenger* launch at 11.38am and explode 73 seconds later, killing all seven crew members instantly.

This chapter has applied Oliver Williamson's conceptual framework to examine how Shleifer's argument has worked in the UK in outsourcing public services. Figure 6.5 uses that framework to formulate seven questions that indicate why using a market can fail because of high transaction costs. Each is grounded in departures from the assumptions required by models that 'prove' markets work best: the buyer has perfect information and can write a complete contract; there are so many buyers and many sellers (with no barriers to entry) so that the departure of any single buyer or seller has no impact on the functioning of the market; and a transactional relationship does not impair the 'atmosphere' in which a service is provided (for example, professionally or voluntarily).

Figure 6.6 uses the seven questions from Figure 6.5 to identify where the decision to outsource has high transaction costs and hence may fail. All of these conditions applied to NASA's contract with Morton Thiokol, which had five primary causes of market failure:

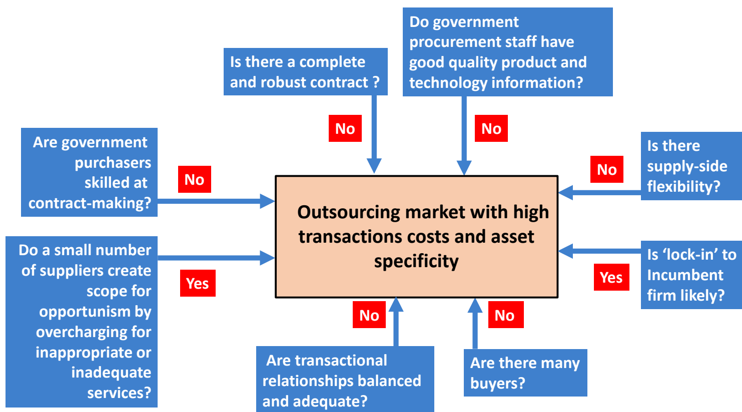
1. Although four firms competed for the initial contract, after it was awarded to Morton Thiokol there was what Williamson describes as a 'fundamental transformation' to Thiokol having a monopoly.

Figure 6.5: Seven questions that indicate where a market may fail

Question	High transaction costs in using a market
1. Can a complete contract be specified?	No. This could be because: – the buyer is uncertain over when and at what scale a service will be needed; or – the service needed is too complex to be specified in advance; or – the buyer is uncertain *and* the service needed is complex.
2. Is the buyer able to assess the adequacy of the quality and costs of what is supplied?	No, and they would find it costly to try to find out if the supplier is overcharging for the volume and quality of services supplied.
3. Is there supply-side flexibility?	No: there is a small number of suppliers, those that fail do not exit the market, and the dominant suppliers are not challenged by new entrants.
4. Are there many buyers?	No: the supplier in the contract has had to invest in assets (equipment and staff) that are specific to the buyer.
5. Is the transactional relationship between buyer and supplier adequate to cover all aspects?	No: the buyer's experience of the quality of service supplied is impaired by a transactional relationship – 'atmosphere' matters.
6. Is there scope for suppliers to behave with opportunism?	Yes: the buyer is vulnerable to being exploited by being overcharged for an excessive or inadequate volume of services of poor quality.
7. Is the buyer a skilled purchaser?	No. This could be because: – the suppliers bring their 'five star generals' to negotiate with the buyer's junior staff; – the contract is one-off; or – the service is so complex and uncertain that there is no 'learning by doing' from contracting over time.

2. Thiokol's assets in this area were specific to NASA: there were no other buyers for a booster rocket for the space shuttle.
3. The contract for the costly research and development to develop and produce the booster rocket was a one-off contract, so NASA had no opportunity to do repeated 'learning by doing' and develop into a skilled purchaser.
4. Research development is complex and uncertain so NASA could not write a complete contract to specify what Morton Thiokol ought to do. And when NASA most needed to launch *Challenger* they were dismayed at Morton Thiokol introducing new criteria that it would not be safe to do so: the need to launch in cold weather was not specified in the initial contract.

Figure 6.6: A market with high transaction costs



Source: Author.

NASA chose Morton Thiokol because it could 'do a more economical job than any of the other proposers in both the development and the production phases of the program'. But Thiokol's proposal ranked worst amongst the four bidders in terms of 'design, development and verification'.[82] Vaughan found that NASA's contract was designed to generate financial incentives for Thiokol that 'prioritized cost saving and meeting deadlines over safety'.[83] Budgetary pressure on an incomplete contract always requires careful monitoring of quality, but that pressure also makes that difficult to do, as in this case.

