

CHAPTER I

Patient Capital

The future will be present one day and needs to be cared for. How much and how far is affected by uncertainty, which expands as the future deepens. Market advocates have dominated policy since the 1980s and if markets will provide, why is the long term a problem? The argument here is that the prevailing market interest (or discount) rate sets a limit on future provision and that this time horizon is typically short. Within this horizon, private enterprise does and should provide. Beyond it, private enterprise alone is not enough.

That is why the public sector has not contracted. Public spending typically allocates 35 to 50 per cent and more of GDP in most advanced countries. Levels are generally flat and, despite a decade of austerity policies, were rising after 2008 as a proportion of government expenditures.¹ In the academic discipline of economics, support for public provision is thin. The persistence and size of the public sector remain largely unremarked. But the free-standing markets assumed as the norm in economic theory produce much less than half of total economic welfare. Public sector persistence suggests that something more powerful than ideology is at work.

I.1 THE ARGUMENT

In my *Challenge of affluence* (2006), personal well-being was shown to depend on achieving a good balance between immediate gratification and delayed reward. Here a similar approach is extended to the public sector. The formal decision procedures of cost-benefit discounting aspire to do the same. They are subtle, endlessly ingenious, and

¹ OECD, 'General government spending'; Kersetenetzky and Guedes, 'Great recession'.

ultimately inconclusive.² They are normative, i.e. designed to achieve the most efficient or equitable outcome. Mathematical models of discounting provide a semblance of precision at a cost of arbitrary premises, unrealistic abstraction, and indeterminate results. In contrast, history is positive: it tells us what has actually been tried out, how, and with what results. Our model here is simple. Its validity is confirmed by financial practice and historical experience. As in economics more generally, this is not a law but a tendency, and exceptions are also revealing.³

Free markets have short time horizons. But why? The interest rate provides a benchmark for expected returns, and the same interest rate defines the maximum time horizon within which to break even on an investment. At any time the economy has a prevailing interest rate. We take this rate as exogenous, given to firms by policy or the market, i.e. not a 'natural' variable arising from economic equilibrium (which is a theoretical construct and difficult to identify). This actual interest rate (adjusted upwards or downwards for the risk of any particular activity) draws a line across the future. The prevailing interest rate represents the current cost of capital. A commercial undertaking must recover its initial outlay in less time. If a project can only break even beyond this boundary, it cannot be undertaken by business alone. Likewise undertakings that are locked into long-lived structures or machinery. They need external help through co-ownership, subsidy, management, regulation, a concession, or a licence. For European railways in the nineteenth century, 'Private capital to ensure their extension at such a pace as was needed was not available . . . The Governments were therefore compelled perforce to render a large measure of direct assistance'.⁴ The Croton Aqueduct in New York was built over a seven-year period starting in 1835, and took thirty years until annual revenues exceeded expenses.⁵

Bank loans specify a precise schedule for repayment, but many indispensable activities have indeterminate or distant break-even horizons. A public body (including monarchy, nobility, the locality, and the church in the past; in modern times, government, not-for-profits,

² Gollier, *Pricing the planet's future*; Lind et al., *Discounting for time and risk*; Millner and Heal, 'Choosing the future'; see Chapter 7.

³ Hausman, *Inexact and separate science*. ⁴ Pim, *Railways and the state*, 134.

⁵ Glaeser, 'Public ownership', 29.

and philanthropists) can commit to long-term projects even if success is uncertain. It spreads the risk among the whole of society.⁶ Families can do this too. In contrast, in market societies, undertakings that pay off inside the credit time horizon are typically undertaken by business. This suggests a division of labour: market competition for short-term provision; government, not-for-profits, and the family for long or uncertain durations. This boundary predicts where the limit is likely to run and sets down where it ought to be. When violated in either direction, poor outcomes are likely, inefficiency, corruption, or failure

Economic undertakings have an intrinsic duration: winter wheat is planted in the autumn and the harvest returns a surplus in seven or eight months; it can easily be funded with bank credit. In contrast, a stand of hardwoods (black cherry or maple) cannot be funded from scratch with bank loans: 'during the first 50 years, the tree is worth, at best about a dollar or two for pulpwood'.⁷ Waiting this long is well beyond business time horizons. Virgin forest can be cut down but new growth requires subsidies or tax relief. In the 1970s it was estimated that the average economic life of capital equipment was fifteen years.⁸ In telecommunications, landline systems were innovated privately but became regulated monopolies or state enterprises. The lines and exchanges would last for decades, the handsets for ten years. In contrast, mobile phone technology changes about once a decade and handsets last for two years. The presumption is for private ownership and it is difficult to find a state-owned mobile phone company outside China, North Korea, and Cuba.

1.2 THE HIGHER THE RATE, THE SHORTER THE WAIT

The higher the market interest rate (or the private discount rate), the less time is available to break even. That is all that the argument requires, but it can be made a little more precise. The time boundary between private and public enterprise is easy to draw. It is the 'pay-back period', the time required for interest on a loan to add up to the original advance, under the prevailing interest rate. For the lender, this is the time their money is locked in and at risk. For the borrower

⁶ Arrow and Lind, 'Uncertainty'. ⁷ Jacobson, 'Forest finance 8', 7.

⁸ Lind, *Discounting for time and risk*, 85.

it defines how long it takes for cash flow to add up to the principal: 'counting the number of years it takes before the cumulative cash flow equals the initial investment'.⁹ A project which takes longer than the payback period to break even cannot pay its capital cost and cannot be undertaken for profit. An investor can get more by lending at the prevailing interest rate. If a project takes longer to break even, or the capital is locked in for longer, then business cannot do it alone. It requires some protection from risk until the project pays off.

The number of years to payback can be calculated using the following short-cut: take 100 and divide it by the interest rate. That is the number of years to the time horizon. For example, if the interest rate is 10 per cent, the time horizon is at $100/10$, i.e. it is ten years in the future. If the interest rate is 5 per cent, the payback period is twenty years. When interest rates are lower, the number of years is greater, and vice versa. For example, with interest at 10 per cent, a venture that can repay its initial investment in less than ten years should normally benefit from private enterprise. If it requires more time, business cannot do it alone, and likewise at other interest rates. The next section works out the argument in more detail, and can be skipped by readers in a hurry. It can be taken up again in section 4.

1.3 CREDIT TIME HORIZONS IN MORE DETAIL

The credit time horizon is defined here as the time it takes a lender to break even on a loan out of successive equal payments of interest (i.e. without repayment of principal). This is the 'payback period' method of investment appraisal. Investment manuals do not recommend it because it ignores the time value of money (a dollar tomorrow is worth less than one today) and any cash flows beyond break-even. But it is one of three main methods in common use for project appraisal.¹⁰ A USA survey in the 1990s found that 57 per cent of 392 chief financial officers always used the payback period method to evaluate

⁹ Brealey et al., *Corporate finance*, 133.

¹⁰ Treynor and Black, 'Corporate investment decisions', 314; Blatt, *Dynamic economic systems*, ch. 13; Thibierge and Beresford, *Practical guide*, 74–83.

investment.¹¹ The venerable measure of ‘Years Purchase’, often used to value real estate, is the same as payback: it is obtained by dividing the market value by the annual rent, i.e. the number of annual payments that add up to the market price.¹² Interest-only credit (without repayment of principal) is a simplification but is not unusual. A machine delivers a flow of output and only scrap value at the end. For more than two centuries the British government borrowed against perpetual bonds (‘consols’) with no maturity, and public debt today is rolled over, not reduced. Before the First World War, most housing was financed with interest-only open-ended mortgages, and the main form of business credit was the overdraft which was serviced with interest but not repaid.¹³

The payback method is not endorsed as practical tool, but as a rough-and-ready diagnostic used here to specify an outer bound for bank credit to break even. To make a profit, a business has to recover its investment in less time. Business cash flow needs to be more than the cost of finance, so their rate of return is higher, which implies (on the payback method) a shorter time to break even. With capital repayment, the time to break even is shorter still. In practice, business sets out hurdle rates for expected profits that are considerably higher than prevailing interest rates.¹⁴ Three different studies suggest rates of return around 15 per cent (payback 6.6 years).¹⁵

It is necessary to show how the payback period defines the outer boundary time limit on private enterprise. The canonical method of project appraisal is net present value (NPV). This is the cumulative value today of all future cash flows produced by an investment, discounted by the rate of interest, less the initial investment.¹⁶ For investment to go ahead the NPV needs to be positive. The discount rate applied represents the satisfaction lost now by postponing it to the future (the ‘opportunity cost’), including the risk of failing to

¹¹ Graham and Harvey, ‘Theory and practice’, 196–200.

