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The US as Exemplar and Paradigm

For much of the twentieth century, the US was a standard of the good life, for perfectly explicable reasons. In a war-torn, class-ridden, poverty-stricken and undemocratic world, America was distinctive for peace, class mobility, wealth and the absence of mass terror. This transcendent position reached its height in the period immediately after the Second World War. The vibrant role of the US in the interwar period in the forms of culture characteristic of the twentieth century – cinema, popular music and jazz – was now supplemented by overwhelming military, political and economic predominance.

The most important source of its international prestige in economic affairs, however, has remained its singular superiority in levels of per capita income, which was double that of the nations of Western Europe in 1950. In the postwar period up until the early 1970s, the US experienced lower growth rates in national income and higher levels of unemployment than Western Europe and Japan. Even with this erosion, the US continued to maintain its leading place in the calculation of national income per capita. In 2014, it was richer than any state in the European Union (excluding Luxembourg) – by 16 per cent in comparison with the Netherlands, by 20 and 21 per cent compared with Germany and Sweden, respectively, and by 40 and 41 per cent compared with the UK and France, respectively.¹ As we shall see in the next chapter, much of this apparent predominance disappears for typical workers when these figures are modified to reflect the highly unequal distribution of income in the US and the exceptionally high number of hours worked per year.

The US is an old nation and invariably embodies idiosyncratic and peculiar aspects. It is, for instance, the centre of world science and simultaneously the location of a vast creationist movement. These are fascinating and troubling aspects of the culture, but will be dealt with only in passing. The focus here will, rather, be upon the persistence in the US of a distorted view of its own development that, in retrospect, made the revival of pre-New Deal pieties in the 1980s a plausible event. Thus, even in the late nineteenth century, as we have seen, the American view of Thomas Edison as the lone

curmudgeonly genius contrasted with the more realistic perspective held abroad (see Chapter 2) that he and those like him in the US were grand systems builders.

By the end of the twentieth century, this gap in perception had become a chasm. It is epitomised by attitudes towards the postwar electronics revolution, a key aspect of US hegemony and, even more so, the gateway worldwide to the technology of the twenty-first century: the Edison myth has been re-created in the popular lionisation of the heroic entrepreneurs Steve Jobs and Bill Gates. The creations of these individuals, however, so visible to the consuming public, only emerged in the context of an electronics sector in the US that had its origins in important elements of state enterprise and planning; of no less fundamental significance was the pioneering role played by the state in the US in creating the educational infrastructure that made the electronics revolution possible.

The mythic history of the electronics sector as solely the triumph of entrepreneurial individualism has served as a totem for the renewed political economy of unfettered capitalism in the US from around 1980, reinforced by the disintegration of European centrally planned economies in the period from 1989 to 1991. The decades since 1980 have been characterised by such rapid rises in the levels of inequality and wealth in the US as to make it once again exceptional among major capitalist economies, but not in an altogether positive manner. While growing inequality is to be observed in other economies, its rapid ascent in the US (and the UK) is linked, at least in part, to explicit political decisions that have generated inequality and a willingness to accede to the judgement of the market.

In one sense, American hegemony has remained in place. At a cultural level, the mass marketing of films and television programmes in the US has been successfully transferred abroad and has often smothered local output. In a broad range of academic fields, the American accent has become, figuratively and literally, pervasive. In economics, the US brand offers a view of rationality linked to individual decision making that has only a distant connection with the decisive role played by collective and state action in the nation's rise to world dominance. Like Ancient Rome even after its demise, the US continues to structure worldwide the terms in which intellectual discourse can take place about the future of society.

US history – the peculiar and the explicable

The US emerged in the late eighteenth century with a singular history among large countries. It conducted its political affairs on the basis of a republican constitution emerging from Enlightenment discourse, abjuring an established church and approaching a separation of citizenship from nationality for white Europeans. The rhetoric of its politics moved decisively

in a democratic direction in the first half of the nineteenth century. Yet the functioning of this democratic republic continued undisturbed, even in the midst of civil war, at a time when democracy was considered a volatile and subversive political form by the great sages of the era. Its population ranked in per capita terms among the richest in the world, and, as we have seen, was already notable for its exceptional levels of literacy.

Europe's past was tied to the collective institutions of the medieval manor, guild and church. Much of the tumult of the history of the early modern period was engendered by aspirations to extricate social affairs and personal life from the strictures of these institutions. The US, by contrast, had a primordial myth of the independent farmer: the free, unsupported and unconstrained individual was taken to be not so much an aspiration as a primary, natural state of existence. The state was not to be seen, in European, Hegelian terms, alongside a civil society, but as an encumbrance, perhaps a 'necessary evil'² upon a free and unfettered individual. This view merged with democratic politics and rhetoric in the election for president of Andrew Jackson in 1828, defeating the incumbent John Quincy Adams who had plans for federal expenditure on domestic improvements, including the building of a national astronomical observatory, dubbed by its enemies 'lighthouses of the skies'.³ A history of anti-state and philistine rhetoric has somehow continued to co-exist in the US into the twenty-first century alongside periods of enormous expansion in state power and planning, as well as intellectual dynamism and educational development. And since 1828, all arguments on social and political affairs have been couched in the language of democracy.

Various aspects of the traditional story were dubious.⁴ The myth of the independent farmer is to be seen in the context of the use of state power to subdue aboriginals and to add substantially to the territories of settlement through a war of aggression with Mexico; the prosperity of this independent farmer was also linked to coordinated state and quasi-state action for the financing of the railroads and, as we have seen in Chapter 1, the setting up of grain markets. For the conurbations already in place, from New York to Chicago, internal improvements, city planning and urban hygiene were central concerns.

The notion that social existence in the US distinguished itself from that in Europe by its unfettered and individualistic character may be further contrasted with a range of instances of collective action. In a positive direction, we observe a deeply rooted movement for public education; more negatively, we see an intolerance of non-conformity that drove religious minorities such as Catholics and Mormons to live in tightly clustered communities. The latter exceptions to what we would now consider to be the normal exercise of civil rights pale in comparison to the existence of slavery as the basis for the leading export of the US *ante bellum* economy – cotton. If a conceptualisation of citizenship and national identity that is not

linked to ethnicity, race and religion remains the most significant contribution by the US to juridical procedure in republics, it was deeply compromised by the legacy of slavery: not until the passage of the Civil Rights Act of 1964 do we see the general revocation or striking down of a host of laws and ordinances at the state level that violate the principle of equality before the law with regard to ethnicity, race and religion, such as the anti-miscegenation statutes.

Already by the early twentieth century, the US was perceived by a range of observers to have engendered a new form of capitalism, a coherent system of planned production and continuous innovation. In this period, Europeans remained predominant in technical innovations in areas such as chemistry that were closely linked to the latest developments in high science. But it was the American Edison who fully implemented the practical implications of the great achievements of Faraday and Maxwell in the theory of electromagnetism with the electrification of a great city. In the implementation of the assembly line, attributed to Henry Ford, the US was seen to make a managerial innovation in manufacture comparable to any technological discovery.

By the beginning of the twentieth century, the US was not only notable for the exceptional characteristics of its industrial development, but was emerging as a focus of interest worldwide and a symbol, for good or ill, of modernity. Both its supporters and its detractors agreed that it displayed immense dynamism, with rapid rises in per capita income even in the context of massive immigration. The political system was unique among the great powers, with its century-long uninterrupted tenure of republican-democratic forms and practices (outside of the South), in the context of a political stability rivalling that found even in Great Britain. No society was more successful in inventing and exploiting new mechanisms of mass production and distribution for the transmission of traditional European culture, such as with the sale of the opera recordings of Enrico Caruso. But what made this the American Century as much in culture as in economics and politics – much to the dismay of many on both the left and the right of the political spectrum – was the capacity of this vast and diverse society to find indigenous aspects of its culture, such as the music of ragtime, that had a capacity for mass appeal. As the century wore on, Hollywood and rock 'n' roll played as great a role in the perception of American hegemony as did mass production and space exploration.

Why, Werner Sombart asked at the beginning of the twentieth century, was there no socialism in the US, with its enormous working class ranged against the most advanced form of capitalism in the world? There are proximate answers to this question: the Socialist Party in the US suffered repression due to its opposition to participation in the First World War;⁵ labour union development in the US, as in Britain until 1906, was inhibited by judicial decisions ruling union actions as restraints of trade. These rulings,

coupled with aggressive action, including violence, on the part of employers, constrained working-class organisation until the New Deal. But not even then was Franklin Roosevelt's Democratic Party transformed into a British-style labour party, much less into something more radical on continental European lines.⁶

The absence of a socialist movement in the US was partially linked to the presence of ethnic and racial tensions within the working class in the US. The potential for such conflict was undoubtedly high, with immigration from diverse national and religious backgrounds in Europe, as well as from Asia and Latin America, interacting and competing with the large population of former slaves and their descendants. These divisions were often successfully exploited and exacerbated by employers and by right-wing politicians, and not just in the former Confederacy. Unlike Europe, where socialism was linked to a secularist agenda, populist agitation, much as in seventeenth-century England, was diffused using the language of religious renewal, as in the presidential campaign of 1896 of William Jennings Bryan, a figure who later supported the creation story of Genesis in the Scopes trial of 1925.

Sombart's answer to his own question makes the original query sound almost rhetorical – there was no socialism in America because the living standards of the working class had been raised to a level of comfort that precluded the need for militant action or organisation. For Sombart, the primary impetus for these high living standards – the presence of free land and the possibility of becoming an independent farmer as an alternative to being a worker – was now disappearing. With the 'closing of the frontier' (famously decreed by the American historian Frederick Jackson Turner to have taken place in 1890), Sombart suggested that socialism was likely to experience 'the greatest possible expansion of its appeal' in the future in the US.⁷

And despite the failure of the Sombart thesis as a predictive model, the high wage story retains some explanatory power: there is little doubt that growing living standards in postwar Western Europe were an aspect of the gradual dissipation of working-class militancy and socialist political organisation in this period. But if we thus move to account for the absence of working-class, socialist politics on the basis of growth, rather than levels of income, it becomes difficult to explain the conservatism of politics and labour in the Great Britain of Sombart's day, since Britain was in this period (with the exception of the Netherlands) the slowest-growing country in Western Europe. Sombart's story also doesn't work too well if we take it literally – that a high absolute standard of living dampens militancy – since US workers in his time were poor in comparison to the standards achieved in postwar Western Europe, where militancy and socialist politics persisted for many decades. The notion that US workers in Sombart's day were well-off relative to foreigners – a variant hypothesis – would have presumably struck

them as irrelevant; in any case, workers of recent immigrant stock – those capable of making such a comparison directly – were often more militant than other workers.

The high wage explanation is not sufficient to account for the absence of socialism in the US, as Sombart recognises at various points in his text. What was peculiar to America was the presence of a high and rising standard of living combined with its success in instilling a sense of legitimacy in the population towards the government and its associated institutions. The Civil War of 1861 to 1865, with its demand for a massive sacrifice of blood without external threat, was a successful test of this legitimacy matched in no other country.⁸ For newcomers of European stock, the separation of citizenship from nationality inherent in the US constitution was key to instilling in them a sense of their rights as citizens, as opposed to a presumption that their presence in the country was due to the sufferance of the majority.

The Lincolnesque basis of legitimacy in the US ('of the people, by the people, for the people') was reinforced in the late nineteenth century by the presence of institutions as advanced in every particular as any in the capitalist world – electoral democracy (outside of the former Confederacy), a meritocratic civil service, an independent, often elected judiciary, a sophisticated legal and institutional framework for the setting up and operation of business, and the absence of de facto medieval residuals in rural areas (with the exception of analogous social structures in the former Confederacy).⁹ In the context of the regulation of industry, the US government's antitrust framework was without parallel. In other respects, the US was unrivalled in the progressive nature of its institutions, fulfilling demands that in other countries would fall under the rubric of socialism. We observe the efflorescence of state-funded, secular school education and even universities, offering the prospect of income and class mobility, if not equality, and thus dampening the frustrations of those upwardly mobile groups that were an important aspect of radical political and intellectual life in Europe, and a separation of church and state that gave no basis for a radical politics rooted in militant secularism, as was to be found in France and Italy.

In addition, the US became in this period the epicentre of the myth of upward mobility from independent ambition and entrepreneurial activity, disseminated through the British writer Samuel Smiles (1812–1904) and later the American Horatio Alger (1832–99). Legitimacy in an economic context was thus reinforced in the US not with any claim to economic equality per se, but to an equality of opportunity, a notion long implicit in British liberal ideology, but having far greater pungency in the context of American republican institutions, practices and habits, as even a grumbling Sombart was willing to concede: 'One must accept that there is a grain of truth in all the nonsense spoken by the Carnegies and those parroting them who want to lull the "boorish rabble" to sleep by telling them miraculous

stories about themselves or others who began as newsboys and finished as multimillionaires.¹⁰

Indeed, there has long persisted in the US an image of the UK as a society more equal than the US in terms of claims on resources (as evidenced by the presence of the socialist National Health Service), but less mobile because of the residual effects of a class system, epitomised by the presence of a royal family. The role of class, blatantly and overtly present in the UK two generations ago, interacted subtly with the issue of mobility in terms of the differential access to economic and political power offered to an elite, as well as the limited aspirations embodied in 'knowing your place' for the lower end. Propagandists for American uniqueness highlighted these aspects of stratification in Europe, as if they were absent in the US, and coupled them with claims that the US was uniquely receptive to the emergence of the next Thomas Alva Edison: the US as the land of opportunity, most especially for entrepreneurial endeavour.

To the extent that this notion of the US as *der goldene Medina* (the Golden Medina) possessed a modicum of validity, it was a product of the sheer absolute superiority of the US in levels of per capita income and the provision of broad access to education of all kinds compared with Western Europe from the nineteenth and over much of the twentieth century, as we shall see below. Social mobility was due less to the US being a unique bastion of entrepreneurial freedom than to the more substantive presence of an elaborately funded state educational system that provided the possibility of individuals rising through the professions as employees, and only occasionally as independent business entrepreneurs.

In broader terms, America's dominance, far from being a manifestation solely of spontaneous action by lone entrepreneurs, was underwritten by its success, most especially compared with Britain, in the creation of industrial giants whose characteristic planned and coordinated nature was a key inspiration for the technocratic paradigm of technocrats and socialists. But the American myth remained that of the independent creative genius – Edison and the young Henry Ford – despite their reliance at every stage on a rich infrastructure of skills and intellect at least partially created by collective action, without whose presence their schemes would never have come to fruition.

The economy, culture and politics of the US had been a subject of intense study and curiosity by others in the first part of the twentieth century, but the period after the Second World War was one in which the commanding dominance of the US was underwritten by its moral prestige. The US emerged after the war associated with its role in the creation of the United Nations, the associated declarations on human rights, the Marshall Plan aid programmes for Europe, and an anti-colonial rhetoric. In material terms, the US was without rival for the first decades after the war, setting a standard that other nations felt to be dispiritingly distant. The lead in

school education pioneered earlier in the century by the US was now reproduced in an expansion of higher education from both the state and private sectors that was unmatched anywhere in the world.

If in the first part of the century the US had already established a predominance in the practical implementation of technologies, from the electrification of cities to the invention of the safety razor, after the Second World War these accomplishments were now matched by supremacy in theoretical pursuits, such as pure mathematics and physics. The illustrious individuals who had fled totalitarian interwar Europe were instrumental in the maturation of scientific and technological activity in the US after the Second World War. But the human and institutional infrastructure already in place meant that the dispersion of mathematics and high science was unprecedented in breadth and depth, a fact reflected in subsequent decades both in the theoretical productions emanating from academic institutions and in the application of high science in nuclear power and electronics.

The presence of notable exiles from Europe was perhaps of even greater significance in high culture than in technology; the US became a centre for European classical music, with residency by composers Arnold Schoenberg and Igor Stravinsky and a host of eminent conductors and instrumentalists. But even here, the domestic soil was already rich, and the ferocious Schoenberg had to concede that he had never heard a better performance of his *Verklärte Nacht* of 1899 than that produced by the augmented Hollywood String Quartet. As if it were not sufficient that it had achieved parity with Europe in the replication of classical music, the period after the Second World War also saw the worldwide realisation that the US, most especially through its African-American citizens, had created in jazz a new and distinctive branch of the Western musical tradition that in its postwar manifestation as be-bop was self-consciously high art. An even more pervasive influence was the emergence of rock 'n' roll in the mid-1950s – a popularised synthesis of African-American electrified blues with a largely white country and western tradition. Thus, the US became emblematic of modernity worldwide, not merely because of the vision of a high material standard that it represented, but because of its striking influence on both high and popular culture: debates on modernity – almost wholly identified with the 'Americanisation' of life – already in progress since earlier in the century, continued at a new level of intensity.

The impact of this Americanisation worldwide, but especially in Western Europe, was profound: as postwar prosperity unfolded, this region found itself confronting American-style mass consumption, youth culture and the other consequences of affluence in its daily life. In a range of instances, European nations failed, as in access to higher education, and in others succeeded, as in the provision of universal health insurance, in finding solutions to the problems of affluence superior to those in the US.

But the US precedence in modernity was present not only in economic and social life, but also in political affairs. In the case of former fascist countries, there were issues surrounding the construction, or reconstruction, of liberal political democracy. More pervasively, mass immigration has forced Europeans to confront the quintessential American issue of the relationship between citizenship and national or ethnic identity: for example, Germany was reluctant until recent times to offer citizenship to long-standing guest workers from Turkey or their children, but gave a right of return and citizenship to foreigners claiming German ethnicity. Even European countries with long republican traditions, such as France, have often dealt with this question in an obtuse, unthinking manner (such as the infamous phrase found in French textbooks offered to francophone Africa – ‘Nos ancêtres les Gaulois’), with others resorting to genocidal approaches, as in the former Yugoslavia. And few European nations besides France have embraced the relatively rigorous separation of church and state embodied in the US constitution, thus prohibiting the privileging by the state of any particular religious practice or institution.¹¹ If in daily life the US has not always dealt with issues concerning race, ethnicity, religion, gender and immigration with any greater justice or efficacy than other nations, its constitution, especially as amended after the Civil War, had set a standard for the juridical and political equality of all those living within its borders long before other rich nations.

Postwar Western Europe had to deal with unburdening itself of its past history, which it did sometimes eagerly and at other times with regret. The changes in daily life were palpable, with the transition from a predominantly rural to an urban economy and society having barely begun in many countries, and the necessity for the recasting of political procedures and institutions in formerly fascist and authoritarian states. In the US, the situation was very different. Postwar prosperity and full employment merely permitted a return to the dreams of material affluence put on hold by the interwar depression – cars and household appliances were not new in postwar US, just more freely available: only television was newly visible in the ordinary life of upper-middle-class families.

Politically, the eighteenth-century constitution continued its uninterrupted functioning, US citizens noting with amazement the movement in France from a third to a fourth, and eventually to a fifth republic, with not even McCarthyism and Cold War paranoia impinging seriously upon the stolid self-confidence with which the US viewed the world. In important ways, the US had become the oldest country in the world – an American child’s breakfast of the mass-produced product of a great corporation, Kellogg’s Corn Flakes, might well have been the same as that of her great-great-grandfather: in Europe, the introduction of such delectations for breakfast represented a profound disjunction with the past. Americans in this period were not forced to think about change to the same degree,

because it took place with less discontinuity and did not have its origins in any other nation's culture.

In the present day, American culture may well prove less adaptable to changing relations with other nations, precisely because of its ownership of the twentieth – the 'American' – century. Past successes and the illusions attendant on them may generate an obduracy that makes it impossible to respond to present-day challenges. Already in the interwar period, Hollywood movies absurdly depicted foreigners, from Parisian policemen to Czech shopkeepers, speaking fluent if pleasantly accented English, a practice that continued well into the postwar period of US hegemony. But, like sleepwalkers, Americans have woken up in the twenty-first century, and this fantasy is an approximation of reality: hoteliers in Paris, as well as corporate executives and academics in Europe, will function in English. For many Americans, this relatively recent development is taken as a verification of continued hegemonic power and cultural superiority, and an excuse not to learn languages, or anything else, from foreigners. When coupled with a history that is perceived as defeating all challengers – the Axis powers in the Second World War, the Soviet Union in the Cold War, and even the later economic rivalry with Japan – there is, at worst, in the collective psychology of the US a notion of divine protection, one that makes it unnecessary to deal seriously with substantive realities such as climate change.

And the grand myth of the heroic entrepreneur continues to be of great assistance to right-wing political movements in the US seeking a return to former glories by pursuing a path of individual self-reliance and low taxes. The realities of American history are something quite different. Much of the earlier achievement of the US is located in collective action in various forms, most importantly in the commitment to education, as well as in acts of planning in the economic sphere, as will be seen below.

Economic development and government enterprise

A few years ago, I was asked to review a few chapters of a book proposal by American academics. The prospective book was well-constructed and distinctive: for a nation notorious for marinating in its own history and institutions, this book was a rare foray into comparative economic history, in which a European model of government involvement in industry was contrasted with the hands-off US approach. The analysis was admirably even-handed in weighing the merits of each system, but ultimately left me, in a proverbial sense, speechless. A key premise of the whole book – that US industrial affairs can be described from a fundamentally laissez-faire perspective – was based on an innocent blindness to the substantive and rich instances of state involvement in the US economy that have proved critical to its development.

The mythology of independent enterprise is compromised at its epicentre – the US agricultural sector. By 1890, ‘the development of large-scale, government-financed agricultural research appears to have been primarily an American phenomenon not copied abroad’.¹² As a result of the passage since 1862 of acts of Congress creating the US Department of Agriculture (USDA), the land grant colleges and agricultural experiment stations, practically all agricultural scientists throughout the early twentieth century were full-time government employees.¹³ Though the resulting agricultural research made little direct contribution to productivity for many decades,¹⁴ the disproportionate electoral weight of the agricultural sector in US national politics continued to underwrite the development of these institutions and their expansion in the 1930s and subsequently.

There is a purely economic rationale for the exceptional level of government intervention in this sector, one perhaps implicit in the minds of the participants but not formalised until a century after the original acts of Congress:¹⁵ even when the individual, atomised farmer has the intellectual capacity to pursue agricultural research and is not constrained financially from so doing, such research will rarely be undertaken, as any resulting benefits will quickly be dissipated to others. US farmers, realising these limitations, had formed thousands of voluntary associations by the early twentieth century, which were conduits, along with county agents, for the diffusion of research from the USDA, experiment stations and land grant colleges; attending meetings offered by the public extension service in order to become acquainted with the latest research and techniques became a regular and important activity.¹⁶

Starting in the 1920s, more dramatically in the 1930s, and continuing during and after the Second World War, the agricultural sector evidenced substantial rises in productivity that were sustained for many decades, reflecting the successful assimilation of the products of free enterprise, such as tractors and other machines powered by the internal combustion engine, as well as foreign innovations, such as the invention of chemical fertiliser. These developments were complemented by the activities of government and government-financed institutions in the creation of a broad range of scientific innovations and procedures, as well as the offering of assistance and guidance in the introduction and implementation of these transformative changes: the government played a central role in the creation and dispersion of a scientific-technological revolution in US agriculture.¹⁷ From the perspective of dynamic efficiency, the American agricultural sector emerges as an exemplar not of disinhibited free enterprise, but of successful governmental–private sector collaboration.

The by-products of this revolution in the agricultural sector have been manifold. On the one hand, this scientific productivity revolution was of disproportionate benefit to well-off farmers and owners, with resulting pressures driving smallholders, sharecroppers and others off the land that

were only partially mitigated by the New Deal interventions described in Chapter 8.¹⁸ But the depletion of rural areas and escape to urban centres are a commonplace of capitalist development. What is striking is the extent to which the vast subcontinent embodying the US did not follow this cultural pattern of an educationally backward rural sector, as we shall see below: the origins of the high school movement are to be found in the Midwest, with respectable rates of college attendance engendered by the land grant colleges, largely, in the early decades, for non-agricultural pursuits.¹⁹ The role of federal government in the creation of these institutions of higher education interacted with unprecedented action at the state level for public school enrolment, giving the US a uniformity and depth of education across its great expanse (outside the former Confederacy) that was to have profound consequences for its economic development during the twentieth century.

In industrial development, the US had a world presence even in the *ante bellum* period, with the 'American system of manufactures' notable for its distinctively high volumes, uniformity of output and use of interchangeable parts. These early triumphs of the system of free enterprise in the US had their origins in 'armory practice' – the demands from the early nineteenth century by the US Ordnance Department that weapons be produced using interchangeable parts. In what would now appear as a slow process of dispersion, the know-how embodied in armouries was diffused via the machine tool industry through a range of consumer products. This culture of interchangeable parts, especially new techniques in pressing and stamping steel introduced by bicycle manufacturers, was later to be central to the emergence of the mass manufacture of Henry Ford.²⁰

Several elements of the development of mass manufacture in the nineteenth and early twentieth centuries thus parallel those to be found in the following discussion of the postwar electronics industry: the US government's role as a source of market demand and in directing development in the primary stages of the new technology; the reliance of the new sectors on the *in situ* skills embedded in the older, displaced ones (bicycles in the context of car manufacture, and vacuum tubes or valves in the case of electronics); the necessity for innovation in the context of a high-wage economy. An important difference in the case of electronics, as we shall see below, is the central role played by science and science-based education in the evolution and dispersion of technology in the postwar context. Both of these American success stories cause difficulties for primitive narratives built around *laissez-faire* and creative destruction.

But this myth of free enterprise and the heroic entrepreneur has proved persistent, partly because it contains important elements of truth. The US economy from the late nineteenth century until the Second World War had evidenced forms of government intervention in its development: distinctively high tariffs, a deep engagement in the technology and the dissemination of knowledge in agriculture, the financing of the railroads, government

activity concerned with the setting of uniform standards in the electrical industry and other sectors, and, as we shall see below, First World War involvement in the reorganisation of the infant electronics industry with the creation of the Radio Corporation of America (RCA). All this is true, but overall, the Second Industrial Revolution of the late nineteenth and early twentieth centuries – the emergence of giant firms, mass production and the innovation of new technologies – took place under the aegis of private enterprise uncoordinated by any state agency, and was often directed and sometimes founded by an entrepreneur. This history may thus be summarised as follows:

1. Technological and institutional innovation in the US (and other countries) largely took place within firms, with leakages from these technological achievements to other firms sufficiently small to make investments in new technology profitable, largely as depicted in the literature of endogenous growth theory.
2. The direction of the development of these new technologies was almost exclusively initiated and directed by firms for the purpose of making a profit in the private sector.
3. Investment in new technologies was undertaken by firms using funds from internal sources and externally from financial institutions and private individuals.

By contrast, the high-technology industries emerging after the Second World War – electronics (semiconductors, computers, telecommunications), aircraft manufacture, atomic power and space exploration – took a very different path. Of these, the electronics sector has had perhaps the most powerful and permanent impact worldwide. In contrast to the Second Industrial Revolution, the innovations of the postwar period emerge in a very different way:

1. Technological innovation in the high-tech sector emanated from a complex web of firms, universities and governmental institutions.
2. High-tech research and development, especially in the crucial first two postwar decades, was largely, though not exclusively, initiated and guided by an interaction between private enterprises and governmental agencies, most especially the US Department of Defense (DOD).
3. As in earlier times, investment in new technologies was undertaken by firms using internal sources and a range of financial institutions and private individuals, with an important role for investment banks and equity-based entrepreneurial finance. But in the postwar period, the government (largely the US DOD) played a key, and in the early decades an overwhelming, role in the financing of research and development of new technologies, whether undertaken by companies, universities or a

governmental agency. Government financing of companies' innovation often took the indirect form of generous 'cost-plus' contracts and/or a guaranteed market for the purchase of the products of firms.

The role of defence expenditure in the postwar US was a subject of great controversy. To President Eisenhower (or his speechwriter) in 1961 we owe the phrase 'military-industrial complex', with its implication that much of this expenditure was unnecessary and due to a corrupting influence on political processes; Baran and Sweezy, as we have seen in Chapter 5, thought that defence expenditure was, like advertising (though even more sinister), part of the economic surplus – useless expenditure maintained to prop up a capitalist economy that would otherwise collapse.²¹ Some economists were concerned with possible inefficiencies in weapons acquisition, with cost-plus agreements permitting cost overruns and possibly excessively high profits for contractors.²² Others noted the high cost to society in terms of the drain on civilian resources.²³

And yet, with all these negative characterisations of defence expenditure, a profound paradox emerges. In the early postwar years, US hegemony appeared to be linked to the great Second Industrial Revolution sectors such as cars and steel, which were engendered and sustained (albeit with some government contracts) by private enterprise. But the performance of these sectors, once so emblematic of US power, was ultimately undistinguished in comparison with that of their international rivals, and began a long contraction. What eventually emerged as the industrial basis of American economic and military power in the postwar world were sectors in which the financing and coordinating role of government was crucial. If earlier the list of sectors with a high level of government involvement included only agriculture, in the postwar world it embraced a whole new set of activities in which the state played a key role, not only in the financing of these sectors, but in the planning and the development of new technologies; in the case of the internet, the US government was central to its creation.²⁴

The US that thus emerged in the twenty-first century was one that had suffered precipitous decline in a range of traditional free enterprise industries, in many of which, such as textiles, this was an inevitable product of the increasing competition from lower-wage countries. In other cases, however, such as the car industry, rapid decline was linked to the failure of this free enterprise sector to maintain its enormous historical advantages when faced with superior management, production techniques and products from others, most notably the Japanese. By contrast, many of the distinctive advantages that the US has retained are embodied in a series of high-technology sectors that are the product of state financing, planning and coordination²⁵ combined with intense competition between enterprises and entrepreneurial financial activity.

Most importantly, all of these sectors were underwritten by several generations of state investment in public and university education, complementing a rich *in situ* base of practical skills with the intellectual infrastructure to make these developments possible. Other elements of US advantage in the tertiary sector, such as the sophistication of its financial institutions, were also made possible by this exceptional commitment to education. An distinctively practical and business focus in American universities may have facilitated this extraordinary outburst of new technologies, but the key characteristic that differentiated the postwar US from any other contemporary society, and any other society in history, was the sheer size of its intellectual establishment, either on a per capita basis or in absolute terms.

And yet, the myth of the entrepreneur has been the impetus in recent decades for a neoliberal reconstruction of society in the US in order to recapture past glories linked to this mythology. Its most recent ideological incarnation in business school circles in the US has been an updated version of the Schumpeterian doctrine of creative destruction – the notion of innovation as invariably disruptive, but inexorable and inevitable in the contemporary world: we can do little but fatalistically accede to its power.²⁶

The postwar electronics revolution in the US fits poorly with these notions of innovation being acts of creative destruction and disruption. The semiconductor was central to the early history of this revolution, with its invention and development prerequisites for progress in almost all other aspects of electronics: the Japanese later dubbed the semiconductor the ‘rice’ of the industry. The semiconductor also plays a special role in capitalist mythology. In its genesis, it appears as the quintessence of Schumpeter’s thunderbolt from a great monopoly: the overturning of the well-established vacuum tube (valve) industry appears to be a prime example of creative destruction of an older sector, with the newer one rising from the ashes.²⁷ And, far more than the mainframe computer with its identification with the Goliath IBM, many of the subsequent semiconductor and microchip developments were the products of firms beginning as entrepreneurial Davids, leading us to a giddy ‘overthrow of matter’²⁸ with the aid of heroic, risk-taking venture capitalists.²⁹ All of these entrepreneurial elements are relevant to the overall story, but must be seen in the context of a sector that emerges from a complex web of relationships between firms, government contractors and universities, whose different aspects are not easily disentangled.

Bell Labs announced the invention of the transistor in 1947, but this discovery had not been made serendipitously. The notion of solid state amplification had emerged as early as 1936, with the research arm of the great private US telephone monopoly AT&T, Bell Labs, seeking a replacement for mechanical relays by electronic connection.³⁰ Bell’s development of the transistor proceeded independently of government funding, though Second World War research and expenditure on radar gave it an important impetus.³¹ An exceptional aspect of the emergence and development of

this sector was the crucial role played by the absorption and integration of the latest achievements in solid state physics,³² a fact that underlines the importance of the existence in the US of a sophisticated intellectual infrastructure from the universities in the genesis of the electronics revolution. The centrality of pure science also plays, as we shall see below, a key role in explaining why the role of government in the innovation process, so peripheral at the beginning of the twentieth century, emerged so prominently here and in subsequent developments.

An important contribution to early research efforts was also made at a less abstract level in materials research by chemists and metallurgists, some of it linked to wartime work: ‘the “linear model” of technological development – wherein scientific research precedes technological development, from which useful products emerge – does not encompass very well what happened in the case of the transistor’.³³ In addition, the new industry was dependent upon the prior existence of skills and the institutional infrastructure from sectors it was later to replace. The emergence of the famous Silicon Valley area of California is linked to the presence, from the early years of the twentieth century, of an extensive electronics sector to serve the needs of the US Navy, shipping companies and then ham (amateur) radio enthusiasts;³⁴ Charles Litton and other tube manufacturers from the interwar era built up a sector whose familiarity with a range of materials and vacuum techniques, cleanliness and precise protocols in manufacturing made them competitive in quality control with the great East Coast manufacturers. Many of these *in situ* skills and institutions were important for the postwar semiconductor sector, as was the entrepreneurial model of a new firm emerging with little capital on the basis of contracts with the US DOD; some of the older manufacturers became suppliers of equipment to the newer industry.³⁵

Even in this apparently most striking example of Schumpeter’s creative destruction, the notion appears to be deeply inadequate. It is vague enough to permit various readings, but the language he uses – comparing this process to a gale, or even a bombardment³⁶ – seems to suggest a sanguine attitude towards the destruction of now obsolescent sectors for the sake of creating anew. But this Wagnerian linkage between destruction and new creation comes up against the historical reality that new developments, be they the cotton industry of the Industrial Revolution, the car industry, or the revolution in miniature of the semiconductor, rely upon the existence of embedded activities, whose associated skills and ways of life can then be transferred to the new activity. In addition, as noted in Chapter 6, older technologies tend to remain in place longer than is generally recognised because of the persistence of bugs and difficulties in implementation of the new techniques and machines.³⁷ Thus, creative displacement, rather than creative destruction, is the norm for socially beneficial developments: the notion that laying waste to a region or sector is a prerequisite for progress is false.

The invention of the transistor by Bell Labs generated enormous interest and excitement in the scientific and engineering community. But for Bell, the device was largely conceived merely as a replacement for the vacuum tube; diffusion in the civilian sector was slow, with some applications in telecommunications and hearing aids. In consumer products more broadly, there was little more than the furtive (and premature) issuance of a transistor radio by Texas Instruments in 1954. Broadly speaking, 'The *ad hoc* manufacturing technology of the early fifties, while sufficient to sustain at least with military help – a minor industry, would have been unable to support the sort of growth the industry was experiencing by the early sixties.'³⁸

A decisive factor engendering the rapid transformation of this sector was the role of the US government, largely through the US DOD. The state played a central role in the funding and directing of research and development by firms and universities, and, more importantly and unambiguously, the DOD created a large and lucrative market for these untested products that permitted firms to undertake long-term development by shifting much of the risk of failure to the tax-paying public through the use, in the 1950s especially, of cost-plus contracts.³⁹ It not only provided an open cheque-book for the provision and engendering of unprecedented new products and their replication in massive numbers, but was constantly prodding and monitoring companies to meet the demands of military technology.⁴⁰

The role of the DOD in providing a market for these new technologies was decisive. One key enterprise, the Silicon Valley startup Fairchild Semiconductor (in fact, the subdivision of a more conventional firm), played a central role in the emergence of reliable and cheap transistor production with the planar process (based on research at Bell Labs). This development was critical to the economic viability of the integrated circuit,⁴¹ and was perhaps the most important innovation since the invention of the transistor itself. Fairchild, along with Texas Instruments, also produced the first integrated circuits about the same time, around 1960. Yet even Fairchild, which generally avoided military financing of R&D in order to prevent the DOD from controlling its research and product development, agreed that 'only the military and the large weapon system contractors... would have the necessary financial resources to buy the complex and expensive products'.⁴² US government purchases of integrated circuits as a percentage of total production were 100 per cent in 1962, 94 per cent in 1963 and 85 per cent in 1965;⁴³ as late as 1959, 85 per cent of total electronics research and development was financed by the federal government.⁴⁴

With the invention of the integrated circuit, a technological revolution beginning in 1947 that might have lasted for the rest of the century if governed by the demands of the free market was consummated in less than a decade and a half with government financing. The increased reliability, and the doubling of the number of transistors on a microchip every 18 to 24 months that followed the emergence of the integrated circuit ('Moore's

Law'), made the semiconductor a viable, and then a necessary, commercial product, symbolised by the creation by Intel in 1971 of the microprocessor – a so-called computer on a chip.