The Rogers Commission described how NASA's 'silent safety program' developed:

> The unrelenting pressure to meet the demands of an accelerating flight schedule might have been adequately handled by NASA if it had insisted upon the exactingly thorough procedures that were its hallmark during the Apollo program. An extensive and redundant safety program comprising interdependent safety, reliability and quality assurance functions existed during and after the [1960s] lunar program to discover any potential safety problems. Between that period and 1986, however, the program became ineffective.[84]

When there are many buyers and sellers, failing suppliers exit the market over time. But the 'fundamental transformation' meant that NASA and Morton Thiokol were locked into a bilateral monopoly. Diane Vaughan has analysed in detail what the consequences were for these two parties after catastrophic public failure. NASA did not terminate its contract with Thiokol: to have done that would have meant finding another supplier, with increased costs and delays to the launch schedule.[85] If Thiokol had accepted legal liability for the accident, this would have brought social stigma, limited its ability to compete

successfully for future government contracts, and left it vulnerable to being sued by private parties. So, after the accident, NASA and Thiokol agreed to avoid litigation of that issue to avoid incurring additional costs.

NASA paid Thiokol $800 million in its initial contract, and $505 million (at no profit) 'to redesign the field joint, rework existing hardware to include the redesign, and replace the reusable hardware lost in the Challenger accident'.[86] Thiokol agreed to a $10 million reduction in the incentive fee it had earned under the contract at the time of the accident[87] (approximately $75 million).[88] My estimate is that the cost to Thiokol of the accident was less than 1 per cent of NASA's total payments.

Now consider two thought experiments of different arrangements for booster rockets:

1. Thiokol was one of a large number of suppliers in a mass market, and
2. NASA managed its own rocket development and production in-house.

In the first thought experiment, the overriding objective concern of Thiokol's managers would have been to preserve their market share. So, it is likely that they would have told NASA it was not safe to launch on 27 January 1986. Where the market works, as Samuel Bowles argued, 'prices do the work of morals, recruiting shabby motives to elevated ends'.[89] In the second thought experiment, we know NASA managers were driven by making economies and meeting the demanding schedule for launches – not the safety of the astronauts. So, with in-house production it is likely that they would have gone ahead with the launch on 27 January 1986. (Recall here that Chapter 1 described how the managers at Mid Staffordshire NHS Foundation Trust were driven by making economies and meeting waiting time targets, not the care of patients –with catastrophic consequences.)

6.4 Outsourcing and the UK's parastate

In England in the 2020s, about a third of what the government spends on goods and services is outsourced. Brilliant economists have described how policymakers ought to aim to:

1. *Develop into a skilled purchaser* able to choose between competing outsourcers that all have the capability to deliver at the scale and quality required.
2. *Develop effective systems for contracting and monitoring* to ensure that providers do not act opportunistically (for example, via quality-shading once a contract is let).
3. *Set fair prices* to enable private firms to make reasonable profits when they deliver goods and services of high quality, and avoid creating either opportunities for excess profits or putting such intense pressure on costs that quality suffers.

4. *Develop effective competition*: outsourcers ought to compete on price and quality so that a failing supplier can exit the market and be easily replaced. This requires ensuring there is a sufficient number of suppliers. Where that is not possible effective contract monitoring is even more vital than normal.

These conditions require senior civil servants to take commissioning and managing contracts seriously. But Margaret Hodge, who chaired the UK Parliament's Public Accounts Committee (PAC) from 2010 to 2015, concluded that they see these tasks as beneath their pay grade.[90] She described 'too many disasters' in government outsourcing, with examples including failures on:

- *Skilled purchasing*. A company with a credit rating for a contract up to £1 million only was nonetheless awarded a £42 million contract for interpreting services in law courts. They were able to supply only 280 out of the 1,200 interpreters needed.[91]
- *Effective contracting and monitoring*. Like NASA's 'silent safety' system, in contracts for electronic tagging for people convicted of crimes serving sentences in the community, the UK government allowed two large contractors, G4S and SERCO, to behave opportunistically. The firms billed and charged the government for tagging people who had ceased to be tagged, either because their sentence period was up or sometimes when they had died.[92]
- *Effective competition*. Hodge gave an example of one tender that required a company to supply 12 A4 boxes of information, which took 80 hours to print.[93] The government's heavy-handed bureaucracy is perfectly designed to create a formidable barrier to small players entering procurement competitions.

These weaknesses on the demand side of outsourcing have been exacerbated by financialisation of the supply side with failures by the UK government to develop competition and set fair prices. Gill Plimmer pointed out in the *Financial Times* that, to deliver increases in shareholder value, and the remuneration it brought them, senior executives drove up the growth in the size of the big firms that received large public contracts for outsourced services. Successful contractors borrowed heavily to grow through acquisitions of smaller firms, even though these often operated in sectors and countries in which the new parent owners lacked experience and expertise.[94] Strong targeting that aimed to increase shareholder value resulted in firms making losses, when the big outsourcers were caught in a price war as a result of the Conservative–Liberal Democrat government's austerity policies after 2010.

Some key firms gained first-hand experience of what is meant by 'the winners curse' from winning contracts at low prices where they lacked expertise and experience to fulfil them.[95] Plimmer has reported how the stock market value of their shares fell steeply. SERCO was unable to deliver appropriate

care to patients on three different types of NHS contracts: out-of-hours GP services (Cornwall), community services (Suffolk) and a community hospital (Braintree).[96] Its shares fell in value from 674p a share in July 2013 to 215p in November 2014.[97] Over the year to November 2020, Capita's shares plunged in value by 73 per cent.[98] Financialisation of the outsourcing of government services enabled a few executives and managers to recoup extremely large financial rewards unrelated to any social value, whilst the staff who delivered goods and services struggled to make ends meet. Kier was planning to pay its chief executive 'more than £1m in bonuses' after their shares had lost 90 per cent of their value – this was opposed by shareholders.[99] But the most egregious example was Carillion.