¹² Smith, *Wealth of nations*, e.g. Bk. II, ch. iv, 359; Marshall, *Principles of economics*, 593; Tarback, *Handbook of house property*, 125.

¹³ For mortgages, see Chapter 6, (6.3).

¹⁴ Dixit and Pindyck, *Investment under uncertainty*, 6–7, citing Summers, ‘Investment incentives’, 300.

¹⁵ Gollier, *Pricing the planet’s future*, 27; Stockfish, ‘Measuring’, Table 7–3, 268.

¹⁶ Thibierge and Beresford, *Practical guide*, 76–77.

achieve it. In the mechanics of discounting, the present value of each future revenue instalment is calculated as the previous year's discounted revenue reduced by the given discount rate. For example, for a loan today of £100 at 10 per cent interest, the £10 interest paid at the end of the first year is worth £9 today; the £10 paid in the second year is worth £8.1 today, £7.29 in the third year etc.: always 10 per cent less than the previous year. The more distant a future payoff of given size, the less it is worth today. These pay-offs are cumulated to arrive at NPV.

A project is worth undertaking if the NPV is equal to or more than the initial investment, i.e. if the ratio of NPV to initial investment is 0 or greater. To go back to our example (the rate is set for ease of calculation, the interest rate can be anything), for a loan of £100 at 10 per cent interest the payback period is ten years, but all the discounted interest instalments for evermore never add up to £100. NPV is less than 0 and the loan never pays off. The other canonical method is the internal rate of return (IRR) which is the rate of return required for break-even, i.e. for the NPV to equal 0. In our loan example, when NPV is calibrated to break even (NPV=0) in ten years, the same as the payback period, the IRR is 16 per cent (Figure 1.1). NPV and IRR are therefore related. For the same break-even period IRR is always higher than the payback interest rate on the money borrowed or invested so the payback period of the IRR is always shorter.¹⁷ This is what we set out to demonstrate: the business hurdle rate needs to be higher than the payback rate of return. In the American survey already mentioned, NPV and IRR were always used by three-quarters of the 392 chief financial officers.¹⁸

NPV and IRR privilege the present over the future, expectations over outcomes. But to refrain from discounting can also be reasonable.¹⁹ Discounting is the tyranny of the present. It is no less rational to maximise welfare at any other point in time.²⁰ Payback is also simple to apply and to understand.²¹ Its nominal revenues are not discounted. If there are future liabilities, business people are properly

¹⁷ The bank can lend at the payback rate because it pays less for the money than it charges.

¹⁸ Graham and Harvey, 'Theory and practice', 196–200.

¹⁹ Price, *Time, discounting and value*, chs. 19–20, and Chapter 7.

²⁰ Millner and Heal, 'Choosing the future', 19; Offer, *Challenge of affluence*, 46–52.

²¹ Graham and Harvey, 'Theory and practice', 200.

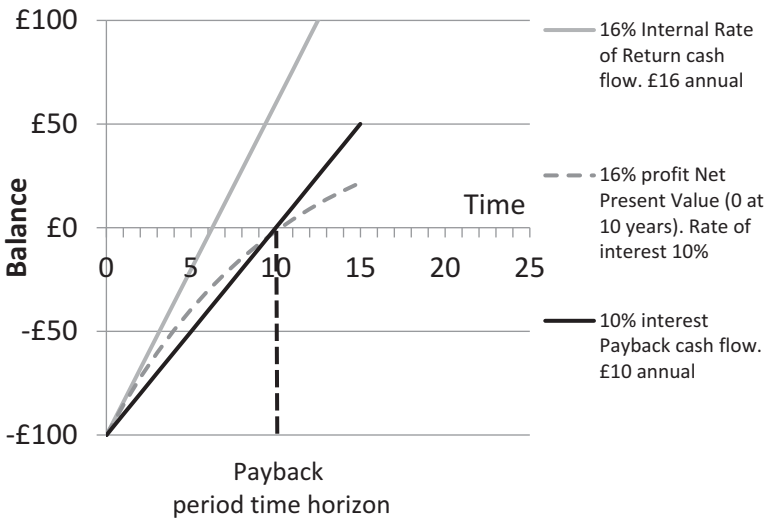


Figure 1.1 £100 loan, 10 per cent interest: break-evens of Internal Rate of Return, Net Present Value, and Payback Period.

concerned about nominal cash flow, not about its speculative value today. NPV measures opportunity ('ex ante'), payback the exposure to failure ('ex post'). During the payback period both lender and borrower are exposed to loss. Downside risk is a worry and the payback method may reflect loss aversion.²² Hence, while NPV and IRR may be compelling for business, they are not for individuals or society.

For the public sector the established method of investment appraisal is cost-benefit analysis (sometimes 'benefit-cost' in the USA). It is an attempt to quantify all the benefits and costs, including indirect and non-monetary ones. The existence of this separate appraisal method acknowledges that the public sector is different. There is, however, a view that public sector investment should only be undertaken if it satisfies market criteria, i.e. produces rates of return that are equal or higher than the market 'hurdle rate'. That position was taken by the United States and British Treasuries in the run up to privatisation in the 1970s and 1980s, with some allowance for the different circumstances of the public sector, e.g. sometimes the absence of

²² Blatt, *Dynamic economic systems*, ch. 13.

a financial return, no taxation and cheaper funding. A market hurdle rate represented a bias against public spending.²³ The market rate applied (itself a composite) is not reliable, because the assets it is based on mature at different times (i.e. repay the principal after different delays).²⁴ A business rate of return for the public sector is inconsistent with our own view that it exists to undertake what business is unable to do. A business rate of return target implies that the public sector is redundant, a prospect aspired to by libertarians and market fundamentalists but belied by reality even in its North American heartland. Cost-benefit analysis today attempts to take account of what makes the public sector different and most experts accept that the appropriate discount rates should be lower than those of the market.²⁵ But there is no single accepted benchmark rate of return. The British Treasury and the USA Environmental Protection Agency apply a 'social rate of time preference' that is lower than market rates of return (discussed in Chapter 7, 7.3), while government investment in the USA still uses a market comparison. Other countries vary.²⁶

1.4 UNCERTAINTY

Formal project appraisal assumes fixed cash flows, and such expectations are also written into credit contracts. But uncertainty increases over time and undermines these agreements. Figure 1.2 shows how uncertainty over the future rate of inflation fans out into the future.

Long-term projects set off cascades of risk and uncertainty which arise at several junctures.²⁷ Any list would include specification and design, construction (on time and budget), quality on completion and in use, operating cost, sustained future demand and revenue, interest rate/inflation, financial risk (provision and price), default of contractors, residual value, competing technologies, obsolescence,

²³ Chick, *Electricity and Energy*, 94–103; Lind, *Discounting for time and risk*, 5–6, 55–59; Spackman, 'Discount rates', 1–3.

²⁴ Millner and Heal, 'Choosing the future', 12.

²⁵ Baumol, 'Social rate of discount'; Millner and Heal, 'Choosing the future', 65; Spackman, 'Time discounting'.

²⁶ European Commission, *Guide to cost-benefit analysis*, 299–303.

²⁷ Grimsey and Lewis, *Public private partnerships*, 172.