The decisive role of the government as a market for these devices in the early phases of its development is indisputable; its other functions were also of significance, if more contentious. Efforts to spread knowledge by Bell Labs were complemented by government sponsorship of conferences and symposia starting in the early 1950s.⁴⁵ In the wake of the invention of the transistor, the US government's aggressive antitrust stance thwarted any temptation on the part of AT&T to preserve control over its development, with a consent decree of 1956 forbidding it to sell semiconductors or computers commercially and demanding that it give royalty-free licences on all transistor patents up to the year 1956, and at 'reasonable royalties' thereafter.⁴⁶ As noted above, the invention of the planar process, a key element in the development of the integrated circuit, took place at Fairchild in 1959 without explicit government support. But the shaping of silicon technology, and later the development of the planar process and the integrated circuit, 'were closely coupled with military procurement and the establishment of reliability and performance standards by the Department of Defense',⁴⁷ with a more rapid dispersion of these new technologies than would otherwise have taken place because of governmental demands for multiple sourcing of products.⁴⁸ Overall, it is hard to avoid the conclusion that 'By creating, supporting, and disseminating diverse approaches to technical innovation in semiconductor microelectronics, government agencies were extremely important in the overall development of micro electronic technology and thus also in the development of the microelectronics industry.'⁴⁹

Early innovations emerged from the AT&T monopoly and from the established receiving tube firms, such as General Electric and RCA, with their extensive research facilities and rich experience in the production of electronic devices. But with older firms hesitant to abandon the lucrative tube market, by the mid- to late 1950s the impetus was shifting to firms that were either new (Fairchild Semiconductor) or new to the sector (Texas Instruments),⁵⁰ generating intense competition among the contracting firms, as they often span off into new enterprises. There was a broad, fluid range of supplementary finance available from other companies (as in the creation of Fairchild Semiconductor by Fairchild) and from established investment banks; by the late 1960s, managers and engineers were leaving Fairchild to start new ventures, facilitated by the emergence of a range of venture capital enterprises and an independent semiconductor equipment industry.⁵¹

The firestorm of energy leading to the introduction of the microprocessor in 1971 and beyond is thus seen to be the product of a complex interaction of forces. In its genesis and early development, the sector was characterised by planning with a long-term time horizon from AT&T and the US government;

further impetus then emerged from intense competition engendered by the fluid entry of new firms, often financed by equity-based venture capital with a much shorter, typically five-year, time horizon. Venture capital here – in sharp contradistinction to some later forms of financial innovation (such as the bundling of subprime mortgages; see Chapter 12) – was characterised by a hands-on, intimate knowledge of the sector, with investors often being engineers and/or entrepreneurs themselves.⁵² The resultant intense competition engendered rapid imitation of Fairchild's silicon transistor planar process and manufacturing techniques for integrated circuits in the 1960s.⁵³ As will be discussed below, this shift to shorter time horizons in the semiconductor industry may reflect the gradual predominance of engineering over fundamental scientific achievements as the product matured.⁵⁴

Other important participants in these developments were universities such as MIT and Stanford, key players in the 'military-industrial-academic complex',⁵⁵ whose intensity of integration with these practical high-technology projects – mostly state-financed and with a military connection – was perhaps without precedent in the history of capitalist development.⁵⁶ These tendencies were enhanced in the Cold War context: as late as 1968, 73 per cent of university and college research and development was funded by federal government, with 58 per cent of the total going for defence and space-related research.⁵⁷

Educational establishments in the US thus played an important role in the formal development of these technologies, a practical orientation to which they had been directed since the late nineteenth century, generating Veblen's deep sarcasm about the nature of these university-business links. US higher education has aspects that still distinguish it from universities in other countries in the context of research and development and patents, including the possible compromises to its integrity from business, the military and (among private universities) rich alumni. In these aspects, as well as the presence of athletic scholarships, sororities and fraternities, the US university system remains singular, most especially when compared with its European counterparts.

But in the period after the Second World War, the most important characteristic of the US educational system that permitted it to contribute to this monumental, world-transformative technology was not so much a business orientation that lent itself to involvement in projects for the practical development of these technologies, but, rather, the sheer size and coherence of the university sector in the US, in both its state and private incarnations. The offerings of US universities dwarfed what existed, and ever had existed, in any country, with scientific and technical subjects ranging from pure mathematics and theoretical physics to the full spectrum of engineering disciplines, as well as provision of specific programmes relevant to semiconductor research.⁵⁸ The richness of the university infrastructure undoubtedly promoted mastery of a range of other skills – administrative,

entrepreneurial and even legal – that were significant in, for instance, Silicon Valley development.⁵⁹

This high level of human infrastructure, the product of an incomparably rich and elaborate university system emanating from state and private sources, had been underwritten by the development of its predominantly state school system. In the pre-Civil War period, US school participation was surpassed only by Prussia; by the early twentieth century, the US was a world leader in participation rates in secondary school with, strikingly, many of the highest rates for the smallest towns.⁶⁰ The notion of the US as a uniquely mobile society was significantly reinforced by these developments.⁶¹

It was the existence of these educational prerequisites that provided both a human infrastructure for the engendering of the entrepreneurs and the personnel for the extraordinary, and extraordinarily rapid, emergence of the electronics sector. When coupled with the *in situ* advantages embodied in individuals inheriting the already advanced development of this sector (such as the key role of amateur ham radio operators in the post-First World War electronics industry), the superiority possessed by the US must have seemed insurmountable. Yet, within a few decades, the US was to be challenged at the very highest levels in electronics, not exclusively, or even particularly, by its European peers, but by nations such as Japan and, later, other Asian nations that, in the immediate postwar context, had appeared to be among the poorest nations in the world. The very sophistication of this sector, with its high component of pure science and its constant desire to put in place strict protocols of manufacture to replace black art,⁶² meant that the rapid emergence of the new technology in its early phases could only take place with extensive state subsidy. But somewhat later, this high scientific component helped promote a rapid diffusion of this revolutionary technology to potential international competitors with the appropriate educational prerequisites.

The period of development in the electronics sector up to 1971 (with direct control of the internet by the US military stretching into the 1980s)⁶³ is thus to be characterised by an admixture of elements with long-term considerations, such as the development of *in situ* skills and institutions, government and big firm (such as AT&T) planning, and advances in formal education, combined with shorter-term, entrepreneurial behaviour in a fiercely competitive environment. But since that time, the seemingly inexorable unfolding of Moore's law has lowered the price of computing power so far as to push the public's focus almost wholly onto applications of this power and its use with the internet – this being the weightless world of entrepreneurial startups and competition, with the Lourdes of this new faith being the garage in Los Altos, California where the electronics hobbyists Steve Wozniak and Steve Jobs started the Apple Computer Company in 1976. Apple's success, however, presupposes not only the range of long-term elements that made cheap computing power and the internet available, but

also those 'networks of engineers, entrepreneurs, and financiers in Silicon Valley... [that] gave them access to the region's unique expertise in manufacturing, product engineering, sales and marketing'.⁶⁴ A one-sided focus on these proximate entrepreneurial accomplishments is often accompanied (echoing views of Thomas Edison from a century earlier)⁶⁵ by a denigration of the centrality of formal schooling in this process, noting that our heroes Wozniak, Jobs and others failed to complete their university degrees.⁶⁶

There are elements of validity in this entrepreneurial story. From the earliest days of semiconductor development, initiatives and innovations from the new semiconductor startups were instrumental to the rapid pace of development and, especially in the context of products for consumers, the market-driven nature of capitalism guided priorities in user-friendly (but computationally wasteful) directions that might never have entered the consciousness of engineers. It was a capitalist form of competition: cooperative ventures in Silicon Valley, such as Varian Associates, sometimes with a left-wing orientation (and subject to McCarthyist scrutiny), were on occasion successful, and their forms of worker participation were mimicked by capitalist firms; their cooperative structures invariably degenerated in the context of the need to engage venture capital funds for expansion and the desire of employees to cash in their share of the rise in the value of the enterprise.⁶⁷ Without question, and most especially given the contributions of Soviet scientists to solid state and semiconductor theory and practice in its early phases,⁶⁸ the deficit of the Soviet bloc in later stages of the elaboration of the electronics revolution reflects not only Cold War isolation, but the failure of the centrally planned system to find a substitute for the decentralised entrepreneurial initiative seen in the US. But a challenging alternative to the latter did emerge in the form of the directed system found in Japan and, with even greater contrast, from the highly centralised, corporatist South Korean system,⁶⁹ even if the latter was ultimately propelled by the need to respond to the exigencies of international capitalist competition.

We are thus confronted with the paradox that the most striking exemplification of capitalist dynamism in the postwar world, the electronics revolution, developed in its critical initial phases, as did other science-based industries, with substantial participation from non-profit-making entities – research from the universities, and finance and direction from the US government. These developments were in sharp contrast to the emergence of great industries and technologies in the late nineteenth and the beginning of the twentieth century, which were engendered almost exclusively by capitalist firms intending to make a profit on their investments.

Was this dramatic change in the provenance of innovation in the postwar world merely an aberration – an artefact of Cold War politics? More likely, it is a reflection, as suggested in earlier chapters, of the fact that these technologies, especially in their inception, have a much higher component of pure science than those at the beginning of the twentieth century. Furthermore,

in their manufacture, the exceptional demands for purity and uniformity of electronics components lent themselves strongly to the elimination of craft-like procedures and towards rigid (and hence replicable) protocols in production. But both the science component and the rigid protocols in manufacture necessary in this sector will discourage profit-pursuing capitalist enterprises from undertaking research leading to these innovations: in contrast to craft-like skills, the permeable nature of the objective knowledge necessary to replicate these innovations means that they will be easily dissipated to rivals, including foreign producers with the appropriate intellectual preparation, in the absence of successful patent and copyright protection. The explosion of innovation that took place in the US emerged in the context of lucrative gains from government contracts coupled with a strong regulatory and antitrust atmosphere that inhibited monopolisation and appropriation by individual firms of technological breakthroughs. Of more fundamental significance, the technological achievements in this and other sectors emerged in the US from its unprecedented success in educating its population in schools and universities, almost exclusively in the context of state and non-profit-making entities.

And yet, in the twenty-first century, the US remains the epicentre of a popular and academic discourse supporting the ideal of a pure and unadorned form of capitalism, with more progressive voices apologetically and defensively requesting that its harshest consequences be curtailed. One prominent group of dissenters from this dialogue, almost invariably identifying themselves with progressive political views, have accepted a version of the narrative above concerning the importance of the role of the state in contemporary economic and technological development.⁷⁰ In the desire to seem hard-headed and relevant in contemporary discussions, the progressive aspects of their programmes – equality and democratic participation – are invariably muted in favour of an emphasis on the efficacy of state participation for generating successful outcomes in the international race for economic and technological superiority. But there is nothing intrinsically progressive about an anti-laissez-faire position on economic development, and the retreat to such a stance is testimony to the continuing ability of neoliberal argument, emanating most powerfully from the US, to shape and constrain the domain of acceptable political discourse.

Late Rome

As we shall see in Chapter 10, the US in the twenty-first century is distinctive for having the widest distribution of income and wealth among rich countries. This extreme disparity has emerged as a result of developments in this direction since about 1980 in the US and Britain that, up to the present, have appeared in a less pronounced form in comparable countries. Even before the great movement of these decades, the US appeared somewhat

above average, but not exceptionally so, in income shares at the top end.⁷¹ This fact appeared to be mostly of academic interest, however, because in the early postwar period, average incomes in the US were so much higher than in other countries.

Furthermore, the relatively wide dispersion in income and wealth in the US in the postwar years was compensated for by the widespread perception, since at least the nineteenth century, that the US was a land of opportunity, a nation with exceptionally high levels of income and even class mobility for residents of European descent. The nation was distinctive for its absence of residual feudal aspects such as class deference and the recognition of aristocratic lineages, characteristics that had persisted even in republican France. The constitutional separation of citizenship and nationality and of church and state gave immigrants from a range of ethnicities and religious groups the notion that their juridical status was on a par with that of the settled population, and that the hurdles to be faced in their personal elevation were largely of an economic nature. When coupled with an unparalleled commitment to public education, the US emerged with an image, and a perception of itself, as uniquely egalitarian because of its mobility. Unfortunately, in the telling and retelling of the story to itself, the focus of the US on its uniqueness has been almost exclusively on its role as an arena for the heroic entrepreneur, rather than as a nation that has succeeded, in an unprecedented way, in creating a literate society through state activity.

In the present day, any claims of US superiority concerning the standard of material welfare of its population over other nations are substantively restricted to its higher levels of per capita income when corrected for purchasing power parity. Unlike in the immediate postwar period, these differences are now relatively modest; the residents of the richest nations are now well enough off that considerations other than average income invariably impinge upon any evaluation of an economy's success or failure. But the central issue remains – even with this exceptionally wide dispersion of income and wealth, can the US maintain its historical claim to being a land of opportunity? The consensus of studies on income mobility is clear – the US appears to be unexceptional among rich nations in income mobility, and inferior to several. Such a result is unsurprising, given the lower levels of income inequality evidenced in America's rivals and the intuitive notion, to be confirmed in Chapter 10, that inequalities of income and wealth work against mobility, other things being equal. Across rich nations, the progressive characteristics that were pioneered in the US and engendered these high levels of mobility, most especially the commitment to school and higher education, have now been matched in other rich countries. In recent years, the rapid rises in tuition cost for post-high-school education have reversed the century-long identification of the US with exceptionally fluid access to education for all classes in society.

Inequality now emerges as the characteristic aspect of the US economy and society in the twenty-first century. Perhaps even more distinctive are the high levels of personal insecurity and poverty in the US, with, in general, a less generous social safety net, including unemployment benefit, compared with other countries and continuing issues surrounding health insurance. With a long-term stagnation of wages for a large section of the population, the middle class (an elastic term in the US context) have become disillusioned with their prospects for material improvement. Whether or not we fully accept the presence of a structural relationship between inequality and bad things in society, such as poor health and crime, it is hard to avoid the even more intuitive notion that inequality is associated with social fragmentation and immobility. Groups at the lower end of the social spectrum – culturally isolated and economically insecure – find it difficult to plan and organise a strategy for themselves and their children for social and economic elevation, most especially one that involves the long, indirect and perhaps culturally alien process of advanced education.

And possibly linked to social inequality, as both cause and effect, are a further range of aspects of US society that have emerged as peculiar in recent years, such as the overt and blatant influence of the interests of the well-off in political processes, underlined by Supreme Court decisions progressively declaring that legal limits on contributions to political campaigns by the rich are restrictions on First Amendment rights of free speech. In the context of a society with weak countervailing forces in the form of labour union organisation, and the exceptionally overt role, compared with other countries, of special interests in political processes, politics in the US often has more resemblance to that in countries with an unsteady tradition of political democracy than to that of a nation in serious contention for being ranked as the oldest democratic republic in the world.

While the US was once, as we have seen, a focus of progressive developments, it is now a centre of anti-progressive and even anti-Enlightenment ideas and movements among rich countries. In cultural terms, the US has mystified the rest of the world by maintaining an overwhelming hegemony of academic scientific learning while possessing a substantial political movement that promotes a synthesis of human anthropology from the creation story of Genesis and the children's television cartoon 'The Flintstones'. There is an old left-wing tradition of seeing such views as a cry of despair or alienation from oppressed groups or even, in the context of its earlier manifestation in William Jennings Bryan, a reaction to the social Darwinism of its day. But even putting to one side the imperfect correlation between these primitive views and the class status of the individuals holding them, the more substantive problem is that a virulent, well-developed ideology of ignorance is in itself an obstacle to social progress. The aggressive and even institutionalised presence of this ideology in many areas of the US not only inhibits social mobility for many individuals from lower incomes, for

whom the cultivation of a scientific worldview becomes difficult, but also threatens the cultivation of rational discourse in the broader political and social context.

In the name of a laudable reluctance to accept the word of experts, the US has generated an anti-intellectual culture unparalleled in the developed world that somehow exists alongside the US maintaining itself as the world centre of scientific, and in many cases general, intellectual discourse. Such a happenstance, in earlier times, might have evoked amusement or even derision, as it did for political and literary commentator H. L. Mencken. But the combination of the influence of corporate propaganda and a situation in which a section of the US population has been inculcated with pre-modern notions of how the world works means that, for instance, much of the collective reaction to the issue of climate change in the US is distinctively infantile – a combination of denial, apocalyptic religious fatalism and a faith that a technological fix will solve the problem in a costless manner.⁷² This reaction, potentially disastrous in itself, also does not bode well for rational responses on the part of the public to future challenges, environmental or otherwise.

The past successes of the US, however, still weigh heavily in contemporary discourse. The meaning of that history is subject to intense intellectual struggle, with one perspective embodying the persistent myth of the heroic entrepreneur. An alternative, more progressive narrative for the twentieth century would focus upon the overwhelming success of the US in assimilating and raising the cultural and skill level of a vast, heterogeneous population, including the deluge of largely European immigrants and what remained, in absolute terms, a very large rural population in the early twentieth century. Central to this success was the aggressive role of the state in the creation of a system of school and higher education, without precedent or parallel in the world, and a juridical structure in its constitution in which citizenship and its incumbent rights were separated from nationality. These powerful mechanisms served the non-white population of the US far less well, with often (especially in the old Confederacy) little protection of citizenship rights and scant opportunity to benefit from the singular abundance of state-financed educational institutions in the US.

Its continued lead in the postwar world in formal education, combined with the cumulative aspects of *in situ* human development, were key aspects of the retention of US predominance. In this period, in contrast to the beginning of the twentieth century, many of the leading sectors of the economy, such as electronics, that absorbed these skilled individuals were not the products of unadulterated entrepreneurial free enterprise, but of a deep admixture between the latter and financing, coordination and direction by the state. The identification of this most successful economy and polity worldwide with the assimilation and (albeit imperfect) integration of this heterogeneous collection of peoples has been a powerful progressive

symbol, in sharp contrast to the anti-immigrant and nativist sentiment that is gaining a new prominence and respectability in the present-day US and other countries.

Given this well-known and attested history, it may seem surprising that the US remains the fount of laissez-faire ideology. Academic economics is dominated worldwide by journals and university departments centred in the US. The dominant conception of society emerging from the US academic world would have been familiar to orthodox practitioners of the early twentieth century: individual consumers, workers and entrepreneurs interacting with market institutions in the free exchange of goods and labour, with the state playing a residual and passive role. Imaginative attempts to modify this orthodoxy, most notably of a Keynesian variety, have a tendency to founder because of the intense individualism of the central doctrine: leading contemporary left-of-centre economists succeed in putting small punctures in the orthodoxy found in their own textbooks, but leave the overall vision undisturbed.

More than ever before, the US determines the framework – efficiency, productivity, economic growth – in which discussions of the good society are to take place. The US is not only the predominant source of scholarly articles and textbooks on economics, but sets the terms for popular discussion by way of an army of allies, such as the anonymous figures (both the authors of its articles and even its book reviews) who produce *The Economist*. This British publication, with two-thirds of its circulation in North America, offers its readers an ‘economic orthodoxy lite’, with a focus on the heroic entrepreneur (as symbolised by the presence of a column called simply ‘Schumpeter’): its broad reach is indicative of the extraordinarily wide influence of this market ideology, embracing as it does not only the formal writings of the academy, but a respectable middle-brow audience as well. The widespread and fatalistic acceptance of the dictates of the marketplace on the part of much of the public, from high unemployment to levels of inequality without precedent in living memory, is linked to the dissemination of this right-wing ideology as scientific veracity in both an academic and a popular context.

The US no longer functions as a standard for the good society, arguably not even in material terms. But in so many ways it continues to set the agenda for discourse worldwide on the standards for societal success. The US offers to the rest of the world a model of capitalism well suited to elites – an unequal society in which the bulk of the population is regulated by market forces, while innovation (including financial innovation) from an elite is the source of wealth creation. US intellectual power, in both its academic and more popular manifestations, continues to play a central role in controlling the terms in which this discourse takes place worldwide, partially, and ironically, because of the continued power and coherence of the university system, much of which was constructed through collective social action

and governmental expenditure. Ideologies, and the political decisions that spring from this intellectual basis, cannot merely be put to one side by the rest of the world, given the weight the US has in macroeconomic and financial events, and the looming crisis over climate change.

The influence of the US may be taking on a trajectory resembling that of Rome: long after its demise in the West at the school textbook date of 476 A.D., Rome played a dominant role in intellectual culture for the subsequent millennium, with Latin language and literature and the sixth-century legal code of Justinian. Many individuals may find the social democratic choices made in Western Europe about how to organise society more attractive than those to be found in the US, but as long as the intellectual discourse is conducted in American terms, these choices will be perceived to be subjective and arbitrary. It is not merely the presence of long lags in the maintenance of influence of great powers that is in operation here, but the failure of the forces of social democracy to offer a coherent alternative.

The inability of European social democracy to mount a coherent defence of its policies will ultimately leave it vulnerable to dismantlement. Compared with the well-developed notions associated with free-market economics, social democracy has become notorious for the absence of a unified conception that gives an overall shape and coherence to individual policies: it is almost as if social democratic policy makers have internalised the Hayekian notion that the imposition of direction and unification on individual policies would smack of a totalitarian constructivism. In the context of this failure, the policies associated with social democracy are therefore characterised by critics as improvisations, a response to political pressure groups, a sentimental and unrealistic attachment to fairness, or luxuries that can be dispensed with in a crisis. Perhaps even more egregiously, if a coherent alternative to the free-market model of society cannot be formulated, individuals and groups who find themselves repelled by the consequences of unrestrained capitalism will accept the latter's claim to be coextensive with rational approaches to social affairs, and may embrace post-modern, religious or other critiques of rationality itself.

The search for a coherent alternative to what remains the pervasive free-market ideology is thus not merely an academic indulgence but a practical necessity. There may be a temptation to appear tough-minded about the problems confronting us. We may thus decide to accept the terms in which the current debate is posed, for instance the notion that we are engaged in an eternal battle with 'the others', but suggest that a deviation from free-market principles, in the form, for instance, of state intervention in industry, will do the job better: such an approach is unlikely to threaten the hegemony of free-market discourse on the trajectory of the economy and society. A true alternative must dare to be utopian – to base a view of society on principles of human development, equality and solidarity, leading to

a control of social decision making in which democracy is not merely an empty phrase.

With contemporary developments, in fact, leading in the direction of increasing inequality, as we shall see in the following chapter, the obstacles to the creation of an alternative path seem ever greater, and at the same time its creation seems ever more necessary.

10

Economic Growth and Inequality

Economic growth emerged in the second half of the twentieth century as the dominant justification for economic policy and, to a great extent, for social action in general. Growth, it was claimed, would obviate, or at least mitigate, sources of conflict in society and generate the resources for doing good things such as alleviating inequality. But does economic growth, as conventionally measured, truly reflect the increased capacity of a society to pursue its desired tasks? There are good reasons to believe that it does not. True economic development is an extended process, one that is only reflected in growth statistics with a long lag, if at all. Inequality, furthermore, is not a problem that we can put off dealing with until we can afford to do so, since it impinges upon the very process of economic development that is the source of increased economic capacity. Lastly, we may ask whether we have let the tail wag the dog – growth was supposed to expand the range of societal choices, but are the exigencies of growth now being used as excuses to dictate social outcomes?

Why is growth desirable?

The very phrase ‘economic growth’ is problematic. It poses an analogy with a natural function, such as the growth of a tree, when in fact, as commonly employed, the phrase merely indicates the rate of increase in an accounting relationship: gross national income is defined as part of an accounting identity in which current income is equal to expenditure on current goods and services – gross domestic product, or GDP. In the exposition below, the terms ‘national income’ and ‘GDP’ will be used interchangeably. The modern form of these accounts shows the influence of Keynesian theory in the way that expenditure is divided between consumption (which largely responds to changes in income and wealth), investment (whose inherent volatility was seen as the central cause of business cycles), and governmental functions, which in traditional Keynesian theory can be manipulated to compensate for the volatility of investment.¹

I will introduce the central aspects of a critique of the national income measure with what I hope is a colourful personal anecdote, true in all details if my memory holds, even if slightly out of focus in terms of chronology. I spent my earliest years growing up in Manhattan Beach, Brooklyn, in housing created from Second World War US Army barracks, in which the four of us (my sister not yet born) were all crowded into a single room, conditions more pleasant than my description might indicate. At some point my father placed a bet on the Irish Sweepstakes, in the US a famous but illegal form of off-track betting; we managed to win \$400 simply because our horse had succeeded in entering a race. With that princely sum, we were just about the first family on the block to purchase a TV set, a magnificent instrument with a seven-inch screen that managed to work upon occasion. One day, while watching a precursor of the notorious infomercials now to be found on US television, I, as a child, was fascinated by an all-purpose machine that could slice and dice vegetables as well as knead dough and do other things – all for only \$9.95! I asked my father why we didn't purchase such a wonderful device, and it was here that I had my epiphany: he explained to me that any machine that performed so many *different* functions probably couldn't do any *one* of them very well. This is the essence of the critique of national income offered here: it is regularly used for highly diverse purposes – as a measure of aggregate demand, of (in per capita terms) economic welfare and, third, of a nation's overall economic capacity – and fulfils none of these tasks adequately.

Of these three purposes, GDP is best suited as a measure of aggregate demand. The national income accounts in their present form have their origins in the interwar period as a tool in the implementation of Keynesian policies to regulate business cycles. The Keynesian theory replaced an older metaphoric image of unemployment as being due to the presence of sludge in the water pipes (such as a labour union) that prevented the clearing of the labour market. Instead, unemployment from a Keynesian perspective was seen to be a question of too little steam pressure (in the form of aggregate demand) being produced to get the engine going at full capacity. National income served as the Keynesian measure of this steam pressure. At present, a focus on GDP for this reason – for the purpose of regulating the overall level of economic activity and mitigating unemployment and business cycle fluctuations – is its least problematic role, at least among Keynesian economists. The high growth rates and low levels of unemployment that characterised the capitalist world of the 1950s and 1960s were attributed to successful Keynesian regulation and brought forth an early version of the 'end of history' argument, by which economic growth in rich countries, taking place in the context of little change in the distribution of income, obviated class conflict – 'a rising tide lifts all boats'.

In the midst of this period of collective celebration, disquiet remained about the inherent untidiness of the Keynesian synthesis. At the microeconomic

level, Keynesian economists generally presumed that the invisible hand of competition between capitalist firms was a suitable mechanism for the allocation and distribution of resources in society, in the absence of specific forms of market failure such as air pollution. In general, the academic consensus was that any redistribution would be best effected by progressive income and wealth taxes: forms of direct interference in free-market allocation from the activities of labour unions or minimum wage legislation were never convincingly integrated into Keynesian orthodoxy by those who argued in their favour. The panoply of legislation created in the US in the 1930s, such as the Glass–Steagall Act regulating the banking sector, were generally passed over unnoticed as merely part of the institutional backdrop to the functioning of the economy. Any notions that these regulations were putting a leash on a financial sector that would otherwise be dangerously unstable were proffered in a muted way. The consensus of an inherent stability and efficacy of the capitalist allocation of resources at a microeconomic level rested uneasily with the macroeconomic arm of the Keynesian synthesis. The Keynesian model was, after all, a mechanism for regulating, rather than reforming or reconstructing, a capitalism that was perceived to be inherently volatile at the macroeconomic level, a system driven by the animal spirits of capitalist psychology; Keynesianism never even pretended to offer a mechanism for structural reform of this instability.

The period of the 1970s saw the cessation of this golden age of growth, with higher levels of unemployment than had been seen since the early years of the postwar recovery, and concerns about the level of inflation; these events vitiated confidence in the Keynesian model of managed capitalism. But the 1970s were also characterised by the loss of any residual belief in the developed capitalist world that the centrally planned economic system of Soviet-type economies offered an alternative mode for the regulation of an economy in which, perhaps, stability and full employment could be exchanged at a reasonable cost for the obvious inadequacies of the centrally planned system.

This perceived lack of an alternative to capitalism, in the context of an economic crisis in nations evincing, at least nominally, a Keynesian-style ideology, contributed to a revival in the popularity (most especially among individuals and groups not likely to be victims of these doctrines) of nineteenth-century liberal ideas. The Keynesian identification of unemployment with a deficiency of aggregate demand was rejected in favour of a reconstituted version of the liberal view, taking the form of a postulated natural rate of unemployment. From this perspective, the only sustainable way to deal with unemployment is to increase labour market flexibility and remove institutional barriers to the adjustment of wages. Since the crisis of 2007–8 and the renewal of the spectre of mass unemployment in many countries, there has been some revival of Keynesian ideas and an increased emphasis on the need for the maintenance of a sufficiency of levels of aggregate

demand to mitigate economic collapse: GDP and its associated statistics have once again become the focus of urgent public concern. It is this largely technocratic role of national income in the regulation of aggregate demand that has led to it being adopted as a measure for other purposes.

The role of national income as an indication (in per capita terms) of economic welfare is more ideologically tinged. Despite the emergence of other measures in popular discourse, especially in the context of poorer countries, such as the Human Development Index of the United Nations,² growth in national income remains ubiquitous as an indication of improvements in material welfare in a given society, and for making comparisons between societies. Thus, as a riposte to left-wing or elite critiques of consumerism, we are told that economic growth is essential because people 'want to better their lives... and only with more economic output can more people live a more enjoyable and more satisfying existence'.³

There can be no doubt that rises in national income in the early postwar world reflected increases in living standards. Economies across the Western world (and in the Eastern bloc as well) experienced consequential improvements in their material standard of living, with the great bulk of the population having the opportunity to make significant additions to the quantity of domestic housing space, and to improve the quality of domestic life with devices for the alleviation of work in the home, such as vacuum cleaners, and for entertainment, such as television. For some groups, even in Western Europe and North America, rising income permitted the purchase of minimum sufficiency in food and clothing for the first time. Medical care underwent a revolution with the introduction of antibiotics. Perhaps the most decisive improvement in the quality of life came about through the emptying of factories, mines and farms – the offering to a large portion of the population the possibility of earning their living in the less arduous and dangerous context of white collar work.

In the wake of these dramatic changes in material life, there emerged in this period a large literature critical of this mass consumerism – the supposedly gratuitous expenditure on the part of a public that had been manipulated by advertisers to purchase goods they really didn't need. One of the earliest and most prominent examples, Galbraith's *Affluent Society* of 1958, combined this critique with a call for a focus on the eradication of poverty in the context of an increase in public sector expenditure, as embodied in the book's famous phrase, 'private wealth amidst public squalor'. From our present perspective, however, Galbraith's concentration on gratuitous expenditure by consumers was dysfunctional and distracted attention from the real gains for the great mass of the population in this period. Much of this literature, down to the present day, takes the form of patronising lectures from well-heeled authors on the presence of a popular addiction to consumption goods, one that serves little purpose but to alienate a public exercising its free choice in the context of available possibilities for living

and consuming; its focus on how adults can be manipulated by advertising, furthermore, focuses attention away from its egregious and sinister use in the manipulation of children. While earlier critiques of consumption by the masses were often from elite, right-wing sources,⁴ the great body of anti-consumerist critiques, from the 1950s to the present, have largely emanated from individuals who would identify themselves politically as being left of centre (or, in the case of Baran and Sweezy, a more definitively left-radical viewpoint). The baleful result is the established presence of a right-wing populist defence of the freedom for consumers to spend as they choose against left-wing elitists. Any reform programme based on socialist or environmental principles must put forth a convincing vision of an alternative path that does not simply admonish the population to behave better.

There are good reasons for hesitating to identify improvements in well-being simply with the rises in per capita income that have taken place in rich countries in the past few decades. First, increases in welfare result not only from rises in per capita income, but, in principle, from reductions in the number of hours worked per year, under the presumption that these cutbacks are voluntary; the latter tendency has had markedly divergent trajectories in advanced economies, with modest declines of 1.4 per cent in the US and 5.5 per cent in the UK from 1980 to 2013, in contrast to an 18.3 per cent decline in France and an 11 per cent decline in the Netherlands, so that hours worked in France and Netherlands in 2013 are 83 per cent and 77 per cent of those in the US, respectively, and 89 per cent and 83 per cent of those in the UK.⁵

Second, in the context of negative externalities in consumption (such as traffic jams from more cars on the road), an increase in the production and sale of cars may generate little or no improvement in welfare if there is no decrease in the average journey times of households. It would thus be difficult to contend that the share of rises in per capita income in recent decades that is accounted for by the purchase and use of cars (and paying for roads and maintenance) is matched by comparable improvements in personal mobility.

The growth rate in GDP may also underestimate improvements in the population's consumption of goods. As noted in Chapter 6, hedonic calculations suggest that improvements in the quality of many goods, such as quieter engines and improved safety features in cars, are not fully represented in real income calculations. Perhaps more significantly, a declining rate of purchase of durable consumer goods such as cars or television sets may be consistent with a rise in the number of vehicles or televisions per household. In general, declines or slow growth in income among, for instance, poor people do not necessarily signal greater deprivation in the consumption of durable consumer goods.

But it is no repetition of the misplaced anti-consumerist critiques of the past to suggest that, in the present day, the correspondence between economic

growth in rich countries and any reasonable concept of improvements in human welfare has deteriorated. The most straightforward reason for this disconnect is that for the last three decades, as will be seen below, there has been a rapid widening of the gap between rich and poor, most exceptionally in the Anglo-Saxon economies. While, for several decades after the Second World War, the distribution of income in most rich countries was relatively stable, so that that the rising tide of rapid economic growth did indeed 'lift all boats', more recent economic growth has often been of little benefit to the less well-off, or even middling, groups in the economy.

Economists, however, are still in the habit of treating an economy's overall growth rate as the central parameter for judging its success, with rises in inequality as a peripheral consideration. Increases in inequality, however, can cause us to re-evaluate our perceptions of this success: from 1975 to 2006, average family income grew in the US at a rate of 32 per cent, compared with 27 per cent in France. But the rise in inequality in the US was so great in this period that, if we exclude the top 1 per cent in the US and in France (where inequality also increased, though more modestly), growth was 18 per cent in the US and 26 per cent in France.⁶ This widening of the income distribution is an important issue not only for considerations of economic welfare but, as we shall see below, because of its longer-term effects on economic capacity.

Economic capacity and lags in economic development

The third use of national income, as a measure of a nation's overall economic capacity, plays a pervasive role in public discourse, but one that is rarely subject to critical evaluation. The notion that GDP growth – economic growth – can measure the expansion of a nation's economic capacity with a simple scalar measure parallels tendencies in other disciplines in the twentieth century, such as the search in psychology for 'g', an overall measure of the limits of an individual's cognitive power in terms of biological capacity, to be examined in Chapter 11. The argument here will be focused on this aspect of the limitations of the GDP measure – as an indicator of a nation's capacity to pursue various tasks – and on the commonly encountered notion that expenditure on physical infrastructure and education, or public action to mitigate inequality, are luxuries that await sufficient economic growth to make them affordable.

The idea that national income measures the gross economic capacity of a nation is a pervasive, if hidden, presumption of contemporary political discourse, with Margaret Thatcher and others suggesting that, for instance, tax cuts for the rich are necessary to generate the growth in national income necessary for society to be able to afford the good things in life, such as aid to the poor. For the economist Joseph Stiglitz, 'growth increases supply ... [and] should in theory, make [choices between alternatives] less painful'.⁷ But

growth in national income (economic growth) is an imprecise or even inaccurate measure of changes in a nation's capacity to make economic choices in the future. Standard measures of national income violate meaningful conceptions of economic capacity, which should in principle be linked to notions of sustainable consumption. In strict analogy with good accounting practice for firms, a society whose rapid growth in consumption takes place alongside a neglect of its physical infrastructure is living in a fool's paradise, and is falsely measuring its income; in an ecological context, the national accounts fail by not incorporating the depreciation of the natural environment into the income calculation. The additional element introduced into the discussion here will emphasise that changes in national income poorly represent increases or decreases in the flow of services available from the stock of human assets. Growth in national income, therefore, does not give an accurate notion of the trajectory of a nation's economic capacity.

A relatively trivial aspect of measuring a nation's economic capacity concerns the continuing focus in public discussions on aggregate, as opposed to per capita, levels of GDP, as when in 2010 it was widely reported that China had surpassed Japan as number two in the world GDP stakes. What possible significance can be attached to this 'event'? Clearly, it tells us nothing about the present-day possibilities for material consumption in Japan compared with China, a country that remains poor on a per capita basis. What, then, is the purpose of such a comparison? A search through some of the common recitations of the importance of economic growth may give a clue, such as the notorious failure of the late-nineteenth-century French economy to expand in comparison with Imperial Germany. But France's slow growth in national income, as noted in Chapter 2, is substantially accounted for by stagnation in the growth of its population numbers, so that in per capita income terms, improvements in French living standards were closer to those in Germany than to the laggard gains in Britain. In this and other cases, the true reason for concern about rankings of GDP and its growth in absolute terms is as a measure of a nation's capacity to make war (either in a literal sense or in the context of economic warfare) – today an indication of the lingering influence of US Cold War obsessions in popular, and even academic, discourse.

GDP as a measure of economic capacity, however, is about more than war making. As suggested above, it is often employed as an indicator of the limits to the ranges of economic choices available to a given society: growth in GDP supposedly alleviates the need to choose between good things – consuming more, and also helping the poor. The critique here focuses on two elements: first, the inappropriate use of the growth rate in national income as an indicator of a nation's enhancement in its overall economic capacity – its long-term economic development; second, the fact that the inappropriateness of this measure shows itself in a particular way: many

activities that generate increases in an economy's (long-term) economic capacity, such as education, will register in the GDP accounts only with a long lag.

GDP growth rates are a deceptive indicator of increases in a nation's economic capacity, which are better measured by considering the growth of economic income. In a well-known definition, economic income is the maximum amount that an individual can consume in a given time period and still expect to be as well-off at the end as at the beginning.⁸ The literature in this area deals with a range of issues,⁹ but converges on notions linked with capital maintenance – economic income is not simply net cash inflow, but *sustainable* net cash inflow. There is, thus, a tension between a conception of income simply as money flowing in (which the national income measure comes close to doing) and economic income. This tension is most visible in the context of a firm, where an attempt is made in company accounts to keep a record of the change in the value of its assets, which must then be reconciled with the income statement. The motivation for so doing is that an accounting system that identified income purely with net cash flow would not signal to a firm the dangers of running its machines 24 hours a day – it would be blind to their accelerated depreciation under these conditions. In principle, if not in practice, an appropriate deduction for this accelerated depreciation should bring the firm's calculation of its income closer in line with this economic income than it otherwise would be.

In the case of firms with publicly traded shares, the value of the firm's assets is calculated not only in the formalised accounts of the firm (which often take the form of historic cost valuation of assets and mechanical, tax-driven rules for their depreciation), but on the stock market. Let us presume that the firm suddenly makes a discovery that is expected to be economically lucrative in the future (but not immediately), and this fact becomes public knowledge. How is this information – a perceived increase in the firm's long-term sustainable cash flow – likely to appear in measures of firm performance? In the firm's capital account, whether this discovery will register as an increase in the value of the assets of the firm will be contingent on accounting conventions and firm strategies, especially with regard to the registration of patents on this discovery. In the company's annual income statement, however, the impact on the profits registered is likely to be minimal or non-existent – the reconciliation in the income statement with any increase in firm value recorded in the capital account will take place 'below the line'. The one immediate manifestation of this discovery is a likely jump in the share value of the company, a reflection of an expected increase in the firm's economic income – its sustainable net cash flow over time – one not likely to be immediately visible in standard calculations of a firm's profit.