From 2012 to 2016, Carillion had financed payments of dividends to its shareholders that exceeded its profits, a feat accomplished by selling assets worth £217 million and running up debts. Although it was a signatory to the government's Prompt Payment Code, it failed to fulfil that commitment to pay 95 per cent of invoices within 60 days (unless there are exceptional circumstances).[100] Carillion's standard terms were payments within 120 days – those suppliers wanting earlier payment were required to accept a discount. In July 2017, after Carillion's share value had fallen by 70 per cent and it had issued its first profit warning, the government awarded Carillion transport infrastructure contracts related to HS2 (high speed rail) worth £1.34 billion. In November 2017, after Carillion's third profit warning and its announcement that it was heading towards a breach of its debt covenants, the government still awarded Carillion a contract worth £130 million for the London–Corby rail electrification project.[101] In January 2018 Carillion went into liquidation. After the firm's collapse, the prisons it had been contracted to maintain were found to be in a bad way from lack of investment, severe staff shortages and a backlog of work.[102] The buildings of its new hospitals in Liverpool and Birmingham were found to have serious structural faults; there was huge disruption for departments, agencies and customers relying on its services; its pension schemes had liabilities of around £2.6 billion; its 30,000 subcontractors were owed £2 billion; and over 2,000 people lost their jobs.[103] Four supervising institutions that failed to protect the interests of all of these Carillion stakeholders were the subject of a coruscating joint report, published, in 2018, from two select committees of the House of Commons, the Business, Energy and Industrial Strategy and Work and Pensions Committees.[104] These were:

Carillion's remuneration committee (RemCo). Its role according to the Institute of Directors is to 'make sound decisions on levels of remuneration, on the link between remuneration and performance'.[105] Alexander Pepper has criticised the outcomes of that system as being quite incapable of making fair settlements. This is because remuneration committees seek to resolve the collective action problem when posed with the rhetorical question: do we want our chief executive to be paid less than the average?

> There is no ethical justification for paying economic rents in the form of excessive remuneration. Executives and investors, along with governments and major institutions, all share a moral responsibility for ensuring that there is distributive justice in society. But the problem of high pay will not be solved by technical means alone – the various parties involved must also recognise their ethical obligations. When it comes to top pay, for too long companies have behaved as if they are in the equivalent of an arms race. It is a mad, bad system, and it needs to change if inflation in executive pay is to be brought under control.[106]

Carillion's chief executive recalled that his total remuneration in 2016 'jumped from something like £1.1 million or £1.2 million to £1.5 million'.[107] That was 70 times the UK's median pay for full-time jobs.[108] He was also paid 'a bonus of £245,000 (37 per cent of his salary) despite meeting none of his financial performance targets'.[109] The joint report's verdict:

> In the years leading up to the company's collapse, Carillion's remuneration committee paid substantially higher salaries and bonuses to senior staff while financial performance declined. It was the opposite of payment by results. Only months before the company was forced to admit it was in crisis, the RemCo was attempting to give executives the chance for bigger bonuses, abandoned only after pressure from institutional investors. As the company collapsed, the RemCo's priority was salary boosts and extra payments to senior leaders in the hope they wouldn't flee the company, continuing to ensure those at the top of Carillion would suffer less from its collapse than the workers and other stakeholders to whom they had responsibility.[110]

The Pensions Regulator is a state agency that promises: 'We protect the UK's workplace pensions. We make sure employers, trustees, pension specialists and business advisers can fulfil their duties to scheme members.'[111] The joint report's verdict was very different:

> The Pensions Regulator failed in all its objectives regarding the Carillion pension scheme. Scheme members will receive reduced pensions. The Pension Protection Fund [a state agency that is compensator of last resort to ill-served pensioners] and its levy payers will pick up their biggest bill ever. Any growth in the company that resulted from scrimping on pension contributions can hardly be described as sustainable. Carillion was run so irresponsibly that its pension schemes may well have ended up in the PPF regardless,

> but the Regulator should not be spared blame for allowing years of underfunding by the company.[112]

Carillion's auditor, KPMG. Two of the auditing giant's core values were 'Integrity – we do what is right' and 'Courage – we think and act boldly'.[113] The joint report's verdict was damning:

> KPMG audited Carillion for 19 years, pocketing £29 million in the process. Not once during that time did they qualify their audit opinion on the financial statements, instead signing off the figures put in front of them by the company's directors. Yet, had KPMG been prepared to challenge management, the warning signs were there in highly questionable assumptions about construction contract revenue and the intangible asset of goodwill accumulated in historic acquisitions. These assumptions were fundamental to the picture of corporate health presented in audited annual accounts. In failing to exercise—and voice—professional scepticism towards Carillion's aggressive accounting judgements, KPMG was complicit in them. It should take its own share of responsibility for the consequences.[114]

