THE CORPORATION IN THE 21ST CENTURY

ALSO BY JOHN KAY

Other People's Money

The Long and Short of It

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The Truth About Markets

THE CORPORATION IN THE 21ST CENTURY

Why (Almost) Everything We Are Told About Business Is Wrong

JOHN KAY

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INTRODUCTION: BUSINESS IN SOCIETY

> And no one puts new wine into old wineskins; or else the new wine bursts the wineskins, the wine is spilled, and the wineskins are ruined. But new wine must be put into new wineskins.
>
> Mark 2:22, New King James Version[1]

In 1901 financier J. P. Morgan orchestrated the creation of US Steel, then by almost any measure the largest company in the world. Two years earlier, John D. Rockefeller had consolidated his activities into Standard Oil of New Jersey, which controlled around 90 per cent of refined oil products in the United States. Steel and oil were essential elements in the rise of the automobile industry, which would transform both everyday life and the ways in which people thought about business.

Business historian Alfred Chandler documented the rise of the modern managerial corporation in his magisterial *Strategy and Structure* (1962).[2] The book showcased General Motors, along with chemical giant DuPont, retailer Sears Roebuck and Standard Oil of New Jersey. These companies dominated their industries in the United States and increasingly operated internationally. They exerted political influence, and their turnover exceeded the national product of many states. Their combination of economic and political power seemed to secure their dominance in perpetuity.

It didn't. In 2009 General Motors (GM) entered Chapter 11 bankruptcy. GM is still – just – the top-selling US automobile supplier, but its global production lags far behind that of

Toyota and Volkswagen. DuPont has broken itself up, and Sears Roebuck is more or less defunct. These failures are not because people have ceased to drive cars and shop or because business no longer requires chemical products. Incumbents lost out because other businesses met customer needs more effectively. Among Chandler's examples only Standard Oil of New Jersey – now ExxonMobil – continues to enjoy its former leadership status. Somewhat quixotically, in view of the widespread demand for a transition from fossil fuels.

In the 1970s you might presciently have anticipated that information technology would be key to the development of twenty-first-century business. And many savvy investors did; their enthusiasm made IBM the world's most valuable corporation. The leading computer company of the age would surely lead the race to the new frontier. That wasn't how it worked out.

On Wall Street they called the upstarts 'the FAANGs' – Facebook (Meta), Apple, Amazon, Netflix and Google (Alphabet). Then the fickle fashion of finance favoured the 'Magnificent Seven', with Netflix replaced by Nvidia, and Tesla and Microsoft added to the list – the latter restored to fortune after missing out on the Apple-led shift to mobile computing in the first decade of the new century. Microsoft is actually the longest established of these titans of the modern economy, famously founded in 1975 by Harvard dropouts Paul Allen and Bill Gates. Four of these businesses companies began trading only in the twenty-first century. None of the FAANGs is a manufacturer (I will explain Apple later.) The employees of these companies are not the labouring poor, victims of class oppression; many hold degrees from prestigious universities. (I will come back to Amazon later.) The workers *are* the means of production.

In 2023 investors believed that the 'Magnificent Seven' represented the future of business. They clamoured to buy their stock, as they had once clamoured to buy US Steel, General Motors and IBM. And these investors are likely to be right – for a time. But experience suggests the dominance of the seven is likely to be as transitory as that of the large businesses of earlier generations. As I write this, negotiations are proceeding for the rump of US Steel to be bought by Nippon Steel of Japan, and Andrew Carnegie and the Gilded Age have become a footnote to history. Thus the mighty fall – or just slowly fade away.

A central thesis of this book is that business has evolved but that the language that is widely used to describe business has not. The world economy is not controlled by a few multinational corporations; such corporations have mostly failed even to control their own industries for long. In the nineteenth and twentieth centuries capital was required to build, first, textile mills and iron works, then railways and steel mills and subsequently automobile assembly lines and petrochemical plants. These 'means of production' were industry-specific – there is not much you can do with a railway except run trains along it, and if you want to be an engine driver you need to seek employment with a business that operates (but, as I will explain, does not necessarily own) a track and a train.

The leading companies of the twenty-first century have little need of such equipment. The relatively modest amounts of capital they raise are used to cover the operating losses of a start-up business. The physical assets required by twenty-first-century corporations are mostly fungible: they are offices, shops, vehicles and data centres which can be used in many alternative activities. These 'means of production' need not be owned by the business that uses them and now mostly they are not.

Thus the owners of tangible capital, such as real estate companies and vehicle lessors, no longer derive control of business from that ownership. Labour is no longer subjected to the whims of capitalist owners of the means of production. Often workers do not know who the owners of the physical means of production are, or who the shareholders of the business they work for are, and they don't know because it doesn't matter. They work for an organisation that has a formal management structure but whose hierarchy is relatively flat and participative.

Necessarily so. In modern businesses the 'boss' can't issue peremptory instructions to subordinates, as Andrew Carnegie and Henry Ford did, because modern bosses don't know what these instructions should be: they need the information, the commitment and, above all, the capabilities which are widely distributed across the organisation. The modern business environment is characterised by radical uncertainty. It can be navigated only by assembling the collective knowledge of many individuals and by developing collective intelligence – a problem-solving capability which distinguishes the firm from its competitors, and even its own past. Relationships in these businesses cannot be purely transactional: they require groups of people working together towards shared objectives, and such cooperative activity necessarily has a social as well as a commercial dimension.

Collective knowledge is the accumulation of the facts and theories we can find in libraries and on Wikipedia, augmented by insights from our own experience and that of others. Other animals mostly know what they have learned for themselves. We understand science and appreciate art because of the endeavours of great scientists and famous artists and the efforts of our teachers to explain their achievements to us. Collective knowledge also includes what we have learned about ourselves and each other through our social and business interactions. When to praise and when to criticise, when to follow and when to lead. Collective knowledge is sometimes described as 'the wisdom of crowds', but the wisdom of crowds lies in the *aggregate of knowledge* rather than the *average of knowledge*. No one knows everything about anything or much about everything.

The twenty-first-century corporation is defined by these human capabilities, not its physical capital. The successful firm builds distinctive capabilities and distinctive *collections and combinations* of capabilities – capabilities such as supplier or customer relationships, technical and business process innovations, brands, reputations and user networks. These things can only be – at most – approximately replicated by competitors. Such differentiation among firms means that the structure of modern industry is very different from that of the past, which featured an economy in which essentially similar farms, mills and steelworks competed in the production of essentially similar products in capital-intensive and purpose-specific facilities.