For the firm, thus, there are mechanisms, most especially in the imperfect form of stock market evaluation, for registering changes in its long-term,

sustainable cash flow – its economic capacity. There is no equivalent mechanism in the national accounts. Four ways will be highlighted below in which the economic income perspective sheds light on the inadequacies of standard approaches to economic growth as an indicator of the growth of economic capacity:

1. The issues surrounding infrastructure and the ecological critique concerned with common property resources.
2. The problem of economic irreversibilities.
3. Human assets and external effects. We have seen in Chapter 7 that there are significant positive external effects to educational improvement that are put to one side by the individualistic focus of the human capital literature. As a result, many of the benefits to society of improved education will register in conventional national income calculations only with a substantial lag; lags may also exist because of the residual *in situ* advantages of established economic powers. A key empirical proposition here is that educational development will emerge in conventional national income indicators with long and variable lags.
4. The relationship between economic growth and income distribution. Much of what appears as consumption by poor people in the national accounts is, in fact, expenditure to maintain human assets. Furthermore, both poverty and income distribution will have reciprocal relationships with educational attainment and economic mobility in a society. Income distribution considerations are thus key components, along with formal education, in the development of the human assets of a society and, therefore, of its economic capacity.

These considerations are considered in turn.

Problems of economic measurement associated with the infrastructure and the natural environment each exist for distinct reasons. In the case of infrastructure, neglect of the upkeep of roads, bridges and ports takes place in the context of the likely invisibility of their deterioration in the short term; politicians focusing on the next election can claim to make savings in the public finances, with the costs to be borne by later generations. This problem is only exacerbated by a one-sided emphasis on the conventional economic growth measure. Thus, an article in *The Times* of London¹⁰ in 2004 lamented the fact that supposed achievements from high economic growth whose foundations were built during the Thatcher era were being threatened by a relentless rise in public spending and government employment by a Labour government. But much of this enhanced spending was to compensate for shortfalls in spending provision in the pre-Labour era for the National Health Service. If we accept that this expenditure was necessary maintenance in the context of the nation's health, than the growth rates in national income registered in the supposed golden age of the Thatcher

era had been, to use my former president's syntax, over exaggerated when considered from the perspective of economic income.

Environmental campaigners, by contrast, have an additional burden. Unlike the physical infrastructure, over which, as a rule, governments have stewardship, environmental issues are often concerned with the running down of key elements of a collective capital stock that are common property, such as the atmosphere and the oceans in the context of climate change. With the special complication that these forms of deterioration cross national boundaries, modifications to national income growth calculations to incorporate deductions for this deterioration are unlikely to take place.¹¹ Nevertheless, this line of argumentation plays an important role in counteracting a continuing tendency to treat GDP as a good measure of overall economic capacity: it is still common to suggest that the best way to deal with environmental problems is, first, to generate sufficient economic growth (rise in GDP) to be able to deal with these problems.¹² Such an argument is inherently unpersuasive if the growth in the economic capacity to cope with this environmental deterioration is poorly measured by these GDP rises in the first place. It would be as if a firm had a strategy for earning the cash to renew its obsolescent capital stock by running its existing machines 24 hours a day: the firm had better take care that the resultant increase in revenues does not mask an accelerated collapse of existing equipment that makes their replacement impossible.

The problem of irreversibilities means that decisions made today restrict choices in the future, so that growth rates emanating from those decisions do not necessarily correspond to greater economic capacity in the form of enhanced choice. Issues surrounding public transport illustrate that decisions made in one generation may well exclude alternatives forever, a story told most vividly in the case of Los Angeles in the film 'Who Framed Roger Rabbit?' The group conspiring to frame our eponymous hero were involved in a conspiracy to rid Los Angeles of trams (this is all taking place in the 1940s) for the sake of the oil companies. The wry subtext of the film is that, of course, the villains succeeded. In fact, the story told in the film closely paralleled what really happened in a host of US cities, in which a social decision was made to remove trams, buy up rights of way for highways, and zone residential living conditions to low-density, car-oriented living.¹³ Decisions on public transport have little to do with the textbook picture of the individual consumer choosing between goods. In many of these cases, there is not much room for marginal decisions – either the environment is optimised for the car or it remains suitable for public transport. Many European cities are fortunate in the fact that they are too old and too cramped to be completely destroyed to accommodate the car; in the US, New York City partially survived the schemes of the city planner Robert Moses for this reason (see Chapter 1). But in newer cities, the development of car-oriented, low-density environments is well-nigh irreversible, and it is hard

to feel anything but *Schadenfreude* for the feeble attempts of present-day Los Angeles to introduce public transport.

The presence of significant positive external effects resulting from cognitive development, discussed in Chapter 7, gives an additional reason to believe that the path of the growth rate of economic income will deviate from that of the conventional national income measure. Figure 10.1 shows economic growth in Japan from 1870 to 1998 using a conventional national income measure denoted by y , its trajectory indicating the growth rate in different time periods of real (corrected for inflation) income per capita in each sub-period (1870–1913 (1.5 per cent); 1913–40 (2.8 per cent); 1955–73 (8.2 per cent); and 1973–90 (3.0 per cent)).¹⁴ The slow growth of 0.8 per cent from 1990 to 1998 signals the beginning of a period of stagnation in the growth of y , but in no way mitigates the world historical significance of the transformation of this society over the previous decades. In 1870, Japan's per capita income was 23 per cent of that in the UK and 37 per cent of the

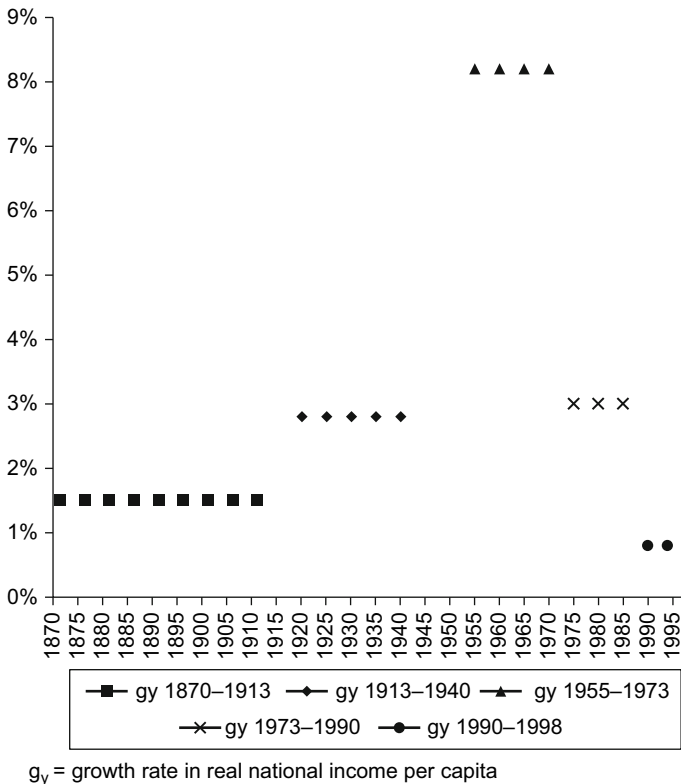


Figure 10.1 Japanese growth history: y

West European average, slowly advancing by 1913 to 28 per cent of the UK and 40 per cent of Western Europe. It is only in the postwar boom that we observe the Japanese miracle: following recovery to pre-Second World War levels in 1955, a stupendous growth then takes place that propels Japan to rough parity with the UK and Western Europe by 1973.

These statistics document an elevation of material life in Japanese society from deprivation to affluence and are undoubtedly indicative of a significant rise in the material well-being of the population. From the perspective of economic capacity, many of the caveats about the use of the national income growth measure discussed above, such as environmental pollution, are probably of secondary interest for much of this history. It is, rather, the large proportion of the increases in business investment and governmental expenditure devoted to war making and to war-making capacity before 1945 that vitiate the use of the growth rate in y as an indicator of the expansion in the capacity of Japanese society to provide consumer and other material benefits to its population.

There is, however, something important missing in the narrative implied by looking solely at the trajectory of y . It would appear from this trajectory that the period 1870–1913 was one of only moderate success, with the post-Second World War period the locus of Japan's transformation into one of the richest states in the world. But such a recitation of events masks the fact that the pre-First World War period contains perhaps the most extraordinary economic and cultural transformation of the past half millennium of global history. Japan emerged from the 250-year Tokugawa period before the Meiji restoration of 1868 with a sophisticated bureaucracy and the highest rates of literacy in Asia: primary school enrolment rates in 1882, early in the reform process, were already 47 per cent of those in Germany and 52 per cent of the rates in France.¹⁵ But self-imposed isolation from the west of the Tokugawa period had dictated that Japan had been overwhelmingly a traditional society both in material and intellectual terms.

The subsequent transformation involved the construction of physical (including war-making) capacity, but was dominated by a modernisation in cultural and intellectual formation: rises in literacy and school enrolment only partially capture a transition from a traditional Confucian cultural orientation to a focus on German bureaucracy, the biology of Charles Darwin and the physics of James Clerk Maxwell. Is there any historical parallel for the speed and thoroughness with which this reorientation of Japanese culture took place?¹⁶ There may well have been negative aspects to this rapid transition, including a disruption of cultural norms that led some sections of the society in the direction of a deranged militarism in subsequent decades.¹⁷ From a strictly economic perspective, however, the period from 1870 to 1913 is one of world historical significance and the truly miraculous phase of Japanese development, one that transformed the economic potential of the society.

An alternative perspective on Japanese growth would be embodied in a conjectural history of the growth of e_i (economic income), tracing the evolution of Japan's economic potential over this period, with economic income represented by consumption plus the net rate of accumulation of natural, physical and human assets. Unlike the growth rates in y , however, they cannot be readily calculated, for several reasons. First, growth in e_i is an indication of the rate of expansion of economic capacity – the increased *potential* to pursue a range of activities – but this growth may never be realised and observed. One reason for a gap between growth in economic capacity and its actualisation will be the influence of macroeconomic conditions. For example, in Figure 10.1, for the whole sub-period 1955 to 1990, Japanese growth in y is very high (5.6 per cent), but from 1955 to 1973, it is at the stupendous level of 8.2 per cent, partially reflecting buoyant world markets and therefore the ease of using existing potential to full capacity in the midst of this golden age of capitalism. A portion of the decline in the growth of y to 3 per cent from 1973 to 1990 probably reflects weaker worldwide and domestic macroeconomic conditions, with concomitant lower levels of utilisation of physical and human capacity, rather than any substantial decrease in the growth rate of economic potential e_i in this period.¹⁸

A second reason for a failure to realise economic potential may be particularly relevant for dealing with communist and former communist countries. In the case of China, the exceptional growth rates in y since the market-based reforms commencing in 1978 may have had as prerequisites the great achievements in literacy and general education since 1949 (in contrast with the weaker performance of India since independence),¹⁹ despite the murderous brutality and irrational policies that accompanied the communist revolutions in China and other countries. Whether these increases in economic potential would ever have been realised under the pre-reform, centrally planned regime in China is conjectural and problematic. But the e_i perspective underlines this important question: was China's economic emergence purely a matter of market reform per se, or was it linked to this prior expansion in its economic potential, especially with regard to its human assets?

The perspective taken here is that the trajectory of national economic potential is centrally determined by the development of its human assets. In the perspicacious, if premature, words of Dr Lyon Playfair, 'Raw material... is being made available to all... and Industry must in future be supported, not by a competition of local advantages, but by a competition of intellects.'²⁰ A century after this prognostication, Japan began its rise from abject poverty – for the first time in history, we observe a great industrial power emerge that is almost completely bereft of raw materials. Unfortunately, the very complexity of the role played by human assets in the development of economic potential generates further obstacles to the measurement of the latter in any precise way: even concrete indicators, such as increases in

school enrolment, are likely to disguise the extent to which these increases are also accompanied, in the Japanese and other cases, by a reorientation from traditional to modern, scientific disciplines.

These difficulties, however, do not justify an approach that simply abandons any attempt to chart the trajectory of growth of a nation's natural, physical and human assets. It may well be foolish for a country to pursue a strategy of economic growth that results in excessive amounts of pollution (with the excuse that they will deal with it when rich enough to afford to do so): the modified national accounts incorporating the resultant deterioration in the value of the natural capital stock illustrate that such a strategy may well be dysfunctional. By analogy, accelerated growth in national income may emerge from egregious forms of labour, long hours and dangerous conditions for children and adults. But such forms of growth, resulting in a depreciation of the human capital stock and derangement of household life, may not be conducive to long-term development, as will be seen below. In the opposite direction, societies that have made exceptional efforts to educate their population, often underpinned by stability and security in household existence, will see much of this appreciation in the value of the human capital stock register as increases in national income, but almost invariably with a long lag.

A correct understanding of these issues is vital not only for an understanding of the economics of the historical past, but for economic policy. If policy makers naïvely use growth rates in per capita income as an indication of the rate of increase of a nation's economic capacity, some awkward judgements can easily emerge: the gains in national income accruing to Japan in the decades after 1868, if such accounts had existed, might have been taken as an indication of only modest achievement, instead of the remarkable transformation that actually occurred. If our contemporary obsessions with 'the' growth rate had then been in place, would not an imaginary pre-First World War IMF have called for less investment in school facilities in Japan and more in silk production?

For the reasons indicated in Chapter 7, rapid growth in economic capacity associated with accretions to human assets is likely to appear in growth rates in national income only with long lags; in the case of Japan, this general tendency may have been reinforced by its specific circumstances – militarism and defeat in war delaying the realisation of economic potential in terms of goods and services, followed by the Golden Age of Capitalism after the Second World War, a period uniquely conducive to the realisation of economic potential. But the presence of these lags from educational improvement is a more general proposition. A study by Lars Sandberg shows only a weak association between literacy and income for 20 European countries in 1850, but a much higher one between literacy in 1850 and income in 1970.²¹ In the case of Sweden, there is some controversy surrounding the traditional view that it was an exceptionally poor European country

in the mid-nineteenth century,²² and Sandberg's resulting use of Sweden in this context as 'poor but educated'. Perhaps the most striking European example, one not used by him, is Finland, demonstrably poor in 1870 (a per capita income 69 per cent that of Sweden, and 58 per cent of the West European average) but with relatively high levels of literacy,²³ which reached West European average incomes in the 1970s and then surpassed them. We now find it difficult to encounter poor, educated countries. And while overeducation – the failure of societies to make good use of an increasingly educated population – may come about for a range of reasons to be discussed in Chapter 12, the apparent overproduction of, especially, highly skilled graduates may simply result from the lags inherent in the processes by which this increase in skills is absorbed into the economy and registers as higher current income.

Education, in the raw sense of an increase in formal schooling, is no royal road to economic growth. Substantial lags will be observed because of the time needed for the effects of newly educated workers entering the workforce, intergenerational effects, and the working through of the multiplier of the dispersion of the spillovers from cognitive development discussed in Chapter 7. For instance, the process of emulation of those individuals with newly acquired skills may well be an extended process. But this cognitive dispersion has several other socially embedded aspects that may also result in lags before substantive improvements in material life can be observed: it is possible, for instance, that concomitant improvements in the physical infrastructure (most obvious in the case of computer facilities, libraries and scientific equipment) may need to take place before we can observe significant rises in material conditions resulting from improved cognitive functioning.

If aspects of the physical infrastructure are complementary to educational advance, then human infrastructure plays an even more central role. Broad-based societal development of cognitive capacity involves the presence of households whose members have achieved sufficient levels of security in health, nutrition and general material existence to be able to proceed with planning and organising the augmentation of their skills and cognitive capacity; these households must also have the financial resources to pursue learning activities. The more substantial the barriers linked to class and ethnicity, the greater the obstacles to the use of formal education as a transformative device: in unequal societies, many children are unlikely to receive from their home environment a range of habits, attitudes, cognitive and social skills that those from privileged groups take for granted. In societies with limited upward mobility, incentives to pursue cognitive development may be reduced because of the perception that the potential material rewards from this pursuit are of a restricted nature. Thus, if cognitive development is a key requisite of economic advance, then the complementary role played by social equality may dictate that it is not a luxury indulged in once a country becomes rich, but an essential aspect of this process.

Inequality and national income

In the rich nations of Western Europe and North America, the Golden Age of Capitalism after the Second World War largely took place with no obvious trend in the distribution of income within nations, so that the rapid growth of this period was coincident with widespread material gains across these societies. The general deceleration of economic growth beginning in the 1970s witnessed the emergence to prominence in both academic and popular discourse in the Anglo-Saxon world of a range of economic arguments under the general rubric of neoliberalism. On the whole, these doctrines did not address the question of economic equality directly, but were broadly consistent with the pursuit of a range of public policies concerning governmental expenditure and taxation, the regulation of labour union activity and the privatisation or deregulation of formerly public services, that, in fact, engendered inequality. Thus, the neoliberal notion that the economy would operate more efficiently with a reduction in the burden of taxation is superficially one without any inherent class bias, but its most prominent realisation in subsequent decades was the lowering of tax rates for high earners justified by the supply side claim, put forth in an academic context by Martin Feldstein, that lower tax rates would generate incentives for those on high incomes to be more entrepreneurial.²⁴ Alongside these academic arguments, there was a more popular rhetoric from Arthur Laffer and others, to be discussed below, that opined the virtues of inequality.

The growth of inequality since the 1980s has shown some of its earliest and most explicit manifestations in the Anglo-Saxon world. For a range of other rich countries, this tendency towards growing inequality has been emerging, though less decisively, with those defying this trend not obviously less successful in terms of overall economic growth.²⁵ The trend towards growing inequality has been robust for a range of different measures and measurement techniques, reflected in overall growth in both income and wealth inequality, most distinctively in the increasing shares of the top layers and often declining shares for the bottom groups.²⁶ And especially since the crisis of 2007–8, the presence and persistence of low-wage work and poverty are widespread, though important differences exist between countries.²⁷

One element generating this process of growing inequality within rich nations has simply been the dispersion of national economic policies first undertaken in the UK since the accession of Margaret Thatcher in 1979 and of Ronald Reagan in the US in 1981, most especially the decline in tax rates for higher earners: between 1970 and 2004 in the US, average tax rates for the highest income group fell from 75 per cent to 35 per cent (in the UK, the fall was from 92 to 43 per cent (for the year 2000)).²⁸ But an explanation based on ideology and national economic policies, though important, is only part of the story, one that does not account for the ease with which

these policies have been foisted upon the constituencies of these nations and the plausibility that the neoliberal doctrines have acquired in public discourse.

The leading candidates to explain this growing inequality are technological change and increasing international competition. The former story has been told for the US by Claudia Goldin and Lawrence Katz: growth in inequality in the past three decades is accounted for by a process through which less educated workers have suffered in 'the race between education and technology' – a race, it is claimed, that the US has lost not so much because of any discontinuous surge in technological change, but by a stagnation in the production of individuals with improved educational qualifications – a process that has transformed the US from being a world leader in the education field to being a mediocre performer in the OECD;²⁹ as we shall see, there are reasons to posit a reverse system of causation for these developments, with greater inequality being primarily a cause, rather than the effect, of educational failure. Other studies have reinforced the familiar image of robotics displacing well-paid car production workers, with rich nations experiencing 'reduced labor input of routine manual and routine cognitive tasks and increased labor input of nonroutine cognitive tasks' due to technological change, thus explaining a substantial portion of the demand shift 'favoring college labor' in the US since 1970 and the resultant broadening of the distribution of income.³⁰

One hesitates to attribute rising inequality solely to the elusive technological genie: some wheel it out whenever labour is displaced, even in the context of depression, with the ameliorating suggestion that any pain caused is for the sake of progress and creative destruction.³¹ Hints in the data are present suggesting that an explanation for growing inequality based exclusively on technology is insufficient: growing inequality in the personal distribution of income has been paralleled by another trend – a comparable increase in many countries in the ratio of profits and property income to wages. Such a development suggests a weakening in the bargaining power of labour vis-à-vis capital, perhaps partially attributable to technological change, but the latter's effect on the relationship between profits and wages on its own would, in a priori terms, be unclear.³²

In some countries, most especially the US, the increase in the profits share has been partially masked by rises in the remuneration of CEOs and other executives (registered in national accounts as wages), with CEO-to-worker compensation ratios rising from about 20 to 1 in the early 1970s to over 200 to 1 in 2011, having peaked at over 350 to 1 at the turn of the new century. These extraordinary changes in the remuneration of upper layers appear to be nothing more than rents siphoned off from firms' increased possibilities for profits at the expense of workers; gains have been particularly pronounced in the financial sector.³³ The reasons why these developments have taken place most definitively in the US appear to be the incentive to

do so because of the low average tax rates on upper incomes, and a long-standing idea, once only an arcane academic notion, of binding executive pay to 'performance'.³⁴ In contrast to similar schemes for workers, this elevated form of piece work takes place in a context in which CEOs and other executives, unlike workers, often control the terms and conditions under which this remuneration is paid: institutional structures and power relations have played a key role in these changes.³⁵

A growing weakness in labour's bargaining power is readily accounted for by the gradual evolution of a more competitive environment in the postwar world, with a consequent decline of the power of organised labour both in wage negotiation and in political influence: the intensification of competition and enhanced mobility of capital described in Chapter 5 have been to the disadvantage of those at the lowest levels of education through a hollowing-out process by which well-paid working-class jobs either have disappeared or have seen their pay and working conditions deteriorate. Increasing inequality overall is, thus, a consequence of the increased power of capital vis-à-vis labour: the expanding purview of firms has induced a search for the cheapest sources for labour worldwide and has been complemented by improvements in transport and communications that have facilitated this process. The growing international fluidity of corporate capital is evidenced not only in seeking out low-cost labour on a worldwide basis, but in a seemingly ever-expanding facility for the avoidance of corporate taxation in host countries and the seeking out of a range of subsidies and forms of tax relief there. For rich individuals, the expansion of tax haven facilities in recent decades has eased the shifting of financial wealth for the avoidance of tax, as we shall see in Chapter 12.

These longer-term developments have converged with a discontinuous expansion in the labour available from developing countries, symbolised and exemplified by the entry of China and India as participants in world capitalism in the 1980s, and the former Soviet bloc in the 1990s – the 'great doubling' of the pool of world labour:³⁶ 'It is almost impossible that globalization of the magnitudes observed in the 1990s and 2000s would not impact the distribution of earnings and incomes in the USA and elsewhere.'³⁷ It is thus appropriate to take an ecumenical view of the question of rising inequality, incorporating many of the elements specified above: 'The combination of digitalization and globalization partially moots the debate over whether trade or skill-biased technical change drives inequality more: offshoring and digitalization go together. The rapid expansion of mass higher education in developing countries has allowed low-wage countries to compete in high-tech sectors, weakening the comparative advantage of advanced countries in these sectors.'³⁸

The emphasis placed by different groups regarding the provenance of this growth in inequality has proved to be of importance in a political context. Explanations centred on changes in taxes and public policy (such as the

policies pursued under Reagan and Thatcher) often have a country-level focus and straightforwardly seek alleviation through changes in national economic policy, most especially a revocation of many of the tax reductions on upper incomes that have taken place in recent decades: the advocacy of such policies is often identified with politics of a moderate left persuasion.³⁹ By contrast, the more internationally based explanations for growing inequality have a broader range and complexity of political agendas for the alleviation of growing inequality. We thus see the advocacy of public policies to inhibit free trade and the free movement of capital: these policies are associated with those who trace the cause of growing inequality in rich countries to the elimination (or the threat thereof) of well-paid jobs in, especially, manufacturing due to the relocation of these jobs abroad. Those promoting these invariably modest forms of national economic planning (commonly, but not invariably, associated with left-wing political views, often labour union-based) are often fiercely opposed not only by right-wing free-market advocates, but by many members of the moderate left who reject restrictions on international economic activity as a form of public policy.⁴⁰

Explanations for growing international inequality linked with technological change can have about them an air of inevitability: the resultant policies emerging to deal with workers supposedly displaced by technological change are invariably concerned with accommodating and acceding to these developments. Thus, for Goldin and Katz, the persistent displacement of workers with lower levels of skills is used to focus on what they perceive to be present-day failures in public policy in the context of education. But others, as we will see in Chapter 11, structure discussions of inequality in terms of what individuals deserve based on their intrinsic intelligence and character, and how these personal traits affect the level of education they acquire: the winners have a right to their income gains, and the losers are merely the victims of their own inadequacies. If growing inequality is linked to the rapidity of technological change, it is argued, those individuals who have invested in the skills required to prosper in such an environment will need material rewards sufficient to motivate them to undertake that investment.

Ultimately, however, the provenance of growing inequality – whether it is due to increasing international competition or to technological change – is a secondary consideration here. Of greater importance are the deleterious effects of growing inequality and insecurity on the society and economy, and whether policies to halt or reverse such tendencies should be promoted even in the face of claims that they are in violation of conventional canons of economic rationality or, heaven forbid, the imperatives of economic growth.

Can inequality be justified by the presence of a trade-off between equality and efficiency? A prominent intervention from the economist Arthur Okun in an older literature takes such a relationship for granted: 'We can't have

our cake of market efficiency and share it equally.' Inequality in capitalism was, according to him, something '*intended* to encourage effort and channel it into socially productive activity'.⁴¹ We might well ask: intended by whom? The whispered implication from the American liberal Okun is that inequality, while a necessary evil, has been sanctioned, with conscious intention, by society through a democratic process of public policy formation because of its efficiency properties. Note that, by contrast, for a true free-market liberal such as Hayek, inequality is an inherent part of the naturally evolving spontaneous order and not to be tampered with by public policy initiatives. We thus observe contrasting attitudes towards inequality among leading protagonists in the modern era – it receives principled support as part of the natural order of things from liberals such as Hayek and Milton Friedman as well as, with a somewhat different orientation, from social Darwinists (see Chapter 11). For American liberals such as Okun and European social democrats, by contrast, acquiescence to inequality is a contingent, empirical question: it is acceptable only to the extent that it is consistent with efficient operation of the economy. Rising inequality in recent decades is causing a renewed intensification of discussions on the nature of this trade-off.

The economist Simon Kuznets had cautiously detected widening inequality in early phases of growth as an empirical regularity.⁴² The predominant prejudice in mainstream economics had been to complement the incentives argument above with stories of the form

inequality → saving → economic growth

Despite the fact that, in a strict neoclassical growth model (see Chapter 6), long-term growth is unrelated to the rate of saving, this notion from classical economics – that upper income earners (the 'wealth creators') will be the source of saving that will serve to finance growth – has continued to have sway, in both academic and political discourse. The Kuznets results showing a trajectory of economic growth that, in its early stages, is correlated with rises in inequality has been contested as an empirical generalisation, since, as we have seen, Japan, South Korea and Taiwan maintained high levels of economic equality in the context of great success in their early growth phases. But the powerful example of mainland China since the late 1970s, with its spectacular growth rates accompanied by sharp rises in inequality, has been of influence in debates over economic development, most especially among the elites of poor countries, who can find it easy to convince themselves that their own self-aggrandisement is to the general good.

In the wake of the economic crisis of 2007–8, this positive link between economic growth and inequality has been contested from Keynesian and other economic perspectives: inequality tends to reduce aggregate demand, with possible adverse effects on the level and growth of income; it can also

be a source of economic crises, as lower-income groups pile up debts that eventually become unsustainable, while those on upper incomes save too much, resulting in deficiencies in aggregate demand. The argument against inequality below, however, will advance the discussion developed earlier: inequality poses dangers to the long-term development of a society's human assets and therefore its economic potential. Socialist policies promoting equality, far from creating a dilemma because of the supposed deleterious effects of equality on economic development, are, on the contrary, in line with the grain of history in expanding society's economic capacity based on its human assets.⁴³

The presumption that there is an unfortunate but necessary trade-off between good things like equality and efficiency is a deeply resonant one, and perhaps accounts for the ease with which politicians and others convince the public (and themselves) of the destructive notion that the path out of an economic downturn is for ordinary individuals to surrender to the necessity of cutbacks in public expenditure and to make material sacrifices for the sake of economic recovery. Ruling groups making these decisions, usually themselves immune to any substantive negative consequences from these cutbacks, may or may not be sincere in their protestations of the need for general sacrifice. But what is indubitable is how useful such a view is to them. In the 1980s, I was flabbergasted to hear from an elderly woman in Moscow (no apologist for the regime) that a compensatory aspect to the dreadful sacrifices suffered by Soviet society in the process of collectivisation in the late 1920s and 1930s was the fact that, in their absence, 'we couldn't have won the war': the notion that suffering can take place without purpose and without compensation is often difficult for individuals to bear.

Rising inequality continues to have its defenders. A durable political notion in the US, despite its lack of status in the economics literature, is the Laffer curve: so great is the increase in effort of the well-off as a result of reductions in their tax rates that the resultant increase in economic growth is of general benefit, including a rise in the total tax revenues collected from the rich. The element of truth in this notion relates to the blackmail proffered by the well-off in many countries, whose threats to move to more welcoming locations often play a role in encouraging governments (or giving them the excuse) to set low tax rates and permit schemes for legal tax avoidance. In practice, the question of withdrawal of labour by the highly remunerated is typically intermixed with the different question of whether high tax rates discourage private sector investment,⁴⁴ with nations sometimes pursuing a race to the bottom by undertaking measures to create a pleasing environment for international investment.

In its strict labour effort formulation, the Laffer curve has had little traction in academic economics in the land of its origin, even in right-wing circles: highly paid CEOs in the US have, on the whole, no other nation to flee to, and the notion that even greater remuneration would generate significantly

more effort from them beggars belief. In mainstream economics, after all, the well-established textbook notion of the backward-bending supply curve of labour suggests that higher levels of income might well be taken in the form of a lessening of effort, most especially by those who are more affluent: this would appear to be an aspect of the reduction in hours worked per year in rich countries noted above. I once made the mistake of offering the jocular suggestion to some prominent economists that the drastic reduction in quantity of output of composers between the eighteenth century (Handel, Haydn) and the nineteenth (Verdi, Brahms) might be due to the more successful enforcement of property rights in the latter period, making Verdi and Brahms comfortably well-off without the need to churn out compositions at the extraordinary rate of their predecessors.⁴⁵ This thesis about incentives for musical composition was never meant to be taken overly seriously, but is at least as plausible as the Laffer notion that the rich will make Promethean efforts in return for lower tax rates.

Even if the Laffer curve in its literal form has been rejected by mainstream economics, the underlying dogma of the discipline remains that 'incentives [are all that] matter' – that effort will invariably be encouraged by higher material rewards, and that negative incentives such as taxation will discourage effort. When left-of-centre economists support policies for the redistribution of income that appear to interfere with prices and allocation in a market economy – the strengthening of union power, minimum wage legislation and taxes on luxury goods – they do so in a defensive manner.

Current arguments in favour of greater equality thus typically embody the commonly presumed trade-off between equity and efficiency, but emphasise the consumption benefits that might then accrue to the less well-off.⁴⁶ Such approaches are insufficient for dealing with the questions surrounding economic equality: they tend to have an apologetic tone about them, as if support for equality were the ethical thing but fraught with negative economic consequences. Thus, the best-known argument in recent decades in favour of income equalisation as an aspect of justice is that of the philosopher John Rawls. For present purposes, the key element of his programme, dubbed the 'Difference Principle', is that 'unless there is a distribution that makes both persons better off...an equal distribution is to be preferred', with social and economic inequalities 'to be to the greatest benefit of the least advantaged members of society'.⁴⁷ Such a principle is consistent with a substantial deviation from a generalised equalisation of income if inequality generates better material conditions for the least advantaged than would a more equal society. The *Stanford Encyclopedia of Philosophy* assures us that this is likely to be the case: 'The overwhelming opinion...is that in the foreseeable future the possibility of earning greater income will bring forth greater productive effort. This will increase the total wealth of the economy and, under the Difference Principle, the wealth of

the least advantaged.⁴⁸ Rawls's 'strongly egalitarian conception'⁴⁹ is thus a highly contingent matter, a focus on notions of justice and fairness in the distribution of resources that leaves little room for considerations of the role of inequality in class dynamics, democratic participation and societal evolution.

But even Rawls's modest intervention in favour of equality was not to pass muster in the newly emergent Gilded Age of the 1970s. Rawls performs a rarefied thought experiment – what kind of income distribution would result in a 'veil of ignorance',⁵⁰ in which individuals didn't know where in the income spectrum they would find themselves? The emergent society would possess characteristics of fairness, at least in some lights, but to others it would be in violation of natural liberty: let us postulate, says Robert Nozick,⁵¹ that into some such egalitarian Elysium comes Wilt Chamberlain, a real-life figure, famous for being the first basketball player over seven feet tall to make effective use of his height in the professional game. Everybody,⁵² according to Nozick, is happy to offer him extra remuneration to encourage him to play, even if the resulting income distribution then becomes more unfair according to the previously postulated Rawls criterion or any comparable one. What objection could there be to this exercise of freedom and consumer choice, and, by implication, any new income distribution that emerges under such conditions? Arguments of this kind have a familiar ring to economists – free choice results in Pareto optimal improvements, in which some members of the society are better off, and none made worse. The story has to be structured very carefully to make it part of a general parable about income distribution: in the real world, a newly rich individual emerging from Nozick's parable may well choose to buy up great swathes of land and dispossess existing residents, making it unlikely that 'everybody' is in favour of the new situation. But in its own terms, and in the context of the time it was written, the argument had a devastating impact – why should we not be, in Milton Friedman's phrase, 'free to choose'?

The essentially timeless, static framework in which Rawls's problem is originally posed means that, no matter how cleverly it is done, egalitarian rules of the kind postulated by him will degenerate, with outcomes gravitating in Nozick's direction – in favour of an income distribution dictated by autonomous individuals having free choice. But real societies have to reproduce themselves over time. The individuals in this parable, indulging in their free choice to widen the income distribution, are presumably adults (with the interested parties in this case likely to be predominantly male), with few four-year-olds actively participating in the decision. For a living, on-going society, a key question surrounding the transformation taking place in the distribution of income embodied in this parable is how the very personal identity of members of society, both current participants and future generations – their mentality, repertoire of skills, knowledge and social attitudes – might be affected by these changes: what kinds of people

and what kind of society will emerge from this process? The issues involved in dealing with income distribution thus move far beyond any simple disputations over fairness among contemporaneous individuals and onto issues surrounding the whole future trajectory of society.

In reaction to the rise in inequality in income and wealth in the past three decades in rich countries, a literature has emerged rejecting the anti-redistributive notions above, including Richard Wilkinson and Kate Pickett's *The Spirit Level*, in which they purport to find a positive relationship between inequality and other bad things, such as murder rates, mental illness and obesity, in a range of countries in the twenty-first century. In its strongest form, *The Spirit Level* suggests that it is inequality per se, rather than poverty, that is the fundamental problem in the rich countries under consideration. The book and its associated literature have had the salutary effect of signalling the complex and socially embedded nature of inequality: it can shape aspects of physical and psychological well-being in society that extend far beyond unequal access to resources for consumption.⁵³ But this largely statistically driven hypothesis (that the correlation with bad things across countries is better with inequality than with poverty) is neither convincingly confirmed nor very plausible: in rich countries 'The Wealthy Kids Are All Right',⁵⁴ and are not typically handicapped by even high levels of inequality in the society at large. More importantly, *The Spirit Level* fails to integrate the observed empirical relationships between, for instance, inequality and health outcomes into a plausible conceptual framework concerned with human and societal development.

The questions surrounding the conceptual basis for viewing national income and its distribution converge here. The predominant view in economics is, as we have seen, that national income is a good representation of society's capacity to pursue various activities. The distribution of this income within society is treated as a distinct and separable matter, with the relevant economic issue being whether an overly equal distribution might weaken material incentives and, therefore, growth in GDP. A dual critique of this separability notion will be presented here. First are its pernicious political consequences. Public services and policies directed towards economic redistribution will tend to be seen as luxuries only affordable in a state of affluence. In conditions of economic slowdown, they are perceived to be no longer affordable. The second and more significant reason for rejecting the notion of dealing with national income as a good measure of economic capacity, one that can be readily separated from the distribution of that national income, is that it is untrue. When rises in economic capacity are seen solely from the perspective of short-term GDP growth, the debilitating effects of inequality on long-term economic development are invisible: hard-headed policies for squeezing the poor are seen as perhaps unpleasant, but economically sound. In a longer-term context especially, we need to reconceptualise the relationship between GDP and its distribution.⁵⁵

More comprehensive than either the distribution of income or wealth for judging the fairness of a society is the capabilities notion, from the economist and philosopher Amartya Sen, of the range of substantive freedoms with which individuals are endowed. It is, unfortunately, elusive and hard to measure. Sen rejects the dichotomy from the political philosopher Isaiah Berlin (subsequently adopted as Cold War dogma) between a primary (or negative) freedom – ‘not being interfered with by others’ – and a secondary or positive form, as found in Spinoza or Marx, linked to self-realisation. For Berlin, ‘The “positive” sense of the word “liberty” derives from the wish on the part of the individual to be his own master... Socialized forms of [this notion]... are at the heart of many of the nationalist, communist, authoritarian, and totalitarian creeds of our day.’⁵⁶ Instead, Sen offers a reconfiguration that encompasses both of these categories, with a seamless link between the negative aspects of freedom (such as the absence of censorship) and its positive form (the endowment of literacy): a just society offers all individuals the opportunity to acquire a range of substantive capabilities in order to function freely in society – ‘the freedom that we actually have to choose between different styles and ways of living’. Consideration is thus given both to the freedom with which choices are undertaken (analogous to concerns about negative freedom) as well as to the positive freedoms associated with the opportunities that individuals actually have.⁵⁷ The approach taken in this book is similar, but with a special focus on rich societies, the formation and transformation of children’s lives and its consequent effects on societal development, collective interaction and democratic control, and not solely upon individual functioning.