The Financial Reporting Council (FRC). The FRC aims to 'promote transparency and integrity in business' for 'investors and others who rely on company reports, audit and high-quality risk management'.[115] The joint report's verdict:

> The FRC was far too passive in relation to Carillion's financial reporting. It should have followed up its identification of several failings in Carillion's 2015 accounts with subsequent monitoring. Its limited intervention in July 2017 clearly failed to deter the company in persisting with its over-optimistic presentation of financial information. The FRC was instead happy to walk away after securing box-ticking disclosures of information. It was timid in challenging Carillion on the inadequate and questionable nature of the financial information it provided and wholly ineffective in taking to task the auditors who had responsibility for ensuring their veracity.[116]

In early 2022, after hearings at a tribunal, the FRC 'ruled that during the inspections KPMG auditors created documents, including meeting minutes, spreadsheets and assessments of goodwill'. KPMG was fined £14.4 million.[117]

Plimmer reported in the *Financial Times* how the financial difficulties of Carillion and Interserve created opportunities for financial speculators to make millions of pounds. In 2018, Coltrane Asset Management (a New York-based hedge fund) made £4 million by betting on Carillion's shares losing value (short-selling), and in 2019 it attempted to derail the rescue plan for Interserve. Emerald (a private equity fund) bought 'about £140 million of

Interserve's debt in the secondary market last year [*2022*] for as little as 50p in the pound' and stood 'to gain millions if the debt-for-equity swap is agreed'.[118]

The Carillion fiasco clearly sits in a parallel universe from Shleifer's vision of governments effortlessly contracting with dedicated private enterprises to reliably deliver social goals. But UK citizens rightly expected the UK government to have been more aware of Carillion's precarious financial position than a hedge fund based in New York, to ensure Carillion did not neglect the prisons it was contracted to maintain and that it built safe hospitals, and to require compliance with the government's own Prompt Payment Code. Citizens would clearly expect the Pensions Regulator to ensure the security of Carillion's pensions schemes. The FRC exists because too often an auditor has found nothing wrong with a firm's financial position prior to its collapse. So, we would have expected FRC to have acted promptly on discovering the failures of KPMG.

There are also similar stories from outsourcing of social care for the elderly in the 1980s by local government in the UK to experienced local firms and entrepreneurs. Outsourcing was supposed to break up a 'provider' monopoly by government agencies but, by the 2000s, mergers and acquisitions undermined what used to be a competitive market. The local suppliers often found it hard to compete against large financialised companies. By 2004 two firms, Southern Cross and Four Seasons Health Care, dominated the social care market. In 2003, Southern Cross owned more than 100 care homes and 'was attracting the attention of investment bankers'. It was acquired in 2004 by the US private equity group Blackstone, which made a profit of £1.1 billion by selling off, first its property assets and then its shares. In 2011, when Southern Cross owned 750 care homes, it went into administration. Its 31,000 residents all needed to be cared for.[119] In 1999, Four Seasons Health Care started out as a small Scottish chain of care homes. It grew, was acquired by, and passed through, five funds: Alchemy Partners, Allianz Three Delta, Terra Firma and H/2 Capital Partners.[120] Mazzucato points out that by 2008 (just nine years later) Four Seasons Health Care had a debt burden that required a weekly interest charge of £100 per bed.[121] The firm subsequently went into administration in 2019, when it owned and ran over 320 care homes and cared for thousands of residents.[122]

Conclusions

The extreme neoliberal nostrum that government ought to privatise or outsource all except for a residual category like Air Force One was tested to destruction in post-Thatcherite Britain. Williamson's framework suggests that privatisation of the coal and steel industries would bring gains without losses. But they removed a means through which training and employment was maintained in the areas that have since been left behind. Hence the generous government support given to private industry for the rump that remains

of the UK's steel industry. The nationalised coal industry aimed to secure the resilience of the UK to what was a vital source of energy. Privatised suppliers of energy have no interest in developing resilience when that conflicts with making profits.

Adam Smith's examples, of the butcher, brewer and baker, are of markets that worked so well because they satisfied a stringent set of conditions. Each was a small self-managed enterprise and whether it thrived or failed depended on its local reputation. Each market was contestable; it was easy for new entrants to replace the suppliers failing on quality and price. Consumers were skilled repeat buyers who knew what they wanted, their willingness to pay, and easily assessed the price and quality of what was on offer. They exemplified Smith's famous metaphor of working like an 'invisible hand'.[123] Governments could only make privatisation and outsourcing work for services that do not satisfy those stringent conditions through the visible mechanisms of regulation and written contracts. But the vulnerability of those mechanisms has been exposed by another institution of neoliberalism, namely financialisation. The UK government has failed to make privatisation work for gas, electricity, railways and water. Katharina Pistor's *The code of capital* (see Chapter 5) explains why, as Dieter Helm argued, 'light-touch' regulation of financialised water companies failed so spectacularly because it assumed that 'balance sheets were a matter best left to the companies' and allowed 'The horses [to] have bolted with their dividends'.[124] The UK government has also failed to create an effective market in outsourcing.