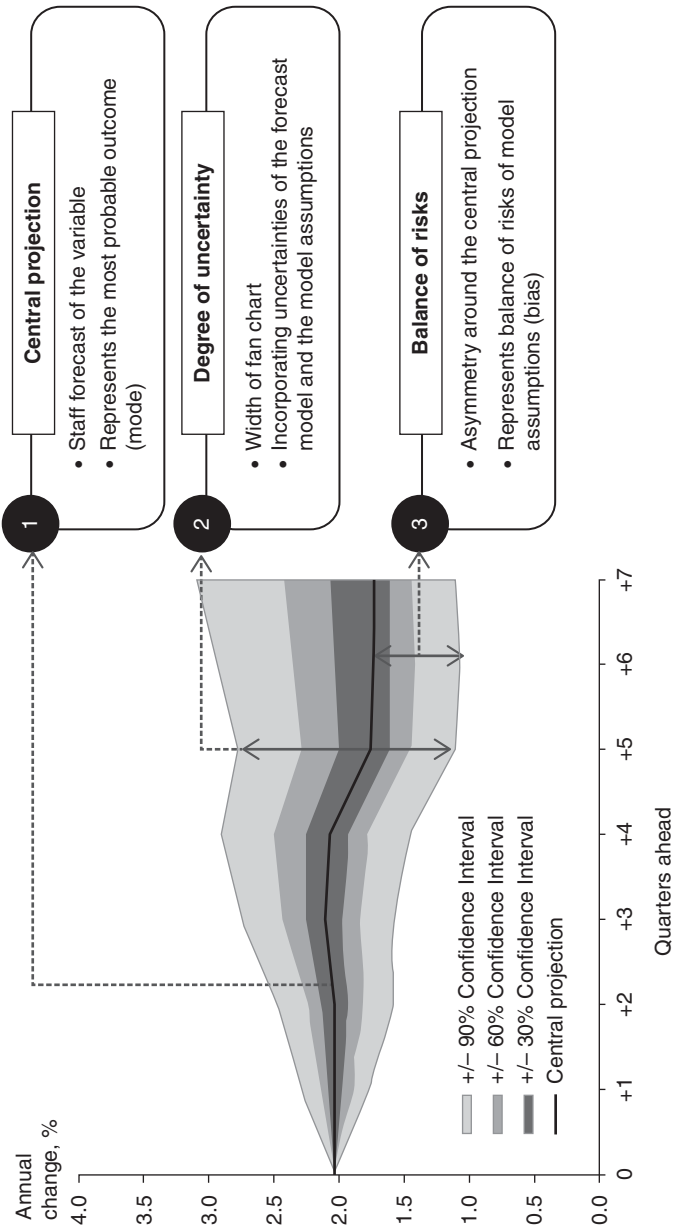


Figure 1.2. Inflation fan chart.
 Source: Razi and Loke, 'Fan chart'.

regulation and politics, environmental change, civic disturbance, war, and unknown unknowns.

Large projects are rarely completed on time and budget. 'The iron law of megaprojects' is 'over budget, over time, under benefits, over and over again'.²⁸ The exceptions are said to be outliers, one to eight projects per thousand. This causes heart-searching among clients and academics. One common explanation is genuine or feigned over-optimism on the part of promoters, clients, and contractors. Another is that bidders make unrealistically low estimates while overstating the benefits.²⁹

The iron law may yet arise, however, because the wrong benchmark is used. This benchmark is also metallic, the 'iron triangle' of cost, time, and quality locked in at the outset. The initial design is given an authority which it cannot bear. Long-term projects are too complicated to specify completely in advance and it is therefore wrong to regard early estimates as binding.³⁰ Both law and economics understand that contracts are incomplete and cannot anticipate every contingency.³¹

The full benefits of a project and how to achieve them cannot be known fully in advance. Promoters, clients and contractors learn as the project moves ahead and specifications are revised. 'Learning by doing' is a source of productivity improvement.³² Technologies improve incrementally. In complicated ones such as aircraft, computers, and smartphones, it has proven impossible to jump directly from initial breakthrough to the current models. A big long-term project is a 'Great Leap Forward', and not everything will go to plan. Bad faith may be involved, but even with the best intentions mis-specifications and overruns are inevitable. The question is how to deal with them. Compliance with defective plans is the wrong benchmark. Indeed, it is completion on time and within budget that may be suspect. 'Did they do it right?' is not the same as 'did they get it right?' A project may be completed at projected cost, time, and

²⁸ Flyvbjerg, 'Introduction', *Handbook of megaproject management*, 12.

²⁹ Flyvbjerg et al., 'Underestimating costs in public works'.

³⁰ Atkinson, 'Project management'.

³¹ Hart, *Firms, contracts, and financial structure*; idem, 'Incomplete contracts and public ownership'.

³² Arrow, 'Economic implications of learning by doing'.

quality, and still be unfit for purpose. The Sydney Opera House is iconic but it cost fourteen times the initial estimate, and the original architect had to be removed.

For lenders, their own rigidity is a source of risk. When payments are missed projects can go into terminal failure.³³ Whatever the outcome, it is difficult to know whether bad faith is not implicated. Long-term projects inevitably give rise to an asymmetry in which the contractors know more than the client. This 'agency problem' presents opportunities for cheating. A desirable but difficult solution is credible trust.³⁴ Another is to take the project in-house.

1.5 BEYOND THE PAYBACK LIMIT: FRANCHISE AND FINANCIAL MANIA

Two devices make it possible for business to operate beyond the payback limit. One is a government or social franchise. The second is financial manias. The payback horizon can be overridden using the device of the 'franchise', defined here as a revenue flow with some protection from competition, pricing power, long duration, and low variance. Such revenue flows are available to 'natural monopoly' network utilities, electricity, gas, water and landline telephones, or strong commercial brands supported by advertising. Governments support the franchise with limited liability, rights of way, tax concessions, natural resource grants, patents and copyrights, outright subsidies, guarantees and bailouts, regulated marketplaces, contract enforcement, and a legal personality for corporations. Hence a great deal of business enterprise has little to do with free markets and is carried out at the pleasure of the state.³⁵ In a franchise, government confers some powers on a corporation or other private entity. This gives rise to mutual dependency: government comes to depend on business to provide a service, while the corporation relies on government for secure income streams. The ultimate franchise is the state itself: it controls a territory and owns a tax base. Not even the state is entirely secure: it is open to challenge from the outside and can be

³³ Flyvbjerg, 'Introduction'. ³⁴ Weihe, 'Towards a process perspective', 516–519.

³⁵ Ciepley, 'Beyond public and private'; Eeckhout, *Profit paradox*; Philippon, *Great reversal*.

captured from within. Privatisation can be seen as such a quest, to capture tax revenues for a private franchise.

The crucial benefit of franchise is the access it provides to cheaper finance, and hence to longer break-evens. With benefit of a franchise, it is possible to issue bonds at much lower cost and longer maturities than equity or bank loans. The interest cost, unlike the return on equities, is tax deductible (another government subsidy). Long-term finance is locked in, while the investor (unlike a bank) can exit at any point by selling the bonds. With cheap finance, business can undertake projects extending for longer than bank or equity finance would allow. When that is not enough, government steps in to carry out the projects itself. Government can borrow for even less, and, if necessary, can forgo a financial return entirely or take a loss (as in the case of military expenditure).

Commercial banking, whose lending rate defines the payback boundary, is itself a franchise, underpinned by central banking, with clearing, licensing, regulation, and lender of last resort functions. In 2014, 61 per cent of the liabilities of the American financial system were covered by explicit or implicit protection from loss by the federal government.³⁶ Between 2008 and 2014, the fifty largest US companies 'received approximately \$27 in federal government loans, loan guarantees and bailouts for every \$1 they paid in federal taxes'.³⁷ In 2012–13, the UK government spent £1.4 on subsidies, direct grants and tax breaks to big business for every pound it received in corporation tax.

During the first globalisation before the First World War, between 1880 and 1913, almost all the massive British, French, and German foreign investment was guaranteed by governments or government entities.³⁸ Private enterprise depends on public goods: the legal system, money, transport and communication infrastructure and bandwidth, the skills and abilities imparted by households and public education, not to mention regulation, administration, and national defence.

The franchise system affects finance, network infrastructures, mass housing, defence and war, internal security and the legal system,

³⁶ Marshall et al., 'Bailout barometer'. ³⁷ Oxfam America, 'Broken at the top', 6.

³⁸ Bent and Esteves, 'Government-supported industries', table 3.

social insurance, social and cultural infrastructure, environmental protection, even the household and the family. In recent years there is a surge in social enterprise which seeks a profit in providing public and social goods.³⁹ Our payback model suggests that this is made possible because low interest rates since 2008 have pushed out payback boundaries. At 2 per cent, the payback limit is fifty years. But social enterprise is vulnerable to rising interest rates. A similar movement of ‘five-percent philanthropy’ for working-class housing in late-Victorian Britain came to grief on this issue.⁴⁰ The sway of franchise runs counter to the assumption in economics that business is superior due to market competition: private enterprise can only flourish long term under protection. Within the payback boundary competition works, beyond it a franchise is needed.

Every once in a very long while some breakthrough, real or imagined, offers investors a prospect of enrichment, of super-profits way beyond the humble returns of prevailing interest rates. Such prospective windfalls attach themselves to unlikely objects, tulips in seventeenth-century Netherlands, or the unspecified enterprises of the South Sea company in Britain shortly afterwards.⁴¹ In the latter case, as in many others, the windfall was underwritten by a state franchise. In Britain in the 1830s and 1840s, newly developed railways promised a vastly superior productivity over existing networks of roads, canals, and stage coaches. The windfalls would go to those who moved early, as borne out by an investment stampede in 1835. A new investment mania began in 1844 and lasted until 1847. Such opportunities induce a temporary blindness: cash-flow calculations are set aside as investors become speculators. Banks, however, did not invest. Within a few short years liquidity overwhelmed real opportunities and gave rise to over-investment, over-construction, and to large losses, and many companies collapsed. Only early movers realised windfalls. The mania was all the more remarkable given the enactment of the Railway Act of 1844 which allowed for the expropriation of any railway whose dividends exceeded 10 per cent (with compensation only for profits below that ceiling). For the rest, it was either wipe-out or the unexciting steady returns of a blue-chip

³⁹ Nicholls et al., *Social Finance*. ⁴⁰ Morris, ‘Market solutions for social problems’.