An important supplement to inequality measures that captures some of the outcomes embodied in the social dynamics of a capabilities approach are statistical measurements of intergenerational economic mobility. As a matter of logic and arithmetic, it is possible to construct examples in which greater income mobility enhances inequality, leading to a possible conflict between egalitarian goals.⁵⁸ In the twenty-first century, however, the literature on economic mobility decisively supports the intuitively plausible proposition that, in general, more unequal societies will be more immobile in relative terms, with those who are poor more likely to persist in that state, and with family background playing a more important role in subsequent economic success than in more equal societies.⁵⁹

In general, the empirical literature overwhelmingly sanctions, with relatively few anomalous cases, a classification of rich countries into those of lesser and greater equality, with the more unequal ones having greater inequality not only in income, but in wealth, and experiencing higher levels of both poverty (usually measured by the percentage of households below 50 per cent of median income) and household insecurity, and lower intergenerational mobility, at least partially because of the lower provision of a range of social welfare benefits typical of such societies.⁶⁰ The US and the

UK, with high levels of income inequality, appear to do poorly compared with other nations regarding levels of intergenerational mobility, poverty and child poverty. In the case of the US, these widely confirmed conclusions put to rest the nation's long-standing self-image as a land of opportunity.⁶¹

As we have seen in Chapter 7, school children across the OECD have been subjected to a panoply of uniform examinations on mathematics, science and literacy in recent decades. In studies considering the family and socio-economic background of the children involved, the less than exceptional achievement in reading and mathematics scores for the UK and the US is substantially accounted for by the high 'socio-economic gradient' (most specifically, the presence of poverty).⁶² US school children go from mediocre performers in science and mathematics to the upper range of achievement internationally when only those from the public schools with the lowest level of poverty (fewer than 10 per cent of students eligible for free or reduced-price lunch) are included.⁶³

Furthermore, there is little indication of an efficiency–equity trade-off in education, in which more equal education systems would systematically show a lower mean performance for their students. On the contrary, one major study claims that in countries with better test results, epitomised in Europe by Finland, students' individual performance tends to be less influenced by family background or the school they attend than in countries doing less well on these tests.⁶⁴ In general, the evidence here is that children's educational outcomes are strongly influenced by family and socioeconomic background, but that the nature and forms that schooling takes in different countries may play a role in mitigating these family background effects, with longer preschool education and delays in tracking being decisive.⁶⁵

The emergence and widespread dissemination of the above literature surrounding the empirical reality of a dramatic rise in inequality have not succeeded in bringing this issue to the centre of debates concerning economic and social policy. With economic growth and a supposed trade-off between equity and efficiency still at the centre of policy discussions, considerations of economic equality are treated as luxuries, to be put aside until whatever on-going economic crisis is alleviated. This view complements the widespread notion discussed earlier, from Galbraith's *Affluent Society* of 1958 to Margaret Thatcher, that dealing with poverty is merely another good thing that we do when we are rich enough to do so. An alternative perspective can be developed by viewing the effects of inequality on personal and social reproduction. The core of the argument here was anticipated many years ago by one of the founders of modern growth theory:

In many countries, a part of expenditures on food, education, public health, and so forth, serves to increase productive capacity. (And wouldn't we also have to allow for depreciation or replacement of human beings?) ... economists usually settle for a less satisfying but more practical

division of total output into consumption and investment along more or less practical lines.⁶⁶

Thus, once our central concern is with the construction of an indicator of overall productive capacity, we must abandon the standard delineation used in the GDP accounts between consumption and investment – a division that was constructed for the purposes of regulating aggregate demand. The distinction is an inappropriate one in the context of long-term economic development and the presence of class divisions in society: the meaning of the word ‘consumption’ needs to be reconceptualised. For the well-off, most of the consumption registered as such in GDP accounts is just what it appears to be – goods electively consumed to satisfy desire. For the poor, by contrast, much of the expenditure registered in GDP accounts as consumption is for depreciation or replacement: it is capital expenditure in a human context – what Marx called the ‘reproduction of labour power’. The resources devoted by a poor person to basic foodstuffs, or to the heating of her dwelling, or to the health and education of her children, contribute to the maintenance of the human assets of her and her family. In the context of poverty-level wages, life consists of a ‘constant struggle to juggle household finances, just trying to get by... one paycheck away from homelessness’. The effects upon children are predictable: ‘Because they cannot afford day care, their children sometimes move from house to house, between different relatives or neighbors, watching too much TV and sometimes not doing their homework. Older children grow up too fast because they become caretakers for their younger siblings.’⁶⁷

For individuals at the lower end of the income spectrum, deprivation can thus mean not just reduced consumption, but the wasting away of their human assets and those of their children: given these elemental facts of human existence, it is no wonder that tabloids and other forms of media owned by right-wing millionaires find the need to focus on feckless and wasteful expenditure by poor people.⁶⁸ But policies that overlook the realities of inequality may have consequences that affect not only the happiness of members of society, but its whole future development, most especially in the context of the close convergence in international comparisons between inequality, the incidence of poverty and child poverty, and broader-based notions of social justice.⁶⁹

It will come as no surprise that the free-market economist George Stigler viewed this matter with alarm and attempted to demonstrate that, for rich countries at least, the question of subsistence was a trivial matter: in a pioneering use of the mathematical technique of linear programming, he calculated that food sufficiency could be achieved at 1950 prices for less than \$100 a year.⁷⁰ While these estimates have been questioned, there is little doubt that billions of people since that time have survived on a food allocation of less than \$100 a year at 1950 prices; it is also clear that subsistence

in all cultures has always been at a level above biological sufficiency. Is subsistence, then, an irrelevant economic category? Non-economists seem to be unaware that economics, with its utilitarian, subjective theoretical core, makes no principled distinction between a necessity and a luxury,⁷¹ with little exception made even in development economics – the economics of poor countries.⁷² A pioneering attempt at developing a concept of subsistence relevant to rich nations had focused on the minimally sufficient resources necessary to function as a normal person in society.⁷³ Perhaps more relevant to the perspective taken here are the ideas emerging from the writings of Amartya Sen discussed above, which emphasise, more ambitiously, the minimal resources necessary for the full development of the potentialities of individuals within the household.

There is little explicit mention in the literature (an exception being the Domar comment above) that inadequate consideration of the accretion of human assets can also lead to an incorrect calculation of the trajectory of economic capacity. Thus, existing national income accounting methodology can make no adjustments for the accelerated depreciation of the stock of human assets, both in physical and in educational terms, that can take place in periods of intense development in industry and agriculture. As a result, GDP growth will overestimate increases in economic capacity if there has been an accompanying deterioration in the human capital stock. This point may now appear self-evident when confronting the abuse of children in a labouring context, or the Soviet one-sided obsessions with technological achievement in the process of development and the consequent brutal treatment of workers and, especially, peasants.

But even in the most striking examples of economic success – for instance, the US in the late nineteenth and early twentieth centuries – is it not possible that levels of misery have been generated that are unnecessary, if not dysfunctional? Thus, horrific conditions for, especially, the lowest grades of work appear to have persisted in the steel industry in the US into the early twentieth century. These conditions are often noted in discussions, but commonly with the mitigation that individuals chose this sector over other work.⁷⁴ It is suggested, furthermore, that these conditions were an aspect of the extraordinary accumulation of physical capital and overall growth rates that were bringing the US to world predominance: with the inevitable trade-off between equity and efficiency, humanitarians naïvely wishing for an enforced reduction of the work week from 70 hours should weigh their desire for a reduced burden on workers with the loss of present and future productive capacity accompanying any such politically imposed move. But such a supposedly hard-headed calculation presumes that there is no long-term cost to society, purely from a productive perspective, of the deterioration in human assets incumbent upon working under such debilitating conditions. If a correct evaluation were made, might the decimation of individual workers and their household and social existence, including

that of their children and subsequent generations, mean that the misery imposed upon these workers was largely gratuitous from the perspective of long-term development?

Socialism vs. 'economic realities'

Two claims on public attention that constantly derail attempts to evaluate policy from a longer-term perspective are 'the embattled state' and the exigencies of economic growth. National economic survival continues to be the *leitmotif* of the daily press, filled invariably with the familiar rhetoric of efficiency and competitiveness. Even before the outbreak of the financial and euro crises, the dominant ideology has centred on competitiveness and economic growth as the means for the avoidance of mass unemployment, but also an aspect of a worldwide battle for supremacy through economic power: the efficacy of education has been viewed in the context of a contest between nations, in Cold War times in terms of rivalry with the Soviet Union and subsequently linked to the Yellow Peril threat emanating first from Japan and then from China. The onset of economic crises only helps to institutionalise an atmosphere of generalised agitation and is used as an excuse to treat expenditure on basic public services as unaffordable luxuries that must be cut, policies often accompanied by handouts and giveaways to the well-off as part of a strategy of recovery. This is a turnaround from the way events are ordered in the natural world, where when an animal is faced with starvation or deprivation, evolutionary survival places a priority on the protection of vital organs, including the brain; peculiarly, orthodox policy prescriptions often cancel, or even reverse, this priority.

The notion that economies are engaged in an economic war with other nations is a pervasive one. The journalist Thomas Friedman contrasted the olive tree, representing 'the warmth of family, the joy of individuality, the intimacy of personal rituals, the depth of private relationships' with the Lexus, 'the drive for sustenance, improvement, prosperity and modernization – as it is played out in today's globalization system.'⁷⁵ The latter was the dominant and constraining force, requiring all nations to pursue a strategy of low taxation, deregulation and reduction of union rights: globalisation and increasing competition constrain the ability of national governments to pursue egalitarian strategies and to indulge in the luxury of excessive social spending.⁷⁶ In earlier literature, this notion of a nation's competitiveness was typically linked to changes in its unit labour costs relative to its trading partners, with the latter negatively related to changes in its exchange rate and to wages and social costs for its workers, and positively related to the growth rate in productivity. More recent empirical work has avoided this kind of explicit calculation of competitiveness, but a popular perception has remained that 'the forces of globalization put the systems of social security in rich countries at risk... [with] a race-to-the-bottom scenario... as rich

countries are forced to adopt low labour standards and lower wages...and to scale back on well developed social security systems in order to remain competitive'.⁷⁷

This perception appears to be incorrect: it is not evident that international competitiveness has acted as a significant constraining force on nations' economic activity.⁷⁸ This fact should not prove surprising, given that the major nations of the world are only to a limited degree in economic competition with each other.⁷⁹ But there is an element of veracity buried in the competitiveness rhetoric: small countries on a social democratic path do appear to have been constrained in their behaviour due to the influence of international economic forces. While, contrary to right-wing myth, there is no evidence historically that relatively egalitarian countries, such as those in Scandinavia, have experienced lower GDP growth over the long term as a result of their relatively high rates of taxation and social spending, these countries have consistently pursued policies involving relatively light taxes on capital by international standards, with higher rates on labour incomes and consumption (the latter likely to be regressive).⁸⁰ One interpretation is that such policies are pursued because of their pro-growth character,⁸¹ an alternative is to suggest that small nations of this type feel under a particular constraint to retain and attract mobile international capital, even if it means creating taxation regimes that may seem inconsistent with their social democratic policy goals.⁸² If the international economy is imposing ever more severe constraints on the progressive policies of, particularly, smaller, relatively open economies, future developments in social equality may require coordination across larger agglomerations such as the European Union, Japan or the US.

Other discussions of global competitiveness avoid the crude race-to-the-bottom rhetoric of earlier times, with the World Economic Forum (WEF) defining competitiveness as 'the set of institutions, policies, and factors that determine the level of productivity of a country. The level of productivity, in turn, sets the level of prosperity that can be earned by an economy.'⁸³ Despite the abandonment of the overt Hobbesian 'war against all' rhetoric of earlier notions of competitiveness, the analysis retains the short-term focus of former approaches. Its distinctive recommendations take the form of free-market solutions, imprecating against restrictive and discriminatory rules on foreign direct investment and limitations on foreign ownership, and on the virtues of openness in international trade: it is only then conceded that the 'vast empirical evidence' in favour of the latter is highly contested. Furthermore, labour is to be flexible so that it can be shifted 'from one economic activity to another rapidly and at low cost [we may ask: low cost to whom?], and to allow for wage fluctuations without much social disruption [once again, to whom?], with the promotion of meritocracy [and not, for instance, solidarity or cooperation] at the workplace.'⁸⁴ The standard of success for Europe in recent years in this battle for competitiveness

remains Germany, where significant wage restraint has been present since the mid-1990s.⁸⁵ But recitations of German economic performance rarely put this success in the context of the general declines in labour's share of national output in Germany and elsewhere discussed above, or indicate how this story generalises to other nations: is German success at competitiveness merely part of a zero sum game that disadvantages other nations, most especially those within the eurozone?

And, despite gestures in the direction of the longer-term notion of 'sustainable competitiveness' with the inclusion of a range of ecological and social considerations, the US and the UK remain unshaken in their top ten competitiveness rankings despite their egregious performance, noted above but not mentioned in the WEF study, in levels of poverty and child poverty.⁸⁶ It is as if there were a division of labour between organisations such as the WEF, that deal with masculine, practical issues such as economic competitiveness, and feminine organisations such as UNICEF, that discuss child poverty. In fact, these so-called practical approaches merely make a virtue of myopia.

Economic growth remains, however, an even more central concern of public policy than competitiveness, especially for rich countries. In the economics literature, it is usually presumed that rises in per capita GDP will be closely linked to increases in a nation's productivity, the latter often approximated by rises in output per employed worker. In Baumol et al. (2007), quoted above, three prominent economists, whose guiding figure is William Baumol, a leading American liberal academic, are quoted as dismissing considerations of income distribution in evaluations of national income on the basis that such questions involve subjective value judgements while, presumably, ignoring the issue does not: 'As for income equality or inequality, the value one places on this is inherently subjective, and thus measures of GDP "adjusted" for differences in the distribution of income should not be given undue weight'; on the same page, these economists, with some dismay, note that when modifications for inequality and the value of leisure were made, income per capita in some countries in Europe in 2006 was calculated to be higher than in the US in a study for the OECD.⁸⁷ The Baumol et al. philippic against the lack of a work ethic in Western Europe that follows comes across as unintentionally hilarious, and is not even sound in the context of orthodox economics, in which the substitution of leisure for work can be perfectly rational.

For these authors, however, in the long run, 'only one economic statistic really matters: the *growth of productivity*', the main reason being that it is the appropriate measure of the growth of economic capacity – the growth in the ability to deal with, for instance, an ageing population. It would be difficult to contest the centrality of productivity increases to economic achievement – the success of postwar Japan in, for instance, the car industry was driven by brilliant managerial innovations that reduced costs below

those of its competitors. Clearly, important lessons can be learned by careful examination of these innovations.

But the search for policy recommendations for the economy based on facts about productivity at the economy-wide level can be much more problematic. In national accounts, government output is calculated by measuring its inputs, which consist mostly of labour hours: the governmental sector will not register rises in productivity for the economy as a whole, even when services are improving, so that if this sector's share of the economy increases, this automatically lowers the measured labour productivity growth of the whole economy, regardless of its performance.⁸⁸ And in the context of a societal focus on economic growth and, therefore, the growth rate in productivity, such notions will soon fall foul of Baumol's disease: just as a broad-based policy to promote the proliferation of string quartets will do little for the level, much less the growth rate, of productivity in society,⁸⁹ programmes to transform education – if they are undertaken seriously – will be labour-intensive and wreak havoc on measured increases in productivity. When attempts are made to measure rises in the efficiency of governmental expenditure explicitly, the danger exists that productivity-increasing solutions will be foisted on the weaker members of the community: on-line higher education may have a range of efficacious possibilities for improving student learning,⁹⁰ but its likely implementation will be not in elite universities, but in state institutions eager to save money, despite the exceptional need of many of their students, especially those from poor backgrounds, for guidance and personalised instruction. The important role of the universities as centres of diversity of opinion and approaches to knowledge will also be compromised by this one-sided approach to efficiency.

Economic and productivity growth can thus be presented as a neutral, technocratic tool when, in fact, it can be all-encompassing in its demands, dictating social outcomes and constraining the range of meaningful choices. We thus read the following typical discussion in *The Economist*: 'Diana Farrell, of the M^cKinsey Global Institute, argues that the real problem holding back innovation in many developed countries is too much government in the form of red tape and market barriers. She points out that planning restrictions have prevented the expansion of Ahold and other efficient retailers in France.'⁹¹ Increases in the measured productivity of the retailing and construction sectors can easily be generated by lifting planning restrictions constraining the emergence of car-oriented, low-density living environments. But would such changes represent social, or even economic, improvement? Being productive in this context means building American-style out-of-town shopping centres, the enervation of urban and town centre pedestrian-friendly environments, and the marginalisation of a range of smaller retail outlets and their associated wholesalers; the supposed efficiency gains rarely include consideration of the necessary road building undertaken at taxpayers' expense, the invisible congestion costs of greater

car use, and the erosion of the public good characteristics associated with a vibrant city centre. (Whether such projects will continue to be commercially viable in the age of internet shopping remains to be seen.) In a world in which the views of management consultants commonly guide decisions on social issues, arguments surrounding the flourishing of families and the upbringing of children in the context of an integrated approach to community development and transport planning – notions that might interfere with schemes to raise productivity growth – come across as just so much noise.

A focus on the exigencies of economic growth and its corollary, the growth rate of productivity, can thus preclude other – any other – considerations in the making of social decisions. This privileging of economic considerations above all others is not simply the province of economists. We live in an age when, for instance, public bodies perform benefit–cost calculations on the regulation of mercury pollution in which benefits are calculated in terms of the reduced loss in future wages for children whose IQs are lowered (in straightforward terms, whose brains are damaged) by eating fish caught by freshwater anglers.⁹² How is it that, in societies putatively richer than ever before, the economic calculus has become the *lingua franca* of social discourse to an extent that would have surprised even Herbert Spencer? One reason appears to be the desire to ape the achievements of the exact sciences, with numbers, parameters and decisive conclusions, even if the social judgement arrived at takes the form of a pseudo-scientific exactitude in which it is presumed that brain damage to children can meaningfully be translated into shortfalls in IQ and then into income lost to society.

The blatant long-term inefficacy of such a state of affairs helps to clarify why an attempt here to cultivate an alternative vision and direction is not a fanciful or feckless undertaking, but a necessity. The creation of a society under truly democratic control, and perceived as such by its constituents, will be the subject of the remaining chapters. The discussion, introduced here and continued in Chapter 11, starts with childhood, because that is where we all begin. Most contemporary discussions of the social role of education focus on its role in enhancing productivity. We now find that even the most eloquent defences of the importance of education feel the need to make arguments for its role in facilitating growth:

As with critical thinking, so too with the arts. We discover that they are essential for the goal of economic growth and the maintenance of a healthy business culture...If our only concern were national economic growth, then we should still protect humanistic liberal arts education.⁹³

It must be confessed that this somewhat defensive approach has, on occasion, been echoed in this book, with the caveat that ‘liberal arts’ is perceived here to embody not only subjects such as literature, but universal preparation in

science, mathematics and a host of putatively impractical and unnecessary forms of knowledge as well. Do we, then, have to return to the Victorians to find unabashed resolutions in favour of education for its own sake?

we shall find, as a matter of experience, if we know the best that has been thought and uttered in the world, we shall find that the art and poetry and eloquence of men who lived, perhaps, long ago, who had the most limited natural knowledge, who had the most erroneous conceptions about many important matters, we shall find that this art, and poetry, and eloquence, have in fact not only the power of refreshing and delighting us, they have also the power [of] fortifying, and elevating, and quickening, and suggestive power, capable of wonderfully helping us to relate the results of modern science to our need for conduct, our need for beauty.⁹⁴

Unfortunately, Matthew Arnold's argument for education in terms of the cultivation of 'sweetness and light' will not go down well in today's *macho* discourse. A greater obstacle, even than his obtuse identification of knowledge with a mastery of Latin and classical Greek, is his attitude towards 'the masses', with their growing tendency towards anarchy: the latter is to be weaned out of them by 'culture', or, if necessary, in 'the old Roman way...flog the rank and file and fling the ringleaders from the Tarpeian Rock'.⁹⁵ This class of attitudes is not only offensive to (most) modern sensibilities, but a peculiar one in retrospect, given that it was not the docile masses, but the members of Arnold's own class across Europe, who at the time were bringing violence and destruction to Africa and Asia and, in 1914, to Europe itself.⁹⁶ Education for its own sake has been deeply scarred by its entanglement with such elitist notions. But more modern and acceptable versions of this doctrine exist. The philosopher Harry Brighouse writes:

Students need the kind of education that will enable them to be effective participants in the economy, but there is no reason for states in developed countries to steer the education system towards the specific demands of employers...children have a right to learn about a range of ways of living and to the kind of education that will enable them to reflect on their own way of life in the light of these alternatives...[they] should be educated so that they can have rich and flourishing lives independently of their participation in the economy...schools should educate children so that they can be effective, and reasonable, participants in public decisionmaking and execution.⁹⁷

Arguments of this kind are not unprecedented. They can be found in an extensive literature already emerging in the twentieth century (to be revisited in Chapter 11) suggesting that rich societies have attained sufficient

freedom of action to move beyond narrow economic criteria for evaluating the role of education in society. Are these progressive goals to be dismissed as utopian, unrealistic and too expensive as a societal project? They have implicitly been brushed aside: contemporary debates about education for the masses are largely preoccupied with carefully weighing, for instance, the economic efficacy of smaller classroom size compared with higher qualifications for teachers, with the success of these alternatives measured by improvements in PISA scores or their equivalent. The form that such an education takes, dedicated as it is to the efficient replication of cogs for the economic machine, remains narrowly utilitarian, authoritarian and ultimately sterile.

An approach to child development for the masses of the kind proposed by Brighouse will immediately be dubbed utopian. In the context of a societal focus on economic growth and therefore the growth rate in productivity, such notions will, as suggested above, be subject to Baumol's disease: programmes to transform education – if they are undertaken seriously – will ruin attempts to generate measured increases in productivity for the overall economy. Real education is extravagant in its use of – most especially – human resources, in both a quantitative and a qualitative sense.

For an upper range of the population, this fact is simply taken for granted. The necessity for well-planned schemata for endowing the next generation with a capacity for controlling their own lives and mastery over the social environment takes the form of careful monitoring of the child's physical and psychological well-being beginning from – or before – birth. The human and physical resources present in the home environment dictate that even before entering a select group of, typically but not invariably, private schools, the forms that upbringing and education take have only limited resemblance to the experience of ordinary children. In school, core material is usually mastered in a manner that shows only modest gains in PISA-type tests over the best state institutions with an academic orientation.⁹⁸ But education for mastery implies the replication in modern terms of the 'sweetness and light' of well-rounded individuals idealised by Matthew Arnold, with children receiving individual attention in a stimulating physical and psychological environment that exists in another world from the prison-like atmosphere of schools for the masses. Mastery subsumes aspects of down-to-earth attainment, including physical culture and sports training and hands-on command of how things work in the world of mechanical and electronic devices, as well as in the natural environment.

And despite Arnold's self-absorbed depiction of himself as being engaged in a losing war with the Philistines,⁹⁹ we shall see in Chapter 11 that elite institutions have continued to offer students in the twenty-first century the opportunity for deep engagement with the world heritage of music and drama. When gaps appear in this idealised depiction of elite education, the parents of these children have the material resources and the intellectual

capacity to compensate for these shortfalls explicitly, as well as passing on through travel and general worldliness a familiarity with how things work in the world of economic and political power. Schooling only reinforces the home side advantage.

Few interventions by Stalin have received universal approbation from Western scholars, but the curious episode towards the end of his life when he intervened in a controversy concerning the nature of language is an exception. Some Soviet linguists, perhaps over-zealous to demonstrate their ideological rectitude, had declared language to be part of society's superstructure. As a consequence, it would evolve with the productive forces and, even more strangely, under capitalism, different classes would speak essentially different languages. No, said Stalin in an article published in *Pravda*, language is not part of the superstructure. Not surprisingly, the controversy came to an end.¹⁰⁰ It is necessary here, however, to take issue with Iosif Vissarionovich. In the twenty-first century, widening inequality within countries worldwide, combined with improved communication and mobility emanating from technological and political changes in countries such as China and Russia, has produced an international elite in direct and regular contact, and fluent in its own language, English. What had been an aberration even in the plutocracies before the First World War (such as a German-speaking elite in Hungary) is now an international norm. With economic inequality reaching, on occasion, stupendous magnitudes, as in the US, this elite is well aware that its central concerns and self-interest are more closely linked to its counterparts in other countries than its compatriots at home.

Is it, then, 'socialism or barbarism?', as the famous slogan suggests, with even rich societies taking the form of plutocracies in which the ruling elites are ever more distanced economically and culturally from the mass of the population? Neoliberal policies over past decades have damaged or dismantled the economic and social accomplishments of previous generations, with little gained in compensation. Dreams of a maturing democratic polity with advancing wealth, technology and education seem to have dissipated. Does the elite's endowing of its own next generation with a capacity for controlling their own lives and mastery over the social environment offer any hints on how to construct a socialist, democratically controlled society built on real, existing non-utopian foundations?

The strategy for societal transformation that emerges in the next chapters is concerned with giving an opportunity for self-realisation and development of personal capacities to all individuals from their earliest years, one that is not contingent on, and compensates for, limitations in household circumstances; a complementary aspect of the programme is to promote a capacity to exercise democratic control on a regular basis in the working and living environment and in the context of the broader society. The

goals of such a programme are plausible because they are congruent with the central role played by human assets in the economic and social development of contemporary societies. Furthermore, the realisation of this strategy takes place largely through the use of off-the-shelf public policy tools such as taxation, expenditure and regulation, rather than through a discontinuous construction *de novo* of societal institutions. The present unpropitious economic conditions, rather than generating a reconsideration of the policies that led to this predicament in the first place, have tended to engender a focus on short-term, mostly free-market bromides under the guise of coping with economic realities. By contrast, the strategy to be pursued here has a long-term time horizon, one designed to find a path for survival, and even flourishing, in this dangerous twenty-first century.

* * *

In recent years, widespread discussion – and disquiet – has emerged from the suggestion by Robert J. Gordon that productivity growth in the US is likely to fall to a fraction of 1 per cent in the future: the large gains in labour productivity (2.33 per cent per annum) from the late nineteenth century until the early 1970s will not be repeated.¹⁰¹ His claims have had a wide reception, since he was practically a lone voice suggesting that the productivity surge of the mid-1990s observed in US statistics was less likely a reflection of the widely heralded new economy based on computer technology than a transitory phase reflecting largely economy-wide cyclical factors and rapid increases in the productivity of the computer industry itself.¹⁰² According to him, the low-hanging fruit have been picked: the electronics revolution has not yielded, and will not yield, gains to productivity and to consumer welfare comparable to the Second Industrial Revolution benefits from electrification, the internal combustion engine, indoor plumbing and running water.

The question arises why this prospective decline in productivity growth has been treated as a source of such alarm. One reason is that Gordon's pessimism merely reinforces other present-day economic tendencies: much of what is increasingly desired in countries as they grow rich includes services such as personalised care for the elderly and infirm, activities that are unlikely to experience rapid increases in productivity, and cannot do so, by definition, if these increases emerge from the government consumption sector, as noted above. The approach taken by Gordon appears to maintain a fatalistic association between an absence of new technological bounty and a stagnation in productive advance, which then results in slow economic growth that makes the maintenance of full employment impossible. The resignation associated with this long-term narrative then spills over to the

headwind of recent decades associated with increasing competition from poor countries and the resultant downward pressure on wages: these events contain, he suggests, 'a sense of inevitability'.¹⁰³

Gordon's remedies are limited to poaching skilled labour from poor economies,¹⁰⁴ a short-sighted strategy for a nation with pretences to global moral leadership and a bad example in an ecological context of a rich country gratuitously generating population growth to fulfil proximate economic objectives. Further explanations for the widespread alarm expressed by the prospect of a productivity growth decline might be a historical association of periods of slow productivity growth with macroeconomic stagnation and mass unemployment, and one other factor, perhaps the most significant one: perpetual growth is the key mechanism used by economic orthodoxy and those with the reins of economic and political power to avoid confronting the central questions surrounding economic and social equality.¹⁰⁵

Extraordinarily, a sense of helplessness has also been present in an opposite direction. A report from the McKinsey Global Institute has outlined a range of a dozen 'disruptive' technologies soon to be upon us, linked to continuing developments in the electronics sector, energy and gene sequencing.¹⁰⁶ If hosannas can be expected from techno-optimists and others, the response from the moderate left was disquieting:

Even a quick scan of the report's list suggests that some of the victims of disruption will be workers who are currently considered highly skilled, and who invested a lot of time and money in acquiring those skills. So should workers simply be prepared to acquire new skills? [They] might well ask... what will happen to us if, like so many students, we go deep into debt to acquire the skills we're told we need, only to learn that the economy no longer wants those skills? Education, then, is no longer the answer to rising inequality, if it ever was (which I doubt).

So what is the answer? If the picture I've drawn is at all right, the only way we could have anything resembling a middle-class society — a society in which ordinary citizens have a reasonable assurance of maintaining a decent life as long as they work hard and play by the rules — would be by having a strong social safety net, one that guarantees not just health care but a minimum income, too. And with an ever-rising share of income going to capital rather than labor, that safety net would have to be paid for to an important extent via taxes on profits and/or investment income.¹⁰⁷

What capitalism thus seems to offer us, in light of recent discussions, is stagnation if the technology fairy doesn't come, and if he or she does appear, the prospects are, if anything, worse. Either we are then subject to the tender mercies of the Schumpeterian ghouls of creative destruction, or we follow

Krugman's path: in a defensive way, still acceding to the 'dictates of the market', we create a supplicant underclass that is reliant on state munificence.¹⁰⁸ Clearly, Krugman's call for a strong social safety net and redistributive taxation would be part of any socialist programme, but where is the sense of forward movement? Is this the best we can do?

Part III

Socialism and Human Possibilities

Introduction

The narrative presented up to now has attempted to demonstrate that socialist conceptions of human development are congruent with broad-based practical strategies for effecting economic growth and achievement. In this sense, it conforms to the dominant socialist programme of the twentieth century. As we have seen in Part I, 'Socialism and Central Planning', the earlier approach presumed that the vision of a rational organisation of society could be observed in incipient form in the structures and protocols of the great capitalist firms, and that a practical, non-utopian socialism would follow along these lines. Despite perceptive insights into the workings of capitalism and perspicacious critiques of economic orthodoxy, the planning approach was deeply flawed. Socialism became identified, simultaneously, with dysfunctional and authoritarian approaches to the organisation of society.

In Part II, a renewed endeavour was made to link a strategy of socialist development to tendencies in contemporary capitalism: education is widely regarded as a key requisite of economic growth, and also acts to promote income equality and mobility. In the broader context of human development, low levels of inequality and high levels of security in society facilitate educational programmes and complement them by permitting individuals and households to plan their lives in a coherent manner. A vigorous programme focusing on the human development of all tiers of society will conform both to the exigencies of the modern economy and to the traditional socialist focus on social equality,

As we shall see in the following chapters, it would be disingenuous to imagine that a true socialist programme could be implemented in contemporary society without confronting a host of problematic issues. What is the nature of this new educational programme? Does it simply involve more resources, or do we have to reconsider the structure and organisation of the educational system, and, indeed, the very content and goals of

that education? How does a transformed approach to education and human development impinge upon the daily life of individuals as they work, vote and function as free citizens, and can such a focus on individual realisation and personal development be reconciled with traditional socialist concerns with solidarity and democratic control at work and in society? And, having surrendered the possibility of directing an economy by way of a central plan, what mechanisms are available in a socialist context to promote, if not guarantee, full employment of human capabilities, and not just full employment in its crudest sense?

These questions will be posed here rather than answered definitively. But at a time when politicians and social thinkers have resigned themselves fatalistically to coping on a day-to-day basis with each emergent crisis, or have adopted the attitude that an aimless pragmatism is the height of worldly wisdom, it is worthwhile to address these considerations. In the absence of a belief that society should unfold autonomously from a Hayekian spontaneous order or a social Darwinist survival-of-the-fittest mechanism, is there any choice but to confront these issues?

11

Education in a Free Society

Education is not an independent variable in an economic growth equation. In its broadest sense, it is a fundamental aspect of, and prerequisite for, human existence. Even if we are not blank slates, our functioning as human beings is deeply conditioned by what is consciously and unconsciously passed on to us: we are shaped by the actions, attitudes and behaviour of others and the environmental context in which these interactions take place, most especially in the first years of life. No more fundamental question about society can be asked than how we are to be educated.

Hayek's dilemma

The demand for equality of opportunity or equal starting conditions (*Startgerechtigkeit*) appeals to, and has been supported by, many who in general favour the free market order.¹

Hayek's dilemma was to articulate his objections – in the name of liberty – to a free society that embodied equal opportunity for all classes in society: the danger was always present for Hayek that, like John Stuart Mill (see Chapter 12), some of his fellow liberals would gravitate to support of workers' control and a range of socialist policies. As we have seen in Chapter 1, Hayek had constructed a capitalist utopia that is the most complete of its kind in a liberal mould, one in which economic and social outcomes emerge through voluntary processes of market exchange. In mainstream economic orthodoxy, by contrast, such 'invisible hand' outcomes only take place in the context of an initial disposition of property rights. A common means of legitimating this distribution of income and wealth in society is to claim that it has been ratified by a democratic decision-making process (as hinted at by Arthur Okun in Chapter 10). But political democracy was often opposed, or held in suspicion, by the nineteenth-century liberals Hayek so admires, and by Hayek himself. The great *coup* of Hayek's spontaneous order, as we have seen in Chapter 1, was that property rights themselves are the product

of this evolutionary process of market exchange. These property rights are not imposed or arbitrary, and cannot be easily altered without upsetting the whole of the dialectical interaction between different aspects of this spontaneous order.

But why and how, in more specific terms, will even well-meaning attempts at creating equal opportunity limit or distort the functioning of the spontaneous order? At one juncture, Hayek suggests that the process of individual decision making and risk taking that is an essential part of the spontaneous order must be 'borne not only by those who decide but also by their descendents':² attempts to give all children in society an opportunity to develop their capacities as human beings would pervert the spontaneous order, because the profligacy and irresponsibility of individuals would no longer be constrained by the effects their decisions would have on their offspring. Hayek does not pursue this outburst of Old Testament and Victorian sensibility in any detail, and it seems to be of little influence (except in magazine advertisements for luxury watches) in contemporary debates.

Hayek is opaque, but on firmer ground, in opposing any attempt to eliminate the disadvantages accruing to some groups in society by imposing, in the style of Plato or Sparta, a uniform upbringing upon all children: 'utilization of dispersed knowledge is...made possible by the fact that the opportunities for...different individuals are different, and because many of these particular circumstances are known only to them...in the absence of a unified body of knowledge of all the particulars to be taken into account, the overall order depends on the use of knowledge possessed by [the] individuals and used for their purposes'.³ Thus, there would be dangers, purely from the point of view of efficacy, in attempting to impose even a well-constructed barracks-style educational system. The family environment, by preserving the range and variety of experience to which individual children are exposed, is superior in the 'utilization of dispersed knowledge' that is of such importance in the efficient functioning of society.

Yet Hayek's use of the term 'different' in addressing the opportunities open to individuals resembles the disingenuousness of the US Supreme Court in 1896 in its upholding of the legality of racial segregation with the phrase 'separate but equal' in the *Plessy vs. Ferguson* decision: it is simply a fine phrase occluding the presence of inequality. At present, a generalised barracks-like Spartan solution to the problems of inequalities in education is nowhere being proposed. There is, however, a genuine threat, as opposed to a fantasised one, to political democracy and, therefore, the use of dispersed knowledge in the making of social decisions: in the context of a widening of income and wealth in the nations of the rich world, most exceptionally the US, even the limited gains made in the direction of popular control of public affairs may be eroding, with decisions increasingly being made by a small, like-minded group with a common outlook on the world.

Hayek's argument against public policies promoting equality reinforces one earlier found in *The Road to Serfdom* of 1944 – the 'slippery slope' notion that movement in the direction of equality, most especially in the context of government policy, leads down the totalitarian road:

There is...much to be said in favour of the government providing on an equal basis the means for the schooling of minors who are not yet fully responsible citizens, even though there are grave doubts whether we ought to allow government to administer them. But *all this would still be very far from creating real equality of opportunity, even for persons possessing the same abilities*. To achieve this government would have to control the whole physical and human environment of all persons, and have to endeavour to provide at least equivalent chances for each; and the more government succeeded in these endeavours, the stronger would become the legitimate demand that, on the same principle, any still remaining handicaps must be removed – or compensated for by putting extra burden on the still relatively favoured. This would have to go on until government literally controlled every circumstance which could affect any person's well-being.⁴

There is an element of truth in Hayek's declaration here, as we shall see below: the cultivation of equal opportunities for human development across society will, of necessity, extend far beyond *pro forma* equality in access to classroom education. But his famous prediction that such developments necessarily entail, even if inadvertently, movement along the road to serfdom has that rare honour in the social sciences of having been decisively refuted. All across the Western world, the extension of provisions of the welfare state and of access to state education at school and higher levels in the decades after the publication of Hayek's *Road to Serfdom* were coincident with an extension of civil rights, civil liberties and democratic participation in the public sphere; countries with strong social welfare regimes have consistently stood at the highest levels in rankings of press freedom and absence of censorship.⁵ At a fundamental level, these interconnections reflect the indissoluble links between the negative and positive liberties discussed in Chapter 10 and, substantively, a tendency for populations in societies with heightened levels of economic security to be more tolerant than others. The problem posed by Hayek seems to have existed largely in his imagination.

Hayek's reasons for opposition to the pursuit of equal opportunity have never achieved popularity among defenders of the free market. Few go down his path of opposing it *even for persons possessing the same abilities*, as he says above, thereby leaving outcomes, including the inheritance of property, to the unfolding of the spontaneous order. For him, it is this order, emerging out of processes of free exchange, which is to be defended

by those with a belief in liberty, rather than any notion that this process yields a fair distribution of rewards: while it is important for the maintenance of the market order that individuals believe that their well-being depends primarily on their own efforts and decisions, for Hayek there is invariably a substantial component of luck in the determination of market outcomes.⁶

The very richness of Hayek's conceptualisation of capitalism as the unfolding of a spontaneous order leads him into difficulties. We have already seen an example of this problem in his critique of central planning in Chapter 4: he develops a notion of capitalist competition as a dynamic intertemporal process, but then fails to confront successfully the consequent issue of the role of the financial sector both as a facilitator of this dynamism and as a source of destabilisation. Similarly, when dealing with the question of the distribution of rewards in capitalism, Hayek's intertemporal and intergenerational spontaneous order can make no promise of just outcomes for members of society, even for children. Few have followed him down this path, with libertarians like Robert Nozick finding it far easier to defend capitalist income distribution in the context of a timeless (and presumably childless) world in which intergenerational effects are precluded from consideration (see Chapter 10).