Education and healthcare, however, were too politically salient to be marketised in the same way by the Conservative, and New Labour, governments who bought into new public management doctrines advocated by neoliberal think tanks. The next two chapters, 7 and 8, examine the policy of decentralised quasi-markets run under state control and micro-local agencies (individual schools, universities or hospitals) that were required to compete in order to attract customers (parents, students or patients).

Endnotes

1 Shleifer, Andrei (1998) 'State versus private ownership', *Journal of Economic Perspectives*, vol.12, no. 4, pp.133–50. https://doi.org/10.1257/jep.12.4.133

2 Krugman, Paul (1994) 'Rational expectations', in *Peddling prosperity: Economic sense and nonsense in the age of diminished expectations*, UK: WW Norton & Company, pp.47–53.

3 Chandler Jr, Alfred D. (1977) *The visible hand*, US: Harvard University Press. http://library.mpib-berlin.mpg.de/toc/z2010_942.pdf

4 Coase, Ronald (1988) '1. The nature of the firm: Origin', *The Journal of Law, Economics, and Organization*, vol, 4, no. 1, pp.3–17. https://doi

.org/10.1093/oxfordjournals.jleo.a036946; Coase, Ronald. (1937) 'The nature of the firm', *Economica*, vol. 4, no. 16, pp.386–405. https://doi.org/10.1111/j.1468-0335.1937.tb00002.x

[5] The Royal Swedish Academy of Sciences (1991) 'Press Release: Nobel Prize awarded to Ronald H. Coase', *The Nobel Prize*. https://perma.cc/HS7L-X3YH

[6] Smith, Adam (1976) *The Wealth of Nations*, US: University of Chicago Press.

[7] Applebaum, Anne (2022) 'Holodomor', *Encyclopedia Britannica*, 8 May. https://perma.cc/RP5H-ZM6Y

[8] Brown, Archie (2010) *The rise and fall of communism*, UK: Vintage, p.337.

[9] Bowles, Samuel (2008) 'Policies designed for self-interested citizens may undermine "the moral sentiments": Evidence from economic experiments'. *Science*, vol. 320, no. 5883, pp.1605–09. https://doi.org/10.1126/science.1152110

[10] Hart, Oliver (2008) 'Economica Coase lecture: Reference points and the theory of the firm', *Economica*, vol. 75, no. 299, pp.404–11. https://doi.org/10.1111/j.1468-0335.2007.00659.x

[11] Coase, Ronald, 'The nature of the firm', p.394.

[12] Coase, Ronald (1988) '3. The nature of the firm: Influence', *The Journal of Law, Economics, and Organization*, vol. 4, no. 1, p.33. https://doi.org/10.1093/oxfordjournals.jleo.a036947

[13] Chandler, Alfred, *The visible hand*, p.490.

[14] Coase, Ronald, '3. The nature of the firm: Influence', pp. 33-34.

[15] The Nobel Prize (2023) 'Oliver E. Williamson – Facts.' https://perma.cc/UX8B-46LP

[16] Williamson, Oliver (1975) *Markets and hierarchies: Analysis and anti-trust implications*, UK: The Free Press; Williamson, Oliver (1985) *The economic institutions of capitalism. Firms, markets, relational contracting*, UK: The Free Press.

[17] Dunleavy, Patrick and Hood, Christopher (1994) 'From old public administration to new public management', *Public Money & Management*, vol. 14, no. 3, pp.9–16. https://doi.org/10.1080/09540969409387823; Hood, Christopher (1995) 'The "new public management" in the 1980s: Variations on a theme', *Accounting, organizations and society*, vol. 20, no. 2–3, pp.93–109. https://doi.org/10.1016/0361-3682(93)E0001-W

[18] Access to Mineral Heritage (2005) *Underground coal production and manpower from 1947*.

https://web.archive.org/web/20140714165303/http://mininghistory.thehumanjourney.net/edu/UndergroundCoalProductionPost1947.shtml

[19] Access to Mineral Heritage, *Underground coal production*.

[20] Krugman, Paul, *Peddling prosperity*, p.181.

[21] Atteridge, Aaron and Strambo, Claudia (2021) *Decline of the United Kingdom's steel industry*. Sweden: Stockholm Environment Institute. https://euagenda.eu/upload/publications/decline-of-the-steel-industry-in-the-uk.pdf; Access to Mineral Heritage, *Underground coal production and manpower from 1947*.