As a result, what we call 'profit' is no longer primarily a return on capital but is 'economic rent'. The term 'economic rent' came into use in what was still a predominantly agricultural economy to describe the return that accrues to landowners because some lands are more fertile or better located than others. Today economic rent is used to describe the earnings that arise because some people, places and institutions have commercially valuable talents which others struggle to emulate. Economic rent accrues to silver-tongued attorneys, brilliant brain surgeons, dashing dealmakers and to sports and film stars. Economic rent is earned by Taylor Swift, and by businesses and house owners in Silicon Valley; economic rent is derived from the unique attractions of Venice and the enthusiasm of worldwide supporters of Manchester United.

But economic rent also describes and explains the revenue that is generated because some firms are better than others at providing the goods and services that their customers want. The economic rent earned by Apple and Amazon, like the economic rent accruing to Swift and Manchester United and arising in Silicon Valley and Venice, is the result of doing things better than other people, places and organisations. All these people, places and organisations have monopolies – of being their impressively differentiated selves. The traditional association of economic rent with monopoly is thus true, but trivial.

And we should welcome that differentiation and its associated 'monopolies'. The perfectly competitive market in which every product is homogeneous and every producer is equally efficient is not an ideal but a stationary equilibrium in which enterprise and innovation are absent. The purpose of economic organisation is to create combinations of factors of production that yield more value than the same factors would in alternative uses. And to do so successfully is to create a source of economic rent.

But when the term 'economic rent' *is* mentioned in modern texts on economics, business and politics, it is most often in the context of 'rent-seeking': the attempt by individuals and companies to appropriate some of the value created by other individuals and companies, by establishing monopolies or providing unneeded intermediary services. Such rent-seeking is indeed a major blight on modern economies, and a better appreciation of the nature and origins of economic rent will better equip us to tackle it. We need to rein in the excesses of financial intermediation. We need to limit the use of political influence to gain favoured positions; to win contracts, to establish monopolies, to secure incumbent-friendly regulations. It is not the purpose of this book to propose remedies for rent-seeking: the implications of my analysis for business and public policy, both of which should promote the rents that arise from innovative differentiation and eliminate the ones that are the result of the abuse of political institutions, will be the task of a successor volume. My objective here is to promote what I regard as an essential preliminary: a better understanding of how business works, and an explanation of how it does not work in the ways many people – both critics and apologists – think.

An understanding of the concept, origins and effects of economic rent is essential to understanding not only the financial accounts of firms but also the distribution of income and wealth in the modern economy. But the inherited terminology of capital and capitalism gets in the way of that understanding. Even sophisticated investors examine 'return on capital employed' (ROCE), although the return often has no more connection to the capital employed than it has to the amount of water used (ROW) or the number of meetings held (ROM).

Economic rent is not an anomaly but a central and valuable feature of a vibrant economy. Economic advance occurs when people and businesses create rents by doing things better, and it progresses further by inspiring others to try to compete them away. If this is capitalism, then I am a supporter of capitalism. But the process I describe has very little to do with 'capital' and nothing whatsoever to do with any struggle between capitalists and workers for control of the means of production. The economic system I favour and the one described in this book is better described as a market economy, or better still a pluralist economy, than as a capitalist economy. A pluralist economy is one in which people are free to do new things (and often fail at them) without requiring the approval of some central authority. A pluralist economy is a system in which consumers are able to make their wants known in a competitive environment that rewards success in meeting those wants.

But the pluralism of a market economy also requires a discipline in which failure is acknowledged and leads to change. Bureaucratic organisations find such self-awareness hard. IBM, General Motors and US Steel failed economically for more or less the same reasons that the Soviet Union failed economically: the difficulty centralised authorities encounter in adapting to changing technologies and changing needs. These institutions were slow to move and slow to acknowledge failure. However, the economic underperformance of IBM, GM and US Steel led only to the decline of these companies. Microsoft and Apple, Toyota and Tesla, Nucor and Arcelor Mittal were able to take their place. But the economic underperformance of the Soviet Union led to the decline, and ultimately demise, of an entire political system.

The term 'capitalism' came into being to describe an economy designed and controlled by a bourgeois elite. Both supporters and critics of modern business frequently conflate this historic caricature of 'capitalism' with today's reality of a market or pluralist economy, whose essential characteristic is that it is not controlled, or not controlled for long, by anyone at all. The mismatch of language and reality extends further. In the second half of the twentieth century, business evolved from an industrial structure characterised by large-scale production facilities staffed by low-skilled workers to one populated by knowledge workers sharing their collective intelligence in a cooperative environment. But the dominant narrative of how the business world did and should work evolved in the opposite direction. Economic relations were defined in purely transactional terms; intrinsic motivation and professional ethics were replaced by targets and bonuses. The purpose of business, MBA students were told, was not to meet the needs of customers and society but to create 'shareholder value' for anonymous stockholders.

The further, but closely related, paradox is that as capital became less central to the operation of business, the financial sector expanded greatly in size and remuneration. And the degraded values of parts of the financial sector spread to business. Both business founders and senior executives rewarded themselves handsomely for their profession of devotion to the cause of shareholder value. As a result of the erosion of business ethics and the evidence of indefensible inequalities, the twenty-first-century corporation faces a crisis of legitimacy. Today the public hates the producers even as it laps up the products. And, as I shall describe all too graphically, the managerial proponents of shareholder value often ended up destroying not only shareholder value but also the very businesses that their abler and better-motivated predecessors had created.

Both the intellectual origins and the practical application of these approaches, promoting individualism and emphasising shareholder value, come from the United States. But the influence of these ideas has been global. Business operates internationally, but all businesses are subject to the laws, regulations, customs and societal expectations both of the country in which they are registered or incorporated and of the countries in which they operate. It should hardly be necessary to say that these laws, regulations, customs and societal expectations differ from country to country. But it *is* necessary to say that they differ, because so much of what is written about business fails to recognise that both the legal duties and the expected behaviour of company directors and executives depend on where the company is based and where it is doing business. The relevant differences are not just those between the US and Russia, or Canada and Japan, but also between Delaware and California and – I shall give these countries specific attention – between Britain, Germany and the United States. And the differences and similarities between these jurisdictions and those of Asian societies are likely to be crucial to the development of the twenty-first-century corporation.

This is a book written by a British economist, and I offer no apology for the fact that much of my own business experience and knowledge is derived from the UK. Britain had a central role in the emergence of modern finance, modern law and modern institutions, and engaged in a colonial project that spread these developments around the world. The Industrial Revolution began in the UK, and the most influential business texts of the eighteenth and nineteenth centuries – Adam Smith's *Wealth of Nations* and Karl Marx's *Capital* – were written close to my boyhood home in Edinburgh and my current office in London respectively. Economics was the foundational discipline for an understanding of business for both Smith and Marx – although, as I will explain, modern economics has contributed less to an understanding of modern business than might reasonably have been hoped.