⁴¹ Kindleberger and Aliber, *Manias, panics and crashes*; Quinn and Turner, *Boom and bust*.

investment. After the dust had settled, however, society was equipped with a dense railway system, indeed so over-equipped to the extent that even a normal profit was difficult to make.⁴² Railway construction was piecemeal and bottom-up. Promoters had local horizons and MPs with local priorities defeated government intentions to lay out a more integrated public system.⁴³ Some 20,000 miles of line were built when 13,000 would have sufficed. 'Railways could have been nationalized in 1844 (or later) without adverse effects.'⁴⁴

During mania episodes prudence is suspended and speculators fly blind in the hope of landing in Eldorado. Innovation is driven not by market returns but by the prospect of outsize windfalls. 'The central dynamic is that the price of the financial asset is separated from any concern with the underlying cash flows.'⁴⁵ If society is fortunate and speculators are disappointed, investors find themselves in possession of long-term low-return assets. Such positive legacies of financial manias are even less frequent than the episodes themselves. For a productive legacy, apart from English railways, two others that come to mind are the electric tramway (and underground metro) revolution of the 1900s, and the telecom bubble of the late 1990s, which left a similar legacy of (in this case) long-distance fibre-optic telecommunication backbone lines, after some of the main enterprises failed.⁴⁶ Another example might be the Channel Tunnel, a technological success but a financial failure. Episodes of mania are sometimes rife with corruption: promoters mislead investors with outsize promises, set up and skim excessive start-up costs, and sometimes end up in prison. The effect is the same: investment is driven by delusion, not by a realistic calculation of market returns.

A natural experiment is provided by the development of railways and energy utilities in Europe and the settler societies overseas. Piped water, canals, and railways were undertaken for profit initially. Eighteenth-century British toll roads (turnpikes) were built not-

⁴² Arnold and McCartney, 'Rates of return'; Casson, *World's first railway*; Lewin, *Railway mania*; Mitchell et al., 'How good was the profitability?'; Odlyzko, 'Collective hallucinations'.

⁴³ Lewin, *Railway mania*; Casson, *World's first railway*; dissenting, Odlyzko, 'Early British railway system'.

⁴⁴ Casson, *World's first railway*, 2, 26.

⁴⁵ Janeway, *Doing capitalism*, 2; Perez, *Technological revolutions*, pt II.

⁴⁶ McKay, *Trolleys and tramways*; Malik, *Broadbandits*.

for-profit and the Post Office was a public service. Roads, pavements, street lighting, and sewers were laid out sometimes by developers but mostly by self-governing towns. In more recent times the highway system has always been provided by government. By the end of the nineteenth century, a good deal of the new network utilities had shifted into public hands after government conflicts with their private owners, while the others made use of a public subsidy or at least a public right of way.⁴⁷ Battersea bridge, pictured on the cover, followed this course as well.

The railway systems of continental Europe, when they were not built by governments directly, all required subsidies and guarantees. Likewise colonial railways in nineteenth-century Australasia, India, and South Africa, as well as those in the 'informal empire' in Latin America. North American railways received massive grants of public land which usually came with a monopoly right of way. In railways globally public ownership was increasingly preferred and was not inimical to efficiency.⁴⁸

Of all countries, Britain alone ran a truly private company railway system. That single exception occurred due to investor miscalculation in the special circumstances of the railway mania. In Britain, investor mania overpowered uncertainty and made government intervention unnecessary. Initial finance was mostly by means of equity, made possibly by the privilege of limited liability conferred on the railways before it was made available to other business. Every line had to be authorised by an act of Parliament and empowered for compulsory purchase of its rights of way, and all of them continued to be regulated thereafter. Everywhere else uncertainty required government investment, subsidy, or guarantee, i.e. some kind of franchise or outright government ownership. The security of the franchise (or government ownership) then made it possible to rely on bond finance, which tapped public savings directly, and with much longer maturities and lower cost than bank credit. In the British case, once the basic network was in place with its quasi-monopolies, the product was no longer the

⁴⁷ Millward, *Private and public enterprise*, 22.

⁴⁸ Bignon, 'Big push or big grab?'; Bogart, 'Engines of development'; idem, 'Nationalizations'; idem, 'A global perspective'; Chaudhary and Bogart, 'Public-private partnerships and efficiency'; Bogart and Chaudhary, 'Off the rails'.

long-lived permanent way and rolling stock, but a perishable commodity, journeys made and concluded in the course of hours, which could be financed if necessary by ordinary commercial credit. Bond finance could be secured by a network that already existed, with a record of operation and profits.

British railways were taken over by the state during the First World War, were knocked together into four companies in 1923, and nationalised in 1945. London underground railways, which began as private ventures in the 1860s, were subsidised and municipalised, and were finally amalgamated with surface transport as a public system in 1933.⁴⁹ In the 1990s, free-market convictions motivated a return to private ownership, but despite the government's best efforts this remains incomplete and is being rolled back.⁵⁰ The track is in public ownership again, and investment in rolling stock is only partly private. The East Coast railway, one of the main long-distance passenger arteries, has now reverted three times into public ownership due to private failure, and other private lines (in the London Underground and the Channel Tunnel) have collapsed. New lines (Crossrail, HS2) are being constructed by government. In June 2018, 'every single homegrown train operator is damaged goods'.⁵¹ Of the privatised British passenger franchises, 74 per cent were owned by foreign government railway companies in 2014. A rigorous recent survey concludes that 'even after conservative assumptions, rail privatisation has resulted in considerable additional costs: it was a major public policy error'.⁵²

In the United States intercity passenger railways had to be nationalised in 1971 and continue to be run as a public service. The freight railways there are currently in private ownership and operate successfully. These companies inherited the sunk costs of a large passenger and freight system, much of which had gone out of business and was salvaged by government. For eight years the largest system (Conrail) was run successfully by government before it was sold off. Much of the business is with captive clients, carrying bulk commodities on

⁴⁹ Barker and Robbins, *History of London transport*.

⁵⁰ Lewis and Offer, 'Railways as patient capital'; McCartney and Stittle, 'A very costly industry'.

⁵¹ Lea, 'Bumps and dents in all the operators'.

⁵² McCartney and Stittle, 'A very costly industry', 1.

long-term contracts and over long distances, as well as containers.⁵³ This gives them pricing power, and they carry very little debt. In Japan the main railways were nationalised in 1906 and privatised in 1987. Privatisation there has succeeded due to special local conditions: high urban densities and levels of passenger rail use, very low interest rates, and (it might be added) a corporate culture of patient capital.⁵⁴

Most forms of transport rely on the public sector. In motor cars the product cycle is short, several years for most models, but their use depends on the public infrastructure of roads.⁵⁵ For air transport, on the face of it a competitive industry, the product cycle (flights) is measured in hours. Government underwrites the lion's share of commercial aircraft development costs and builds the airports (Figure 1.3).⁵⁶ Likewise, ocean shipping moors in ports constructed

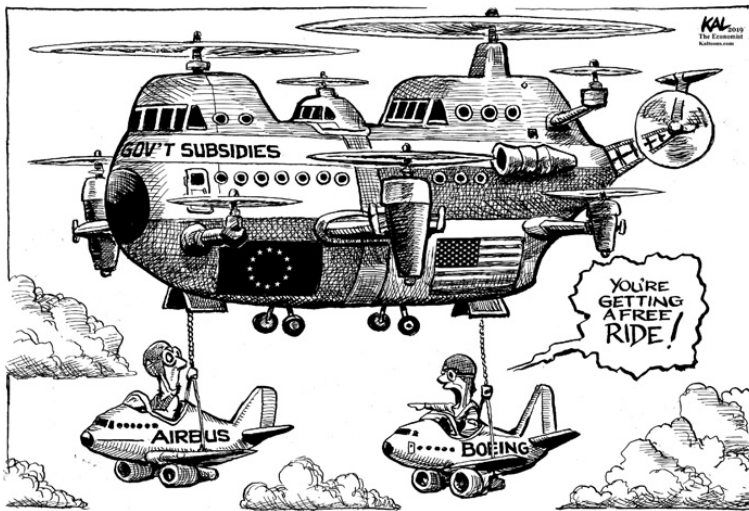


Figure 1.3 *The Economist*, 13 April 2019.