[22] Muellbauer, John and Soskice, David (2022) *The Thatcher legacy. Lessons for the future of the UK economy*, UK: The Resolution Foundation, p.19. https://perma.cc/7G84-87LN

[23] *BBC News* (2019) 'Corby: "Devastating" steel works closure remembered 40 years on'. https://perma.cc/ET4X-P93M

[24] Doshi, Vidhi (2016) 'Sanjeev Gupta: From college dorm deals to UK steel's great hope', *The Guardian*, 6 April. https://perma.cc/8KYQ-4LR2

[25] Collingridge, John (2019) 'How Sanjeev Gupta built an empire on risky alchemy', *The Times*, 7 July. https://perma.cc/W22Q-V6CG

[26] Smith, Robert; Fletcher, Laurence; and Dickie, Mure (2021) 'Scottish government raises provision on Gupta guarantee to £161m', *Financial Times*, 17 December. https://perma.cc/ZRA6-PFBU

[27] Glackin, Michael (2022) 'New disclosures over Sanjeev Gupta's smelter turn heat on the SNP', *The Sunday Times*, 23 July. https://perma.cc/6VET-8QU8

[28] Trade Remedies Authority (2021) 'TRA publishes final recommendation on steel safeguard measures', 11 June. https://www.gov.uk/government/news/tra-publishes-final-recommendation-on-steel-safeguard-measures

[29] Jim, Pickard and Pfeifer, Sylvia (2023) 'Jeremy Hunt set to sign off on support for UK steel groups', *Financial Times*, 20 January. https://perma.cc/TT6A-WCJK

[30] Smith, Robert; Pfeifer, Sylvia; and O'Dwyer, Michael (2022) 'Sanjeev Gupta's auditor quit after lack of evidence to complete work', *Financial Times*, 20 September. https://perma.cc/YE5T-8ABM

[31] Walker, Owen; Pfeifer, Sylvia; and Smith, Robert (2022) 'Sanjeev Gupta's Liberty Steel nears deal with creditors led by Credit Suisse', *Financial Times*, 15 November. https://perma.cc/2H5B-2L5D

[32] Ofgem (n.d.) 'Our role and responsibilities'. https://perma.cc/U8CY-FUZZ

[33] Thomas, Nathalie (2022) 'Ofgem admits failings in oversight of UK retail energy market', *Financial Times*, 8 February. https://perma.cc/FL86-A77R; Thomas, Helen (2022) 'UK energy crisis needs fighting on multiple fronts'. *Financial Times*, 5 January. https://perma.cc/4DD5-RF2E

[34] Office for Budget Responsibility (2022) *Economic and Fiscal Outlook*, UK: HMSO. https://perma.cc/U7UG-ZS4G

[35] Thomas, Nathalie, 'Ofgem admits failings in oversight of UK retail energy market'.

[36] Thomas, Nathalie (2021) 'UK's ageing reactors bring nuclear question to a head', *Financial Times*, 14 July. https://perma.cc/2JTD-TUFU

[37] UK Government (2022) *British energy security strategy*. https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy

[38] Grubb, Michael (2022) 'The UK energy strategy is both cowardly and incoherent', *Financial Times*, 10 April. https://perma.cc/3EQY-FQ4P

[39] Ward, Andrew (2017) 'Centrica to close UK's largest gas storage site', *Financial Times*, 20 June. https://perma.cc/BEH8-PBQ7

[40] Thomas, Nathalie (2022) '"We can't take energy security for granted": UK races to boost gas storage capacity', *Financial Times*, 1 December. https://perma.cc/7PK9-ECT4

[41] Moran, Michael (2003) *The British regulatory state: high modernism and hyper-innovation*, UK: Oxford University Press. https://epdf.pub/the-british-regulatory-state-high-modernism-and-hyper-innovation.html

[42] Moran, Michael, *The British regulatory state*, p.178.

[43] Moran, Michael, *The British regulatory state*, p.177.

[44] Wellings, Richard (2014) 'The privatisation of the UK railway industry: An experiment in railway structure', *Economic Affairs*, vol. 34, no. 2, pp.255–66. https://doi.org/10.1111/ecaf.12083

[45] Secretary of State for Transport (2021) *Great British Railways. The Williams-Shapps Plan for Rail*. CP 423, UK: HMSO, p.13.

[46] ORR (2023) 'About ORR'. https://perma.cc/NJK9-L8TA

[47] Pidd, Helen (2022) 'Revealed: North of England train line vastly under-reports cancellations', *The Guardian*, 27 November. https://perma.cc/MLS5-PWY2

[48] Brabin, Tracy; Burnham, Andy; Coppard, Oliver; Driscoll, Jamie; and Rotheram, Steve (2022) 'Joint Northern Mayors statement as rail services in the North grind to a halt', *West Yorkshire Combined Authority*, 27 October. https://perma.cc/6UNC-QASS

[49] Byatt, Ian (2019) *A regulator's sign off: Changing the taps in Britain*, UK: Short Run Press Ltd, p.30.

[50] The Editorial Board (2023) 'England's ill-fated experiment with privatising water', *Financial Times*, 28 June. https://perma.cc/L3WU-5G8W

[51] Laville, Sandra (2023) 'Revealed: Warning to ministers over privatised water kept secret since 2002', *The Guardian*, 20 May. https://perma.cc/CH4Q-YLH5

[52] Wilkinson, Max (2020) 'A Regulator's Sign Off: Changing the Taps in Britain, by Ian Byatt', *Financial Times*, 6 January. https://perma.cc/TE3K-4SA6

[53] Helm, Dieter (2023) 'Lessons from the Thames Water debacle', *Financial Times*, 2 July. https://perma.cc/BT8R-3524

[54] Bullough, Oliver (2022) 'Sewage sleuths: The men who revealed the slow, dirty death of Welsh and English rivers', *The Guardian*, 4 August. https://perma.cc/2X7H-3TD6

[55] House of Lords Industry and Regulators Committee (HLIRC) (2023) *The affluent and the effluent: Cleaning up failures in water and sewage regulation*. HL Paper 166. p.15.