Still, if one were to seek twentieth-century works of similar significance, one would have to look to the United States. Perhaps to Chandler's *Strategy and Structure,* noted above, or to *The Modern Corporation and Private Property*, in which Adolf Berle and Gardiner Means first documented the transition in American business from the robber barons of the Gilded Age to the managerially controlled businesses of the twentieth century.[3]

If any individual exemplified that transition it was Alfred Sloan, the General Motors executive who was perhaps the greatest businessman of the twentieth century. As Sloan and his Chief Financial Officer, Donaldson Brown, approached retirement, they were anxious to ensure that the lessons that they had learned would be preserved for subsequent generations. Brown hired Peter Drucker, one of the numerous Viennese intellectuals who had fled the increasingly Nazified Europe for the United States, to tell the story.

The result was a business classic, *Concept of the Corporation,* which made Drucker the first management 'guru'.[4] Sloan and his colleagues did not like the book, and publishers were sceptical that a book about business would sell. How wrong could they have been! Seventy-five years later *Concept of the Corporation* is still in print.

And every bookshop now has a section devoted to business books. Mostly, they fall into one of two categories. One type has titles such as '*Flexagility™ – the Secret of Delighting Customers and Raking in Enormous Profits*'. You will find them in airport bookstalls, not far from the self-help manuals. Their authors make a living, often a rewarding one, from consultancy or the delivery of 'motivational speeches'. The contents of these volumes are unlikely to engage your attention through even the shortest flight. Another genre comprises books with titles like '*Fleeced, Poisoned and Spied Upon – How Capitalism is Fuelling Inequality, Damaging our Well-Being and Destroying the Planet.*' These are written for people who welcome confirmation of what they think they already know.

This book fits neither of these categories. I hope that thoughtful executives – and there are many – will find something of interest in it, but I do not set out to offer tips for ambitious young managers. My target audience is people who would never normally pick up a business book – people who read popular science or history, but might welcome an intellectually serious, even sometimes challenging, approach to a subject with whose detail they are unfamiliar. I hope this book might stimulate students and young people who might be thinking of a business career or would just like to learn more about business. I would like to think they might read it and even enjoy it – and perhaps conclude that a career in business has more to offer than just financial reward.

PART 1

THE BACKGROUND

We have many and ambivalent relationships with business – in our multiple roles as consumers, employees, savers and citizens. Without the products of modern business our lives would be, by twenty-first-century standards, not only economically but also culturally impoverished. In fact, without the products of modern business most of us, including the author of this book, would be dead. And yet not only do most intelligent and thoughtful people have a negative view of business, especially large business; twenty-first-century business has described itself in terms that invite that negativity.

1

LOVE THE PRODUCT, HATE THE PRODUCER

> Senator Levin: ‘When you heard that your employees in these emails and looking at these deals said “God, what a shitty deal” or “God, what a piece of crap”, when you hear your own employees or read about these in emails, do you feel anything?’
> David Viniar, CFO Goldman Sachs: ‘I think that is very unfortunate to have on email.’ [Laughter]
>
> Senate Investigations Committee, 2010[1]

> The whole organization is focused on the highest level of client service, taking a long-term view, really thinking about their needs, their interests.
>
> David Solomon, CEO, Goldman Sachs, interviewed by Jim Cramer, 2022[2]

As I began writing this book, Arkansas Teacher Retirement System was leading a proposed class litigation by a group of investors against Goldman Sachs, widely regarded as the world’s premier investment bank. The plaintiffs claim to have been misled by the official ethics and values statement of Goldman Sachs, which began (and still begins) ‘our clients’ interests always come first’.[3]

You might have expected that the bank would respond by providing evidence to document the strength of its commitment to its clients with testimonials from customers, depositions from senior executives, illustrations of instances in which profit had

'Carbolic Smoke Ball', *Illustrated London News* (1893)

been sacrificed because 'our clients' interests always come first'. You would have been quite wrong.

The *defence* attorneys produced more than thirty press reports that alleged that Goldman had acted in ways that benefited the firm and its employees but disadvantaged its customers. They supplemented their submissions with expert analyses showing that these revelations of apparent malpractice had little impact on the stock price.[4] Market participants, the defence argued, did not take the company's ethical claims seriously and hence were equally indifferent to lapses from them. In legal terms, the press reports constituted a 'corrective disclosure' of the misrepresentations in the ethics and values code, like an erratum slip correcting a typo in the annual report. The statement of business principles was 'generic'; it represented 'puffery', akin to claims that 'Heineken refreshes the parts other beers cannot reach'.[5] No reasonable person would regard them as statements of fact on which they might rely. US courts had ruled in an earlier case that

J. P. Morgan's claims that the company had 'risk management processes [that] are highly disciplined and designed to preserve the integrity of the risk management process' and that the bank 'set the standard for integrity' were 'puffs' like 'Red Bull gives you wings', and hence unactionable.[6] To someone outside the arcane world of US class litigation, however, the difference of tone and substance between 'our clients' interests always come first' and 'refreshes the parts other beers cannot reach' seems clear and substantial.

The term 'puff' in legal circles dates from a case in which the future British prime minister Herbert Asquith unsuccessfully defended the Carbolic Smoke Ball Company. The company had advertised that users of its product would not contract influenza and further promised £100, a considerable sum at the time, to anyone who did use the smoke ball and contracted the disease.

The story that Red Bull was sued by someone who found himself unable to fly is an urban myth, although the manufacturer did settle a case brought by consumers who claimed that the company exaggerated its energy-giving properties.

The US Courts dismissed a claim by Ted Martin, purported holder of the world record for kicking hacky sacks – a kind of footbag – against the manufacturer of Five Hour Energy shots: 'long lasting energy with no sugar and zero net carbs. When you need an extra boost you don't want to wait!' The firm had released an advertising video in which the narrator claimed that in the five hours after consuming the beverage he had swum the English Channel, disproved the theory of relativity and broken the world record for kicking hacky sacks. Illinois Judge Tharp began judgment with a quotation from Oscar Wilde: 'It is a curious fact that people are never so trivial as when they take themselves seriously.'[7]

The Arkansas Teacher action was resolved in August 2023: the Supreme Court had referred the issue back to the lower court with a strong indication that it should uphold the arguments of the defence. As a result, the class action could not proceed. Kannon Shanmugam, acting for Goldman Sachs, noted that 'It was an enormously important case for the client; beyond the financial stakes, the client felt very strongly that it had not made any misstatements'.[8] Nevertheless, the Arkansas Teacher claim to have been duped is a little far-fetched. Matt Taibbi's 2009 denunciation of Goldman Sachs as 'a great vampire squid wrapped around the face of humanity, relentlessly jamming its blood funnel into anything that smells like money' went viral and must surely have spread as far across the internet as Little Rock.[9]

The revelation of blatant conflicts of interest in the broader financial sector during the 'new economy' bubble of 1999–2000 was followed by evidence of the promotion of mortgage-backed securities based on home loans that borrowers were unlikely to be able to repay. The global financial crisis that followed these abuses, and in part resulted from them, drove reputations in the financial sector to successive lows. Banking is not the respected business it once was, and perhaps its standards should not be regarded as representative of business as a whole.