Copyright: Kevin KAL Kallaugher, *The Economist*, Kaltoons.com

⁵³ Stover, *American railroads*, chs. 9–10.

⁵⁴ Fukui and Oda, 'Who should take responsibility'; Shoji, 'Lessons from Japanese experiences'.

⁵⁵ Offer, *Challenge of affluence*, chs. 9–10. ⁵⁶ Mowery and Rosenberg, *Technology*, ch. 7.

by governments. It escapes government tutelage by plying a public right of way (policed, however, by sovereign navies), and flying flags of convenience.

Privately held companies (like philanthropists) are not beholden to market time horizons. Capital can wait, but only for large windfall returns. Private equity investment takes an asset (usually an existing one) off the bourse and into private ownership. Notionally this might seem like ‘patient capital’ seeking long-term returns. But private equity is a quest for large windfall profits: ‘After the investment, the general partners would hold the entity for five years or so’ before selling it on. This implies a rate of return well in excess of market interest rates. There was no ‘abstinence’ involved. The windfall was anticipated by hefty management fees as well as a 20 per cent share of the ultimate profit.⁵⁷ It can be a form of looting, an opportunity to strip existing enterprises by loading them with debt and extracting heavy dividends.⁵⁸ Venture capital can also wait but depends on innovation. The purpose is not to nurture long-term vital low-return activities, but to gamble on windfalls arising from technological breakthroughs. Dealing with the unknown, there is no basis for calculation: ‘absence of market discipline is the essence of the process’.⁵⁹ The expected return (usually obtained by floating the investment on the stock exchange) is meant to be well in excess of ordinary business returns. The first great wave of venture capitalism in the United States strove to marketise innovation from the Cold War. Development was undertaken by private firms under government contracts, which financed from one-half and up to two-thirds of research and development in the USA during the Cold War years.⁶⁰

I.6 PUBLIC–PRIVATE PARTNERSHIPS

Public–private partnerships (PPP) were designed to leapfrog the credit time horizon. Introduced in the 1980s, they spread throughout the world, especially in middle-income developing countries and in

⁵⁷ Ivashina and Lerner, *Patient capital*, x. ⁵⁸ E.g. Eley, ‘Debenhams liquidation’.

⁵⁹ Janeway, *Doing capitalism*, 2.

⁶⁰ Janeway, *Doing capitalism*, ch. 10; Mowery and Rosenberg, *Technology*, ch. 6.

English-speaking ones. They deliver the services of public infrastructure like roads, schools, and hospitals by means of private investment, secured by government revenue guarantees.⁶¹ Three decades later their flaws are evident and PPPs are in retreat. Their trajectory shows how violating credit time horizons can be fraught with trouble.

Public–private contracts diffused to developing countries at the behest of the World Bank as part of the ‘Washington Consensus’ in which the international monetary and credit agencies imposed market-friendly reforms as a condition of access to credit. The IMF and the World Bank provided loans, guarantees, and intermediate access to much larger private loans.⁶² The PPP contractual framework provided a secure outlet for the funds of large banks and financial institutions in the United States, Britain, Europe, India, and Japan; they also provided a lucrative role for international consultants, suppliers, and contractors.⁶³

The Washington Consensus is now discredited, and the experience of PPP is mixed. This is reflected in the trajectory of these ventures. Their implementation internationally peaked in 2013 at about \$220 billion of investment a year in less-developed countries. Since then PPP investment has gone into steep decline (Figure 1.4). The payments, however, will continue far into the future. The attractions of PPP for lenders remain large, and financial institutions, the G20, and the UK government (until recently) were still trying to pump it back into life.⁶⁴

1.7 THE PRIVATE FINANCE INITIATIVE IN THE UK

The British version, the private finance initiative (PFI), was introduced in 1992 by a Conservative government to attract commercial credit into infrastructure investment, at business rates of return with

⁶¹ Hodge et al., *International handbook*.

⁶² Noubma-Um, ‘Empirical evidence’, 472–3; World Bank, ‘Sources of financing’; Offer and Söderberg, *Nobel factor*, 233–246.

⁶³ Bayliss and Van Waeyenberge, ‘Unpacking the public private partnership revival’; Finnerty, *Project financing*, ch. 5; World Bank, ‘Sources of financing’; World Bank, ‘Private participation in infrastructure’.

⁶⁴ Bayliss and Van Waeyenberge, *ibid.*; Dujovne, ‘G20 economies must push’; Plimmer and Parker, ‘Theresa May sticks’.

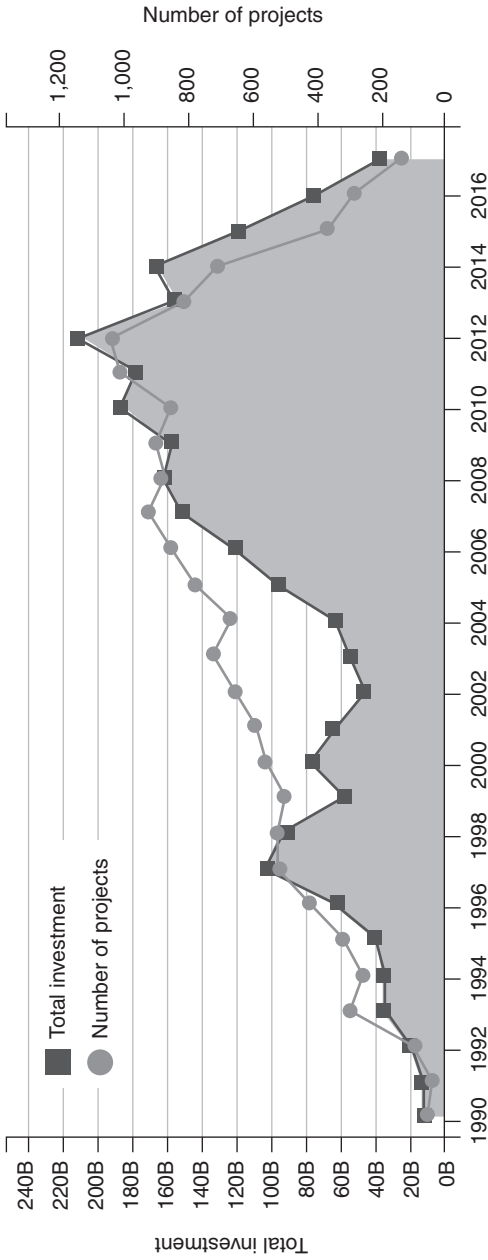


Figure 1.4 Public-private partnerships in medium-developed and less-developed countries, 1990–2016.
 Source: World Bank.⁶⁵

⁶⁵ ppi.worldbank.org/visualization/ppi.html#sector=&status=&ppi=&investment=®ion=&ida=&income=&ppp=&mdb=&year=&excel=false&map=&header=true

a government guarantee.⁶⁶ Under PFI, a commercial venture became a fixed-income financial asset with the security of public debt, but at commercial interest rates typically two to three times as high.⁶⁷ In these British PPPs, a public agency commissioned a project from a corporate consortium, usually a 'special purpose vehicle' (SPV) created for the purpose. Special purpose vehicles were formed for the benefit of the lenders, i.e. to make the projects 'bankable',⁶⁸ and were designed to protect parent companies from project liabilities. The SPV raised the money, erected the structures, and delivered the service. The public authority paid regular fees which combined loan service, capital repayment, and service charges. Typically, about one-half of the payment is to service and pay back the initial finance.⁶⁹ Payment continued for the economic life of the project, e.g. twenty-five to thirty years for schools and hospitals, regardless of suitability or need. Partnerships were contractually insulated from changes in the government budget, and payments were linked to the retail price index.

Coming into power in 1997 after a long period in opposition, the New Labour party embraced sound money policies in a quest for acceptance by finance. It promised to comply with the Maastricht Treaty limit of borrowing no more than 3 per cent of GDP a year and its own self-imposed public debt ceiling of 40 per cent of GDP. PFI appeared in the national accounts as expenditure, not borrowing, an accounting ruse that made investment possible without incurring public debt. Although never admitted, that is still widely understood to have been its prime motivation.⁷⁰

For Labour in opposition this prospect was enticing as early as 1991, but not a word of it has appeared in subsequent justifications.⁷¹ Instead, the argument was that PPP was efficient.⁷² Every PPP

⁶⁶ Great Britain (GB) House of Commons (HC) Treasury Committee, 'Private finance initiative', 3; GB National Audit Office (NAO), 'Choice of finance', 41–50, esp. 47–50.