The most influential defences of the market order are to be found not, however, in Nozick's libertarianism, but, as Hayek notes, in Catholic and quasi-Calvinist teaching: he ruefully concedes that the legitimisation of capitalism (especially, he says, in the US) has invariably been linked to the notion that it 'regularly rewards the deserving'.⁷ Since the late nineteenth century, this notion of capitalism as a system of just deserts has been embodied in mainstream static microeconomics, both as a prediction (loosely speaking, those who are more productive will tend to be paid more) and often as a normative rule (they *should* be paid more).⁸ We thus have a concoction of various elements from Catholic and Calvinist teaching: the Augustinian heritage of a (far from innocent) child with an immortal soul whose subsequent success in worldly activities, including presumably any inherited wealth, is (especially in the Calvinist context) a sign of grace, combined with an economic theory that links remuneration to productivity.

In political terms, these two principles can be used to bind together all those citizens who view themselves as 'working hard and playing by the rules' against scroungers, reprobates and the undeserving poor. But when these two elements combine with nineteenth-century social Darwinism and twentieth-century psychology and biology, we have a unified theory of remuneration in capitalist society linked to the exigencies of biology and capitalist competitive processes. The IQ wars of the twentieth and twenty-first centuries speak to fundamental perceptions of the future of humankind.

Is it all a waste of time?

The path charted by Hayek has rarely been followed by others who wish to defend the distribution of economic resources emerging under free-market conditions. If his phrase 'same abilities' is taken to refer to inherent, biological potential, the overwhelming majority of those who abjure the pursuit of equal opportunity do so because they – implicitly or explicitly – reject the same abilities premise on class or racial terms, so that the pursuit of this goal is a waste of time. Many such individuals believe that capitalism already distributes resources on a meritocratic basis and that inequalities in income and wealth reflect the distribution of individual qualities dictated by natural endowment. This doctrine is pervasive, but elusive and difficult to confront directly because it is so often expressed in a muted form with the use of words such as 'able' and 'capable'. These central questions concerning human capacity take their most explicit forms within the covers of journals of psychology, neurobiology and child development.

In earlier times, the qualities that were in the blood were linked to character and even diction: it has often been noted that the well-born nature of the eponymous hero of Charles Dickens's *Oliver Twist* was reflected in his elevated language, distinctly different from those among whom he had been raised. In our time, however, it is not nobility of character or diction that is inherited, but overall mental capacity: some people are just born more capable than others, facts then reflected in the distribution of economic resources. The academic and intellectual underpinning for this supposedly common-sense view of the world is the concept of overall mental capacity, 'g', as measured through a statistical surrogate, the intelligence quotient, or IQ. In the words of one of the pioneers of research in this area, '[intelligence] denotes, first of all, a quality that is intellectual and not emotional or moral: in measuring it we try to rule out the effects of the child's zeal, interest, industry, and the like. [It] denotes a general capacity, a capacity that enters into everything the child says or does or thinks; [it is] by definition an innate capacity: hence a lack of it is not necessarily proved by a lack of educational knowledge or skill.'⁹

In modern times, this capacity is no longer thought to be passed from one generation to another through the blood, but genetically. The development of the concept of IQ at the beginning of the twentieth century by Alfred Binet had a pragmatic motivation – to construct a measure to isolate those children in need of special assistance because of their low scores. Binet in 1909 had already inveighed against those who assert 'that an individual's intelligence is a fixed quantity, a quantity which cannot be increased. We must protest and react against this brutal pessimism.'¹⁰ But even for Binet's relatively straightforward diagnostic purposes, an IQ test cannot locate mental deficiency in children performing poorly, since weak results may reflect a whole range of causes other than inherent cognitive inadequacy,

including the individual's cultural background, attitudes, health and physiology. Thus, if a child's level of motivation were to play an important role in IQ test score results,¹¹ then these tests could serve neither as a decisive mechanism for locating those who were deficient in intelligence, nor as a statistical surrogate for *g*. The inherent limitations in the use of the IQ measure at its point of origin are only exacerbated as we proceed through the twentieth and into the twenty-first century, when performance on these tests is seen as a quasi-biological measure of overall mental potential and capacity.

The IQ measure soon moved on from its unpretentious beginnings with Binet to play a central role in twentieth-century attempts by the human sciences to emulate the stupendous achievements of the physical sciences and the more slowly emerging accomplishments of the life sciences. In economics, the unified conceptualisation of a nation's economic activity with the creation of the national income measure released a flood of theoretical and empirical literature related to its regulation and growth; for psychology, the emergence of an empirical surrogate for *g* in the form of IQ gave both a unified focus to measures of mental activity and a scalar variable for use in empirical testing. In contrast to psychoanalytic approaches, psychology was now possessed of a parameter that could be used to test scientific, objectively verifiable hypotheses. And compared with the equally empiricist behaviourist school, there was a unity and directionality to IQ research, with the ready possibility for integration with evolutionary theory, genetics and neurological investigations. So powerful has been the pressure to find objective measures of this kind that, even among the critics of the IQ measure, one of the most popular alternatives in recent times has involved replacing the *g* concept with a broader set of competencies, as well as a notion of 'emotional intelligence'.¹²

The prestige of the science-is-measurement ideology has been as powerful in psychology as in economics. Unlike the national income measure in economics, however, the centrality of IQ in public discourse had been somewhat neutralised in the postwar period because of the association of this statistic and its quasi-biologicistic interpretation with interwar fascism and eugenics; this politically controversial role of the IQ measure is most strongly evident when it is seen to be correlated not only with income, wealth and social status, but with race. The reconstitution of investigation in this area in recent decades has been linked to the increasing prestige of biological approaches to human behaviour, most especially with the mapping of the human genome. The most widely noted research in this area, the Minnesota twins studies, has involved children reared either in the same family or apart, including a range of biological relationships, from identical twins to adopted children; attempts to parse the roles of biology (genetic endowment) and the broader social environment in IQ have often claimed to find an important, even predominant, role for the biological component.¹³

Historically, the influence of IQ studies (without, however, attributing these conclusions and motives to all researchers involved), with its notion of a substantial, innate and (as usually interpreted) fixed biological component to general intelligence, has followed well-defined patterns. It was used as far back as the 1920s in the US to separate students into academic and non-academic streams, and formed the philosophical and intellectual basis for academic segregation at age 11 in Britain under the 1944 Education Act.¹⁴ The IQ measure has been used in research purporting to demonstrate that present-day capitalism is already substantively meritocratic, with obstacles to social mobility linked to the presence not of class hierarchies but of inherent, relatively unchangeable differences in intellectual capacity between individuals.¹⁵ Others have used biologicistic approaches to explain the emergence of the Industrial Revolution in Britain (primogeniture forced genetically well-endowed aristocratic offspring to seek their fortunes away from agriculture) or to claim IQ as the decisive explanatory variable in differences in per capita GDP between nations.¹⁶

The most important policy conclusion emerging from those committed to a fundamentalist approach to these IQ studies is a quietism about the possibilities of the alleviation of inequality by way of various forms of social engineering by the state, most especially through the educational system.¹⁷ Thus, Arthur Jensen in 1973 famously answered 'Very little, if at all' to his own question 'How Much Can We Boost IQ and Scholastic Achievement?' through, for instance, compensatory education.¹⁸ Others have proceeded along similar lines, though some research in this tradition has found a distinctive role for the environment (socioeconomic status) in IQ determination among impoverished families.¹⁹ The predominant emphasis, however, has been to focus on 'nature' rather than 'nurture' in the formation of intellectual capacity and associated forms of economic and social attainment.

The most prominent figure in public discourse in recent decades in dealing with these issues has been Charles Murray. The singular characteristic of his large output is his elaboration of the social implications of what he takes to be the conclusions emerging from IQ research.²⁰ There are inherent, hard-wired constraints on intellectual capacity that are binding on a large percentage of the population:

Many children are just not gifted enough to learn to read and write at more than a rudimentary level...and the schools can only tweak their performance at the margins...The problem is not that [they] have not been taught enough, but that [they] are not smart enough.²¹

The writings of Charles Murray have the characteristic of focusing on key issues affecting the trajectory of education for all children in the twenty-first century and, perhaps unintentionally, their link to class and hierarchy in society. His admonition to 'remove the ideological blinkers and stop

pretending that all children can or should pursue the academic track'²² follows directly from the inherent genetic limitations outlined above. But, Murray suggests, let us put to one side the demonstrable fact that 'Only a small minority of high-school graduates have the intelligence to succeed in college.' For the sake of argument, one can replace the inflammatory term 'intelligence' with that of 'academic ability', working 'from the simple and easily demonstrable proposition that what you see in the academic ability of high-school seniors is what you get.'²³ Murray's Modest Proposal is as follows:

set up a single goal to represent educational success, which will take four years to achieve no matter what is being taught...attach a large economic reward to it that usually has nothing to do with what has been learned...urge large numbers of people who do not possess adequate ability to try to achieve the goal, wait until they have spent a lot of time and money, and then deny it to them...stigmatize everyone who doesn't meet the goal...call the goal a 'B.A.'²⁴

It is impossible to argue against Murray's proposition that the goal of education is 'to bring children to adulthood having discovered things they enjoy doing and having learned how to do them well. The goal applies equally to every child, across the entire range of every ability.'²⁵ But since, according to Murray, only 10 to 15 per cent have the academic ability to succeed at university, the practice in the US, now present in the UK and other countries, of sending half the population in pursuit of a BA is dysfunctional and wasteful, and it would better to abolish it. Its replacement by certifications of professional qualification and the more widespread use of distance learning in lieu of campus study will better serve the needs of both employers and job seekers; these changes can unfold without the need for any government involvement or subsidy. 'Get rid of the four-year requirement, and many young people who are eager for careers in business, say, would do just fine in the eight or ten courses in marketing, management, and finance that they are highly motivated to take.'²⁶

Many elements of Murray's programme are unfolding in the US and UK, with rising university fees beginning to make study on a university campus a luxury for the well-off. Whether market-based certifications of qualification can simultaneously serve the needs of employers 'and' job seekers is, however, dubious: as we have seen in Chapter 8, the fine-sounding notion that qualifications should be set to meet the needs of employers is flawed. From the employer's point of view, the ideal engineering or accountancy graduate will be able to 'hit the ground running'. But for young workers (whether they know it or not), and for society as a whole, the supposedly impractical aspects of study, those involving basic skills, prepare young people for a lifetime of work for different employers and under changing

conditions, including the possibility of working, as most people do, far from their original field of study. That is why handing over the setting of qualifications to the needs of employers is so inefficacious for individual workers, and for society as a whole.

In the context of societies, such as the US, that have experienced dramatic increases in economic inequality in recent decades, Murray's vision of a streamed, vocational education for the overwhelming majority – 85 to 90 per cent of the population – is an influential one, and complements the notion that only a small portion of the population are capable of absorbing the knowledge that would be necessary for full participation in forms of political and economic democracy. It leads, however, to some peculiar notions:

For the student who wants to become a good hotel manager, software designer, accountant, hospital administrator, farmer, high-school teacher, social worker, journalist, optometrist, interior designer, or football coach, four years of class work is ridiculous.²⁷

The question arises here of what kind of world Murray lives in, or wishes to create. In the list above, perhaps he is referring to high-school teachers for other people's children – for the great mass who inevitably 'don't make the grade' – and not for those of his own class. The critical issue in the twenty-first century will not be how well societies educate the children of the elite – which all societies do according to their own lights – but their success at realising the human potential of those from marginal backgrounds. I studied high-school physics a half century ago with a friend from our housing project in Queens, who would go on to complete an MA in engineering and a PhD in physics (he was a year behind me in school because, like many other superlative achievers, he had not been deemed suitable at the age of 11 for the 'special progress' track) and go on to become a notable figure in the US high-tech industry. The daunting task of setting challenges for such a student in science class was met by our teacher, an aspirational actor on Broadway who had a BA in physics from one of New York City's free higher educational establishments. If, by contrast, my friend had progressed through a Murray-style educational system populated by mediocre, certificated teachers for the masses, would his highly productive career as engineer and physicist ever have emerged? Extraordinarily, this indifference to academic qualifications for teachers in school has now registered as a legitimate position to take in educational debates.

It is indubitable that Murray has successfully focused on fundamental tensions in present-day higher education, with its on-going conflict between meeting vocational as well as broader educational and cultural goals, all in the context of participation by half the population. He is also correct that university is far too late a stage to impart familiarity with history, science,

and great works of art, music and literature,²⁸ tasks that should have been fulfilled at school. It is typical of the best right-wing thinkers that they alight on an accurate analysis of present-day social situations: much of what passes for higher education, in the context of the levels of academic achievement with which students enter, is wasteful and even farcical. For Murray, these failures are embedded in the intellectual limitations of the vast majority of the population and imply that social decision making will inevitably reside with an elite. An alternative approach would be to consider why social inequality and the present methods for educating children from the youngest ages have been generating these supposedly immutable chasms in educational outcomes, and then devise a strategy for alleviation: the goals of such a programme would be to realise the intellectual and overall human potential of individual children and use it to extend democratic participation and decision making in society.

It would be unfair to segregate Charles Murray from others who make their case for inequality surreptitiously: his frank social Darwinist legitimisation of social segmentation is merely held more consistently, more explicitly and less disingenuously than it is by those who weakly claim that some people are inherently more able than others. By contrast, Hayek's liberal justification for class division, with its admonition that we accede to a spontaneous order that invariably embodies a substantial component of arbitrariness, has had no traction outside the bounds of academic discourse. In Chapter 4, in the famous debates between Oskar Lange and Ludwig von Mises, Lange at one point suggests that the future socialist republic will have to build a statue to Mises for his assistance in clarifying the nature of the problems of rational socialist organisation.²⁹ No such statue was ever built to Mises in the communist-led Poland to which Lange returned after the Second World War. It would, perhaps, be pushing irony too far to suggest here that a future socialist society should build a statue to Charles Murray for delineating with exceptional clarity the gap between the socialist worldview and that of both social Darwinists and professed liberals.

Does the existing state of knowledge dictate that the distribution and existing levels of academic achievement are a reflection of hard-wired biological constraints? On the contrary, it appears that there is more to say about this modern form of Augustinian predestination. Even researchers accepting the inherent validity of the IQ measure and its straightforward decomposition into genetic and environmental causes have reined in the more extravagant claims for a genetic fatalism. As noted above, one study claims that, in the context of impoverished families, a predominant role is played by the environment (socioeconomic status) in IQ determination;³⁰ more broadly, claims of exceptional correspondence in preferences for beer and religious practice among identical twins supposedly reared apart merely underline the lack of true environmental variance in all such studies.³¹

It is easy to make light of the cavalier approach sometimes taken in academic research to the relationship between a supposedly hard-wired intelligence and the social environment. One study³² claims that individuals with high measured intelligence have views on economics that are highly correlated with those of the average economist, attitudes embodying a favourable view of marketplace allocation. Do such results evidence, as the researchers involved seem to think, a link between innate intelligence and the ability to grasp correct free-market principles, and therefore economic success? Perhaps a more straightforward explanation is that 'intelligent', upwardly aspirational individuals are better than the rest of us at internalising and expressing an unfeigned enthusiasm for the dominant ideology of the society in which they live: would not such individuals have waxed eloquent, in the context of the Soviet Union of 1950, about the virtues of a society planned in a rational, coherent manner?

In recent times, the greatest upheaval within the IQ literature has resulted from the realisation that IQ is far from being a fixed, biologically invariant constant. The gains in IQ scores across the world, dubbed the Flynn effect, were dramatic over the twentieth century, with some indication that this process may have reversed itself recently; IQ can also increase or decrease relative to peers in teenage years.³³ In general, IQ appears to be far more contingent and malleable than indicated in the traditional psychological literature, which is not consistent with it being an invariant measure of biological capacity.

In response to these issues, there have been efforts to salvage the traditional approach to IQ and the genes–environment dichotomy using the notion of a feedback loop between genes and the environment, so that 'Within a generation, genetic differences drive feedback processes – genes use individual multipliers to determine and magnify IQ differences between individuals. Between generations, environmental trends drive feedback processes – environment uses social multipliers to raise the average IQ over time. Twin studies, despite their evidence for feeble environmental factors, and IQ trends over time, despite revelation of potent environmental factors, present no paradox.'³⁴ Even for one untutored in psychology or genetics, the logic of this approach is easy to see: my brother's superior genetic endowment (including five inches in height) helped place him in a different 'environment' for playing basketball – high-school and college teams – and left me to play in the schoolyard: initial biological advantages were reinforced. Using the latter and related approaches, psychologists continue to use a discourse centred on IQ, but one stripped of the immutable and exogenous characteristics that originally gave it such explanatory power: a recent survey for the American Psychological Association of the state of research on IQ retains the central concept, but concedes so much scope for the mutability of IQ and the effects of the environment, most especially social class, on the IQ measure as to leave little of the original concept intact. For a

recent president of the Association, 'Intelligence cannot be fully or even meaningfully understood outside its cultural context.'³⁵

For many contemporary researchers, however, shifts in the 'nature–nurture' boundary do not deal sufficiently with the underlying problem: the dichotomy between characteristics in an organism that can be defined as genetic or innate and those acquired from an external environment is a 'folk understanding' of a process that, in fact, involves the continuous interplay of the organism (and its genes) with its environment. As a result, 'the underlying assumptions of contemporary psychological models reflect largely outdated ideas about what it means for something to be innate'.³⁶ The relationship between brain and behavioural development is, in fact, 'one of interdependence and reciprocity: Behaviors influence brain development and the brain mediates all behavior', engaging 'both inherited and environmental factors and...their continuous interaction'.³⁷ The focus in this literature is thus upon on the plasticity of the brain in its interaction with its external environment.³⁸

And, in the spirit of this latter emphasis on brain plasticity, we have seen the emergence of a new discipline surrounding 'expert performance', claiming that the latter can be cultivated in a wide range of activities with a well-defined process of supervised practice, starting at very young ages and maintained at high daily levels for more than a decade. Researchers in this area have even suggested that 'With the exception of fixed genetic factors determining body size and height, we were unable to find evidence for innate constraints to the attainment of elite achievement for healthy individuals'.³⁹ While the efficacy of expert performance has been downplayed in a recent review of the literature,⁴⁰ this approach has served as a useful antidote to those who would crudely derive a genetic fatalism by extrapolating from Mozart's prodigious achievements, apparently unaware of the example of his great contemporary (and slow developer) Joseph Haydn. The case of Haydn underlines the role of the external effects associated with learning described in Chapter 7, and how in a rich environment (such as the musical culture of mid-eighteenth-century central Europe) a capacity for 'genius' might emerge from an individual endowed with what appears to be ordinary raw material. It is, thus, likely that the individualistic controlled experiments used by the advocates and opponents of expert performance may be an insufficient basis for deciding these issues.

Nor is it necessary to presume that human beings begin as a blank slate⁴¹ and to take the extreme position on human malleability found in some earlier radical left-wing thinkers: 'The difference between the most dissimilar characters, between a philosopher and a common street porter, for example, seems to arise not so much from nature, as from habit, custom, and education.'⁴² On the contrary, research is on-going on brain development and its links to genetic inheritance: there may well be lock-in effects in children's cognitive development observed as early as one year. These

effects may be due, at least in part, to environmental factors, such as prenatal exposure to alcohol and malnutrition.⁴³ In general, however, the unfolding of human cognitive capacity from, and before, birth is a field in its infancy: 'we know nothing about the genetics of nonpathological variation in the cognitive capacities of the brain... After more than a century of claims that high intellectual or artistic accomplishment is somehow rooted in heredity and, more specifically, in the possession of "genes for high intelligence" or "genes for creativity", there is no credible evidence for their existence.'⁴⁴

One clear conclusion from recent research is that cognitive differences apparently set in very early,⁴⁵ with the infant mind interacting and 'testing hypotheses' concerning its environment: 'A new picture of childhood and human nature emerges from the research of the past decade. Far from being mere unfinished adults, babies and young children are exquisitely designed by evolution to change and create, to learn and explore. Those capacities, so intrinsic to what it means to be human, appear in their purest forms in the earliest years of our lives.'⁴⁶ The very nature of this plasticity in its early stages implies that the emergence of a child's cognitive facilities, attitudes and habits is a highly contingent matter: 'Experience is changing the brain from the very beginning. Everything a baby sees, hears, tastes, touches, and smells influences the way the brain gets hooked up.'⁴⁷ For the US, there is strong evidence that appropriate motivation, concentration and attitudes are formed in the context of social class at a very young age.⁴⁸

Even looking purely at cognition, the influence of social class at very young ages appears to be potent. Much of our existing knowledge of children derives from their performance observed in laboratories.⁴⁹ By contrast, an influential study from the 1990s by Betty Hart and Todd Risley involved observing 42 families for an hour each month for two and a half years, from when the children were seven to nine months old until they turned three years old.⁵⁰ In terms of words heard, the average child living with recipients of welfare (state benefits) was having half as much experience per hour (616 words per hour) as the average working-class child (1251 words per hour) and less than one-third that of the average child in a professional family (2153 words per hour), cumulating by the age of four in deficits of millions of words for the poorer social groups; children in families in the upper end of the social spectrum also received a distinctively higher proportion of words of encouragement in contrast to prohibition.⁵¹ In a more recent study, significant differences in language proficiency linked to the socio-economic status of the family have been found in children as young as 18 months.⁵²

These latter studies deserve to be at the centre of debate about the future of the human race, rather than buried away in discussions among educational psychologists. It is disconcerting to see studies with congruent results concluding that early childhood intervention as public policy should be supported on the basis that such intervention would be beneficial from an

economic cost–benefit perspective, both social (economic growth) and individual (earnings).⁵³ Most especially in rich countries, such a narrow economic approach seems to trivialise and marginalise what could be a key component of a programme for human liberation, democratic participation and equality.

One reason for the marginalisation of this research is that it is invariably interpreted in terms of the cognitive deficits of children growing up in poorer environments,⁵⁴ rather than being framed in the broader context of the flourishing of all human beings and how this is contingent on social and environmental factors present at, or even before, birth. Partially as a result of the narrow perspective to which this kind of research has been consigned, the resources devoted to it have been minimal compared, for instance, with the pursuit of ‘better’ weapons of mass destruction. While dismissals of the work of Hart and Risley as registering the genetic inputs of the parents⁵⁵ seem merely cavalier, it is legitimate to claim that these central issues affecting the future of humankind cannot be resolved on such a slender reed of empirical verification.⁵⁶

It would appear that there is a great deal to play for in the domain of human transformation. No one should be surprised that, in highly unequal societies, with dramatic contrasts in the life experience of young children from different classes,⁵⁷ increased inputs of formal education do not act as magic bullets. A sobering assessment emerges in a US context:

current policy initiatives are misguided because they either deny or set to the side a basic body of evidence documenting that students from disadvantaged households on average perform less well in school than those from more advantaged families. Because they do not directly address the educational challenges experienced by disadvantaged students, these policy strategies have contributed little – and are not likely to contribute much in the future – to raising overall student achievement or to reducing achievement and educational attainment gaps between advantaged and disadvantaged students. Moreover, such policies have the potential to do serious harm.⁵⁸

The Head Start programme in the US for three-year-olds, for instance, has had mixed results in terms of cognitive development;⁵⁹ by contrast, other studies, often beginning their interventions at birth, claim success in both the cognitive and non-cognitive domains.⁶⁰ But whatever the potency of the environmental forces shaping human development in the very earliest years of life – and they seem to be substantial and to give the lie to mechanistic formulations of IQ fatalism – human beings continue to be affected by, and respond to, the general and school environment in which they find themselves as they grow older. A milder form of fatalism that might easily emerge from the above research – ‘it’s all over by the age of three’ – should

give way to an understanding of the ways in which we all can continue to learn throughout our lives.⁶¹

A key aspect of a socialist education programme, to be discussed below, is how to endow individuals with an education that has a low centre of gravity – one that gives the basis for learning and adapting to changing circumstances in one's life and the general environment. Such a well-grounded education not only promotes the vaunted flexibility that is so commonly heralded as a key aspect of economic efficiency (but is often merely a euphemism for the imposition of economic insecurity upon workers), but also enriches human life with an enhanced capacity to learn new things on a life-long basis; it also contributes to an alleviation of the kind of material insecurity that is associated with individuals whose skills are precariously limited to a narrow repertoire.

Current fashions for biological reductionism, such as the claim that there are genes for religious belief, are clearly an aspect of the readiness of contemporary society to attribute facility, skill or capacity to natural ability. But it is also commonly a sign of a societal failure, and a willingness to use biology as an excuse – the Anglophone who announces to a Dutch person, in English, that she has no gift for foreign language, and the Dutch person replying in mildly accented English that he has the same problem. The common opinion that singing in tune and moving in a graceful or agile manner are deeply embedded natural gifts would seem odd notions in societies where these capacities emerge as part of a child's upbringing. Johann Sebastian Bach, when teaching music to his own or other people's offspring, took it for granted that all children, including those with learning difficulties, were capable of mastering the fundamentals of musical composition: it was a craft that could be mastered by dint of hard work. Bach, of course, recognised that some children evinced originality and taste⁶² in this sphere, while others did not. But the ability to participate in music was, for him, a widely distributed characteristic of humankind in the context of proper instruction and individual application. It was not an esoteric, rare skill possessed only by a limited number of individuals having special gifts.⁶³

Are, then, all individuals equally able? The very question implicitly presumes the existence of a scalar that can act as a summary measure of human capacity – something resembling the psychologists' *g*, from which the IQ statistic was derived as an empirical surrogate: only under such conditions would it be meaningful to rank how able people are. For national economies, as we have seen in Chapter 10, the presence of a unique measure of economic capacity and potentiality is a dubious proposition: the conceptual and substantive obstacles to the creation of such a metric in the context of individual human capability are likely to be even more formidable, if not insurmountable.

But even if we retreat from asserting a belief in the existence of a unique overall mental capacity that can be measured, and merely presume the

presence in individuals of a range of such capacities, our understanding of the relationship between natural and acquired ability is a complex one. If I may use a slightly facetious example, let us presume that among the Mongol population of the thirteenth century there was a (normal?) distribution of natural facility in horse-riding ability (taking into consideration the possibility of special tuition for the children of the elite). Any such variance in ability among Mongols, however, would have been swamped by the differences between the standard of Mongol horsemanship and that of, say, the average European. It is the European unfulfilled potential in horsemanship that is of especial interest, and this is indicated in a substantive way by the standards set by the Mongols: what would have appeared as exceptional or even miraculous ability in Europe would have been part of normal social upbringing in a Mongol context.

This wasted potential and truncated development, emanating from childhood experience, and in the context of class divisions in society, must be a central focus of socialist analysis and activity. Academic research largely confirms what most of us have always taken for granted:

social-class differences in the quality and quantity of children's activities do not largely stem from fundamental differences in parents' desires to help children develop or cultivate their skills and talents. Instead, these differences stem from parents' differential access to a wide range of resources, including money, the human capital to know how best to assess and improve children's skills, the cultural capital to know how best to cultivate children's talents, and the social capital to learn about and gain access to programs and activities.⁶⁴

This chapter will conclude by outlining a long-term strategy of human development in the context of formal education. In order to remove the discussion from the realm of speculation, the resource commitment made by the well-off to the upbringing of their own children is used as a point of comparison. In no way is it suggested here that the present practices of elites dictate appropriate priorities for human development, or that the upbringing accorded to their children represents some sort of an ideal of the repertoire of attitudes and faculties that a child might acquire. The helplessness, passivity and immobility imposed upon affluent modern children when they grow up in a low-density, car-oriented suburb might be invidiously contrasted with earlier generations of working-class adolescents, many of whom were impelled, but perhaps also empowered, by circumstances to take responsibility for their own lives and those of other family members.⁶⁵

In the cognitive domain, elite standards for the teaching of academic subjects may have to be combined with greater attention than is given at present to so-called practical skills, including an enhanced familiarity with how things work at a mechanical and biological level, if individuals are to

be liberated from magical thinking or a feeling of helplessness in the face of the complexities of contemporary technological culture. In a host of ways, the present-day upbringing and education of elite children is not to be emulated. But the compendium of capabilities acquired by the children of this exclusive group in society, and the human and financial resources necessary to bring this process to fruition, take the question of upbringing and human transformation away from the realm of utopian speculation and into the domain of substantive goals and targets. The issue, however, is not simply one of providing a successful programme in the context of schooling, since children, like the rest of us, live in the world: it appears that even well-designed schoolroom exercise programmes for children are no substitute for children having outside environments that are usable for play.⁶⁶

In the 1960s, the greatest technological power in the world devoted substantial resources to sending a member of the delicate species *Homo sapiens* to the moon, and is now planning a similar expedition to the planet Mars, partially fuelled by the adolescent presumption that this is all part of the greatest possible human adventure. Given the sinister purposes to which these technologies have also been devoted, these activities appear wasteful but innocent. But a far more interesting and challenging adventure, and a more productive use of resources, would be a serious exploration of the limits of human potential and development. Unless we accept the implicit notion of a genetic fatalism – that there is nothing much that can be done in this area – can we not proceed, using methods already well-established among certain classes of society, to explore not other worlds but our own potentialities as human beings?

Culture

The cultivation of formally acquired skills is central to economic and social development. But other factors, as we have seen, also play an important role in this process, such as the presence in society of a range of *in situ* skills. These capabilities, such as a facility for fixing things, bargaining, preparing food or making music, are often cultivated in the absence of any institutional tuition. Another factor that appears to play a critical role in development is the nature of a society's culture – the set of values, attitudes and habits that are inculcated into individuals from birth as they go about daily life.⁶⁷ Cultural attitudes embedded in the fabric of society can affect its ability to engender social and political cooperation; cultural values and capabilities can also condition whether a society can respond flexibly to economic, technological and social change. Societies embodying cultural values that lend themselves towards cooperation and permit them to respond flexibly in the presence of change are, it is argued, more likely to experience economic and social progress.

But the concept of culture can be a treacherous one. It has the potential for being used in an elastic manner that makes it incapable of being refuted, so that aspects of economically successful cultures become identified *ex post* with efficacious cultural characteristics: if formulated in this manner, we may find ourselves replacing the genetic fatalism outlined above with a softer, but equally consigning, version in which the dysfunctional characteristics of certain cultures act as binding constraints on development. At what point in history do these deep characteristics reveal themselves? And how do we disinter, and predict, the incipiently productive aspects of a culture when that population is mired in poverty – the lazy Japanese of the beginning of the twentieth century and the hopelessly superstitious and tradition-enslaved Ashkenazi Jews of the nineteenth?

Any attempt to make a facile linkage between development and culture can quickly devolve into a morass of cause and effect. The economic historian David Landes assures us that cultural factors in the Europe of 1500 made its subsequent global dominance a certainty;⁶⁸ the political scientist Samuel Huntington makes a similar assertion about the success of South Korea compared with Ghana in the decades after 1960.⁶⁹ But no contemporaneous figure isolated this factor to prognosticate the subsequent successes of, respectively, Europe in 1500 and South Korea in 1960. On the contrary, Ha-Joon Chang, in a chapter entitled 'Lazy Japanese and Thieving Germans', notes a tendency, at least as far back as the nineteenth century, to use cultural deficiency as an explanation for 'endemic' economic backwardness.⁷⁰

And, conveniently, the interpretation of cultural factors can often reverse itself in the wake of economic success, with the so-called Confucian heritage now no longer a burden imposing conformity and lack of innovation on its population, but emblematic of the diligence and high educational standards of East Asia. For most of the post-independence period, the Hindu-centred culture of India had been the focus of highly pejorative analysis as a force constraining economic development in that country.⁷¹ Recent achievements of the software industry in India and of individuals from this background living abroad have generated a more positive interpretation of that nation's ancient culture in relation to the possibilities for economic development: its mathematical learning, going back to the invention of the number zero, its history of entrepreneurial activity and its family structures. The use of culture as an explanatory variable for long-term economic success can thus easily devolve into journalistic chit-chat and, in a perhaps more sinister fashion, a fatalism – softer than a genetically based racial inferiority, but just as damning – that some societies are inevitably mired in a dysfunctional culture, one that acts as a binding constraint on progress.

Progressive analysts have, therefore, objected to the fatalism embodied in the presupposition of an autonomous role for culture, because it can be seen to preclude conscious efforts to transform and develop a society; in addition, analysis in terms of cultural backwardness can come across as

condescending, or worse. Furthermore, an active role for culture is traditionally downplayed in traditional Marxist intellectual architecture because culture is seen to be merely part of the superstructure of society. Such an approach, however, can have the unfortunate effect of generating a passive attitude to this powerful force, as can be seen in the account given by Richard Lewontin of time spent by himself and Carl Sagan with creationist Christians in Arkansas:

Sagan and I drew different conclusions from our experience. For me the confrontation between creationism and the science of evolution was an example of historical, regional, and class differences in culture that could only be understood in the context of American social history. For Carl it was a struggle between ignorance and knowledge.⁷²

In Lewontin's view, there is little that can be done about ignorance that emerges from poverty. By contrast, it is Carl Sagan's forthright and sincere advocacy of science and rationality, in his books for a popular audience and his television series 'Cosmos', that have influenced the world in a progressive direction: a more passive approach that is content merely to ruminate over the cause-effect relationship between fundamentalist religion and scientific ignorance, and that presumes that history consigns certain groups to backwardness, is not conducive to bringing about social change. In another context, we can all be grateful that Jamie Oliver, far from being discouraged by the relatively low level of the culture of food preparation in his native Britain, has used this fact as a spur to become a great public educator in this domain, finding for himself an eager audience, even in France.

And cultural traditions can be 'created' from seemingly weak foundations,⁷³ the most dramatic examples in recent times being the transformation in decades of a number of East Asian cultures – Japan, Taiwan, Singapore – into masters of technological and social infrastructural aspects of Western capitalism that had been hundreds of years in development: the supposedly inherent characteristics of these cultures were rarely detected before the fact of their substantive economic achievement resulting from conscious and determined policy. More mundanely, we observe the success of small groups of determined individuals in British music education, in the form of the Associated Board and other organisations, in transforming what had been known as a land without music in the nineteenth century into a respectable musical culture in the twentieth.⁷⁴

These developments can always be traced to deep cultural aspects, such as the so-called Confucian ethic in Asia, or the musical achievements of British culture in the fifteenth to the seventeenth centuries, but these are *ex post* conclusions: a nation's deep traditions may serve as focal points for subsequent developments, but cultural dispersion with any degree of depth in the modern world is usually the result of conscious acts of public

policy. Thus, it is indubitably true that the luminous creative figures of late-eighteenth- and early-nineteenth-century Germany – Goethe, Kant and Beethoven – presaged the possibility of a widespread literate culture in an otherwise retrograde area of Western Europe, but this transformation was not inevitable or organic; it only came about through the interaction of rapid industrialisation and urbanisation with an intense programme of state-funded education.

And such acts of public policy, if sustained, may then enter into the fabric of the culture itself: the reason why Richard Hofstadter's *Anti-Intellectualism in American Life* of 1962 still reads so well today is, ironically, that he was wrong in his pessimistic trajectory of cultural development in the US. The picture he paints is of a society weighed down by evangelical religion and by a business sector that is 'in the vanguard of anti-intellectual culture',⁷⁵ and, furthermore, suffers the unintended consequences of the widespread introduction of John Dewey's ideas on progressive education into the school-room (see Chapter 7):

Dogmatic, apocalyptic predictions about the collapse of liberal culture or the disappearance of high culture may be right or wrong; but one thing about them seems certain: they are more likely to instill self-pity and despair than the will to resist or the confidence to make the most of one's creative energies. It is possible, of course, that under modern conditions the avenues of choice are being closed...but in so far as the weight of one's will is thrown onto the scales of history, one lives in the belief that it is not to be so.⁷⁶

Fifty years on, the issues posed by him are still being engaged with, not least because the constituency on the side of liberal culture and its 'will to resist' has remained a formidable force in society. Undoubtedly, the single most powerful factor that has shaped this constituency has been the cumulative effects of the expansion of publicly funded education. Various other public institutions have played an important, if subsidiary, role, emblematic of which in Britain would be the half century of wildlife programmes on the BBC by David Attenborough.

An example of the role of public policy in cultural affairs concerns the controversy surrounding the transmission of advertising to children. This issue comes into particularly sharp focus in the US, with a signal event being Ronald Reagan's vetoing in 1988 of a bill that would have limited advertising during children's programming and required broadcasters to provide educational programmes for children as a condition of licence renewal.⁷⁷ Would even Friedrich Hayek have supported Reagan here in the latter's defence of the spontaneous order – the blocking of any governmental interference in the natural process by which advertisers influence the opinions of children in a free market? Reactions from those concerned with children's welfare

were furious: 'Every aspect of children's lives – their physical and mental health, their education, their creativity, and their values – is negatively affected by their involuntary status as consumers in the marketplace.'⁷⁸ Some have suggested that 'In the late twentieth and early twenty-first centuries corporate-produced children's culture has replaced schooling as the producer of the central curriculum of childhood' and that commercial dynamics are 'forces that impose themselves into all aspects of our own and our children's private lives'.⁷⁹

The assertions in the latter quotations lack credulity. By failing to locate the problems discussed in class terms, they ignore the fact that the 'forces that impose themselves into all aspects of our own and our children's private lives' do not do so equally throughout society. The children of the elite and upper income levels in the US and elsewhere continue to reproduce, by any objective measure, credible levels of school achievement and replication of high culture. Their parents cope with a commercialism that is perhaps more intrusive than that in the past, but remains more of an annoyance than a threat. In addition, other groups in society are not merely passive recipients of commercialism: it would be a mistake to underestimate the presence of spontaneous creativity in society, sometimes taking the form of rebellion against, and sometimes a creative reshaping of, the commercial culture. It is indubitably true, however, that for much of the population, the high aspirations of parents for their young children run into ever greater obstacles, unknown to society's upper levels, in opposing commercial forces: the harassed single mother using the television or computer as a child minder is a familiar image.