[56] HLIRC, *The affluent and the effluent*, pp.15–17.

[57] HLIRC, *The affluent and the effluent*, p.65.

[58] Bell, Derek and Gray, Tim (2002) 'The ambiguous role of the environment agency in England and Wales', *Environmental Politics*, vol. 11, no. 3, pp.78–79, 93.

[59] HLIRC, *The affluent and the effluent*, p.12.

[60] HLIRC, *The affluent and the effluent*, p.65.

[61] HLIRC, *The affluent and the effluent*, p.46.

[62] HLIRC, *The affluent and the effluent*, p.75.

[63] HLIRC, *The affluent and the effluent*, p.46.

[64] Environment Agency (2022) *Water and sewerage companies in England: environmental performance report 2021*. https://www.gov.uk/government/publications/water-and-sewerage-companies-in-england-environmental-performance-report-2021/water-and-sewerage-companies-in-england-environmental-performance-report-2021

[65] Wace, Charlotte (2022) 'Sewage and mud spill taints the beauty of one of Cornwall's most beautiful beaches', *The Times*. 1 November. https://perma.cc/S3UV-DEAT

[66] Environment Agency, *Water and sewerage companies in England: Environmental performance report 2021*.

[67] The Editorial Board, ‘England’s ill-fated experiment with privatising water’.

[68] Plimmer, Gill and Fildes, Nic (2023) ‘Managed by Macquarie: the Australian group with a grip on global infrastructure’, *Financial Times*, 27 June. https://perma.cc/BV3G-BMKE

[69] Shleifer, Andrei, ‘State versus private ownership’, p.136.

[70] Shleifer, Andrei, ‘State versus private ownership’, p.135.

[71] Mazzucato, Mariana (2018) *The value of everything: Making and taking in the global economy*, UK: Hachette, p.194.

[72] *Wikipedia* (n.d.) ‘NASA spinoff technologies’. https://perma.cc/PF2T-MPYV

[73] JFK Library (2019) ‘Address at Rice University, September 12, 1962’ [Video]. YouTube, 28 June. https://www.youtube.com/watch?v=iiC-E8vl7Fw

[74] Feynman, Richard (1989) ‘Afterthoughts and Appendix F, Personal observations on the reliability of the Shuttle’, in *What do you care what other people think?* UK: Bantam, pp.212–37.

[75] Wagner, Dennis (2016) ‘1986 Ronald Reagan – Space Shuttle Challenger Explosion’, *State of the Union History*, 28 January. https://perma.cc/KM66-MF8U

[76] Challenger Center for Space Science Education (2009) *The Challenger story: Teacher in space*. https://web.archive.org/web/20090125080418/http://www.challenger.org/about/history/index.cfm

[77] Vaughan, Diane (1996) *The Challenger launch decision. Risky technology, culture, and deviance at NASA*, US: University of Chicago Press.

[78] Rogers, William (Chair) (1986) *Report to the president by the Presidential Commission on the Space Shuttle Challenger Accident*. https://sma.nasa.gov/SignificantIncidents/assets/rogers_commission_report.pdf, p.138.

[79] Rogers, William, *Report to the president*, Figure 14.

[80] Herkert, Joseph (1991) ‘Management’s hat trick: Misuse of “engineering judgment” in the Challenger incident’, *Journal of Business Ethics*, vol. 10, pp.617–20. https://www.jstor.org/stable/25072193

[81] Bell, Trudy and Esch, Karl (1987) ‘The fatal flaw in flight 51–1’, *IEEE Spectrum*, vol. 24, no. 2, pp.36–37. https://doi.org/10.1109/MSPEC.1987.6448023

[82] Rogers, William, *Report to the president by the Presidential Commission on the Space Shuttle Challenger Accident*, p.121.

[83] Vaughan, Diane (1990) 'Autonomy, interdependence, and social control: NASA and the space shuttle Challenger', *Administrative Science Quarterly*, vol. 35, no. 2, p.247. https://doi.org/10.2307/2393390

[84] Rogers, William, *Report to the president*, p.153.

[85] Vaughan, Diane, 'Autonomy, interdependence, and social control', p.249.

[86] Vaughan, Diane, 'Autonomy, interdependence, and social control', p.250.

[87] Vaughan, Diane, 'Autonomy, interdependence, and social control', p.249.

[88] Vaughan, Diane, 'Autonomy, interdependence, and social control', p.248.

[89] Bowles, Samuel, 'Policies designed for self-interested citizens'.

[90] Hodge, Margaret (2017) *Called to account: How corporate bad behaviour and government waste combine*, UK: Little, Brown.