⁶⁷ Finnerty, *Project financing*, ch. 2; Hare, 'PPP and PFI', 100.

⁶⁸ Bayliss and Van Waeyenberge, 'Unpacking the public private partnership revival', 580; Finnerty, *Project financing*, ch. 2.

⁶⁹ GB NAO, Comptroller and Auditor General, 'PFI and PF2', 26.

⁷⁰ Atkins et al., 'Public versus private', 15–16; Foot, 'P.F. Eye', 11; GB HC, Committee of Public Accounts, 'Public finance initiatives', 3; Hellowell, 'UK's private finance initiative'; Nelson and Hoskin, 'The great debt deceit'.

⁷¹ Brown et al., 'Financing infrastructure', 13–14.

⁷² GB HC, Committee of Public Accounts, 'PFI in housing and hospitals', 8–16; GB HM Treasury, 'Public private partnerships', 16–17; idem, 'PFI', 1–2.

project was meant to be tested by means of ‘value for money’ comparisons with a public sector alternative. Commercial finance costs at least twice as much as public borrowing. The comparison had to show, therefore, that private efficiency was more than twice as high as that of the public sector.⁷³

Advocates of market efficiency in finance (the ‘efficient market hypothesis’) argue that when the same technology is used, government projects are no less risky than corporate ones, and that commercial interest rates are therefore appropriate.⁷⁴ Superior efficiency was meant to be achieved by means of ‘risk transfer’, i.e. the greater capacity of the private sector to absorb risk would more than offset the higher cost of finance. Government documents insisted that PFI was more efficient, and even quantified the savings achieved over public sector comparators.⁷⁵

These savings were soon shown to be bogus. Government has much greater capacity to absorb risk than any private entity.⁷⁶ ‘The only publications which are broadly positive about PFI tend to be those that have been compiled by official bodies as part of their statutory remit.’⁷⁷ Value for money tests were biased in favour of PFI.⁷⁸ Even using the Treasury’s own method the purported advantage was razor-thin, while alternative measures showed it to be strongly negative.⁷⁹

Biases took a variety of forms. Foremost among them was the costing of risk transfers. At the outset the cost and completion record of PFIs was better than the public sector comparators, but the public sector caught up, and in later reviews any advantage was small (non-PFI in

⁷³ Brown et al., ‘Financing infrastructure’, 14; Edwards, ‘The private finance initiative (PFI) and value for money?’, 11–20; Hare, ‘PPP and PFI’, 98–106.

⁷⁴ Spackman, ‘Time discounting’, 472, 477, 505.

⁷⁵ GB HM Treasury, ‘Public private partnerships’, 17–18. ⁷⁶ Arrow and Lind, ‘Uncertainty’.

⁷⁷ Wall and Connolly, ‘Private finance initiative’, 712.

⁷⁸ Atkins et al., ‘Public versus private’; Boardman and Hellowell, ‘Comparative analysis’; Edwards et al., ‘Evaluating the operation of PFI’; Gaffney et al., ‘NHS capital expenditure’; idem, ‘PFI in the NHS’; Heald, ‘Value for money tests’; GB NAO, Comptroller and Auditor General, ‘Lessons from PFI’; idem, ‘Review of the VfM assessment’; idem, ‘PFI and PF2’; GB HC Treasury Committee, ‘Private finance initiative’; Pollock et al., ‘Private finance and “value for money” in NHS hospitals’; Pollock et al., ‘Private finance initiative’; Siemiatycki and Farooqi, ‘Value for money and risk’.

⁷⁹ GB NAO, Comptroller and Auditor General, ‘Review of the VfM assessment process’, fig. 4, 19; fig. 6, 25.

brackets): in a survey in 2008, 69 (65) per cent of PFI projects had delivered on time and 65 (54) per cent within budget.⁸⁰ It had to be shown that the difference had any practical significance. Even if it did, as we have argued in Chapter 1 (1.4), that is not necessarily a virtue. PFI may have contained its costs better because its budgets already embodied a premium for cost overruns: they tended to be about a quarter more expensive than public sector equivalents, and costs often escalated between the announcement and signing of contracts, when the test benchmark was set.⁸¹ For PFI, the clock started ticking only after a long process of negotiation and planning, making completion look more timely than it was.⁸² A marginal advantage in completion time is hardly a justification for thirty-year contracts: that could be achieved by contracts for construction alone. With all the contracting required, high legal, consultant and accountancy fees were incurred by both sides. These were estimated at 3.5 per cent for the public sector client, 3.8 per cent for the winning bid and about 5 per cent for the failed ones, for a total of 12.3 per cent.⁸³ The discount rate for the public sector comparators was fixed in 2003; after the financial crisis of 2008 this was twice as high as the rate at which government was currently borrowing, but the comparator remained unchanged, adding another bias against the public sector.⁸⁴ In response to such criticism the Treasury withdrew its value for money guidance in 2012.

Initially the Treasury promised careful retrospective evaluations of the projects,⁸⁵ but none was ever undertaken: there is no official analysis available to show whether PFI has delivered value for money, and none is currently envisaged.⁸⁶ This is also the case more generally for PPP.⁸⁷ Particulars of PFI projects were placed beyond scrutiny by 'commercial confidentiality'.⁸⁸ If PPPs could be

⁸⁰ GB NAO, Comptroller and Auditor General, 'Performance of PFI construction', 7–8.

⁸¹ Boardman et al., 'Theory and evidence', 17. ⁸² *Ibid.*, ii.

⁸³ Dudkin and Väilä, 'Transaction costs', 14.

⁸⁴ GB NAO, Comptroller and Auditor General, 'PFI and PF2', 20.

⁸⁵ GB HM Treasury, 'Public private partnerships', 32.

⁸⁶ GB HC, Committee of Public Accounts, 'Public finance initiatives', 5; GB NAO, Comptroller and Auditor General, 'PFI and PF2', 19–20.

⁸⁷ Hodge, 'Reviewing public–private partnerships', 94–105.

⁸⁸ Jubilee Debt Campaign, 'UK's PPP disaster', 5; Siemiatycki and Farooqi, 'Value for money and risk', 288.

shown as superior, we can be sure it would have been done. External evaluations of individual projects showed poor value for money.⁸⁹

Insurance pools share individual risk with many others, the larger the number the lower the premium. Hence the public sector, whose resources encompass the whole of the tax base, can insure more cheaply than a private entity.⁹⁰ Public sector comparators were typically imputed a premium for ‘optimism bias’ and ‘risk transfer’; but if the public sector has to pay a premium to the SPV in order to avoid the risk, there is no risk transfer

Uncertainty cannot be dissipated by mere contract. The government was exposed to supplier default, while remaining locked into the projects. If an SPV failed, the parent company could walk away, but not the government.⁹¹ In several instances contractors failed and did just that. The Channel Tunnel company was set up as a free-standing private enterprise project with no subsidy, but when it failed the government took it over.⁹² The £3bn Channel Tunnel rail link PPP required successive government rescues.⁹³ The £15.7bn thirty-year Metronet Underground maintenance contract and the parallel Tube Lines PPP reverted to public management.⁹⁴ Several hospital and IT projects faltered.⁹⁵ In the aftermath of the financial crisis, when lending dried up, the government stepped in with funding.⁹⁶ Carillion, the second largest government contractor, collapsed in January 2018 with more than £2bn of unfinished projects.⁹⁷

Over and above the cost of credit, PFI projects incurred costs additional to those of public sector projects. PFI took out expensive insurance while the public sector self-insured. Contractors held costly cash balances and paid extra fees to consultants and

⁸⁹ e.g., Edwards et al., ‘Evaluating the operation of PFI’. ⁹⁰ Arrow and Lind, ‘Uncertainty’.

⁹¹ Edwards et al., ‘Evaluating the operation of PFI’, 97; Zhang, ‘Financial viability analysis’, 657.

⁹² Finnerty, *Project financing*, ch. 20.

⁹³ Wikipedia, ‘International Finance Corporation’; Wikipedia, ‘High Speed 1’; Wikipedia, ‘Partnerships UK’.

⁹⁴ BBC, ‘Tube maintenance back “in house”’; *Economist*, ‘Mind the money gap’; *Private Eye*, ‘Tubular balls-up’; Wright, ‘Private buyers sought for Metronet’.