With little apparent willingness to engage in any explicit class analysis of the question of cultural dissemination, we see in its place the *ersatz* radicalism of cultural studies: the problem of transmission of culture is implicitly surrendered as a hopeless task. Cultural studies refuses 'to equate "culture" with high culture [and] attempts to examine the diversity of a society's artistic, institutional, and communicative expressions and practices'.⁸⁰ It cultivates in children a media literacy that 'respects children's intellectual ability to deal with the complexities of power, oppression, and exploitation' rather than being placed in a 'contemporary right-wing, test-driven educational context'.⁸¹

The words are brave, and the sentiments are admirable, but 'arming' children by having them make a critical analysis of some aspect of commercial culture is ultimately a negative, defensive strategy. In the absence of substantive knowledge of the cultural heritage and standards of excellence as points of reference, children (or anyone else) are incapable of making anything but the most vapid and superficial of cultural critiques. By contrast, the elite of society attempts, and often succeeds, in giving its children an education in the household, school and broader environment that is 'progressive' – flexible and interactive, leaving room for the cultivation of creative impulses

and yet demanding of achievement of substantive knowledge. Critiques of commercial culture emerging from such children, encouraged to appreciate Sophocles and Shakespeare, can have a richness unknown to those who have solely been subject to a cultural studies perspective.

Public policy thus plays a crucial role in cultural evolution, most powerfully in the context of public education. It also influences culture through creations such as Attenborough's BBC programmes and by decisions on whether or not to constrain, for instance, advertising to children on television. But it is indubitably true that cultural development, rather than being the product of conscious, or even self-conscious, acts of public policy, often emerges as an aspect of Hayek's spontaneous order, such as the appearance of video games (though somehow one suspects the good professor, born in nineteenth-century Vienna, would have been uncomfortable with this example). In such circumstances, the danger exists that well-meaning cultural guardians may impose a straightjacket on forms of cultural innovation emerging in unexpected places: there are endless examples paralleling that of the incipient genius of jazz, the young Bill Basie, inhibited by a music teacher accepting no deviation from the study of 'serious' (European classical) music.⁸² The Count Basie problem points to the conflict between the passing on of a cultural heritage and permitting that culture to evolve, flourish and innovate in a spontaneous manner. In the case at hand, there is the additional tension – existing in many contemporary cultures but quintessentially in the US context – between a dominant (European) culture and an emergent (at the beginning of the twentieth century) African-American cultural (in this case musical) identity. An easy resolution would be to take a mediated, moderate view on this matter. But such an approach would be inappropriate. The fact that there is ambiguity in the nature of the cultural identity to be passed on to children can be used as an excuse to pass on a weakened, anodyne and superficial version of the cultural heritage, perhaps by an exclusive focus on a supposed core of reading, writing and arithmetic: any such attempt at a Scholastic differentiation between form (the skill of reading) and content (the substantive material being considered) is unlikely to be successful.

The myths surrounding cultural spontaneity, of culture emerging naturally from certain individuals and groups (often, in a US context, projected upon African-Americans by the majority population), militate against a focus on the need for early exposure and formalised training in many highly valued human skills, for instance, music. As seen in Chapter 7, this romanticised emphasis on spontaneity, often associated with progressive education and left-wing political views in general, can even impinge upon the teaching of standard English in schools. In the resulting circumstances, right-wing advocates can often pose as the defenders of education and culture (a particularly absurd happenstance in a US context, with the strong tendency of its right wing to manifest philistine and anti-science attitudes)

and as educational reformers for children from poorer backgrounds. This peculiar situation emerges from the central dilemma surrounding progressive education: whatever its suitability for children from families of a cultural elite, it often appears to be inegalitarian and inappropriate for children from ordinary or lower-class backgrounds. Under present conditions, such children may well benefit from a more traditional education, with elements of rote learning. As noted in Chapter 7, one of the clichés of present-day educational debates is that Asian nations, often highly successful in international testing races, complain that their methods are not suitable for producing the kind of creativity emerging from the best Western elite education.

The key phrase in the paragraph above is 'under present conditions'. For rich countries, it should be possible to dissolve any such trade-off between the spontaneity and creativity of progressive approaches to education and the egalitarianism associated with traditional approaches: it is a question of applying the appropriate focus, energy, enthusiasm and, above all, resources – a replication for all children at birth of the kind of opportunities that are now provided only to the children of an elite. The major obstacle to moving in this direction is the will to do so.

The inevitable limitations of any such programme, however, must be noted. The great mass of children, even in rich societies, grow up bereft of the cognitive repertoire, self-confidence and capacity for self-realisation that the upper range of society helps to inculcate into its children even before they enter formal schooling. Any attempt to use the public school system as a vehicle for the installation of equal opportunity in society imposes upon the school system an insuperable task – it must eliminate cognitive gaps rooted in home background and instil in children a capacity for the formulation and execution of lifetime goals of the kind that elite children are trained to do (partially by emulation of parents' behaviour) at home. Schooling is the most powerful single social mechanism for the equalisation of opportunity within society, but even the best-constructed schooling and even preschooling programmes are unlikely to be a sufficient remedy: these programmes are likely to be more successful in societies that are not overly unequal in the first place.

Strategies utopian and practical

It is thus appropriate to re-engage with the socialist goals enunciated in the Introduction. With a focus on its individualistic aspects linked to self-realisation, socialism is here perceived as a form of social organisation that gives to all individuals an opportunity for self-realisation and development of personal capacities. Such an approach implies an access to upbringing and education from the earliest stages of life that is not contingent on, and compensates for, limitations in household circumstances, a mitigation of the forms of deprivation and insecurities to which households are subject,

and opportunities for employment that involve full exercise and realisation of personal capacities.

Even when considering human liberation from this individualistic perspective, with its focus on upbringing and schooling, the issues surrounding living in the world cannot be ignored. Thus, an 'upbringing and education that is not contingent on limitations in household circumstances' not only serves as a path to individual self-realisation, but plays a key role in any strategy to mitigate or eliminate economic and social inequality and to promote democratic control in daily life and in the broader society. But causation also proceeds in the opposite direction: the presence of deprivation and differential circumstances in the first place greatly complicates the execution of an educational programme of any real ambition, since with pronounced social and economic inequality, the household may fail as a vehicle of support for a child's formal education.

Of at least equal significance, however, is the role of the household itself in the child's upbringing as a source of *in situ* learning – the attitudes, behaviour, habits, cognitive development and implicit knowledge that emerge from that source. The diversity of experience in households can, as we have seen above, be a source of enrichment for society as a whole. But in societies with severe forms of social and economic inequality, as well as geographical, ethnic and racial segregation, what children learn in their households may diverge substantially and dampen any equalising effects of a common formal education. In addition, the work environment functions as a further source of *in situ* learning that can rarely be duplicated by formalised schooling.

We thus have a large literature confirming the efficacy of early childhood intervention in various domains, most especially of preschool education from very young ages, with the most robust claims for long-term success in the non-cognitive domain.⁸³ It is worthwhile, however, proceeding with care in this matter: it has been suggested that indiscriminate use of preschool facilities can deprive infants of important interaction with parents.⁸⁴ Furthermore, one must not pretend that even the most efficacious programme starting from birth can fully compensate for what can be offered in terms of life experience to children from the upper strata of society, even in the relatively mundane sphere of summer vacation activities. The outside world impinges even on the domain of physical activity, with school programmes of far less importance than the nature of the built environment in which the child grows up and the opportunities it offers for spontaneous physical activity (play).⁸⁵ Social class plays a pervasive role in the structuring of 'being a self' in a broad range of social contexts, including the school, which serves, in many contexts, merely to reinforce existing class divisions.⁸⁶

With all these caveats, formal education is, and has been, the single most powerful public policy vehicle for social transformation in rich countries

over the past century. The purpose here is to investigate the extent to which an enhanced educational policy can be used as an instigator and conveyor of social change – one element, albeit a key one, in the promotion of individual self-realisation, social equality and democracy. The path to be pursued is a circuitous one, the first step being a review of the contemporary debate on the relative economic efficacy of smaller class sizes versus ‘better’ teachers. The discussion then proceeds to a consideration of the nature of private, and most especially elite private, educational institutions. The purpose here is not to praise or blame the latter, but to give a concrete form to the resources involved in creating ‘palaces for children’⁸⁷ in a twenty-first-century manifestation.

The class size debate is peculiar, because it involves one group of economists arguing that additional expenditure of resources on this activity makes little or no difference to ‘output’. The rationale for this claim – an unusual one in typical economists’ discourse – of a ‘presumed absence of a relationship between resources and student outcomes’ was that ‘bureaucracy, unions and perverse incentives cause public education to squander resources, severing the link between resources and student outcomes’.⁸⁸ The debate itself has taken a rather arid form, with one economist, Eric A. Hanushek, reviewing existing studies and finding little benefit to reductions in class size, and another, Alan B. Krueger, taking an opposing position, claiming to find a significant benefit to class size reductions when the studies reviewed are properly weighted.⁸⁹ Additional support for the latter position is claimed on the basis of Project Star, a large-scale experiment conducted in Tennessee in 1985–9, with children randomly assigned to classes of different sizes.⁹⁰

The editors of a book devoted to this debate offer the anodyne conclusion of a convergence between the positions of Hanushek and Krueger, importuning that ‘All should be able to agree that targeting the expenditure of new funds in ways that have proven to be effective is far preferable to “throwing money at schools” without regard to how it will be spent.’⁹¹ The conclusion drawn is incorrect. There has not been a convergence between the two positions: the Hanushek faction has been decisively victorious in political terms.⁹² In both the UK and the US, doubts sown about the inefficacy of additional school expenditure have merely served as support for those favouring the managerial, and relatively inexpensive, paths to reform in academies and charter schools discussed in Chapter 7.

The debate itself has a range of curious aspects. Both sides proceed to deal with this most fundamental of human activities from a self-consciously economic point of view, in the form of benefit–cost calculations on the efficacy to society of class size reduction (presumably, but not always clearly specified, as a surrogate for increased expenditure on education). Even within this economic framework, the purview of the approaches pursued is narrow, being largely focused on possible increases in individual incomes that might accrue to children taught in smaller classrooms,⁹³

substantively ignoring cognitive and non-cognitive spillover effects and possible consumption benefits to children emerging from increased school expenditure. The attempt to structure these questions in strictly economic terms leads to some strange statements: 'Apart from the opportunity cost of students' time, the number of teachers hired per student is the main determinant of the economic cost of education.'⁹⁴ It is intriguing to contemplate the phrase 'the opportunity cost of students' time' in the context of ten-year-old children – does it refer to the wages foregone from working in factories? And while it is true that teacher numbers and remuneration predominate in school costs, to identify these costs solely with expenditure on teachers is to obscure the range of amenities – sports facilities, music lessons, school architecture – that can make the educational process less unpleasant for children and may be aspects of both cognitive and non-cognitive enrichment.

A second curious aspect of these debates is that the alternative to increased expenditure on education – teacher quality – is not measured in terms of objective parameters, because 'The extensive research addressing this has found little that consistently distinguishes among teachers in their classroom effectiveness... credentials, degrees, experience, and even teacher test scores are not consistently correlated with teaching skill.'⁹⁵ Furthermore, a controlled experiment is cited that finds no improvement in teacher performance when an enriched induction and mentoring programme is introduced.⁹⁶ With, in general, teacher quality thus left a mystery, the path is open for systems of performance-related pay (linked to student results on centrally administered examinations) with a range of incentives of a positive and negative kind.⁹⁷ The predominant tendency, as we have seen in Chapter 7, most especially in the US and the UK, is firmly in the direction of marketised solutions and the imposition of Taylorist managerial schemes on teachers and their 'performance'.⁹⁸

The empirical studies upon which these managerial strategies are based have a weak foundation. The claim that academic qualifications are of no consequence in teacher quality emerges from data so generalised that they aggregate teachers working at all grade levels.⁹⁹ The resultant general dismissal of the importance of academic qualifications in teaching performance would be per se absurd if taken literally at the upper secondary level, where the essential role of such qualifications in, for instance, upper-level science teaching and mathematics teaching is indubitable (see Chapter 7); managerialist schemes are often modified to give targeted higher pay for teachers in these groups, at the expense of women, who are more likely to be qualified in equally important subjects such as English. The associated dismissal in this literature of enriched induction and mentoring, and, by implication, all forms of on-the-job training for teachers, is deeply counter-intuitive, and contrasts with prominent counterexamples such as Finland, discussed in Chapter 7, and the recognition sometimes noted, even in

managerial circles, of the efficacy of teacher mentoring and collaboration within and between schools.¹⁰⁰

The conclusion commonly reached, verging on tautology, that the best available measure of quality is the teacher's value-added contribution to student achievement¹⁰¹ is a convenient one for managerialist advocates of payment by results for teachers. The naïve, or perhaps disingenuous, use of statistical regression techniques suggests that good teachers can overcome even problems of child poverty, with individuals attracted into teaching and then motivated by appropriate rewards and punishments. Characteristic of the difficulties emerging from this approach is 'The Elephant in the Living Room' – the powerful tendency among teachers to avoid teaching in more deprived schools, with 'the desire to teach easier students... typically a stronger motivator than the desire to improve salary': differentials of up to 50 per cent in some US contexts are needed to attract teachers to deprived schools.¹⁰² The author of this article, having noted these facts, still keeps faith with the managerialist approach, advocating generous financial rewards for those teachers who produce 'unusually big gains in student learning', with termination for those who cannot produce results.¹⁰³

Do advocates of managerialist approaches seriously believe that the problems of teaching in deprived schools can be alleviated in this manner? The US profession is already arduous by world standards, working time required at school per year being between 14 to 20 per cent longer than the OECD average:¹⁰⁴ are Taylorist management procedures and scolding individuals for a 'desire to teach easier students' the appropriate way to attract individuals into teaching as a lifetime profession? Teachers wishing to avoid teaching in deprived schools, most especially if they enter with advanced academic qualifications, may feel that their ability to impart knowledge will be impossible in the context of the issues of student alienation and classroom discipline endemic in poorer areas.¹⁰⁵ And even if we could succeed in isolating a miraculous group of good teachers who fortuitously combine academic knowledge and pedagogic excellence with the very different talents associated with the control of masses of disaffected children, what can we say about the motivation of individuals who elect to teach in these deprived areas merely on the basis of enhanced remuneration? The search for a hard-headed, inexpensive solution to the problems associated with deprivation is a distraction from serious confrontation with this issue. It is, perhaps, the last gasp of the free-market magical thinking of the 1980s, with damaging consequences for the lives of children.

Opponents of this managerialist approach to education have maintained a defensive posture for a range of reasons. Most straightforwardly, those critical of charter and academy schools, and of the paying of teachers by performance, are seen to be supportive of the teaching unions and their 'restrictive' practices, and in general of the status quo: their positive recommendations are seen to involve nothing more than throwing money

at the problem. Of even greater significance is the fact that opponents of managerialism offer little prospect of change that is beneficial to the whole community: their prescriptions are largely identified with studies supporting the benefits of increased expenditure and reduced class size for the alleviation of the cognitive and non-cognitive deficits of deprived children.¹⁰⁶

More generally, there has been a recent focus on the fact that mediocre performance on PISA and other international tests in the US can largely be accounted for by failures at the low end; high levels of inequality and relative poverty are generating what would otherwise be good, if not exceptional, results on these tests (see Chapter 10). While this emphasis on inequality is salutary in its own terms, it can lead to a presumption that there is no issue involving resources and education for normal (non-deprived) children, at an extreme suggesting that achievement in school (or in future income) for such children is a reasonable reflection of the child's natural endowment in terms of, for instance, IQ.

For the elite of society, there is every indication that this kind of fatalism about the cognitive development of their children is absent. Education is aggressively pursued, even at the preschool education level, despite the advantages already accruing to the well-born prior to entry in preschool programmes.¹⁰⁷ At least for the US, therefore, it is no longer appropriate to focus on the educational deprivation of poor children as the sole negative outcome associated with inequality: in the last several decades a substantial increase in the association between family income and children's academic achievement for families above the median income level has emerged. These growing gaps in educational attainment between the middle and the top are linked to the effects of growing income inequality on the ability of households to act as platforms for the educational attainment of their children. But there seems to be an additional component: an increasingly explicit focus, at the upper end of the income spectrum, on parental investment in children's cognitive development.¹⁰⁸

It is thus instructive to pursue this question from a more positive point of view: what benefits are to be gained, and what are the limits, to childhood development in cognitive and other domains when resources are unconstrained? A way of grounding this issue in contemporary experience is to examine the benefits accruing from elective private education. Even if one accepts for the moment the presumption that 'Nobody is going to pay between £10,000 and £30,000 a year for an education that is just a wee bit better than the free option',¹⁰⁹ the question of what is meant by 'better' is not self-evident; one indubitable motivation on the part of parents is the prospect of smaller class sizes than in the public sector, though the question of why parents put such a high priority on smaller classes, and their substantive efficacy in the context of private education, are far from trivial issues.

The very top private schools in the US and the UK are massively over-subscribed, despite rapidly rising fees. The median tuition figure for elite private schools in New York is almost \$40,000 a year, with additional costs (covered by fund raising, etc.) bringing expenditure per pupil to about \$50,000, roughly two and a half times the typical expenditure per public school pupil in New York State.¹¹⁰ In the UK, expenditure per pupil in private day schools is two to three times that in state schools.¹¹¹ These figures are only rough approximations of the resources devoted to each student, with, for instance, no weight given to the rich endowments of land and buildings associated with the most venerable of these private schools.

In the US, the intensity and supposed neuroses of the parents of these children are often mocked in the press: 'a group of parents sent a seven-page e-mail detailing concerns: there were not enough snacks, not enough "worldly" snacks like seaweed, zucchini bread with quinoa flour and bean quesadillas (so long as the beans came from BPA-free tin cans)'.¹¹² It is, however, precisely this kind of parental engagement in the life of the school and its activities that results in a 'deliberate blurring of sharp, compartmentalized distinctions between family and school [giving the latter a] continuity and congruence of institutional purpose... [The] school is like an extended family'.¹¹³ Involvement of this kind is not unknown in publicly funded schools, but the relative class homogeneity and professional backgrounds of the parents involved in elite schools enhance the intensity of focus and the impact of parents' opinions on the life of the school, so that, for this exclusive subset of the population, it approximates the democratic ideal of a community-centred institution discussed in Chapter 7.

The rich physical resource endowment of elite institutions is an issue of major significance: 'a school building tells students who they are and how they should think about the world. It can help to manufacture rote obedience or independent activity; it can create high self-confidence or low self-esteem.' Even for children at the preschool level, the kinds of resources provided give 'a silent but dramatic message. Good, sturdy play equipment, bright, comfortable rooms, and lots of interesting toys not only make kids happy but also tell them they deserve the best. The treeless, nearly grassless backyard of the low-cost child-care facility... delivers the opposite message, one that even the kindest and most skilful teacher cannot totally contradict... the lessons learned in nursery school may be reinforced (or undermined) years later.'¹¹⁴

The nature of the elite school's superiority in resource endowment and the priorities set may vary between institutions, reflecting both the physical context and cultural priorities. Thus, the physical plant of the New York City-based Avenues school offers a mere 215,000 square feet for its 760 pupils.¹¹⁵ By contrast, the British Wellington School, 'set in 400 acres of lush Berkshire countryside', 'has 16 rugby pitches, two floodlit astro turf pitches, a state-of-the-art sports hall, 22 hard tennis courts, 12 cricket pitches, an

athletics track, two lacrosse pitches and six netball courts, a shooting range, an acclaimed nine-hole golf course', as well as 'six art studios, a professional recording studio, several concert venues, its own theatre and TV crew'.¹¹⁶ A prep school in New Mexico of 900 students has six classroom buildings, two libraries, an arts centre containing a theatre, art gallery and auditorium, and a sports complex of three gymnasiums, two football fields, four soccer fields, three baseball diamonds, 16 tennis courts and a nine-lane, all-weather track.¹¹⁷

What can be lost in mockery and voyeuristic envy of elite upbringing of their children is a focus on what the well-off are trying to do: like all such groups through recorded history, modern elites are attempting, even if on occasion quixotically, to prepare their offspring to rule, or, in more demotic contemporary discourse, for 'leadership' in a multinational context. Thus, in the Avenues school 'Mandarin or Spanish immersion begins in nursery school; each kindergartner gets an iPad in class. Students will someday have the option of semesters in São Paulo, Beijing or any of the 20 other campuses the school plans to inaugurate around the world'.¹¹⁸ Furthermore, elite groups often give their offspring an opportunity to assimilate culture at a high level (though levels of ruling group philistinism vary across history and geography), with elite New York City schools having a range of offerings including Zen Dance, Roman Travel Writing and a theatre class on 'The Nature of Revenge'.¹¹⁹

Of even greater significance than any exotic offering or eye-catching expenditure of facilities and resources is the striking extent to which these elite institutions claim to deviate from the supposedly tough-minded, results-driven ethos of the managerial approach imposed in the publicly funded sector. Clearly, these schools are expected to deliver results, and invariably succeed, with, in the UK, an extraordinary concentration of entrants to Oxford and Cambridge coming from such institutions, and then on to the upper-level professions. There is, however, at least some evidence that the lifetime advantages accruing to elite school children cannot be accounted for fully in academic terms.¹²⁰

It would be tempting to attribute any residual in worldly success of private school graduates over others to the contacts and interactions accruing both inside and outside these schools, as well as to stocks of family wealth. In the contemporary world, however, these financial and social advantages are complemented by a strategy within elite schools that appears, astonishingly, to evoke the liberationist ethos of the 1960s. If the rhetoric of these institutions does not suggest an adherence to Summerhill's fundamental principle that 'children should not be compelled or pressured to learn or expected to meet "standards" of any sort',¹²¹ it appears equally distant from contemporary managerialist approaches to learning. For the headmaster of a leading boarding school in Britain, Eton College, what a school fundamentally is about 'is to do with holistic development – the

all-rounded person; enabling young people to develop that true sense of self-worth which is, in my view, absolutely essential if [they] are going to be able to stand up for a purpose other than themselves', so that at Eton 'there are no lessons after lunch three days a week – that is time for sports, drama, music; each pupil has personal tutor'.¹²² A particularly piquant observation on the need for such an approach has been made in the context of an elite US prep school: 'It is sometimes fashionable to stereotype "sharing and caring" efforts as sentimental psychobabble, attempts to accommodate feel-good student and teacher preferences that have nothing to do with academic learning and are often undermining of it. But this critique needs tempering... the desire for decent community is a practical judgment about good workplace conditions.'¹²³ Dealing with the whole person and the creation of a community of learning are substantive, practical aspects of the education of individuals expected to hold power and make decisions in contemporary society.

In this context, we may examine the Eton headmaster's guide to building character in teenagers:

1. Encourage them to aim high.
2. Celebrate their diverse individual achievements.
3. Give them genuine responsibility to take the lead.
4. Allow them to fail and learn from the experience.
5. Don't treat them all the same way, and show them understanding.¹²⁴

If principles 1 and 3 evoke the traditions of empire, with the inculcation of the confidence and arrogance necessary for children to perceive themselves as leaders from the youngest age, the remaining ones speak to the intensity of the learning process pursued at Eton: the attention to individual needs underlines why small class sizes are the *sine qua non* of all private school education.¹²⁵ In lesser private schools, a perusal of websites indicates that small class sizes, with a concomitant promise of individual attention from teachers and an improved atmosphere for learning (often, apparently, a euphemism for a lack of bullying), sometimes exist in the context of modest formal qualifications for the teaching staff, reinforcing the recent claim by an educational researcher that 'The reason that class sizes in independent schools are so small is because they need to be, because the teaching is less good than in the state sector.'¹²⁶ On the whole, however, this claim, an attempt to defend state school teachers against attacks by managerial-style reformers, appears to be unjustified. With teachers' wages not significantly worse in the private sector, private schools are able to attract teachers with higher qualifications than those in the state sector because of superior working conditions – better facilities and fewer hours worked per year.¹²⁷ Perhaps most significantly, the students' class background, combined with the private school's offering of small classes and its detailed interaction with

parents, transforms the problems of discipline and truancy endemic to the state sector into a minor and occasional irritant.

At the elite level, the presence of the dilemma posed above, in which a choice has to be made between class size and teacher quality, is irrelevant. Small classes and related expenditure in elite institutions are vehicles for the fulfilment – here in the real world – of the ‘utopian’ goals specified for all children in a socialist society in the Introduction. Thus, children from this limited group are offered the opportunity ‘for self-realisation and development of personal capacities’, as well as ‘the ability to exercise control over their working and living environment’ and ‘in the context of the broader society’. As we have seen above, current research tends to emphasise the long-term efficacy of preschool tuition in terms of the accruing of non-cognitive benefits. As a recent popular study has suggested, ‘What matters most in a child’s development...is not how much information we can stuff into her brain in the first few years. What matters, instead, is whether we are able to help her develop a very different set of qualities, a list that includes persistence, self-control, curiosity, conscientiousness, grit, and self-confidence. Economists refer to these as non cognitive skills, psychologists call them personality traits, and the rest of us sometimes think of them as character.’¹²⁸ But making too sharp a distinction between the cognitive and non-cognitive domains may create false dichotomies. Most learning situations are intertwined with, and inextricable from, these non-cognitive aspects, with feelings of failure and inadequacy built into the systems of non-elite education that most children live with.¹²⁹

Undoubtedly, obstacles will exist to the implementation of a socialist, child-centred educational environment, even in the context of appropriate resourcing. Do we not run a danger, for instance, of generating a mentality in which all children ‘must have prizes’, where the desire not to traumatise the child with feelings of failure also leaves her without a sense that some answers are, objectively speaking, correct, and others not? More generally, there is a potential tension between equality of treatment for all children and excellence: parents can have legitimate concerns about the need for the creation of an educational context for the channelling of a child’s intense and focused efforts in the development of high-level skills.¹³⁰ Advocates who voice egalitarian issues sometimes fail to recognise these legitimate concerns, characterising these ‘highly educated white parents’ as fighting ‘to preserve a tracking system that keeps virtually every child of color out of advanced classes’. The writer on education, Alfie Kohn, is perhaps being quoted unfairly here, because he goes on to focus on what seems to be the real issue:

it is hard to deny the superiority of the instruction in gifted-and-talented programs and some other honors or high-track classes, what with hands-on learning, student-designed projects, computers, field trips, and

other enrichments. But research generally shows that it is precisely those enrichments that produce better results rather than the fact that they are accorded only to a select few. What happens in those classes is more decisive than the fact that they are homogeneous [footnote omitted].¹³¹

Education, education, education. Resources, resources, resources. A glance at figures on public and private expenditure on educational institutions (including tertiary) per unit GDP among OECD countries (for 2011) gives an average of 6.1 per cent, with figures of 6.4 per cent and 6.9 per cent for the UK and the US, respectively.¹³² If calls for equal opportunity for all children are to be taken seriously, a radical programme for using education as part of a broader strategy of social transformation will involve a substantial increase in levels of educational expenditure. The arguments against such a strategy in the end rest on the biologically hard-wired notion that 'it is all a waste of time' and on the apparent inefficacy of throwing money at the problem, using the example of high levels of expenditure in the US and its mediocre international test results.

And yet it is the US, most dramatically, which demonstrates how inextricable education is from issues of class. While important debates on educational philosophies, strategies and approaches are on-going worldwide, it is clear, as we have seen, that much of the supposed failure of the US educational system is linked to its exceptionally high levels of inequality. Unfortunately, any attempt to use education, including intensive preschool tuition, as part of a broader strategy to alleviate social deprivation at the low end – much less a more generalised equalisation of educational opportunities across classes – is bound to appear to be particularly wasteful and extravagant in highly unequal societies such as the US. Other wealthy societies that have not permitted inequality to develop and fester in the manner of the US are likely to find such programmes more effective, and less onerous: interventions that have proved most fruitful have focused on the child's earliest years, both with preschool programmes and with aid to parents in children's upbringing and their ability to secure employment (often abetted by the presence of preschool programmes).¹³³

At the opposite end of the inequality spectrum, the richest residents of the US appear to be taking a lead in a strategy of investing in the human capital of their children as a mechanism for guaranteeing their future status. The ever-developing links of these children to the English-speaking elites of other countries bind them together culturally, and reinforce the material interests they hold in common emerging from the fluidity of capital across national borders in this New International Capitalist Order.

The issue of class can be seen in a concrete form using the example of controversies surrounding homework. Typically, it is taken to be 'the quintessential job of childhood. Homework creates a situation... where the child must complete assigned tasks under minimal supervision and after little

initial training... As in the workplace, when children move from beginners to experts with homework, they demonstrate responsibility and become skilled at managing tasks.¹³⁴ But homework, like getting a job, is not the same experience for individuals from different class backgrounds, a fact obtusely ignored by most commentators on the subject. Thus, we have the case of the French president François Hollande's pledge to eliminate homework in French schools, with work being done at school, rather than at home, in order to foster educational equality for those students who do not have support at home.¹³⁵ And yet we find Hollande's intervention, and his central motivation, airily ridiculed in one of the leading outlets for putatively progressive opinion in the US,¹³⁶ apparently oblivious to the realities underlining homework and class background.

Recent research confirms the common-sense and useful notion (if not interpreted moralistically) that parental involvement in school affairs is conducive to student success.¹³⁷ Homework is an activity, however, where even the most sincere and dedicated efforts of parents with limited education may be of little use. Growing up in a cramped flat, with no one capable of guiding or assisting me past the age of eight, I remember homework as a farcical, humiliating and wasteful experience. I write this not as an act of self-dramatisation, but to underline that this reality continues to be faced by the majority of children growing up even in present-day rich societies. Tony Little, the headmaster of Eton College, has suggested that 'boarding houses should be attached to schools across England to provide children with a "structured environment" in which they can complete homework and take part in a range of extra-curricular activities'. He thus underlines the notion that homework, this essential 'job of childhood', has such strenuous needs for a 'structured environment' as to justify substantial public expenditure to permit these tasks to be carried out away from the home. If Little's proposal for such state-supported schools to 'meet demand from busy parents'¹³⁸ suggests an empathy limited to the plight of the harried upper middle classes, the broad principles are clear: all student work should take place in the context of structure, guidance and assistance from educators, and liberated from the vagaries of individual household circumstances.

Earlier in this chapter, I proffered the suggestion that a future socialist society might build a statue to Charles Murray. In this concluding part, irony and the reader's patience are stretched again by considering how a programme of socialist education can be informed by the present-day practice of the elite school. The first issue is with regard to resources: throwing money at education is an important aspect of any reform strategy. Well-off parents are often willing to pay for their children's education even when a seemingly adequate free alternative is present, with the payoffs showing up in exam results and university admissions. Perhaps of equal significance is the role of the elite school in reinforcing the non-cognitive advantages accruing within the family to children's personal development. The elite

school cultivates confidence in the child not only through the instilling of fluency of verbal and written expression, but by offering personalised guidance: children are encouraged to believe that the trajectories of their lives and careers are issues of importance, giving them a sense of direction and personal development. By contrast, ordinary schools inculcate in the great majority of children a sense of failure and a lack of purpose to their lives at school, feelings that do not necessarily dissipate after school hours, or when the school career ends. Suggestions in both the academic and popular literature that the advantages accruing to graduates of elite schools consist solely of the links made to social networks are well-meaning but deceptive.

In dealing with the wider world, elite schools succeed in reinforcing advantages accruing through family background by giving children the tools of self-mastery at the youngest age: in the context of issues such as politics and business, fluency of expression is combined with self-confidence as an aspect of power, so that speaking and putting forth an opinion about the great issues of the day is part of the birthright of elite children. For the great majority of children, however, the school merely reinforces their own families' sense of bewilderment and lack of control over the general environment, whether with regard to national politics or the world of employment and careers.

Though in recent times most official pronouncements quite bluntly focus on education as a mechanism for preparing the masses to be part of the workforce, it is still felt necessary on occasion to perpetuate the fatuous claim that ordinary children are being trained in school to function as participants in a democratic process. But large classes, authoritarian structures and the protocols of discipline in non-elite schools belie this claim in the daily lives of children, with these conditions inculcating in the great majority passivity, boredom and sometimes rebelliousness. There is a chasm between the authoritarian context of daily life in school and the pronouncements about democratic processes that children are expected to imbibe, and be enthusiastic about. The result is the generation in the child of something approaching cognitive dissonance, in which issues surrounding democracy emerge as abstract and irrelevant, in many cases reinforcing the notion that the grand issues of politics should be left to those born to rule.

The question of classroom discipline is a central issue to both learning and democracy. Clearly, learning cannot proceed outside the context of order and calm. But the inculcation of democratic habits, procedures and ways of thinking is badly served by the authoritarian atmosphere typical of normal schooling. Private schools make the absence of disciplinary issues a key selling point, putting particular emphasis on high teacher–student ratios, with the additional but unadvertised reinforcement of good decorum coming from the involvement and upper-class background of the parents of fellow students. By contrast, protocols of discipline are a way of life in mass education, and one of the vaunted advantages of the independence of

charter schools and academies is their ability, in agreement with parents, to adopt stricter disciplinary codes than is common in other state-run institutions.

The question arises why the discipline question remains a central issue in the pedagogy of children of 13 and older, when the cognitive and emotional capacity to pursue purposeful activity is manifestly already present: this fact is evident in the capacity of children to participate in games and other sporting activities, at both the individual and the collective level, largely without coercion. Since so much of the previous discussion has focused on the deficits of children from less than elite backgrounds, it is worth repeating the suggestion made earlier that, in looking for a measure of what 13-year-olds are capable of, we can point to the behaviour of children from working-class backgrounds of an earlier time and sometimes today – even in rich societies – who have been expected to shoulder adult responsibilities for earning money and caring for siblings.

The discipline question, as much as any cognitive issue, should receive intense focus from the preschool level, the latter involving not mere rhetoric but creative approaches that indubitably will involve throwing money at the problem in the form of personalised attention at this early stage of life. The issues involved in this task will include intensive efforts to isolate problems and disabilities involving individual children, but also aspects in the interpersonal and physical environment of the school that impede children from functioning collectively in an active and purposeful manner. Serious efforts to solve these issues will involve failed attempts along the way. But only in the presence of a substantive elimination of the discipline issue will it be possible to complement intense learning at the individual level with aspects of collective self-organisation and democratic decision making by the student body that involve issues of consequence in the life of the school. The presence of democratic processes and a lack of coercion as the norm in all schools will play an important role in alleviating the gaps in aspiration and achievement between those from elite backgrounds and other children.

One aspect of the elite school experience that seems to have been transformed radically in recent decades has been a backing away from the harshest aspects of the English 'public' (private) school in its traditional manifestation, and the clear notion of education as a rigorous, but pleasurable, experience: modern elites wish their children to succeed academically, but do not view gratuitous suffering as an important contribution to the building of character. On the contrary, advertising for these schools gives a prominent place to the pleasantness of the child's experience there. By contrast, current rhetoric surrounding mass schooling focuses almost exclusively, as we have seen, around examination success, with the misery, unpleasantness and alienation of ordinary school life in classes of 30 or more given an implicit weight of zero.

The stinginess and small-mindedness of the latter approach may, in fact, embody an overly myopic view of what is needed to motivate human beings in a productive direction. We have seen in Chapter 7 that Ivan Illich's radical proposals involved giving extensive freedom of choice to individuals on what they chose to study. These proposals were naïve in the context of working-class children, with the manifest danger that they would elect to acquire a body of skills that were immediately attractive to an employer, but were too narrow in the context of a lifetime of employment. No less important are the demands of a democratic polity. Many children, and disproportionately those from working-class backgrounds, might opt to eliminate from their studies those subjects necessary for their functioning as active and knowledgeable participants in a democratic society.

By contrast, elite institutions in a host of ways give their students a low centre of gravity, typically demanding that their students pursue broad-based programmes of study. In recent years, this propensity has been exemplified by the taking up in the UK of the wide-ranging International Baccalaureate, and the renewed fashion for that most venerable strategy for broad learning, the study of the classics – Latin and Greek. At the same time, however, elite schools partially fulfil Illich's demand for freedom of choice in their offerings that are largely intended as pleasurable aspects of life at school – the opportunity to study music, theatre, and a range of artisan and mechanical skills to a high level of proficiency. These opportunities widen the skill and knowledge base of their students in ways that sometimes open up the possibility of vocational or professional career development in these directions. Institutions of mass education, and the teachers working in them, often make heroic gestures in the direction of offering such opportunities to their students, but the possibilities that are put before children from elite backgrounds at an early stage of life, both at home and at school, are incomparably greater.

Elite educational institutions often function on the frontier of creative and innovative policies, a fact not linked to any lack of talent, imagination or dedication of those involved in mass schooling. In recent times, the draconian constraints increasingly imposed in the mass education sector by payment-by-results regimes function to exacerbate the problems of pursuing innovative strategies in the mass sector. But in a fundamental sense, the gap in innovation between the elite and mass education sector is a question of resources. The mass school creates an environment that is brutal to grow up in as a child and to work in as a teacher. In its most fundamental form, the constrained resources available in the mass school create an insoluble tension between progressive, flexible policies that permit the flowering of well-motivated and prepared students, on the one hand, and a regime embodying more traditional, learning-by-rote procedures and tight disciplinary codes, on the other. The latter approach has historically proved to produce better academic results with students from deprived backgrounds,

and is therefore less likely to exacerbate existing inequalities in society. Elite schools begin with a far narrower variance of parameters of family background than mass schools, but complement this administrative advantage with sufficient resources, epitomised by the teacher–student ratio, so that tuition and attention can be devoted to individual children. The Gordian Knot concerning the predicament of a choice between liberal, progressive education and egalitarian approaches is thus broken by a brute force, Alexandrian solution – sufficient resources are directed at the problem.

In Oskar Lange's model of a socialist economy, discussed in Chapter 4, the Central Planning Board begins with an array of prices and then instructs enterprises to set levels of output so that price is equal to marginal cost and to minimum average cost. The rueful joke, already noted, was that one capitalist country would need to be preserved to obtain these initial prices even after the world socialist revolution; similarly, there would be no reason or purpose in prohibiting elite schools in a socialist society. First, the use of the power of the state to ban any activity that individuals choose to undertake should only take place in the most extreme circumstances, and as a last resort. Second, the elite school, whatever its deformations as a social institution, is a substantive example of what might be attempted, and what can be done, with relatively unconstrained resources in a schooling context. It poses a challenge and, in some cases, a standard to be met in the wider society.