[91] Hodge, Margaret, *Called to account*, pp.317–19.

[92] Hodge, Margaret, *Called to account*, p.309.

[93] Hodge, Margaret, *Called to account*, p.345.

[94] Plimmer, Gill (2018) 'UK contractors have "bankrupt" business models, says vetting group', *Financial Times*, 2 December. https://perma.cc/9MPW-XFM5

[95] Plimmer, Gill (2020) 'Capita in talks to sell education business to tackle £1bn debt', *Financial Times*, 27 November. https://perma.cc/D4AD-U6FW

[96] Hodge, Margaret, *Called to account*, pp.338–39.

[97] Plimmer, Gill and Aglionby, John (2014) 'Serco plans £550m rights issue after profit warning', *Financial Times*, 10 November. https://perma.cc/93HK-WMFF

[98] Plimmer, Gill, 'Capita in talks to sell education business to tackle £1bn debt'.

[99] Plimmer, Gill (2019) 'Kier investors rebel over chief's potential £1m bonus', *Financial Times*, 15 November. https://perma.cc/H8B6-DYP3

[100] Hajikazemi, Sara; Aaltonen, Kirsi; Ahola, Tuomas; Aarseth, Wenche; and Andersen, Bjorn (2020) 'Normalising deviance in construction project organizations: A case study on the collapse of Carillion', *Construction Management and Economics*, vol. 38, no. 12, p.1128. https://doi.org/10.1080/01446193.2020.1804069

[101] Hajikazemi, Sara et al, 'Normalising deviance in construction project organizations', p.1113.

[102] Plimmer, Gill (2019) 'Standards in jails run by Carillion criticised', *Financial Times*, 23 October. https://perma.cc/578M-FE63

[103] Comptroller and Auditor General (2020) *Investigation into the rescue of Carillion's PFI hospital contracts*, Session 2019–20, HC23. https://www.nao.org.uk/reports/investigation-into-the-rescue-of-carillions-pfi-hospital-contracts/1; House of Commons Business, Energy and Industrial Strategy and Work and Pensions Committees (2018) *Carillion: Second joint report from the Business, Energy and Industrial Strategy and Work and Pensions Committees*, Session 2017–19 HC 769, The Stationery Office. p.3.
https://publications.parliament.uk/pa/cm201719/cmselect/cmworpen/769/76903.htm

[104] House of Commons, *Carillion*.

[105] Institute of Directors (2022) *What is the role of the remuneration committee?* https://www.iod.com/resources/factsheets/company-structure/what-is-the-role-of-the-remuneration-committee/

[106] Pepper, Alexander (2022) *If You're So Ethical, Why Are You So Highly Paid?: Ethics, Inequality and Executive Pay*, UK: LSE Press, p.135. https://doi.org/10.31389/lsepress/eth

[107] House of Commons, *Carillion*, p.32.

[108] Office for National Statistics (2016) UK *gross and net weekly median pay for full time and part time workers 2015/2016 based on APS and LFS data*. https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/adhocs/006144ukgrossandnetweeklymedianpayforfulltimeandparttimeworkers20152016basedonapsandlfsdata

[109] House of Commons, *Carillion*, p.33.

[110] House of Commons, *Carillion*, pp.33–34.

[111] The Pensions Regulator (2022) https://perma.cc/725S-CHZA

[112] House of Commons, *Carillion*, pp.59–60.

[113] KPMG (2022) *What are our values?* https://perma.cc/CK8J-WH7G

[114] House of Commons, *Carillion*, p.53.

[115] Financial Reporting Council (2022) *About the FRC*. https://www.frc.org.uk/about-the-frc

[116] House of Commons, *Carillion*, p.61.

[117] O'Dwyer, Michael (2022) 'KPMG faces £14.4mn fine for misleading UK regulators over Carillion audit', *Financial Times*, 12 May. https://perma.cc/JAW2-KX33

[118] Plimmer, Gill (2019) 'Hedge fund in Interserve feud profited from Carillion collapse', *Financial Times*, 8 February. https://perma.cc/6EDA-TDTE

[119] Wachman, Richard (2011) 'Southern Cross's incurably flawed business model let down the vulnerable', *The Guardian*, 16 July. https://perma.cc/GK2H-SYG7

[120] Neville, Sarah; Plimmer, Gill; and Espinoza, Javier (2019) 'Four Seasons woes expose private care home risks', *Financial Times*, 6 May. https://perma.cc/6J7T-N9CJ

[121] Mazzucato, Mariana, *The value of everything*, p.169.

[122] Neville, Sarah et al, 'Four Seasons woes expose private care home risks'; Davies, Rob (2019) 'Four Seasons care home operator collapses into administration', *The Guardian*, 30 April. https://perma.cc/QEL7-ZJRX

[123] Rothschild, Emma (1994) 'Adam Smith and the invisible hand'. *The American Economic Review*, vol. 84, no. 2, pp.319–22. https://www.jstor.org/stable/2117851

[124] Helm, Dieter, 'Lessons from the Thames Water debacle'.