⁹⁵ Carvel, ‘Flagship PFI hospital’; Carr-Brown and Gould, ‘Series of blunders’; Edwards, ‘The private finance initiative’; Robinson, *Unconventional minister*, 104–106; Timmins, ‘NHS trust buys back PFI Hospital’; Timmins, ‘PFI projects switched to tax havens, report claims’; Wikipedia, ‘Hinchinbrooke Hospital’.

⁹⁶ Barker and Timmins, ‘Taxpayers’ cash’. ⁹⁷ Plimmer et al., ‘Cable warns’.

lenders.⁹⁸ The taxes incurred by SPVs were given as a reason why the public sector (which pays no taxes) had lower costs.⁹⁹ One enticement of PFI was corporation tax due to be paid.¹⁰⁰ But much of the profit found its way to tax havens.¹⁰¹ Offshore funds owned about half of the equity, typically paying less than 1 per cent in tax. The most risky stage was the initial one of design and construction. Once it was over, assets were often refinanced more cheaply or sold on at a large profit. Public sector efforts to share the gains had only limited success.¹⁰²

PFI turned out to be expensive. By 2013, nine out of ten government departments would have bought out their PFIs if they could. They were still paying high pre-2008 interest rates.¹⁰³ Local authorities, with no independent sources of finance, were told that if they wanted to build it was PFI or nothing. It was ‘the only game in town’. Likewise for the NHS.¹⁰⁴ But no additional funding was provided for the extra cost, so services were cut instead. NHS hospitals constructed under PFI typically had fewer beds than the ones they replaced.¹⁰⁵

For those who promoted them, the main difficulty was packaging these projects in ‘bankable’ form. So, despite the purported advantages of PFI, it only twice exceeded 10 per cent of annual government capital expenditure. Figure 1.5 shows how the trajectory of PFI has gone into steep decline. In Britain, PFI has run its course.¹⁰⁶

⁹⁸ GB NAO, Comptroller and Auditor General, ‘PFI and PF2’, 16.

⁹⁹ Baumol, ‘Social rate of discount’.

¹⁰⁰ GB HC, Committee of Public Accounts, ‘Public finance initiatives’, 6.

¹⁰¹ GB NAO, Comptroller and Auditor General, ‘PFI and PF2’, 20; Jubilee Debt Campaign, ‘UK’s PPPs disaster’, 4; Timmins, ‘NHS trust buys back PFI hospital’; idem, ‘PFI projects switched to tax havens’; Whitfield, ‘PPP profiteering’.

¹⁰² GB HC, Committee of Public Accounts, ‘Update on PFI debt refinancing’; Whitfield, ‘PPP wealth machine’; Jubilee Debt Campaign, ‘UK’s PPPs disaster’, 4.

¹⁰³ GB NAO, Comptroller and Auditor General, ‘PFI and PF2’, 32.

¹⁰⁴ 1999 quote from GB HC, Committee of Public Accounts, ‘PFI in housing and hospitals’, 7; Edwards et al., ‘Evaluating the operation of PFI’; GB HC, Treasury Committee, ‘Private finance initiative’, 33; Grimsey and Lewis, *Public private partnerships*, 362; Hare, ‘PPP and PFI’, 109–110; Timmins, ‘NHS trust buys back PFI hospital’; idem, ‘PFI projects switched to tax havens’.

¹⁰⁵ Edwards et al., ‘Evaluating the operation of PFI’, 152.

¹⁰⁶ GB HC, Committee of Public Accounts, ‘Public finance initiatives’, 7.

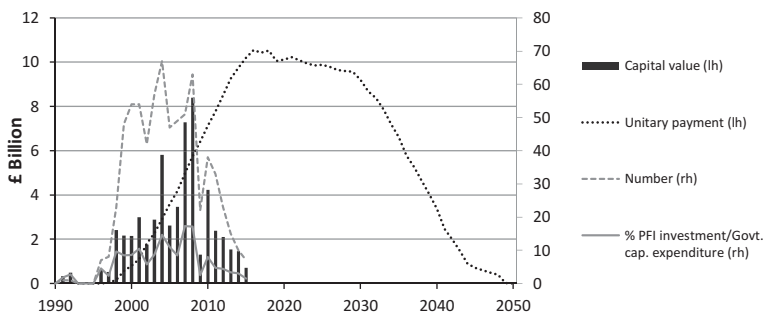


Figure 1.5 PFI investments in the UK

Source: UK Treasury.

Note: Unitary payment is the ongoing combined debt and service charge. Typically, about half is debt service.

1.8 FOR WHOSE BENEFIT?

PFI failed. Despite a renewed commitment by Conservative governments and attempts to fix its defects, the number of new projects declined almost to nothing. ‘These schemes are now widely discredited’ wrote the *Financial Times* in 2017.¹⁰⁷ The new left-wing leadership of the Labour Party threatened to cancel many of the existing contracts.¹⁰⁸ PFI was finally laid to rest on 29 October 2018. But most of the liabilities lie in the future and will continue to be paid until the middle of the current century (Figure 1.5).

Removing debt from the public balance sheet was a deception with no benefits. It was a ‘fiscal illusion’, no more than an accounting device. There was no saving, just the opposite. An excessive cost was imposed on future taxpayers in return for a semblance of prudence and self-control.¹⁰⁹ Local authorities continue to pay for unwanted buildings and for sub-standard ones.¹¹⁰ Some £47 million will

¹⁰⁷ *Financial Times*, ‘UK’s ailing infrastructure’.

¹⁰⁸ Packard and Plimmer, ‘Labour Party threatens’.

¹⁰⁹ GB HC, Committee of Public Accounts, ‘Public finance initiatives’, 3, 15–16; GB NAO, Comptroller and Auditor General, ‘PFI and PF2’, 12; Irwin, ‘Accounting devices and fiscal illusions’.

¹¹⁰ GB NAO, Comptroller and Auditor General, ‘PFI and PF2’, 17; Jubilee Debt Campaign, ‘UK’s PPPs disaster’, 5–7.

eventually be paid for a school in Liverpool which has stood empty since 2014.¹¹¹

Why was PFI sustained for so long? Initially even Conservatives, the party of business, had been sceptical. The concept was rejected by the Treasury and by the Conservative minister for Social Services Keith Joseph as early as the 1970s.¹¹² The former Conservative Chancellor of the Exchequer Nigel Lawson told the House of Lords in 2018:

My Treasury officials [in the 1980s] were keen on it but I refused to have anything to do with it. Subsequently, my successors – particularly, but not exclusively, Mr Gordon Brown – were enthusiastically in favour of it. Its purpose, in the eyes of the Treasury officials who tried to persuade me to take it up, was that it enabled you, at least in the short term, to dress up considerable amounts of public expenditure and put them off the public sector balance sheet. That is not a good reason for adopting something which, in my judgment, does not give good value for money for the taxpayer, and it introduces a degree of moral hazard, which we see very much in the Carillion affair . . . We have now had enough evidence that it is not good value for money and therefore not sensible from the point of view of the taxpayer.¹¹³

PFI inspired magical thinking. ‘Mr Blair and Mr Brown talk as if the PFI was free cash, a capitalist cargo cult from their friends in the city’, wrote Simon Jenkins (a leading journalist) in *The Times*.¹¹⁴ The test, wrote Brown while still in opposition, was not whether PPP was value for money, ‘The real comparison should be between the cost of private finance and the cost (economic and social) of not undertaking the project at all’.¹¹⁵ That is the only underlined sentence in a 22-page document. The shackles were self-imposed. As Chancellor, Brown would only borrow up to 40 per cent of GDP but Maastricht allowed him 60. And no European Union country was ever punished for exceeding a 3 per cent deficit.

One might accept the off-budget reasoning at face value, but it was never made openly: there was no face to value. If undertaken in good

¹¹¹ GB HC, Committee of Public Accounts, ‘Public finance initiatives’, 6.

¹¹² Levitt, ‘Rightwinger who saw risks’.

¹¹³ Lord Lawson, House of Lords Debates, 15 Jan. 2018, 5.06pm.

¹¹⁴ Jenkins, ‘No man is an island’.