> At the Davos meeting of the global business elite in 2020, CEO David Solomon announced that 'effective July 1, Goldman Sachs will only underwrite IPOs in the US and Europe of private companies that have at least one diverse [sic] board member'. This was, he explained, 'a component of our firm's holistic approach to driving sustainable, inclusive economic growth'.[10] And Goldman stood ready to offer a slate of suitably 'diverse' candidates. Solomon could hardly have illustrated better the degree to which the ESG (environmental, social and governance) and EDI (equity, diversity and inclusion) movements which have gripped modern business have allowed companies to substitute virtue signalling for genuine engagement with business ethics.

The Senate investigation in which Mr Viniar was embarrassed had focused on the Timberwolf and Abacus transactions. These were among many similar trades featured in the film and book *The Big Short*, in which Goldman Sachs had marketed securities based on pools of subprime mortgages selected as particularly likely to fail. They not only *were* a shitty deal – they had been *designed* to be a shitty deal.

Not just the finance sector

And yet … the US Chamber of Commerce has rushed to Goldman's defence, filing an *amicus curiae* brief with the court. The brief observes that 'Virtually every company says: "Our clients' interests always come first"; "We are dedicated to complying fully with the letter and spirit of the laws, rules and ethical principles that govern us"; and "Integrity and honesty are at the heart of our business."' The document goes on to warn that 'The import of the holding below [i.e. the finding of the court] is that companies now make those statements at their own peril.'[11] The Chamber's brief does not consider the possibility that those who make such statements could minimise this peril by taking reasonable steps to ensure that they were true.[12] Or that the members of the Chamber might tone down these 'generic statements' to more modest claims of ethical standards that they would actually seek to observe. But the Chamber was joined in a similar *amicus curiae* brief by the Securities Industry and Financial Markets Association, Bank Policy Institute, American Bankers Association and American Property Casualty Insurance Association.

Of course, these documents are drafted by cynical attorneys who perceive a duty to present the best legal defence available to their clients. But it is inconceivable that such representations are placed in the public domain without the approval of senior executives, who are evidently unaware of, or indifferent to, the effect on the reputation of the particular businesses involved and business in general.

Boeing

In October 2018 and again in March 2019 Boeing 737 MAX aircraft crashed soon after take-off, killing everyone on board. All planes of this type were grounded by aviation regulators. In the month after the second accident, Dennis Muilenburg, then chief executive of Boeing, made the following public statement:

> As we work closely with customers and global regulators to return the 737 MAX to service, we continue to be driven by our enduring values, with a focus on safety, integrity and quality in all we do. … Safety is our responsibility, and we own it … When the MAX returns to the skies, we've promised our airline customers and their passengers and crews that it will be as safe as any airplane ever to fly. Our continued disciplined approach is the right decision for our employees, customers, supplier partners and other stakeholders.[13]

How should air passengers interpret these observations? As honest declarations of the company's intentions? Or should they shrug their shoulders cynically and observe, as does the US Chamber of Commerce, that 'virtually all companies make statements of this kind'?

Muilenburg was sacked with a substantial pay-off eight months later, as the planes remained on the tarmac. And a further eight months later a congressional inquiry revealed that 'In several critical instances, Boeing withheld crucial information from the FAA, its customers, and 737 MAX pilots. This included concealing the very existence of MCAS [the corrective software implicated in the crashes] from 737 MAX pilots.' Most significantly, 'Boeing concealed internal test data it had that revealed it took a Boeing test pilot more than 10 seconds to diagnose and respond to uncommanded MCAS activation in a flight simulator, a condition the pilot found to be "catastrophic".'[14] That activation was the source of the problem that caused the two 737 MAX crashes. Flights and deliveries of 737 MAX aircraft resumed in 2021, after the company had paid around $2.5 billion in compensation and penalties.[15]

In September 2022 Muilenburg personally paid $1 million and Boeing a further $200 million to settle charges; these payments were not restitution for the hundreds of deaths but reflected penalties levied by the Securities and Exchange Commission (SEC) for misleading investors (not passengers) in statements of reassurance made after the crashes.[16] Responding to the announcement of the settlement, Boeing said that the company had now made 'fundamental changes that have strengthened our safety processes and oversight of safety issues, and have enhanced our culture of safety, quality, and transparency'. A real change of culture? Or just another statement of the kind that 'virtually all companies make'?

As I completed this manuscript in January 2024, two events made headlines in the business press. Fresh troubles at Boeing, after a panel flew out of an Alaska Airlines 737 MAX, leaving a gaping hole in the fuselage. (The plane returned safely to its departure airport.) And the 2024 meeting at Davos adopted as its theme 'Rebuilding Trust'. Well it might.

Stakeholders

Klaus Schwab, founder and impresario of those Davos events, has long talked enthusiastically of 'stakeholder capitalism', and in 2021 published a book on the subject to help launch a conference around the theme of 'The Great Reset'. Muilenberg spoke of making 'the right decision for our employees, customers, supplier partners and other *stakeholders*'. The term 'stakeholder' was popularised in 1984 in a book by R. Edward Freeman, who used it, as Muilenberg did, to refer to the range of people and organisations who have a legitimate interest in the performance of a business.

It is obvious that no organisation can succeed unless it has regard to the needs of all its stakeholders. And it is also obvious that these interests do not necessarily coincide. Is it the responsibility of management to strike a balance between these conflicting interests? Or is there an overriding shareholder interest, and are other considerations, such as the needs of consumers and the welfare of employees, relevant only instrumentally? Is regard for them required only insofar as it contributes to the capitalist imperative of maximising profits? This may seem an extreme view but, as I will describe, it is one that has been strongly asserted by influential scholars, lawyers and businesspeople.

The tension between these perspectives – stakeholder capitalism or shareholder priority – is a recurrent theme throughout this book. Some people would like to believe that no resolution is necessary – that all interests are essentially aligned and the problem can be dissolved in a warm bath of generalised goodwill. This is naïve, and Boeing illustrates the reality of conflict between competing interests, as I shall describe much more fully in Chapter 22. And yet the history of Boeing, like that of some of the other businesses described in that chapter, points the way to a more compelling resolution.

As almost everyone knows from personal experience, instrumentality – which posits that the interests of others matter only as means to ends – is destructive of social relationships. And the success of modern business depends on strong social relationships between and among stakeholders. In the long run, the corrosive influence of instrumental behaviour damages, perhaps irrevocably, the collective and cooperative behaviour that is necessary for commercial success. Few companies illustrate that issue more clearly than Boeing.