A focused programme of formal education thus plays a key role in the realisation of the goal of equal opportunities for self-realisation and development of personal capacities, as enunciated in the Introduction, by enhancing children's knowledge of how the world works intellectually and giving them a repertoire of substantive, broad-based skills with a low centre of gravity. Furthermore, such a programme, even if only partially fulfilled, might bring about useful changes in attitudes across the population, with the school closing the gap between the well-born and the rest of the population. Young people from deprived backgrounds attending schools provisioned and run as palaces for children might rethink in a productive manner their relationship to their home environment and personal life.

And, if such schools do succeed in closing the gap in educational accomplishment between children born into the higher reaches of society and the masses, such a development might give the latter group a sense of entitlement about the world based on substantive accomplishment rather than empty 'yes we can' rhetoric. For example, a century ago, as we have seen, a powerful movement took place in the most advanced societies such as the US for a free education to be available through secondary school to the age of 18 for all children. With ever-growing demands in the present day for educational qualifications for employment, one might have expected this earlier development to be extended to four years of additional training, with the implementation of universal and free, or even grant-aided, higher and post-secondary education. Extraordinarily, tendencies in the US (and the UK

as well) are now in the opposite direction, with the ability to pay becoming a barrier to post-secondary education. If a successful school programme succeeds at narrowing gaps in substantive accomplishment of children at the school level, the imposition of increasing financial barriers to further study will come across even more transparently than at present as unfair to children who have narrowed gaps in educational accomplishment with elite children. If the reader will forgive me one more outburst of New York irony, I would hope that unhappiness and lack of contentment with their lot might galvanise such a generation of young people to push for genuine, and not rhetorical, equality of opportunity.

The considerations in this chapter concerned with formal education interact in an intimate way with the focus in Chapter 12 on equality and security at the level of the household: real long-term progress is contingent on changes to both these spheres of life. But reform has to start somewhere, and the formal institutions concerned with preschooling and schooling are the most powerful mechanisms of public policy available for promoting equal opportunity in personal development and the capacity to exercise democratic control. Progressives concerned about present-day attempts to use schooling as a panacea and as a mask for the manifest social and economic inequalities that distort human development must not adopt a passive approach to education, one that awaits a transformation 'out there' in society before any meaningful change can take place in children's learning.

Education, including preschooling, as an aspect of a strategy for creating genuine equality of opportunity, involves the monitoring and facilitation of a range of cognitive, physical and emotional competencies: an understanding of their development in children and, specifically their relationship to social class, appears to be just emerging in the literature discussed earlier. A complementary aspect of this question is the effect of the home environment on the aspirations, levels of self-esteem and life horizons of children, and most specifically how these latter parameters are distorted through the prism of social class. Anecdotal evidence points to the limited horizons of children from the poorer end of society even in rich countries, often in the literal sense of an ignorance of life beyond the physical boundaries of the local neighbourhood. More subtly, these limitations in horizon can interact with family deprivation and insecurity to exacerbate the tendency in all human beings to make irrational decisions.¹³⁹ In the more proximate economic context of preparation for work, properly designed formal education, by emphasising broad-based, lifetime preparation for the acquisition of skills, should help alleviate the difficulties facing young people in the twenty-first century by giving them genuine, as opposed to enforced, flexibility in a rapidly changing work environment.

Educational reform also plays an important role in strategies for democratic control of political life and daily affairs. A common view among elite

groupings is that ordinary people must be manipulated for their own good because of their limited knowledge and grasp of issues surrounding public policy (see Chapter 12). The resultant elite claim of a right to exercise control over public affairs is, in some ways, under greater challenge than heretofore: while notions of an incipient internet democracy are wildly exaggerated,¹⁴⁰ an increasing flow and ease of access of factual information, coupled with long-term rises in educational attainment in the population, have made the task of elite manipulation more difficult.

But deficits in the public's familiarity with the details surrounding contemporary political and civic (including business) affairs continue to expedite elite control of decisions: the public, as a rule, monitors elite activities and decisions only on a discontinuous basis, and overall manifests a lack of confidence in its right to rule in the interim, often deferring to these groups or to 'experts', such as bankers. The elevation in educational achievement postulated here in a socialist context plays a role in promoting the exercise of democratic control by facilitating the public's ability to translate this increasing flow of information into usable knowledge and to resist elite media manipulation of these information flows. In addition, a reformed educational system can help instill in the general population the habits, capacity and confidence necessary for exercising democratic control on a regular basis in the work and broader societal context: what elite versions of the educational process already do so well.

The question at hand is not, therefore, merely one of pounding facts into the heads of recalcitrant children. The ability to read with comprehension and then discuss a text concerned with political and civic issues has a cognitive dimension linked to reading skills, but an important element in the latter facility, as we have seen, is a factual base upon which to proceed: an understanding of a text concerned with a filibuster in the US Senate demands more than a comprehension of the individual words and phrases – it also involves familiarity with the facts surrounding the constitutional role of the Senate in the passing of federal law and the accompanying substantive history of, for instance, post-Second World War disputes in the US over racial desegregation. But this kind of factual knowledge of politics and civic affairs is often thought to be boring by much of the population at all stages in life, an attitude invariably more acute at the lower end of the class and income distribution. The resultant deficits in civic knowledge are in sharp contrast with the public's rich assimilation of factual knowledge about popular culture and sport and the pervasive self-confidence with which opinions are voiced on these matters.

The contrast between the public's response to these alternative spheres of knowledge – politics and civics versus popular culture and sport – cannot be accounted for by the supposed difficulty of the former compared with the latter. An important part of the explanation derives from the fact that

the lived experience of the great majority of children in school, and later in work, makes democratic processes and participation seem at best an abstraction, and even an irrelevancy. The school experience continues to be one of authoritarian discipline, codes of silence and passive learning. Heroic attempts in publicly funded educational institutions to move beyond these limitations run up against the objective fact of resource constraints – ratios of 30 or more children to one teacher preclude individualised learning of mathematics as well as the cultivation of collective habits of democracy: such habits can only emanate from normal human interaction between individuals, an impossibility if for no other reason than the din of noise created by large numbers. In the present school context, it is the tribal aspects of politics, at best, that are engendered in children – a collective feeling of ‘us’ against the autonomous lawgivers and executors of discipline.

The evocation in the elite schools discussed above of the spirit of Summerhill-type free school experiments gives credit to the notion that there is something deeply wrong with any school system that needs to proceed in a context of incarceration, even when children have reached the stage of early adolescence. The broad conceptual failure of these experiments is an unwillingness to admit the necessary constraints due to the myopia inherent in being a child. These constraints are of two kinds. First, the cultivation of habits of individual agency in choice of fields of study will be limited by the necessity of instilling in children a broad base of knowledge necessary to cultivate flexibility over a lifetime of work: children cannot merely pursue their interests and affinities in an unconstrained manner.

Of even greater significance, however, is a second imperative of schooling, that of engendering in individuals sufficient intellectual capacity to function as free individuals – participants and decision makers in a democratic society and in a world culture. In the twenty-first century, the prerequisites for consideration of the political and social issues to be confronted will not merely emerge from familiarity with the details of laws and constitutions. The range of knowledge necessary for making sense of the world will embrace broad-based history (including the development worldwide of art, music and literature), the biological and physical sciences, and logical and mathematical thinking. The alleviation of the oppressive circumstances of daily life in school, inherent in present-day levels of resourcing, is central to the creation of a learning environment in which the curiosity inherent in children is successfully channelled into a desire to understand the fundamentals of science, history and rational inquiry, as well as politics, civic life, art, literature and music. A goal of education in society is to give the opportunity to all children to function in the manner of the most productive and creative individuals in society, whose activities seem to obviate and make irrelevant the gap between productive work and playful, spontaneous activity, a potential embodied in all of us as *Homo ludens*.¹⁴¹

The single-minded focus in public discussions on formal education as a facilitator of economic growth has marginalised traditional considerations of education's role and responsibility – the cultivation of a democratic commonwealth through the promotion of civility in human interaction, a sense of collective responsibility and solidarity, and the inculcation of broad-based rationality and culture. The widespread influence of a managerialist approach to educational excellence has encouraged the monitoring of achievement at the level of the individual child, teacher and school. This approach is underwritten by the promotion of a competitive mechanism at each of these levels to generate desired outcomes. It is worthwhile exploring in detail the efficacy of this mechanism.

One aspect of the role of competition is its signalling or informational role. As the economist George Stigler once suggested, it becomes difficult to determine how well one is performing in a foot race in the absence of competitors: the isolation of Soviet-type economies from international competition meant that many sectors found it difficult to judge their own performance by world standards. Furthermore, in some areas of endeavour, such as tennis and boxing, high levels of competitive interaction are necessary for skill development – the acquisition of forms of implicit and explicit knowledge – that would not be possible in any other manner. In other activities, such as playing football or a musical instrument, both competitive and cooperative interaction play a role in the refinement of skills. This informational role for competition in the monitoring and development of skills remains unexceptionable.

The behavioural role of competition in the generation of excellence is more ambivalent. It would be absurd to deny its importance as an aspect of human and higher animal consciousness. Mozart was a highly competitive being, resentful of mediocrities displacing him in favour and financial reward with the Viennese public and court. But even in desperate circumstances, he showed little willingness to accommodate his art, consisting of, as the emperor had said, 'too many notes', to the demands of the marketplace. Human beings have a rich array of motivations for pursuing excellence, only one of which is financial remuneration. In modern capitalist society, more so than in earlier times, success in many fields of endeavour is often identified with the levels of remuneration that they yield, with an elevation, especially in the US, of billionaire entrepreneurs and highly paid CEOs to the level of culture heroes. One is sometimes led to the conclusion that continuing media focus on the centrality of education is due to its continuing statistical association with elevated incomes rather than to any traditional respect for learning per se or its importance in the functioning of a participatory democracy.

An atmosphere of competition and its reflection in individual attitudes can generate dysfunctional outcomes. A child who, for one reason or another, has a demonstrable superiority over others in, for instance, arithmetic may grow

complacent and develop in a truncated way if the child's only motivation is a desire to do better than others; by contrast, an atmosphere of competition can turn transitory discouragement from a small initial weakness in arithmetic into a lifetime of failure. A narrow-minded focus on being 'the best', especially among children, can limit possibilities for personal development. A child with a career ahead as a historian may need to master several foreign languages, but need not be the best in the class in any one of them: such a criterion might even discourage the study of these languages. Albert Einstein was well aware that his mathematical facility did not place him at the level of his greatest contemporaries, such as Henri Poincaré and David Hilbert, but he was able to make striking and imaginative use of mathematics in his physical theories without matching their facility. If children are conditioned to focus only on competitive excellence, the health and other benefits of athletic participation and the pleasures of amateur music making will be denied to all but a small group of individuals with pretensions to professional-level attainment.

An intense commitment to formal education is, thus, a key aspect of any programme of human liberation and development. A dominant characteristic of contemporary discussions is to focus exclusively on the role of education in economic growth, and to discuss these matters as if the sole human motivation for the pursuit of excellence were financial remuneration in the context of interpersonal competition. Such attitudes demonstrate a desiccated imagination and a limited understanding of the range of factors that motivate children and adults to strive for excellence. They also fail to recognise the central role of an educated population in the development of a truly participatory democracy, one that is capable of making rational decisions about the complex range of issues before it in the twenty-first century.

The school is, thus, the most significant public policy intervention for generating equal opportunity for self-realisation and development of personal capacities for all individuals in society. The strategy pursued here involves a special focus on educational resources from preschool to the age of 13. The intention is the full development of the individual capacities of children, combined with a high level of social integration; a key goal is the alleviation of cognitive and non-cognitive deficits linked to social and economic inequality. Formal education can only overcome these deficits to a limited extent, and it is likely to remain a limited form of compensation for family deprivation and for deficiencies in the social environment in which the child grows up.

The intensive commitment of resources to education at this young age serves to promote a reconciliation of excellence and egalitarianism. Individual attention to students' needs permits a tailored response to children's development. No doubt in some contexts, such as the mastery of specific arithmetic and mathematical techniques, the privacy and the infinite patience offered by the computer in the learning process will prove

useful. But such devices are no substitute for personalised attention, and they can make only a minor contribution to the collective discussion and interaction inside the classroom that are central to learning. Tracking or other forms of segregation of students on the basis of some notion of generalised ability is obviated in the context of students receiving sufficient individual attention to be able to pursue specific disciplines to the limits of their capacity. Problems will invariably arise in reconciling this personalised, individual development of students with collective discussion and interaction inside the classroom, but these issues do not appear impossible to resolve.

The social atmosphere inside the school is an essential aspect of learning. A solution to the discipline question is a *sine qua non* of educational reform, to be facilitated by the intensive levels of interaction between student and teacher, most likely in small groups, from the earliest years. By the age of 13, children should know why they are in school and their own central role and responsibility in maintaining an atmosphere conducive to learning. The abolition of homework, with such work integrated and monitored in an extended school day, and the elimination of vacation periods lasting a whole summer would not only be necessary for egalitarian reasons – not permitting students to ‘fall under the table’ – but would be symptomatic of the notion that the school is taking its tasks seriously. If the longer days necessitated by the elimination of homework and shortened vacation time seem a horrific imposition on the life of the child, this is more a comment on the unpleasant environment of the present-day school than on the problems associated with extending the time devoted to supervised learning. If such a programme is to succeed, it will demand the integration of parents and local community, with parents both having a voice in the running of the school and being held accountable for the behaviour of their children.

Student learning involves the pursuit of individual interests reconciled with education for democracy and citizenship, the latter cultivated both in academic learning and in group interaction. The ability to cultivate and pursue individual interests can be facilitated by broad-based exposure to, and availability of, a range of activities, including music, athletics and mechanical arts. Decisions to pursue a special interest, either as an avocation or as a lifetime occupation, should emerge on the basis of genuine affinity and not as a result of the limitations in familiarity and opportunity to pursue alternatives dictated by class distinction.

A range of tensions, not necessarily undesirable, emerge between the likely desire of the child to pursue a special interest and the school’s demand for broad-based learning. First, there is the necessity for the child to embrace a broad range of skills in order to be prepared for a lifetime of work in what is likely to be a diverse range of occupations. Second, the school plays a central role in the preparation to function as a citizen, with a capability and confidence to deal with the issues of the day. A lived atmosphere within the

school of genuine agency over decisions by students, at both individual and collective levels, and responsibility for these decisions, would complement academic learning by acting as preparation for democratic rule of society as adults.

With a sense of both the agency and the responsibilities associated with adulthood embedded at the age of 13, it is probable that the exceptional resource demands made up to this age will decrease, with the social and disciplinary atmosphere in subsequent years gradually approaching that of a university. In such conditions, the discontinuity between high-school education and the range of post-high-school alternatives might well gradually dissipate: it is taken for granted here that post-high-school education in the twenty-first century should be free. The distinctions between so-called vocational and university education are also likely to evaporate, with vocational training having, over time, a greater academic component and academic studies offering enhanced opportunities for work experience. Careful consideration should be given to tuition relevant to social citizenship in all qualifications: it must be presented in a manner that appears to students as a necessary part of their formation as adults, and not merely a gratuitous burden and an imposition upon their time and energy. Lastly, the promotion of low-cost access to lifetime learning facilitated by contemporary internet technology is a likely development in a learning society, though even for adults, such learning needs an important component of human interaction to make it a successful and satisfying experience.

A powerful and focused educational programme is far from sufficient to bring about a society in which all individuals have an opportunity for self-realisation and development of personal capacities. First, with present and growing levels of disparity between the resources that families can offer their children, it is inconceivable that an equalisation of opportunities to develop cognitive capabilities can take place purely in the context of a reform to formal education. Second, since a substantial part of what is involved in the cultivation of cognitive skills involves not only schooling but living in the world – involvement in the working and living environment – growing economic disparities and an inability to exercise democratic control over these spheres inhibit the fulfilment of purely individualistic goals as well.

In the present day, despite the presence of a more knowledgeable and better-educated population than in earlier times, we observe powerful retrograde tendencies from the perspective of democracy and socialism, with less control of workplace affairs than previously and, in a host of ways, diminishing democratic control at the national and international levels.

Are there, in this context, still grounds for optimism?

12

Equality and Democratic Control

An overview

The long-term socialist strategy proposed here is explicit in having a trajectory in the direction of human development, equality and democratic control that is not easily deflected by the vagaries of the marketplace. It is thus in stark contrast to the disingenuous claims of free-market liberals that, for instance, policies of privatisation of public services are mere responses to the demands of a spontaneous order. It is also at variance with the policy prescriptions of American-style liberals and social democrats, who, especially in recent years, at best offer an amelioration and mitigation of the worst effects of an increasingly competitive environment, and at worst pursue policies of accommodation to these realities that differ little from those of the free-marketers.

A primary aspect of the socialist programme outlined in the Introduction is the cultivation of an opportunity for self-realisation and development of personal capacities for all individuals in society. Perhaps the most distinctive characteristic of the programme is its focus on access to upbringing and education from the earliest stages of life that is not contingent on, and compensates for, limitations in household circumstances – the programme outlined in the previous chapter. This focus on resources devoted to early childhood development and to education underlines the emphasis here on public policy intervention that is transformative and developmental, and not merely alleviationist. The complementary aspects of this developmental strategy deal with the mitigation of deprivation and insecurity in the household, permitting it to function as a stable environment in which children's formal education can take place and also act as a vehicle for *in situ* learning in the world. The setting of a standard of full employment is essential for the mitigation of this insecurity.

These policy goals – full employment and the mitigation of household deprivation and insecurity – might seem to set up a conflict between approaches focusing on formal education, discussed in Chapter 11, and

those here that are directing attention to how we live in the real world. But in substance, there is no such tension. The capacity for children to flourish in school is crucially contingent on the living and working environment in which households exist. A successful school programme can help to diminish the gaps in opportunities for personal development for children from diverse class backgrounds, but school systems functioning in more equal societies find that task greatly alleviated. Furthermore, for all individuals in the household, work and the broader environment are arenas for learning throughout their lives: public policies that promote *in situ* learning and opportunities for employment are crucial in themselves and complementary to programmes of formal schooling.

A further aspect of the socialist programme is the ability to exercise democratic control on a regular basis. Democracy in the context of the broader society necessarily entails a genuine voice for the mass of the population in politics, taking place in an environment embodying freedom of speech and conscience; an essential complement to this freedom is transparency in the operation of political and economic affairs. Democracy in the public sphere is enriched and complemented when the mass of the population also has a voice in the workplace and in daily life, with genuine opportunities to exercise control and decision making on a regular basis. This latter constituent of democracy demands that we address questions surrounding relations of power in these localised contexts.

These aspects – education and the development of personal capacities, on the one hand, and the exercise of democratic control, on the other – are intertwined. Thus, for instance, formal education can play a role in the promotion of the capabilities necessary for individuals to exercise democratic control, encouraging the formation of attitudes, expectations and habits conducive to future democratic participation in the working and living environment and in the context of society in general. Of no less importance are public policies that impinge directly on the workplace to promote democratic participation, as well as measures to engender democracy in the broader social and political context.

A unifying characteristic of this programme is the promotion of equality. Public policies promoting equality fall into three categories. The first concerns the public provision of a range of goods commonly characterised as necessities, such as education, health care, transport, housing, food and basic amenities, with transport and housing of special importance with regard to a range of environmental issues dealing with the planning of the urban and living environment. Public policies that promote equality through provision of these goods and services are of particular interest here in their developmental, as opposed to alleviationist, aspects. These policies are linked, in a complementary way, to formal education and can play a role in the enrichment of *in situ* learning in the world, in which household members can flourish and develop their capacities.

A second aspect of these public policies promoting equality is concerned with the resources devoted to, and the jobs created for, this expanded public provision. Activities created or financed by the government function to underwrite policies of full employment, offering to individuals a range of opportunities commensurate with the development of their skills. The discussions in earlier chapters make clear why central planning is to be rejected as a mechanism for achieving full employment; the key consequence of such a rejection, as suggested in Chapter 4, is that careful consideration must be given to the role of finance in economic allocation, a particularly troublesome question when the financial sector's role in the exacerbation of economic instability is acknowledged. Governmental provision of employment also promotes equality by acting as a standard for the compression of the egregious expansion of differentials in remuneration evidenced in recent decades. An important additional development, for the promotion of both equality and democracy, would be a reassertion of collective bargaining and the implementation of worker representation and real decision-making power within enterprises.

The third aspect of public policy driving equality is intimately connected with the exercise of democratic control in the broader society. Progressive taxation plays a central role in reconfiguring the distribution of income and wealth in contemporary societies in an egalitarian direction. Central aspects of such a policy approach include the implementation of genuinely progressive taxation regimes and the cultivation of openness in the conduct of business, financial and political affairs – a liquidation, for instance, of tax havens and the secrecy surrounding them. In the opposite direction, present-day gross inequalities in income and wealth are contributing to the degeneration of democratic processes to a farcical game in which decision making by a broad public plays at most a peripheral role: actions to reduce these inequalities are a necessary aspect of a programme for the promotion of a democratic polity.

The mechanisms employed here will borrow policies with demonstrable records of achievement from social democrats and from others – even central planners – whenever possible, at least as a starting point, rather than conjure up solutions on how to reorganise society *de novo*: 'imaginative' forms of social experimentation by both the left and right have often taken place at the cost of serious disruption to the lives of ordinary people. The programme here, focusing on human development in the context of security and the continuity of household and social existence, dictates an abhorrence of overly speculative, rapid and revolutionary transformations in society. In the spirit of Karl Polanyi, it recognises the often functional, even if inadequate, role of existing societal institutions and the necessity for maintaining a continuity of existence even in the midst of transformation. Above all, change in the context of human development has an unfortunate asymmetry: public policies

with negative consequences can quickly do long-term damage, while an uplift in human capacities is more likely to be observed on a time scale measured in generations.

Economic policies for working and living in the world

Central to any socialist economic programme is a commitment to full employment. Most especially for larger, rich countries and groupings (such as the European Union), it is neither necessary nor desirable to wait until some imaginary spontaneous order brings it about, or until 'they' (domestic or foreign business interests) find it profitable to hire labour. This commitment is to be effected by government policies: first, the active pursuit of functional finance – fiscal expenditure and tax policies to maintain full employment through the maintenance of appropriate levels of aggregate demand. There is a rich literature in this area, one being rediscovered even by mainstream Keynesians in the present period;¹ second, a 'jobs worth doing' programme focuses this fiscal commitment to full employment in the direction of projects emerging from socialist priorities.

Much public policy is, at present, moving in the wrong direction, symbolised by the US Federal Reserve's *de facto* abandonment of its statutory obligation since 1978 to pursue full employment as part of a dual mandate with price stability; the latter is the sole objective of the European Central Bank.² In the wake of the crisis of 2007–8, a range of alleviationist policies has emerged. In general, they accept the presence of mass unemployment as a fact of life. Each of these approaches will be examined below: basic income, legislated reductions in maximum hours worked, tax credits and subsidies to employers for job creation, employment protection schemes and employment guarantee programmes. The 'jobs worth doing' alternative will then be considered in the context of an overall fiscal framework to maintain full employment.

Public policies dealing with the working environment can only be formulated after a position has been taken on a central question: what are jobs for? This is an issue of general significance in the context of the high levels of unemployment emerging almost everywhere in recent years, but of particular acuity in the face of exceptional levels of youth unemployment. From a socialist perspective, a job is about much more than remuneration. Those individuals without paid work and who lack other significant responsibilities, such as the running of a household, will not benefit from the accumulation of skills and knowledge associated with the working environment; they are also likely to suffer from loss of self-esteem and their sense of personal identity. Furthermore, the place of work, from a socialist perspective, should be a fulcrum of democracy in which individuals have a voice and exercise significant control over their immediate circumstances: the unemployed are largely bereft of social citizenship.

Many of these issues come into relief in the context of the advocacy in recent years, from across a broad political spectrum, of a basic (or guaranteed) income paid to all adult individuals. In most formulations, it is paid to everybody at the same rate but not taxed; it is not contingent on a willingness or decision to work. It has affinities and minor differences with earlier proposals for a negative income tax.³ Much of the support for this approach has come from those who, viewing high levels of unemployment as something likely to persist, find it an efficacious way of helping individuals avoid deprivation.⁴ To the extent that such a proposal would replace a broad array of means-tested welfare benefits, it promises administrative savings and, since it is not contingent on a willingness to work or good behaviour of any kind, is non-judgemental and minimises governmental invasion of private lives. If, advocates claim, the threshold above this minimum income at which income tax is paid is set appropriately, the problems of a poverty trap that give a disincentive to work are no worse than under present-day welfare arrangements.

The longer-term effects of the basic income scheme on the expectations and attitudes of generations of young people, especially those with unattractive employment prospects, can only be guessed at.⁵ Perhaps some among this group, following historical examples among the youthful idle rich such as Charles Darwin and Marcel Proust, will make productive use of their free time. But this kind of whimsical speculation is most likely useless. Legislation of a guaranteed income has not emerged in any major economy, and does not seem likely to do so.⁶ The sociologist Amitai Etzioni makes the claim that such a programme is likely to be popular because, like Social Security and Medicare in the US, it will not be means tested.⁷ On the contrary, it seems likely that the latter programmes, like their equivalents in Sweden, have legitimacy with the public because they are seen as something they have paid for, having contributed premiums on these programmes while working.⁸

The implementation of a guaranteed income programme anytime soon is unlikely; it is used here, rather, as a focal point around which to consider the question of social citizenship. For Etzioni, the guaranteed income is a device for reinforcing community responsibilities and loyalties. In his conception, the guaranteed income would exist alongside other policies to alleviate poverty and to support community coherence. Charles Murray advocates the pursuit of a policy of guaranteed income for quite contrary reasons: in the context of a world in which he reluctantly concedes that 'large scale transfers are here to stay',⁹ the guaranteed income will replace all such transfers with a more efficient system. Of greater significance, with the exclusion of other welfare programmes, feckless behaviour by the poor, such as having children out of wedlock, will receive no additional 'reward', so that 'those people' will have to fend for themselves:

the importance of the [guaranteed income] on human relationships and the vitality of communities is...that the government has withdrawn all the ways in which the apparatus of the welfare state tries to take the trouble out of people's lives, and by that withdrawal has made it easier for people to behave in ways that lead to satisfying lives... Without the apparatus of the welfare state, marriage once again becomes the locus within which a man and woman can make a future together, laden with responsibilities and obligations that cannot be put aside... Regarding the community, a [guaranteed income] that has replaced the welfare state makes the community once again the locus within which human needs must be met.¹⁰

As we have seen before, Charles Murray manages to articulate, from his own vantage point, the essence of a major contemporary dilemma: a persistence of long-term unemployment threatens to institutionalise a fragmentation of society into a productive group and a substantial minority of the population permanently existing on subsidies from a resentful majority. In such a context, however, guaranteed income schemes over the long term would be divisive and unsustainable politically and socially, even if they could be made economically viable.

Any alternative, progressive path must be more in keeping with the demands of both economic, ecological, social and political sustainability and human decency: the relegation of part of the population to the category of useless individuals is unacceptable. Viable solutions point in the direction of a generalisation to the whole population of the kind of economic demands that the well-off quite reasonably make for themselves – a range of options in the working and broader environment, a base of material security even when pursuing risky investment (such as long-term study in the pursuit of a career, with options to reinvent oneself if such ventures fail), and opportunities for children to fully develop their human and professional capacities. Such demands must, of necessity, contain as an endpoint something resembling full employment, underwritten by appropriate macroeconomic stabilisation policies and by making work available on the large number of projects in society that need doing. Guaranteed income schemes must be thought of as measures of last resort, and at least a partial admission of a failure in the organisation of social and economic affairs: such schemes implicitly concede that a significant section of the population will be excluded from full economic and social participation.

Each of the remaining alleviationist policies has problematic aspects. Proposals for limiting the maximum number of hours worked per week emerge in the context of reductions in hours worked per year over the past several decades in many countries, as noted in Chapter 10, which are clearly a response to widespread demands in the population. As a policy specifically

directed at reducing unemployment, it appears, in the French example of legislated reduction to a 35-hour week over the past decade, to have been neither as disastrous as critics have portended nor demonstrably successful in alleviating unemployment.¹¹ It is salutary here to be reminded that even if, as suggested above, participation in working life is a key aspect of human development and democratic participation, such notions are easily capable of being appropriated by, for instance, 'hip Silicon Valley firms like Apple' to accelerate exploitation of the workforce,¹² most especially in the presence of weak labour market conditions. For the present and foreseeable future, notions of work being linked to personal identity and self-fulfilment must not be used to mask the fact that for the majority of the population, long working hours are simply drudgery and inhibit leisure and personal and household development: reductions in work time in the long term are likely to be an aspect of a progressive polity.

A more marginal and proximate range of policies for attacking unemployment involves giving employers a tax credit that covers the payroll costs of hiring new labour,¹³ an approach that may have perverse incentive effects on the currently employed labour force and may function merely as a subsidy to employers. Another policy intervention in this sphere is employment protection legislation (EPL). The literature on EPL suggests that it slows rates of both hiring and firing, especially in small and marginally successful firms; its longer-term effects on, for instance, labour productivity at the firm and national levels are ambiguous.¹⁴ EPL can function most effectively when it covers a wide catchment area (such as the European Union or the US) and establishes itself as a norm for employment practice in the private sector. By putting inhibitions on rapid disengagement of those in employment, it can act as a complement to strategies for government-induced hiring discussed below.

Other attempts for dealing with unemployment are embodied in a range of 'employer of last resort' and employment guarantee programmes,¹⁵ to be dubbed collectively ELR. These programmes, identified with the names of a range of eminent economists, including Hyman Minsky, have been designed to alleviate unemployment while doing as little as possible to upset the parameters offered up by the free market, including the existing structure of output and income as well as the underlying trade-off between employment and inflation. The government thus 'does not displace private sector jobs since it offers jobs which are undersupplied or not supplied at all by the private sector'¹⁶ by establishing the equivalent of an infinitely elastic demand for labour at a wage likely to be below that prevailing in the sector under consideration. In such programmes, unfortunately, the government may well end up ratifying and reinforcing existing wage differentials in a manner corresponding to present-day best-practice procurement.¹⁷

ELR proposals often include discussions of training and retraining for prospective workers, but their emphasis is on providing a counter-cyclical,

rapid-response buffer stock to labour market fluctuations: their primary role is, thus, to supply jobs for a relatively undifferentiated class of unskilled labour. ELR approaches, often emerging from an earlier era, offer a mechanism for dealing with the cyclical unemployment of undifferentiated labour, but do not form an integrated programme for dealing with the renewal of work skills or alleviation of the increasing dispersion of remuneration that has emerged in the past decades. Despite their modest ambitions, these largely academic, unexecuted proposals are what have passed as left-wing policies in much of the contemporary world.

The Swedish labour market model, by contrast, had with substantial success dealt with many of these issues through the insistence by powerful labour unions on programmes for the upgrading of worker skills and active compression of wage differentials through centralised wage bargaining. The erosion of these institutions and procedures in Sweden since 1990, and the resulting widening differentials, seem to be largely accounted for by the processes of globalisation and their effects upon the bargaining power of workers vis-à-vis capital in the political arena and in the labour market.¹⁸ As suggested above, any reconstitution of these institutions and procedures in a broad-based socialist project is likely to involve initiatives from large nations or groups of nations, and then participation and cooperation on a transnational basis.

In the twenty-first century, most programmes for dealing with employment, including the ELR, presuppose an acceptance of the structure of economic activity and income distribution dictated by the free market. The alternative discussed below to this range of alleviationist proposals may be seen as an attempt to expand and develop the conditions for the flourishing of households existing during the golden age period after the Second World War, with its relatively full employment. The contemporary context, however, is a society and economy that are substantially richer, and, overall, are making greater demands than previously for the acquisition of formal skills. In the earlier period, completion of the educational requirements that were universally available without charge (a high-school diploma) and/or the acquisition of a range of skills mastered in professional training or in a work context were reasonably well-defined prerequisites for long-term employment and economic security.

Clearly, it would be absurd to idealise this period, with the multiple exclusions to this path linked to racial and gender discrimination common in most countries. But for many young people in the present day, aspects of this earlier, nominally less rich economic environment appear attractive. To replicate the earlier prospect of long-term employment and economic security consequent upon a diploma, a longer period of study leading to a BA university degree or its vocational equivalent is likely to be needed, qualifications whose financial cost have been rising rapidly in the US and the UK. Without question, one aspect of a replication for the twenty-first

century of these earlier golden age conditions would involve free and equal access to post-high-school education and training.

In Chapter 8, the argument was developed that the cultivation of household (including employment) security is not just a good thing: security is not simply a luxury that, unfortunately, has to be traded off against a loss of economic efficiency. On the contrary, once labour is viewed not as a commodity to be shifted about freely but as an economic asset, a whole other set of considerations enter into the question of efficient allocation of labour resources. These 'resources' make long-term plans and decisions about the trajectory of their own lives at work and in the general society, and the lives of their children. In such a context, the disruptive effects of extreme flexibility of the workforce, however useful for individual employers, may be inefficacious for the development of society as a whole.

What would be the nature of a positive approach to employment in a socialist context? Emerging strategies for security and full employment should reinforce long-term goals directed at human development, democracy and social cohesion. The central goal of such a programme would be to provide a universal opportunity to pursue a career of employed work with remuneration commensurate with skill attainment. Even at the lower bound of income, a 'good job'¹⁹ is one that secures (in combination with provision underwritten by the state) medical and retirement provision and a capacity to purchase food, clothing and 'non-essential' goods consistent with social norms; either in the context of employment or outside of it, there would be easily accessible and inexpensive opportunities for skill development. For households in the lower income bounds, the housing stock would meet minimal standards of construction integrity, square metres per person and amenities. Most essentially for households with children, all neighbourhoods must permit young people to flourish in an environment characterised by low levels of violence and social disorder, with stimulation provided by physical amenities such as parks and communal and sports facilities.

Thus, a strategy for employment links in, inevitably, with income distribution, social provision, and the ability of all households, even the poorest, to act as vehicles for the full development of the human capacities of the next generation. A programme of jobs worth doing is also intimately connected with strategies of training and *in situ* learning, both for young people and for workers in mid-career, thus permitting a genuine capacity to adapt to changing circumstances rather than an *ersatz* flexibility based on insecurity and instability in the lives of workers.

But what kinds of jobs are to be created? Industrial policies in rich countries that are pursued only to re-create lost manufacturing capacity for the sake of job creation and an attempt to chase an ephemeral competitiveness in the international arena are likely to be ineffectual. A far better strategy for such countries would be policies that expand employment as a consequence of projects that make substantive improvements to people's lives by

developing the human and physical infrastructure and the living environment. Such a strategy, besides focusing directly on the alleviation of concrete societal needs rather than the vain pursuit of status in the international competitive arena, is likely to yield as a by-product long-term improvements to the society's productive capacity, including the *in situ* skills associated with these projects.

A great many of the activities that are desirable to pursue, such as care for the elderly, are, in any case, labour-absorbing activities. Furthermore, the exigencies of the Baumol cost disease described in Chapter 8 suggest that such pursuits will inexorably become more expensive relative to other aspects of the economy due to their limited scope for growth in labour productivity. Such developments are not, in principle, problematic – well-off individuals seek out the provision of well-qualified and plentiful staff to care for themselves and their aged relatives, and appear to consider it a 'price worth paying'. The great majority of the population in rich countries, however, rely upon public provision for care when elderly, with resultant pressures to provide such care more 'efficiently', that is, with cheaper, less well-qualified staff, and fewer of them. Care for the elderly is, thus, an activity that is both labour-absorbing and desirable, and will necessarily expand with an ageing population: many political disputes in the future will be concerned with whether the great majority of the population are to be left with second-rate care from unqualified staff for the sake of efficiency. We appear to have here, at least superficially, a quintessential trade-off between equity and efficiency.

But care for the elderly is perhaps exceptional among the range of such desirable projects in not embodying an important developmental component. By contrast, the expansion and intensification of educational processes described in Chapter 11 play key roles in advancing the trajectory of societal development across generations; as a by-product, long-term employment for teachers, administrators and adjunct personnel will, of necessity, be created by increased governmental expenditure on education. Furthermore, the construction and maintenance of these palaces for children – building structures, recreational facilities and a natural environment suitable for human flourishing – will provide substantial long-term work for those involved in construction and environmental maintenance.

It is unfortunate that even powerful advocates of policies for greater equality tend to discuss increased expenditure for education, health care and pensions collectively, and in an undifferentiated manner – from an alleviationist perspective – as if they were all good things that society can do when it can afford to do so.²⁰ A more suitable approach would be to underline the role that much of this expenditure, most especially that on education, plays in economic and social development. In addition, however, public policy measures on health care and pensions can also have a developmental component: they offer households security in these areas, thus

acting as a foundation for long-term planning and development of the human assets of household members.

There is a complementary need to provide children with a home and neighbourhood environment in which they can thrive away from the school. Children growing up in conditions where the housing stock is substandard in terms of construction integrity, space and amenities such as heating will suffer significant handicaps no matter how favourable the school environment: there is probably no substitute for the setting of old-fashioned, centrally planned targets for some parameters, such as minimal numbers of square metres per person. In addition, an 'overprovision' of rented accommodation (financed or subsidised by the state) may well be useful in the promotion of labour flexibility and mobility – the very virtues that are often inhibited by the thin markets in such accommodation in countries such as the UK and US that are focused on home ownership.

At least as important as the quality of the housing stock for child development is the local environment. If certain neighbourhoods are considered 'no go' by adults, are they places where children should be growing up?²¹ Past failures at slum clearance do not serve as excuses to avoid explicit decisions on the nature of the built environment. There was an indubitable need to relieve postwar shortages in housing (my own family, as noted in Chapter 10, spending the early postwar years in converted army barracks). But few people at present would choose to defend the specific form taken by postwar programmes for urban construction of public housing in most countries, with their long-term negative consequences on the built environment and social cohesion, and a reinforcement of class and racial segregation. In the context of many urban areas, much of what we observe is the result of short-term decisions made after the Second World War: the rapid building of inexpensive housing (often of poor-quality construction, and given its frequently short life, perhaps not really so inexpensive after all) that, at worst, has consisted of rows of cavernous buildings, often of seven or more storeys. These hideous constructions, littered across the urban landscapes of the Western world to this day, are, as Jane Jacobs has underlined, antithetical to the cultivation of the rich level of social interaction inherent in the urban environment. Those concerned with the welfare of children brought up in 'the projects' have upon them the extra burdens of counteracting their sterility and the competing attractions of gangs and drugs.