¹¹⁵ Brown et al., ‘Financing infrastructure’, 14.

faith, then it was done without due diligence. Some explanation is called for, but none ever came, not in any sources I have seen. PFI is mentioned only once in passing in the Treasury's high-class apologia for New Labour,¹¹⁶ and merely as an efficiency measure. Despite persistent denials, the Treasury continued to prefer PFI because it did not show up as public debt.¹¹⁷

Who benefits? Howard Davies is a British policy economist who has also worked as a financier and a senior public official. He has been the Chairman of the financial regulator, the Financial Services Authority (FSA), of the Audit Commission, Director of the London School of Economics, and, since 2015, Chairman of the Royal Bank of Scotland. In 2018, in front of more than two million television viewers, he stated that 'PFI has been a fraud on the people because essentially the government is always the cheapest borrower'.¹¹⁸

The benefits went largely to the banks who obtained a revenue flow at commercial rates of interest, underwritten by the full faith and credit of the state. Risks were shifted to contractors, operators, and public sector clients.¹¹⁹ Private finance cost at least twice as much as public borrowing. Precisely how much is difficult to know because the contracts are not in the public domain. But finance benefited by more than just the difference in interest rates. In the UK, about 90 per cent of PFI projects were financed by debt. Profits on the equity share were higher, typically in double figures and up to 15 per cent. When they were sold on, projects provided windfall returns. A study of 118 sales revealed an average return to investors of 28.7 per cent.¹²⁰

The markup on PFI loans was likely to be large. It is increasingly understood that commercial lenders can create money out of nothing if the borrower is credible.¹²¹ No borrower is more credible than the state. Syndicating the loans helped reduce liquidity risk. For the

¹¹⁶ Brown et al., *Reforming Britain's economic and financial policy*.

¹¹⁷ GB HC, Committee of Public Accounts, 'Public finance initiatives', 16.

¹¹⁸ BBC Question Time, 'Chairman of RBS, Howard Davies', 18 January.

¹¹⁹ Lea, 'Carillion rivals warn MPs'.

¹²⁰ GB HC, Committee of Public Accounts, 'Private finance initiatives', 11.

¹²¹ Deutsche Bundesbank, 'The role of banks'; McLeay et al., 'Money creation'.

lenders, PFI was a licence to print money: debt could be issued with high leverage and at little cost.

PFI responded to the financial sector's quest for yield. During the 1980s many restrictions on lending were lifted. The consequence was a surge of credit into real estate, bonds, and shares. Credit drove up asset prices but also acted to reduce their yields.¹²² Where did the funding come from? The ten-fold expansion of bank assets during these years cannot have come out of household and corporate savings. The various schools of Modern Monetary Theory argue that credit is generated endogenously in response to demand from credible borrowers: not that deposits generate loans, but that loans create deposits.¹²³ The PPP system provided money market returns with government guarantees. Recently it was reported that, 'PPP policy is now driven far more by the availability of global finance than by the previously perceived potential for efficiency gains through privatisation'.¹²⁴

Corruption requires at least two parties. The instigator of fraud was the New Labour government which came to office in 1997. The party carried favour with business with its code word of 'modernisation'. The term conveyed a disavowal of historical working-class affinities, a quest for middle-class voters, and for acceptance by finance and business.¹²⁵ In mitigation, New Labour believed that finance had the power to derail its government. It was also influenced by North American market fundamentalism, the conviction that government was powerless to control corporations or defy them.¹²⁶

PFI was launched by the Conservatives in 1992 but made little progress because the Treasury insisted on better value than public sector investment ('the universal test'). Labour spoke against PFI in Parliament, but the party leaders already endorsed it in opposition.¹²⁷ Once in power in 1997 they wasted no time in ramping it up. Geoffrey Robinson, a shadowy businessman and Labour MP, came into government as Paymaster General with

¹²² Offer, 'Narrow banking', 167–170. ¹²³ Offer, 'The market turn', 1057–1062.

¹²⁴ Bayliss and Van Waeyenberge, 'Unpacking the public private partnership', 581.

¹²⁵ Rawnsley, *Servants of the people*, 298–302; Finlayson, *New Labour*, ch. 6, esp. 97.

¹²⁶ Ramsay, *Rise of New Labour*, 70–82.

¹²⁷ Brown et al., 'Financing infrastructure investment'.

a mission to seduce lenders into PFI.¹²⁸ He appointed City bankers to serve on a Treasury task force and recruited one of them to lead it. The task was to relax PFI contractual terms. The Treasury's 'value for money' tests straddled the line between advocacy and corruption. In 2000 the task force was privatised as Partnerships UK (PUK), with a majority stake sold off to a consortium of banks, and staffed by corporate lawyers, bankers, and consultants in a manifest conflict of interest.¹²⁹ Steve Robson, the Treasury's privatisation advocate, was knighted, retired, and took up several directorships, including one at the Royal Bank of Scotland. At PUK, however, he remained the 'Treasury nominee', although the bank he worked for was doing business with the scheme. PFI scholar Jean Shaoul wrote that 'we have a government that acts in the interests of a financial oligarchy'.¹³⁰

'Nothing in modern politics is more curious', wrote Simon Jenkins in 2002, 'than Labour's adoption of the most radical privatisation in Europe . . . Mr Blair has been sold on there being only one salvation for public services. It lies in the complete reversal of Labour dogma, in subjugating the public service ethos to the "daring" incentive of private profit. The future lies in bankers and lawyers, not public officials and do-gooders.'¹³¹ For Labour politicians (like social democratic ones everywhere at the time) there was a heady sense of sin, of connection with the high and mighty, of an entitlement confirmed by the voters' mandate. New Labour fell for grand follies, for the 'four sublimes': the techno-challenge of grand projects, the rapture of political monuments, the financial windfalls for all concerned, and the awe of iconic achievements.¹³² In a Faustian bargain, the progressive leadership surrounded itself with people from finance.¹³³

Petty corruption is breaking the rules. Grand corruption is writing them (see Chapter 2). Making it legal confers impunity. 'Modernisation' was a code word for supping at the table of mammon. The failure was fiduciary: sacrificing the public good for an

¹²⁸ Bower, *The Paymaster*.

¹²⁹ *Ibid.*, ch. 8, esp. 141–143; Foot, 'P.F. Eye'; Wikipedia, 'Partnerships UK'.

¹³⁰ Owen and Brady, 'Like paying for schools'. ¹³¹ Jenkins, 'No man is an island'.

¹³² Flyvbjerg, 'Introduction', 6.

¹³³ GB HC, Public Administration Select Committee, 'Goats and Tsars'.

expediency that was never declared or admitted, and which is hard to pin down; not breaking the rules but re-writing them for sectional and even personal advantage.¹³⁴ From its very inception, PFI was widely and vigorously criticised, not least by public agencies. It exemplified the New Labour culture of dissimulation, of pervasive bad faith which has poisoned trust in government more widely.¹³⁵ Finance returned the favour: since the 1990s, outsourcing and privatisation opened a revolving door between government and business. Corporate employees were seconded to government to write contracts with their own sectors. Ministers and officials moved into firms and industries that they had regulated only a short time before.¹³⁶ The three leaders of the New Labour revolution, Blair, Mandelson, and Brown, won lucrative sinecures with financial companies and consultancies.¹³⁷ Such reciprocity makes a mockery of rationality in policy and of 'value for money' rhetoric. Fluid, uncertain projects depend on good faith for success. They are also prone to its opposite, bad faith and corruption.¹³⁸

1.9 CONCLUSION

Friedrich von Hayek argued famously that socialism was impossible because it required omniscience on the part of the central planner. In contrast, in market systems spontaneous order emerges out of local knowledge.¹³⁹ But for long-term provision the higgling of the market is not sufficient. The opposite is the case. Those who insist on certainty are commercial bankers, not central planners. The task of social planning is to manage uncertainty. It needs to apply expert judgement to the pitfalls and opportunities of long-term projects, and to implement them with integrity and competence. Failure in one project is offset by success in another. The obsession of public

¹³⁴ Rothstein and Varraich, *Making sense of corruption*, 26.

¹³⁵ Rawnsley, *Servants of the people*; Osborne, *Rise of political lying*; idem, *Triumph of the political class*.

¹³⁶ Barret, 'Fixing the revolving door'; Brooks and Hughes, 'Public servants, private paydays'; GB HC, Public Administration Select Committee, 'Goats and Tsars'; Transparency International, 'Cabs for hire?'; Wilks, 'Revolving door'.

¹³⁷ Brooks and Hughes, 'Public servants, private paydays', 22.

¹³⁸ OECD, 'Public-private partnerships', 121–124, and Chapter 3.

¹³⁹ Hayek, 'Use of knowledge in society'.

authorities with clearing the ground for business has created perverse incentives. The storied risk-takers of business are only risking their own and borrowed money. For society, the risk-taker is government. Private enterprise works best in the short term, public management for the long. The alternative is asking for trouble: mismanagement and corruption are inherently related to time horizons, as shown amply in the case of PFI.