One is Bear Stearns, the investment bank which famously proclaimed, 'We make nothing but money' and ended up not even making any of that. (In the spring of 2008, six months before the collapse of Lehman and as the global financial crisis began to unfold, Bear Stearns ran out of cash. The Fed orchestrated a rescue by J. P. Morgan. The terms effectively wiped out shareholders – it was widely believed that the harsh terms were payback for Bear Stearns's failure to cooperate in similar operations in the past. The payout was improved after shareholders threatened a class action.)

The loss of confidence

Business reputation has suffered many blows in the last two decades. The collapse of Enron in 2001 was symbolic of a decade of excess in the 1990s; the revelation of the company's frauds demonstrated the scale of hubris that characterised the heady years of 'the new economy'. Other collapses occurred at that time: cable operator Adelphia Communications failed after being looted by its chief executive, John Rigas; at telecoms business WorldCom, former basketball coach Bernie Ebbers's defence that he had little grasp of what was going on may have had more truth than the court acknowledged in sentencing him to twenty-five years' imprisonment.

The financial crisis of 2008 had an impact on public confidence which continues; executives were exposed not only as greedy and corrupt but also as lacking the fundamental skills needed to run successful financial services businesses. In contrast to the earlier jailing of Rigas, Ebbers and Enron's CEO Jeff Skilling, only very junior individuals found themselves in prison after the global financial crisis. Some more recent scandals have led to criminal charges against executives responsible. Volkswagen had falsified data on emissions from its cars, and Wells Fargo created 2 million bogus customer accounts.[17] Silicon Valley celebrity Elizabeth Holmes attracted luminaries to her board. She achieved adulation in US business magazines and a $10 billion valuation for her company before it was revealed that the blood-testing product she was promoting did not exist. In 2022 she was convicted – not for misleading patients but for misleading investors – and sentenced to eleven years in prison.

But many perpetrators of egregious behaviour have remained within the law. The elaborate artificial tax avoidance schemes that have become commonplace among large multinational companies attract increasing public attention. And the widening gap between the remuneration of chief executives and the earnings of ordinary workers has caused broad concern. Some of these billionaire executives are no superstars: individuals such as Philip Green, who extracted nine-figure sums from retailer BHS before selling the company to multiple bankrupt Dominic Chappell for £1, Mike Ashley, the domineering boss of the retailer Sports Direct, and Eddie Lampert, who inflicted similar destruction on Sears, for a century America's leading store chain. The lifestyle of these executives contrasts with the fate of their businesses. The 90-metre yachts of Green and Lampert make good newspaper pictures. Green's is moored in the harbour of the tax haven of Monaco, where he is resident, while Lampert's is named *Fountainhead*, after Ayn Rand's turgid paean to individualism.

In 2017 Jeffrey Blue, an investment banker advising Ashley, took him to court, claiming that 'after four or five pints in the Horse and Groom public house Ashley had promised him £15 million if the share price of Green's company rose to £8'. Witnesses gave evidence that Ashley frequently made business deals while under the influence of alcohol. However, in his judgment Mr Justice Leggatt, echoing Illinois Judge Tharp, opined: 'The fact that Mr Blue has since convinced himself that the offer was a serious one, and that a legally binding agreement was made, shows only that the human capacity for wishful thinking knows few bounds.'[18]

And then the poster children of the internet world became the companies everyone loved to hate. Google's slogan 'Don't be evil' was ridiculed and replaced by the motto 'Do the right thing', itself quietly dropped not long afterwards. Lina Khan's essay excoriating Amazon, published in 2017 while she was still a student at Yale Law School, received wide attention and in 2021 President Biden nominated her as Chair of the Federal Trade Commission. Mark Zuckerberg – still resembling the Harvard student who had launched Facebook from his dorm – became a reviled figure. For Adrienne LaFrance, no demagogue but the editor of the respected *Atlantic* magazine, Facebook was 'an entity engaged in a cold war with the United States and other democracies', 'a lie-disseminating instrument of civilizational collapse'.[19]

The successful businesses that define the modern economy are not well regarded, especially by the young people who are often the most committed users of their products. In 2022, 40 per cent of adult Americans under the age of thirty felt positively about capitalism; but slightly more – 44 per cent – felt positively about socialism.[20] (The poll allowed respondents to approve of both capitalism and socialism. Among those over sixty-five, capitalism was far ahead.) Of course, this finding leaves open what respondents to the poll understood by 'socialism' – the term has been construed very differently by Lenin, Xi Jinping and Bernie Sanders.

Or what respondents understood by 'capitalism'. In his 1946 essay, *Politics and the English Language*, George Orwell observed that 'The word *Fascism* has now no meaning except in so far as it signifies "something not desirable".' Orwell continued: 'It is almost universally felt that when we call a country democratic we are praising it: consequently the defenders of every kind of régime claim that it is a democracy.'[21] (This heuristic remains valid today: the regime over which Kim Jong-Un presides styles itself the Democratic People's Republic of Korea; cynics have observed that every word except 'of' is misleading.)

Something similar has happened to the word 'capitalism'; it has become a term of disapproval, or more rarely approbation, without more specific content. Mostly 'capitalism' is something that the speaker blames for an outcome that he or she dislikes. In the words of journalist Annie Lowrey, '"late capitalism" became a catchall for incidents that capture the tragicomic inanity and inequity of contemporary capitalism. Nordstrom selling jeans with fake mud on them for $425. Prisoners' phone calls costing $14 a minute. Starbucks forcing baristas to write "Come Together" on cups.'[22] More seriously, popular critical discourse emphasises the connection between 'capitalism' and 'inequality', usually without defining either of these complex and ambiguous terms or explaining the relationship between them.

Love the product, hate the producer

And yet … Boeing created the modern civil aviation market, bringing affordable travel to millions of people worldwide.[23] Every day people step off a Boeing plane to begin their holidays, attend a business meeting or reunite with friends and relatives. Both Facebook and Google have over 2 billion active users – far more customers than any other companies in world history.

In the three centuries since the beginning of the Industrial Revolution business has created previously unimaginable comfort and prosperity for much of the world's population. People trust their employer more than they trust the government, although in the US only Congress is trusted less than big business.[24] Americans regard small business as highly trustworthy. Most readers of this book will recently have met employees who really did put the client's interests first: the helpful shop assistant, the reassuring flight attendant, the devoted nurse or doctor, perhaps even a financial adviser who took time to understand the particular needs of the client.

About 6 million businesses are registered in the UK and over 30 million in the United States. The vast majority of these businesses employ fewer than five people.[25] Typically, they are convenience stores, plumbers and electricians, community lawyers and physicians. Of course, some plumbers are more competent than others, but the trade they all practise is much the same, and they are mainly distinguished from each other by the location in which they operate.

This book is not about these microbusinesses, essential though they are to modern economies. This book is about Goldman Sachs and Boeing, Merck and Pfizer, Google and Apple. These are businesses with distinctive combinations of capabilities that have enabled them to scale their operations, operate globally and employ thousands or tens of thousands of people. Businesses that add value as organisations to the talents of the individuals who work in them. Businesses whose activities impinge on the everyday lives of millions and influence the politics and societies in which they operate.

2

A HISTORY OF PHARMACEUTICALS: A CASE FOR TREATMENT

> If there was a company that was selling an Aston Martin at the price of a bicycle, and we buy that company and we ask to charge Toyota prices, I don't think that that should be a crime.
>
> Martin Shkreli, CEO of Turing Pharmaceuticals, defending a decision to raise the price of a 62-year-old drug to fight parasitic infection from $13.50 a tablet to $750, 2017[1]

The pharmaceutical industry has a chequered history. The Carbolic Smoke Ball was typical of the industry's products at the end of the nineteenth century. Promoters made baseless claims that their product would cure a wide range of diseases. Widely advertised elixirs (patent medicines) often contained cocaine and alcohol.[2] These potions may have made patients feel better but did little for their health. The term 'snake oil' is still used today to describe worthless propositions from persuasive salespeople; medicinal 'snake oils' were once promoted to the gullible – some really did contain oil from snakes.[3]

The rise of scientific medicine

Some control of medicines had long been practised through pharmacopoeias: lists of drugs recognised by the medical professionals of the time. But the harsh reality of pre-scientific medicine was that doctors and apothecaries knew little more than their patients. Medical practice relied on folk wisdom, snake oils and an unwarrantedly confident bedside manner.

Drug regulation began in 1906. Congress passed the Pure Food and Drug Act in response to the abuses in the meatpacking industry exposed by Upton Sinclair and the exposé of fraudulent patent medicines described by Samuel Hopkins Adams.[4] Science and medicine were gradually introduced to each other. Aspirin, one of the first drugs with demonstrated efficacy and possibly still the most widely used, was trademarked by the German company Bayer in 1899. (Aspirin became a generic term in the US and UK when Bayer's assets outside Germany were confiscated by First World War belligerents.[5]) Sulfonamides derived from coal tar had been used as dyestuffs for decades. In the 1930s German scientists at Bayer, by then part of IG Farben, conjectured that these compounds might have anti-bacterial action and successfully demonstrated this effect for a drug labelled Prontosil. Thereafter therapeutic sulfonamides were widely marketed.[6]

Events immediately revealed the pharmaceutical industry's potential for both good and harm. A Tennessee company, Massengill, manufactured Elixir Sulfanilamide in 1937 to meet demand from doctors and patients for a liquid formulation. The solid product was dissolved in toxic diethylene glycol, which today is widely used as an anti-freeze. More than a hundred people died; the company's chief chemist, who had not understood the implications of his formulation, committed suicide. Proposals for tighter regulation of new pharmaceutical compounds had been controversial in Congress but were now quickly passed into law.[7]

In the 1950s the German company Chemie Grünenthal marketed Thalidomide, a sedative widely prescribed for morning sickness in pregnant women. The Distillers Company, the poorly managed dominant producer of Scotch whisky, obtained a British licence for the product. The drug was linked to birth defects and withdrawn from the market in 1961, but tragically not before many children in Britain and Germany had been born with seriously deformed limbs.[8] A campaign to obtain compensation for the victims dragged on for many years.[9] In the United States, Frances Kelsey documented the Elixir Sulfonamide tragedy when she was a graduate student. Later, as a reviewer for the Food and Drugs Administration, she thought the information provided on the safety and efficacy of Thalidomide inadequate and refused to authorise its use. President Kennedy subsequently awarded her a medal for distinguished public service.[10]

Antibiotics

The anti-bacterial properties of penicillin were observed in 1928 by Alexander Fleming at St Mary's Hospital in London. Still, this discovery attracted little interest. Stop there for a moment: for a decade, neither government nor business pursued one of the most important innovations of the century – and one with huge commercial potential. Shortly before the outbreak of the Second World War, however, the Rockefeller Foundation funded research by Howard Florey and Ernst Chain at Oxford University who were trying to find a way to synthesise penicillin.[11] They would go on to share a Nobel Prize with Fleming.

The war concentrated minds and released funds – similar effects were observed in many other areas of innovation. Florey visited the US to evangelise for penicillin and found an enthusiastic supporter in George Merck, president of the company that bears his name. The Distillers Company's ill-fated diversification into pharmaceuticals originated in an invitation from the British government's wartime Ministry of Supply to manage a newly constructed penicillin plant in Liverpool. The Ministry had evidently perceived some similarities between whisky distillation and the synthesis of penicillin. Sulfonamides and penicillin were the first antibiotics, and over the following decades this category of drugs would cure millions of people who would otherwise have died of infectious diseases. The life-changing potential of pharmacology was now apparent – as was the opportunity to create profitable new business ventures.

Merck was one of the first companies to recognise that potential – and to benefit from it. George Merck senior had emigrated to the United States at the end of the nineteenth century to establish a branch of his family's German pharmacy business. The company describes the 'Merck Manual' of those times as 'a widely used medical reference' – it advocated bloodletting as a treatment for bronchitis and arsenic as a remedy for impotence.[12] Merck Manuals are still a widely used medical reference, though they now contain more reliable information. The American branch of the German company was nationalised in 1917, and when the war ended, George himself purchased its stock from the US government. German and American Merck were then, and remain, wholly separate businesses.[13]

George senior's son, George W. Merck, turned the company into a research-oriented business that has been listed on the New York Stock Exchange since 1927. After his meeting with Florey, and following the attack at Pearl Harbor, Merck made a commitment to mass production of penicillin; supplies were made available not only to the military but also to other companies and researchers. In 1944 Merck launched streptomycin, another antibiotic, discovered by Rutgers chemist Selman Waksman.[14] The first patient successfully treated with streptomycin was US Army Lieutenant Robert Dole, subsequently Senate majority leader and Republican presidential candidate, who lived for another seventy-five years.[15] This drug was not just the first effective treatment for tuberculosis; it was a cure. George Orwell, dying from the disease, persuaded David Astor, the rich Anglo-American editor of the *Observer* (for which Orwell was a columnist) to purchase a supply of streptomycin from the US. But the author of *1984* responded badly to the drug and died in 1950.[16] Penicillin and streptomycin were licenced freely, but in future, pharmaceutical companies would guard their intellectual property much more closely.

In 1950 Merck famously told students at the Medical College of Virginia: 'We try never to forget that medicine is for the people. It is not for the profits. The profits follow, and if we have remembered that, they have never failed to appear. The better we have remembered it, the larger they have been.'[17] Johnson &

Johnson's 308-word credo, published in 1944, is the work of R. W. Johnson, another member of a founding family. Its emphasis on profit as a result rather than an objective resembles the sentiment of George Merck.[18] In what became a classic business-school case on ethics and corporate reputation, the company's executives applied the credo in 1982 to implement a speedy product recall of Tylenol, the business's best-selling painkiller, after a criminal spiked containers with cyanide.[19] Middle managers did not have to be told to take the products off the shelves; they knew that was the right thing to do and were correctly confident that their bosses would support them.[20]

In the 1980s Merck chemists suspected that a veterinary product they had developed might treat river blindness, a disease caused by a parasite that grows inside the human body and leads to immense suffering for millions in sub-Saharan Africa. Merck created an appropriately modified version of the drug and confirmed its efficacy. Failing to persuade governments or charities to fund further development, the company decided to give the medication away to all who might benefit and continues to do so. (The cost of this philanthropic gesture is less than might be imagined because it is sufficient to take the tablet once a year.[21])

For many years Merck topped *Fortune* magazine's list of most admired companies.[22] The company was an exemplar of successful long-term corporate strategy in business guru Jim Collins's 1994 classic *Built to Last*. Collins's research method was to pair what he described as 'visionary' companies – Merck was one – with more pedestrian but similarly large companies in the same industry. Collins compared Merck to Pfizer and contrasted George Merck's 'medicine is for the people' with the emphasis of his counterpart at Pfizer, John McKeen: 'so far as humanly possible, we aim to get profit out of everything we do.'[23] Collins's argument stressed that, *judged by stock returns,* the 'visionary' companies, including Merck, had far outperformed their comparators.

The tide turns

The post-war pharmaceutical industry enjoyed an implicit contract with the public and the government. The arrangement was complex: drug pricing was, and remains, controversial. The most profitable drugs were not the lifesavers – such as antibiotics and vaccines – but those that alleviate but do not cure chronic diseases suffered by rich people – depression, hypertension, excess stomach acidity. Pharmaceutical products benefit from patent protection, and regulation both constrains their use and restricts competition. But overall, the industry was permitted extraordinary profitability in return for the businesses behaving as exemplary corporate citizens. Yet those days have long gone.

Drug companies came under pressure from Wall Street to demonstrate their commitment to securing value for shareholders. The pay-off from marketing is immediate whereas the pay-off from research is delayed, and industry strategy came to reflect that difference. Merck stumbled – the company would feature again in a 2009 book by Collins, *How the Mighty Fall*. Ten years earlier, Merck had marketed a new painkiller, Vioxx, not just for the minority of patients who derived a unique benefit but for many who might just as advantageously for them, if less profitably for the pharmaceutical industry, have taken an aspirin. US law permits direct advertising of prescription drugs to patients, and for a time Vioxx was the most heavily promoted product in that category.[24] As Ray Gilmartin, then Merck CEO, explained in the company's 2000 annual report: 'as a company, Merck is totally focussed on growth.'[25]

That is not a good strapline for a healthcare company; demand for its products is a regrettable necessity. Vioxx was linked to heart conditions in some patients. Merck withdrew the product in 2004 amid recrimination and lawsuits. Even the revered Johnson & Johnson would find its reputation tarnished by the regulator's discovery of bad practice – and inadequate management responses – at the company's McNeil consumer products group.[26] Merck and Johnson & Johnson deservedly remain respected businesses – 2020's *Fortune* list put J&J at 26 and Merck at 49 in its top fifty admired companies.[27] But they are now outliers in their industry.

When Michael Pearson took over as chief executive of Valeant Pharmaceuticals in 2008, he adopted a new strategy. Others in the industry had been edging towards this approach, but Pearson made it explicit. Valeant bought established drug companies, stopped research and development, emphasised marketing and raised substantially the prices of the proven products to which it had acquired the rights. For a time, the company's profits and share price responded favourably, and Pearson and other executives rewarded themselves accordingly. Some senior employees revelled in the atmosphere of unfettered greed sufficiently thoroughly to commit fraud. When illegality was revealed, Pearson was forced out and the company's shares plummeted; the business has since rebranded itself as Bausch Health, taking the name of the respected eyeglass supplier it had acquired.[28]

Valeant's approach found imitators, however. Martin Shkreli adopted an even more extreme strategy of price gouging at Turing Pharmaceuticals, increasing the cost of Daraprim, on the market since 1953, from $13.50 to $750.[29] In 2007 generic drugs producer Mylan acquired the rights of the long-established EpiPen® – used to provide urgent relief to people with severe allergies – and over the next ten years gradually raised the price sixfold.[30] The company paid almost a billion dollars to settle – 'without admission of liability' – claims that it had violated antitrust laws and defrauded Medicaid.[31] In 2019 Mylan merged with a divested subsidiary of Pfizer and renamed the business Viatris. 'Deriving its name from Latin, Viatris embodies the new company's goal of providing a path – "VIA" – to three – "TRIS" – core goals: expanding access to medicines, leading by innovating to meet patient needs, and being a trusted partner for the healthcare community worldwide.' Chairman Robert J. Coury declared 'We are creating a company unlike any other – a company focused on building a more hopeful and sustainable healthcare journey, empowering patients to live healthier [*sic*] at every stage of life.'[32] But, as the American Chamber of Commerce reminds us, all companies make statements of this kind.

But the most egregious abuse was the aggressive marketing of addictive drugs. Purdue Pharma, privately owned by the Sackler family, is now notorious for promoting opioids to small-town America. And even Johnson & Johnson agreed to contribute $5 billion to a settlement, led by the Sacklers, in acknowledgement of J&J's role in 'deaths of despair'.[33]

The Sackler family have been generous philanthropists, making donations to museums and galleries in London and New York and to Oxford's Bodleian Libraries. This philanthropy has become controversial, with a campaign demanding that Sackler gifts be refused and the family name removed from the buildings that they financed.[34] The protest is led by the queer American photographer Nan Goldin, who battled an addiction to OxyContin (produced by Purdue Pharma). The issues are not straightforward: would critics prefer that the family spent its undeserved money on itself rather than on purposes of public benefit?

Drug companies continued to push the limits of customary behaviour. Insys Therapeutics had developed an opioid for terminally ill cancer patients, for whom its highly addictive properties were of no consequence. But this market was doubly limited: only the terminally ill were customers, and they soon ceased to be customers (although they were replaced by newly diagnosed cancer patients). The head of sales for Insys, Alec Burlakoff, hired a stripper to persuade physicians to promote and prescribe the opioid to non-terminal patients, giving a new interpretation to the term 'hooker'.[35] In an interview with the *Financial Times*, Burlakoff acknowledged that he did not have 'morals, ethics and values'.[36] He described his thinking once he realised that prosecution was likely: 'Not only is the company going to get fined an astronomical amount of money, which I've seen a million times, but worse [*sic*] case scenario, which I've never seen before, they might actually take *my* money.'

Burlakoff and his fellow executives were prosecuted under federal racketeering legislation aimed at criminal gangs; they are now serving prison terms. A pharmaceutical industry that once seemed to exemplify a constructive relationship between private enterprise and public benefit had become widely and justifiably detested. In 2019 Gallup asked Americans whether their view of a list of twenty-five activities was favourable or unfavourable. Only four had net negative ratings – federal government, public relations, healthcare and pharmaceuticals – and pharma's score was much the worst.[37]

The quest for a Covid-19 vaccine

On the last day of 2019, China notified the World Health Organization of an outbreak of a novel coronavirus around the city of Wuhan. In 2020 the virus spread across the world, overwhelming hospital facilities. By the end of the year the illness was implicated in the deaths of millions of people. Lockdowns crippled many businesses and resulted in massive losses of economic output.[38]

Within a few weeks the genome of the virus had been identified, and work began to produce a vaccine. There were two strands of development: the traditional approach to vaccine production, which employs a weakened or modified strain of the virus to provoke the production of antibodies, and a still experimental procedure, modified ribonucleic acid (mRNA), that trains the body to generate its own immune response – an idea that would win a Nobel Prize in 2023 for its pioneers Katalin Karikó and Drew Weissman. In the US and Britain, governments offered funding for vaccine development by pharmaceutical companies and placed large advance orders for successful products. The European Union did something similar on behalf of member states but more slowly and less effectively.[39] Within a year four companies – AstraZeneca, Johnson and Johnson, Moderna and Pfizer – had taken their vaccines through clinical trials and obtained emergency use authorisation in several countries.

Fortune's 2021 most admired companies list showed that the rankings of Johnson & Johnson and Merck had risen by more than ten points. Merck's rating had improved even though the company's vaccine product had failed in trials. The speed and overall effectiveness of response had done something to restore the industry's damaged reputation. And yet the negative consequences of past abuses lingered. The conspiracy allegations that circulated on the wilder fringes of the internet can perhaps be discounted – there has always been an audience for such stories. But take-up was inhibited even among otherwise reasonable people by baseless claims of unacknowledged side effects. In Gallup's 2020 survey, pharma's net favourability rating had improved by seven points. But it was still the lowest of any industry sector.[40]

A Case for Treatment

The pharmaceutical industry illustrates modern business at its best and worst. Its products – antibiotics, anti-hypertensives, statins, vaccines and many others – have saved hundreds of millions of lives and improved the quality of life for almost everyone. Its revenues have funded new research and made large profits for investors. Since stock in companies such as Merck, Pfizer, AstraZeneca and Roche is widely held by individuals and institutions, these returns have contributed to the retirement funds of many people. The profits have also supported the philanthropy of Merck and, even though one should hesitate to applaud, the benefactions of the Sacklers. The Novo Nordisk Foundation, which owns a controlling stake in the Danish drugmaker, is the largest charitable foundation in the world, and the Wellcome Trust, by far the biggest educational endowment in Britain, has funded British science to remarkable effect.[41] Thus two of the four largest charities globally are the result of the philanthropy of the leaders of the pharmaceutical industry: the Danes August

Krogh and Harald Pedersen and the British Henry Wellcome.[42] (The list of leading charitable foundations is completed by those established by Bill Gates and by Sweden's Ingvar Kamprad, founder of furniture chain IKEA.)

But the same industry also illustrates all the features that have led to public mistrust of big business. Many of its executives have demonstrated standards of behaviour far below those that any modern society could accept or should tolerate from people occupying positions of responsibility whose actions bear crucially on the welfare of others.

The pursuit of 'shareholder value', the belief that profit is the defining purpose of a corporation, was one element in the decline of ethical standards. Yet the pharmaceutical industry is also a powerful counterexample to a simplistic view of the problem of 'short-termism'. Venture capitalists cluster around bright academics who have innovative ideas with possible commercial potential. Many established companies invest heavily in the development and trials of new products, the majority of which will fail, and few of which will yield revenues for many years.

This is an important and underappreciated point: there is no shortage of 'patient capital' – institutions such as pension funds and university endowments are naturally looking for investments that may only pay off in the long term – but there is a shortage of patient individuals working in the finance sector, an industry remunerated almost entirely by transactions. The result is a constant flurry of financial activity engaging senior executives, investment professionals and advisers which rarely adds to, and often detracts from, the effectiveness and success of the underlying business. The financial pressures that motivated strategy at Merck and Valeant not only damaged the standing of the businesses and their products but also diminished the returns to their shareholders in the long run. In later chapters I will show that these are far from exceptional cases.

The history of pharmaceuticals illustrates much that is right and wrong in the relationship between business and society. I have described four problem areas: the motivation and standards of behaviour of leaders of the industry; the interface between business and finance; the difficulty of constructing a regulatory regime that is relevant and effective; and the sometimes too tenuous relationships between prices, costs and values. None of these issues is unique to the pharmaceutical sector: similar questions arise in every kind of business, and the answers are necessarily specific to industry, time and place. But in this book – and another that will follow – I will illustrate principles and directions of travel.

3

ECONOMIC MOTIVATION

> [They] are employed in contriving a new form of government for an extensive empire, which, they flatter themselves, will become, and which, indeed, seems very likely to become, one of the greatest and most formidable that ever was in the world.
>
> Adam Smith in *The Wealth of Nations*, 1776[1]

In 1776 Britain's American colonies rebelled. Fifty-six delegates to the Second Continental Congress, including Benjamin Franklin and Thomas Jefferson, signed the Declaration of Independence. In the same year Adam Smith, often described as the founder of economics, published his masterwork. His Scottish homeland, united with England seventy years earlier, was experiencing the beginnings of the Industrial Revolution.

Smith's assessment of the future of the United States of America was prescient. But he is remembered best not for his political acumen but for his economic insight. 'It is the great multiplication of the productions of all the different arts, in consequence of the division of labour, which occasions in a well governed society that universal opulence which extends itself to the lowest ranks of the people,' he wrote.[2] And that would be the experience of both Scotland and the United States.

The economist's usual measure of output and income is Gross Domestic Product (GDP), and inflation-adjusted GDP per head in Britain has grown more than tenfold since 1776.[3] But that statistic gives little insight into the scale of the change. Smith wrote the manuscript of *The Wealth of Nations* with a quill