Outside of urban cores, there has been a complementary postwar tendency for the creation of a built environment of low density in the suburbs to service an inordinately influential but, in most countries, initially minority car-owning population. This suburban development, in comparison with urban housing, was, as a rule, less explicitly state-driven, but often guided by governmental decision makers such as Robert Moses (see Chapter 1) in the context of political pressure from property developers and, in a US context, white flight from urban centres and racial delineation through

'redlining' of neighbourhoods. The car-oriented suburban existence appears to remain a desired mode of living for many households despite its evident absurdities, such as the need for a car to purchase basic amenities and the continued infantilisation of children past the age of ten until they possess a driving licence. But for both the urban housing project and the low-density, car-oriented suburb, is it necessary for us simply to accept as a fact of life for the rest of the twenty-first century the decisions that created these environments as they rapidly emerged in the post-Second World War era? With ever-pressing ecological and energy considerations, combined with a deeper focus than heretofore on the effect of the built environment on child development, many present-day living arrangements, when depicted in the cinema, may well look as incongruous as the pervasive smoking of cigarettes in 60-year-old films.

All of the above implies no absence of jobs worth doing, a core of activities directed at preservation and development of the human and physical infrastructure. Long-term demand for the cultivation of the relevant skills will be underwritten by government expenditure creating jobs in these areas. The activities to be undertaken demand the cultivation of a range of proficiencies both of an old-fashioned kind, such as music teaching in schools and landscape cultivation in an urban environment, as well as more high-technology pursuits, such as the innovation and implementation of medical advances relevant to an ageing population or energy-saving strategies in new construction. Government expenditure in these areas will displace spending and jobs now devoted to creating the luxuries associated with the exceptionally skewed income distribution of contemporary capitalism; this new expenditure has the fail-safe characteristic of being worthwhile in its own terms, whether or not achievements in, for instance, energy conservation lead to commercially realisable gains in the arena of foreign trade.

This securing of the human and physical infrastructure is to be viewed as part of a range of necessary activities for long-term social and economic development. A clear implication of such a perspective is that, in contrast to the present-day tendency to constrain spending on education and assistance to deprived sections of society and physical infrastructure in an economic crisis, a very different strategy would be pursued: the trajectory of expenditures described here would be relatively unaffected by short-term perturbations in overall economic activity, with accommodations necessary to respond to an economic crisis or inflationary pressures more likely taking the form of changes in tax rates and monetary policy. It is consumption by the well-off, rather than these developmental expenditures, that is to be seen as a luxury that can be readily varied on a short-term basis to offset fluctuations in overall economic activity.

Taxation thus plays a role in macroeconomic stabilisation. In addition, taxation policy is central to the formation of a distribution of income and wealth corresponding to the needs of economic equity and political

democracy: this role for taxation will be discussed below. But limitations are present in the extent to which taxation policy alone can be used to correct the extreme variations in income and wealth in contemporary economies. The diminution of income and wealth differentials can also be effected by the very expansion of governmental activity and procurement described above. First, the activities pursued can underwrite universal access to fundamental aspects of social reproduction – necessities – including health care and education. Provision of inexpensive living accommodation can set a lower bound on the parameters of physical construction and quality of neighbourhood existence: a constant concern must be whether they create an environment suitable for the upbringing of children. Public transportation systems should be inexpensive and attractive alternatives to the necessity for car ownership, with long-term environmental planning focused on facilitating such a development. In general, social procurement policies will have a goal of minimising the extent to which those on low income are subject to social exclusion.

A second way in which governmental activity and procurement can narrow differentials in income and wealth is by acting as an exemplar in its own activities for other areas of the economy in the setting of standards for remuneration and conditions of employment. As noted above in the context of the US, government procurement procedures often simply replicate existing free-market levels of remuneration at the low end. But government payment of low wages to street cleaners in its employ has nothing to do with efficiency – it is merely a form of redistribution of income away from the poorest-paid groups in society. At upper levels of remuneration, the public sector has been progressively imitating the absurd levels of upper-level executive pay in the private sector. This tendency has emerged with the claimed need to compete in the bidding for top-quality managerial talent and because of the out-sourcing or privatisation of many public services (such as the running of prisons or water provision), coupled with limited regulation of these *de facto* monopolies. The government bureaucracy's own internal hierarchy of rewards can straightforwardly be restructured in the awarding of contracts for these services. The very rapidity with which these wide differentials have emerged in both the private and public sectors of many countries may indicate that rewinding them will not be an insuperable task.

At the top end of those working in government service, the revolving door of employment of politicians and regulators who then join the industries they have privatised or regulated is a threat both to economic probity and, as we shall see below, to the maintenance of a democratic polity: in many cases, the notion of a lifetime career in public service may have to be reconstituted after years of overly intimate relations between the public and private spheres. In the context of some sectors, such as the financial industry, the creation of a class of civil servants who possess a detailed

understanding of the institutions they are regulating is likely to be facilitated by the much tighter and intimate regulation of these sectors that is, in any case, desirable.

The perspective presented here of extended government provision based on long-term human development has, indubitably, problematic and ambiguous aspects. Clearly, the range of jobs worth doing will vary greatly even within nations, with urban issues perhaps less central in Arizona and water provision more so than in New York City or London; the exigencies of climate change are likely to redirect many of these priorities. A further issue arising is whether the government should vary its expenditure in order to mitigate what appear to be cyclical fluctuations in employment and economic activity in the form of ELR-type programmes. The suggestion above was that substantial participation in such programmes would dilute the long-term focus of the jobs worth doing approach and the creation of a career trajectory for workers. Thus, the main accommodation to short-term macroeconomic instability is not likely to be changes in overall levels of government expenditure, which are linked to long-term societal goals, but variations in tax rates or, in classic approaches to functional finance, changes in monetary policy.²² The difficulties in separating cyclical (short-term) from long-term fluctuations suggest that a clear wall of separation between the various policy instruments may be difficult to maintain.

There are also questions surrounding the role of competition in the procurement of services by the government and the setting of standards for work. In the context, for instance, of government funding of improvements in the housing stock and environment of lower-income groups in urban areas, it will be salutary to review the serious errors, as well as the successful interventions, made in the postwar era. Best practice will invariably involve wide consultation and the open dissemination of relevant information: new projects must be integrated into the existing urban environment, and decisions must be reached on the disposition and amenities to be present in the new structures. This process will involve eliciting ideas, information and experience from the ground up, as well as competitive bidding for the substantive execution of the tasks involved. But competitive bidding implies that building contracts (and therefore employment) will be gained by some and lost by others. Is it, then, acceptable to have a long-term strategy of governmental activity that implies secure employment for some groups, such as teachers, but not for others, such as workers in the construction industry?

None of these questions can be easily resolved. The programme specified above links governmental activity to a set of ambitious goals – the initiation of projects that simultaneously promote social cohesion and economic development, secure long-term work and act to narrow the spread of remuneration currently present in the private sector. Both the latter two issues must confront the reality of labour heterogeneity, reflecting primarily differences

in individual qualifications, but also individual needs and aspirations. Thus, for some participants in the labour market (such as those with extensive work commitments in the household), employment embodying a long-term career path may not even be the desired option. Under such conditions, simply setting an aspiration of full employment as a fundamental goal of public policy is overly simplistic. It elides public policy initiatives whose goals differ: on the one hand, facilitating the execution of individuals' long-term plans for employment in the context of skill acquisition and enhancement, and on the other, more traditional notions of the availability of some sort of paid work for those desiring it.

The heterogeneous nature of labour also impinges on any attempt to set rates of governmental remuneration (embodying, as well, conditions of employment) at a narrower range than that present in the current labour market. At the lower end of remuneration, a substantial government presence, based on its in-house activities and procurement, can play a role in mitigating reliance on other policy tools, such as minimum wage legislation. Setting the appropriate spread of remuneration at the higher end poses more substantial difficulties concerning the use of academic qualifications from school or higher education as a badge guaranteeing a level of remuneration for initial employment in government service: any such rigid correspondence is likely to reinforce current tendencies to view education solely from a utilitarian and remunerative perspective. With all these difficulties, the differentials in remuneration that have been emerging from the private sector in recent decades have been so egregious that even a partial correction emerging from an expanded role of government in the setting of remuneration would be salutary.

Expanded government participation in intrinsically worthwhile activities, as proposed here, provides a path for long-term human and economic development and underwrites the securing of long-term employment. Furthermore, it militates against contemporary tendencies in the direction of the imposition of a supposed flexibility and insecurity on the workforce. For those imbued with the entrepreneurial spirit, for whom security of employment is neither necessary nor desirable, nothing presented here implies any limitations on the ability of individuals to function outside the aegis and strictures of governmental activity in their own labouring activities.

Financial conundrums

The long-term plans for jobs worth doing cannot serve as an instant solution to the present-day crisis of mass unemployment in, for instance, large parts of Europe, nor can they deal definitively with the general issues surrounding macroeconomic instability. Solutions to the latter problems will entail, in addition, a commitment to full employment from government expenditure

and taxation, and a focus on directing and constraining the activities of the financial sector of the economy.

As we have seen in Part I, the centrally planned schemata and their substantive manifestations in the twentieth century were designed, above all, to deal with the 'anarchy' of capitalist economic relations, most dramatically manifest in economic crises. For the technocratic planning paradigm that underwrote models of central planning, it was finance above all that epitomised the gratuitously wasteful aspects of capitalist economic activity. By the latter part of the last century, the centrally planned economic system was seen to have failed vis-à-vis its capitalist rival: for Hayek, this supposed anarchy of capitalist economic activity – the presence of decentralised decision making and risk taking – was, in fact, the very source of its dynamism. In capitalism, the presence of a financial sector is an inherent aspect of these decentralised decision-making processes.

Finance in capitalism is thus linked both to its capacity for dynamism and to instability, with the crisis of 2007–8 generating an intensified focus in both mainstream and heterodox economics on the role of the financial sector in economic instability. Given, however, the intimate relationship between the financial sector and general economic activity, it may appear fruitless to attempt to allocate a defined share of 'blame' for economic crises past and present to financial activities, with the implicit presumption that somehow the financial aspect of economic endeavour can be segmented and compartmentalised in a capitalist economy.

In the context of the innovations that have taken place in the financial sector in recent decades, even defenders of these altered arrangements have been willing to consider whether they may have exacerbated instability.²³ An emerging contemporary mainstream literature reinforces older and heterodox views suggesting that the financial sector can play a distinctive role in economic perturbations, locating the presence of financial cycles that have a life and a logic of their own as 'credit booms gone wrong'.²⁴ And the very virtues that make for the celebrated vibrancy and fluidity of the contemporary financial world can create an excessive 'elasticity' of monetary and financial regimes,²⁵ with consequent instability linked to a range of developments highlighted below, most especially the increasing use by banks and other financial institutions of financial markets as a source of income and liquidity.²⁶

A limited discussion has also emerged of the benefits and costs of an environment that is conducive to financial crises. For many discussants, there is an evocation of the role of finance, even, or perhaps especially, in its frenzied bubble phases, as playing a central role in productivity-boosting waves of innovation (technological and otherwise). The quashing or dampening of these bubbles could, it is suggested, be very costly to long-term growth, a sentiment expressed even by Hyman Minsky, an economist whose career was devoted to investigating the negative consequences of financial instability.²⁷

In critical discussions of the present system, the looming spectre of an unacceptable Soviet-type central planning alternative appears to be present.²⁸

The question arises whether it is appropriate to make a full identification of the benefits accruing from progress, technological and otherwise, with headline-grabbing (as they used to be called), share-price-enhancing innovations in, for instance, software provision or pharmaceutical products. Financial bubbles may accelerate the introduction of these innovations to consumer and inter-industry markets; the extraordinary harvest of new products in the US in the first quarter of the twentieth century was broadly coincident with financial and especially stock market development, often in what seems to have been an atmosphere of frenzied speculation.

In the twenty-first century, it is the latest innovation in mobile phone technology that immediately catches our attention. But fundamental innovation is largely the by-product of the long-term investment in physical, and especially human, capital that is the main artery of human progress. As we have seen in Chapter 9, innovations such as mobile phones are low-hanging fruit – the by-product of the decades-long theoretical and substantive development of electronics and semiconductor technology that transformed the world. These processes contained a role for entrepreneurial finance, but also embraced long-term planning and financing from government. The key prerequisite, however, was the rich and widely dispersed human infrastructure whose skills had been enriched by *in situ* involvement in existing activities and the extensive educational system that had largely been underwritten by government expenditure. The relative weight of governmental activities vis-à-vis entrepreneurship and entrepreneurial finance is likely to have increased in favour of the former in recent decades with, as noted earlier, the greater predominance of pure science in the development of modern technology. Entrepreneurial finance has played, and is likely to play, an important but secondary role in fundamental technological innovation. The benefits of bubble-induced innovation may thus be exaggerated by focusing solely on any resultant acceleration of the marketing of innovations, an activity that may be merely a short-term, overt and partial manifestation of society's material progress: constraining, directing and regulating the financial sector may well inhibit its activities, but the incumbent losses to society are likely to be of a limited kind.

By contrast, the social costs of financial bubbles will be high if the plans that guide long-term investments are derailed by a crisis that engenders mass unemployment of human and physical resources. The costs of financial bubbles and the consequent economic instability may be higher than would be indicated simply by considering the GDP foregone, as is typically done,²⁹ since such a measure is not likely to take full account of the long-term disruption to the planning and development of the stock of human assets consequent upon a crisis. A vast literature of an anecdotal and

fictional kind has dealt with the disruption to the lives and aspirations of individuals and households because of crises, past and present,³⁰ but there is little focus in economics on how these personal and household catastrophes translate into deficits in economic development for society as a whole. On the contrary, the pervasive influence of an interpretation from Joseph Schumpeter perceives these disruptions to be unintended consequences of a creative destruction incumbent upon progress, technological and otherwise. Though Schumpeter, perhaps more than any other prominent economist, linked capitalist dynamism and innovation to the financial sector, he dismissed its link to business fluctuations by giving a real-factors explanation for the leading exemplar of such fluctuations, the Great Depression of the 1930s: these perturbations are seen to be the inevitable by-product of economic development, including waves of technological change – ‘innovations are at the root of cyclical fluctuations’ – and cannot be attributed to the malfunctioning of capitalism and its financial sector.³¹

This discourse helps to reinforce the tendency in orthodox economics to preclude consideration of the role of finance in the economy, including its effect upon fluctuations in general business activity.³² The neoclassical and technocratic planning traditions inherit from David Ricardo a classical dichotomy, postulating that finance, if it is not to obscure the role of real factors in economic outcomes, is to be seen as a diaphanous veil through which economic outcomes may be viewed. Real outcomes in the economy – the microeconomic allocation of goods and services – are dictated by relative prices and will therefore be unaffected by changes in the stock of money; the latter will only affect the general price level – the monetary economy. The substantive implications of such an approach were manifest in the famous theorem of Franco Modigliani and Merton Miller of 1958: in the context of the classical dichotomy and its associated perfect capital market, the value of a firm will not be contingent on its debt-to-equity ratio or (as subsequently demonstrated) its dividend payout ratio. In general terms, finance and financial variables (including liquidity ratios and ratios of short- and long-term indebtedness to the term structure of assets) can have no effect upon real economic outcomes in the business world and on the fortunes of firms.³³

With money and finance just a veil, the search for the causes of an economic crisis, even one apparently initiated in the financial sector, must inevitably lead to the real sector of the economy. In recent decades, the dominant academic approach to these issues has been that of real business cycle theory, in which cycles are conceived of as the equilibrium reaction of a modelled economy to some kind of exogenous random shock,³⁴ with perturbations in the rate of introduction of new technology especially popular. Keynesian notions of the possibility of economic fluctuations emanating from the financial sector have been commonly treated as old-fashioned and not rigorously grounded in microeconomic theory.

The approach of economic orthodoxy to these issues left the mainstream of academic economics largely unprepared to deal with the financial crisis of 2007–8 – nothing in presentations of firm behaviour in orthodox microeconomics would suggest that the seizing up of bank liquidity would threaten paralysis in the real sector of the production, purchase and sale of goods and services. A by-product of the orthodox adherence to the centrality of the real economy is that, within economics, finance is a niche sub-discipline, with few academic specialists outside the financial sector sufficiently cognisant of institutional detail to be able to challenge, from a public policy perspective, decisions made by bankers and financiers – the insiders who make decisions concerning these issues on a daily basis. When the financial crisis erupted, the foxes were called in to put out the fire they had ignited in the henhouse.

Somewhat surprisingly, a broad swathe of heterodox and critical approaches, perhaps reflecting the technocratic planning heritage, parallel neoclassical orthodox approaches in claiming to look beneath the surface: the financial innovations of recent decades are seen as attempts by capitalism to cope with or counteract more deep-seated tendencies (such as falling profitability in the real sector), or, more commonly, the financial sector is seen as parasitic – a fetter on capitalist development. The political slogans that emerge from such an approach often contrast ‘Main Street vs. Wall Street’³⁵ and are reminiscent of popular front strategies of earlier times based on the theory of monopoly capitalism, with its call for a united front against the ‘big monopolies’.

The argument below will suggest that finance is fundamental to the operation of capitalism and, in some form, to decentralised decision making in general. The dramatic changes in the financial environment of recent decades cannot be characterised as natural emanations from some Hayekian spontaneous order; on the other hand, they are neither aberrations nor dysfunctional in the context of capitalist development, and have emerged for well-defined reasons. As in the case of earlier market-based developments, the state has played, and continues to play, a fundamental role in these dramatic changes.

Furthermore, many of the issues surfacing in the context of finance and its evolution raise questions about the regulation of any economic system with substantial amounts of decentralised decision making and allocation: as we have seen in Chapter 4, Oskar Lange’s fantastic scheme for a socialist economy simply by-passes these issues. Any attempt to construct a real-life alternative to central planning, most especially in a socialist context, must weigh the costs and benefits of taming finance. But any such effort should also ask, in a positive fashion, whether present-day financial arrangements can be modified to bring them more in line with the fulfilment of the socialist goals for the widening of opportunities for self-realisation and the development of personal capacities; on a collective basis, can we reform

the operation of the financial sector to enhance the exercise of democratic control?

In spite of the obstacles presented above by the dichotomy between the real and the financial sector at the core of mainstream economics, the latter possesses an elaborate, if heuristic, justification for the role of finance and its associated institutions in capitalism. The traditional arguments for the positive role of financial institutions in economic development fall into three classes. First, finance and financial institutions increase the efficiency of the use of investment funds. Financial institutions are seen to contribute to raising the efficiency of investment through the evaluation of projects and the selection of the most promising ones. Evaluating projects is costly, and specialised financial institutions develop cumulative experience in the evaluation of projects. Second, financial institutions attract household savings and mobilise them to finance the most promising projects. Third, financial institutions diversify risks by the pooling of projects undertaken.

Developments in recent decades in financial markets often cast a peculiar light on these principles. Much of the public perception of the efficacy of the financial sector is of its role in the monitoring, evaluation and nurturing of new products, most especially in the context of Silicon Valley-type technological innovations. But the activities of financial institutions in the context of the housing sector leading up to the 2007–8 financial crisis involved, in many cases, a perfunctory evaluation of key financial variables of individual projects (in a manner reminiscent of the activities of conglomerates in the 1960s and 1970s),³⁶ with a reliance upon compiling a broad portfolio to control risk. Furthermore, the need for financial institutions to attract household savings by offering attractive returns in an increasingly competitive market may have constrained their ability to focus on, and cultivate an expertise in, the monitoring of projects in a particular sphere of activity such as housing, as in the case of savings and loan associations in the US and building societies in the UK, or in a defined geographical area. Many recent developments, in the context of an increased ‘Americanisation’ – securitisation – of finance, in which the weight of allocation rests upon anonymous markets, tend to break the traditional identification made above between the financial sector and the activities of a range of financial institutions acting as the vehicles through which investment funds are allocated.

The dramatic transformation in the financial landscape worldwide since the 1970s has been underpinned by an electronic revolution in the collection, storage and transmission of data and of business and financial information, and has interacted with changes in the institutional structures, attitudes, and economic and social environment of the financial sector.³⁷ These changes may be parsed into a breaking down of barriers between segments of the sector – a de-segmentation of formerly separable components – so that the formerly specialised activities of commercial (clearing) banks, investment banks, insurance companies and other institutions

(including non-financial institutions) find themselves with overlapping and competing interests in the same domains.

A second change has been a vast extension of securitisation and marketisation in the financial sector, such as when a multinational firm replaces the negotiation of a loan with a bank with the issuance of its own marketable debt (invariably underwritten by financial institutions), or a more vulnerable firm offers its debt on the market in a low-grade junk form rather than having it placed privately with an investor by a financial institution. Subsumed here, but of enormous consequence in its own terms, is the expansion and marketisation of risk, as in the emergence of derivatives and their associated markets. The emergence of vast markets for these instruments, while having, especially in their OTC (over-the-counter) manifestations, the characteristics of an uncontrollable 'wild beast', is not simply the emanation of a spontaneous order. We have seen (Chapter 1) that the creation of markets for the sale of bushels of wheat in the nineteenth century was enabled and encouraged by state authorities in the US; in a similar way, the derivatives market emerges from state intervention in product design and the regulation of new contracts.³⁸ The third aspect of this financial revolution – its internationalised and globalised nature – was, in a seemingly paradoxical manner, promoted by the collapse of the Bretton Woods system of fixed exchange rates, with the resultant expanded needs for the facilitation of trade and the hedging of risk between fluctuating currencies; financial globalisation then received a substantial reinforcement with the final collapse of the centrally planned economic system in Europe in 1991.

The cumulative and concomitant aspects of this transformation are part of a generalised intensification of competition in all spheres of economic activity, of which finance is one aspect.³⁹ Thus, in the US, in a system that began to break down in the 1970s, a typical arrangement between banks and large firms as borrowers – one that complemented a comfortable and intimate relationship between them on the lending front – was that the latter held substantial compensating balances in the banks' coffers as part of a *quid pro quo* in which these firms would be given priority access in periods of liquidity tightening.⁴⁰ It was largely at the initiative of non-financial firms that bank loans were increasingly replaced with firms' issuance of their own marketable debt: banks had to accede to being the mere underwriters of debt for these firms rather than lenders to them. This loss by the banks in the sphere of lending – their key income-earning activity – was partially recompensed by the fact that, initially, regulators did not require banks to write up this underwriting activity in their accounts as liabilities.

The link between financial innovation and regulatory failure is central to an understanding of the genesis of the former, and an indication of the obstacles that innovation creates for democratic control of economic activity: the creation myth of the eurodollar as an attempt to avoid regulation is often told in the context of the legal limits on the interest rates

that could be paid to depositors within US borders. From other perspectives, however, the question of regulation has proved crucial for contemporary developments. The state's role as an ultimate provider of liquidity facilitated the development of, and may even have been necessary for, the existence of extensive markets in derivatives, as will be seen below. And in a different sense of the word 'regulation', the elaboration and extension of financial markets internationally are linked with the collapse of the Bretton Woods system in the early 1970s, with vast resources and new mechanisms needed to facilitate trade in the absence of fixed rates between currencies: these new mechanisms imposed a form of regulation upon currencies and on the behaviour of national governments that were no longer subject to the constraints of the Bretton Woods fixed exchange rate system.

These dramatic changes in the financial sphere can be seen to have efficacious aspects for capitalism and, in some respects, for any regime for the allocation of investment funds that is not fully centralised. In mainstream economic theory, the perfect capital market offers a static ideal of how finance should function in a capitalist economy: a universal and uniform rate of discount is present for the evaluation of all investment projects, with the capital market disinterestedly ranking projects in terms of their contribution to net present value. The provenance of the project (whether it emerges, for instance, from a small or a large firm) is not a consideration in the ranking of projects. By contrast, a dynamic approach to finance emphasises the role of the financial sector in the development of new instruments for savers, new mechanisms for the financing of projects, and the extension of the geographical domain of finance, factors central to the heuristic justification for the role of finance discussed above.

From these perspectives, the changes of recent decades have reduced traditional asymmetries between firms and even countries, tending to compress the capital market down to a single, uniform layer. The development of a market for less-than-investment-grade securities, under the invidious sobriquet 'junk', epitomised these changes. The junk bond market has often been associated with marginal practices, but is also an aspect of a widening and deepening of the market for funds for a range of projects and firms in the context of a capital market that is more sophisticated and more competitive, from both a static and a dynamic perspective, than heretofore.⁴¹

A notable aspect of the evolution of finance has been the emergence of the market for derivatives, marketable instruments usually embodying the risk on the primary instrument (for instance a bond, or a currency in the context of international trade) from which it is 'derived': even supporters of derivatives concede their potential for exacerbating financial volatility. But to treat these developments as merely part of a casino capitalism and a fetter on capitalist development would be inappropriate: the rapid expansion of a broad range of these risk-based devices was strictly necessary for the expansion of the volume of international trade and investment that continued

to take place with the breakdown of the Bretton Woods system. In general, the rise of derivatives markets is an aspect of an increasing sophistication in the conduct of business: it creates a publicly available and marketable price for risk for firms – in many contexts, an easier way of dealing with risk than the clumsier device of a firm diversifying its own activities, thereby facilitating an expansion of trade and investment, including with the very poorest countries.

The new marketised financial landscape has, furthermore, been associated with various meritocratic characteristics, including a breaking down of insider and class hierarchies linked to the personalised nature of most traditional banking.⁴² In more general terms, there is often claimed to be a greater openness and production of information associated with market relations (such as the issuing of a security to the public) compared with transactional relations (a loan negotiated between a firm and a bank): periods when firms desire to raise money from the public in share or bond issuance, or in the context of merger activity, have often been associated with maximum disclosure of new information about the firm's affairs. Such disclosure can be inhibited by the possibility, or the excuse, that valuable information will be passed on to competitors, thereby justifying universal public disclosure of this information as a public good.

The putative gains associated with this financial revolution may come at a high cost, with a resultant exacerbation of instability, as even supporters of this revolution quoted above will suggest; in the most literal sense, this revolution has proved costly, with a substantial increase of the share of GDP taken by the financial sector in the US and the UK since 1980, a tendency not in general replicated in developed economies.⁴³

And some of these gains may be elusive in the context of potential fallacies of composition: innovation in the domain of finance is not necessarily comparable to equivalent effects in the real sector of the economy, and may have drastically different consequences.⁴⁴ Savings in the real sector in the control of inventories (stocks and work in progress) reflect a net rise in the productivity, and therefore in the real income, of the society as a whole: the famous just-in-time system permitted Japanese car manufacturers to hold lower inventories of glass, rubber and steel, which were real savings in the resources devoted to these products. An equivalent financial innovation, which permits every enterprise in the economy to perform the same volume of transactions with only half of their present holdings of cash, generates no equivalent societal gain: the marginal cost to society of (fiduciary) money creation by the government is close to zero. On the contrary, an innovation that merely permits every firm to economise on its holdings of cash may merely reduce the liquidity of firms, so that this financial innovation has merely contributed to the fragility of the economy.⁴⁵

This kind of liquidity paradox is likely to be exacerbated in the context of a marketised environment for finance, with a euphoria generated by

hedging and with derivative instruments promoting a tendency to underestimate systemic risk and perpetuating the illusion at the level of the individual economic actor (including financial institutions) that risk has been dispersed.⁴⁶ The need for the rapid unwinding of illiquid positions may be impossible if and when markets freeze up, resulting in the ultimate reliance on the state as the underpinning of this financial innovation.⁴⁷

Much financial innovation has been related to a desire to avoid regulation, as we have seen in the context of the origins of the eurodollar, and to avoid taxes. Those for whom regulation is an imposition on the unfolding of a natural, spontaneous order will treat such developments in a sanguine manner: the increasing elasticity of financial instruments – the increasing speed and volume of their response to changing opportunities – exacerbates situations in which the regulated object disappears from view just as it is being regulated, thereby permitting economic actors to arbitrage international differences in regulation and minimise the latter's effect at the national level.⁴⁸

As a result, measures proposed to reduce financial elasticity, such as capital controls and the so-called Tobin tax (a tax on the volume of the transactions to discourage international capital movements on a very short-term basis), are likely to be ineffective in the context of a financial environment dominated by derivatives and by currency swap arrangements that circumvent restrictive policies by obviating the need for explicit capital flows to take place.⁴⁹ And one may question the notion introduced above that transparency and openness are invariably advanced as financial allocation becomes more of a market-based phenomenon. On the contrary, the very complexity of the instruments associated with financial innovation – most specifically derivatives – have resulted in difficulties in knowing where the dog is buried,⁵⁰ and may well make many financial processes less transparent than before.

What kinds of public policy approaches are relevant to socialists in the context of the financial revolution of recent decades? Is it simply a question of taming finance, and is a return to the institutions and structures of earlier times possible or even desirable? Mainstream analysts concerned with the destabilisation associated with this revolution advocate an adaptation and accommodation to the rapid changes that are still in the process of unfolding. Thus, it is suggested, it is fruitless to attempt to reconstruct institutionally the lines of separation that used to exist between, for instance, commercial banks and investment banks. Instead, it is the regulation of functions (such as traditional commercial banking activities – the making of short-term loans and the facilitation of liquidity), rather than the institutions themselves, that should take place. Commercial banking functions might continue to exist within a broader financial conglomerate, but be regulated with the intention that they should serve a quasi-public utility role in the financial system as a whole – reminiscent of older proposals from

Irving Fisher in the wake of the crisis of the 1930s.⁵¹ The most common response to the explosion of securitised financial devices, including derivatives, has been the suggestion that the large share of this growth that has taken place in instruments traded OTC should be corralled into organised exchanges that can be monitored and regulated.

Pervading these proposals is the implicit understanding that much current financial innovation emerged in the context of avoiding regulation, and that these activities function as a constraint on discretionary government behaviour. Many analysts evidence an ambivalent attitude towards this avoidance of regulation: the lifting of the oppressive hand of the government from the spontaneous order of capitalist interaction is seen as a positive aspect of the financial revolution, one mitigated only by its tendency to generate a periodic spontaneous combustion in the financial sector and in the broader economy. An important aspect of the latter problem is the presence of external effects associated with financial activity, exacerbated by the broad array of complex derivative instruments present in the financial system: the potential instability of a given financial institution may necessitate its holding higher capital reserves than would be prudent if only its own financial integrity were under consideration. A range of commentators are thus willing to concede that the financial system may have to sacrifice some of its putative efficiency by devoting increased resources to sterile holdings in order to promote economic stability.⁵²

For socialists, however, it is not merely the combustible elements of the financial system that may legitimate a deviation from notions of efficiency dictated by market criteria. Of equal significance is the extensive and growing capacity of contemporary financial arrangements, so lauded by many of the commentators above, not only to avoid governmental regulation – to neutralise democratic monitoring and direction of the allocation of resources – but to dictate a form of financial prudence to nation states that imposes a particular neoliberal vision of society.

Finance has always played a key role in the monitoring and constraining of the behaviour of all economic actors – the individual, the firm and the nation state – in capitalist economies. These financial forms of economic regulation invariably have an element of conscious construction, rather than merely being the by-product of the eruption of a spontaneous order. As noted above, in the wake of the collapse of the Bretton Woods fixed exchange rate system, the vast expansion of financial activity, including innovations in the field of derivatives, facilitated a continued growth in trade and investment activity internationally. At the same time, the financial system has enlarged its role as a monitor and arbiter of the economic behaviour of nations at all levels of income and economic development: critical words not only from quasi-official organs such as the International Monetary Fund, but even from the private ratings agency Standard and Poor's, are often sufficient to cause powerful nations to readjust their economic

policies. In what may thus emerge as an embattled context, constraints from the financial sector internationally may be the most substantial obstacle to any national economic programme for redirecting economic priorities in a progressive direction.

The extent to which recent financial developments have imposed binding constraints on the economic policy options open to the larger rich states, the prime candidates for socialist reform, must not be exaggerated. In recent times, rich states falling victim to the 'gnomes of Zurich' (the paranoid and xenophobic phrase from the British Labour Party of the 1960s) have sometimes found themselves, as in the case of France in the 1990s with its *franc fort* policy, subjecting themselves to the self-imposed constraints of an overly high exchange rate.

More egregiously, a large section of Europe is now foundering over the rigidities and deflationary aspects – both inherent and resulting from the policies pursued – in the euro single currency zone. The initiation of the currency was naïvely lauded by many progressives as a step away from narrow nationalism and in the direction of European unity, an acceleration of an economic and political integration that was thought to be forthcoming too slowly. From this perspective, it is notable, even paradoxical, that financial innovations of recent decades, especially the emergence and elaboration of derivative instruments, had reduced the need for such a unified currency by successfully facilitating an expansion of trade and investment between nations with different currencies. But the other motive for the introduction of a single currency – to constrain the behaviour of wayward states in a modern equivalent of the gold standard – has its goals reinforced by the role these financial innovations play in the monitoring and redirection of the actions of individual nation states. The financial sphere already imposes restraints on the freedom of nation states to pursue independent social and economic policies, but for those nations functioning in the context of a single currency, especially one directed to function in a deflationary direction, the constraints imposed may become binding.⁵³

Given the latter fact, many states may be subject to inordinately onerous standards of financial probity as they attempt to expand aggregate demand to achieve full employment. In present-day conditions most especially, the socialist commitment to full employment may well need to move beyond the Keynesian focus of the postwar period on the manipulation of aggregate demand as the sole lever for its realisation. We must start from a vantage point that takes the provision of full employment (with the latter being focused on occupations commensurate with levels of skills developed, and especially with a range of opportunities for newcomers to the labour force) as a central societal goal, one not to be contingent on market-based fluctuations in aggregate demand. In the past, activities to improve the trade-off between aggregate demand and employment have been centred on Active Labour Market Policies (ALMP), discussed earlier, but no claims

have ever been made that such policies, by themselves, are a path to full employment.

The contrast between an orthodox and a socialist approach to, especially, long-term employment emerges from the jobs worth doing programme described above. Many of the activities in this programme will have, as a by-product, an improvement in the employment efficiency of expenditure, with much of it involving the expansion of labour-intensive sectors (urban and environmental renovation, housing and public transport) or the expansion of labour use within them (such as education). Such a redirection towards activities with a high efficiency of employment is likely to reduce, almost by definition, growth in productivity per head and therefore growth in per capita GDP: one obstacle to the pursuit of such a strategy may, therefore, be the single-minded obsession with economic growth that is conventionally encountered in public discussions. An alleviating aspect of this strategy of redirecting priorities in the direction of education, urban and environmental renovation, and improvements to public transport is that these activities are likely to use, for many nations, a higher share of domestic value added than, especially, the consumption resources that have been diverted away from upper-income expenditure, thereby, if anything, mitigating international pressures on the currency.

A less substantive, but conceivably more pungent, possibility for improving the employment efficiency of the economy lies in a revival of the notions of wage compression and social contract discussed above, policies that had extended periods of success in the postwar period in the context of nations such as Sweden and other countries with relatively high levels of economic equality. The broad thrust of such strategies was always that generalised wage constraint has a greater chance of sustained success in an egalitarian context – in an atmosphere perceived to approximate one of equal sacrifice. A socialist approach to wage setting places notions of equal sacrifice in the context of a long-term developmental strategy that *necessitates* equality rather than viewing policies to promote equalisation merely as attempts to ameliorate unfairness. In the conception presented here, the more equal society is, in the long term, the more robust and capable one.

Can present-day financial arrangements be modified to bring them more in line with the fulfilment of the socialist goals outlined above? The answer depends upon what we want from a financial system. In the wake of the financial crisis of 2007–8, all serious observers have been emphasising the need to mitigate the high costs of instability, if for no other reason than to protect the ‘gains’ of the financial revolution of recent decades. Will the raising of equity holdings by banks and the monitoring of the individual functions of financial institutions be sufficient to exercise control over the financial system as a whole in the context of the unprecedented fluidity across the system, both geographically and across functions? And will the corraling and monitoring of marketised elements such as OTC derivatives

be sufficient to prevent a repetition of the extreme forms of disciplining exercised by financial markets on national governments during the Asian crisis of 1997?

If the kinds of measures now being proposed fail to avert a new financial crisis within memory of the last one, even defenders of the financial revolution of recent decades may be forced to consider more constraining measures than those currently on offer. Such measures will involve a determined functional finance initiative at the national or transnational level, in coordination with a centralised financial authority that controls the activities of individual financial institutions and their functions.

From a socialist standpoint, it is inappropriate to accede to a perspective that looks upon such a process of increased regulation and centralisation purely in negative terms, as a loss of efficiency that must come about for the sake of economic stability. On the contrary, if we take as our ideal of innovation and economic development the burgeoning of the postwar US electronics industry, we see a balance being maintained between the financing of long-term goals and priorities from the centre (largely the US Department of Defense, but also embodying the long-term expansion of human assets through state-financed education) and intense competition for projects, including initiation, impetus and innovation from below, with finance acting as a monitor and local risk taker.

We thus find that the exigencies of the contemporary economy will necessitate, from a socialist perspective, an important degree of centralised control of the overall economy. From one vantage point, such a development is unfortunate, with most contemporary radical notions for restructuring society quite rightly putting a focus on local control, ground-up initiatives and decentralisation.⁵⁴ The main factor compelling developments in a centralised direction is a negative one: there is a need for the construction of institutions to effect the full employment programme in the context of the powerful forces buffeting it in the contemporary economy, most especially those emerging from the financial revolution described above. The key institutional mechanism of control will be an entity at the national level whose primary directive is the coordination of governmental fiscal and monetary policies (which function almost everywhere today in separate domains) to maintain full employment, integrated with strong regulatory powers over financial institutions and financial functions.

A second aspect of centralisation is a more positive one. The entity coordinating monetary, fiscal and financial activities overall will also be charged with the monitoring and facilitation of projects consistent with the jobs worth doing programme: an important element of centralised direction is necessitated by the externalities embedded in programmes associated with climate change, the provision of housing, public transport and education. This centralised aspect of project development is, however, also linked to the maintenance of full employment: the forces of the contemporary

financial revolution and the interconnected aspects of the real economy may prove to be so powerful as to derail a full employment programme, as specified above, based purely on the regulation of aggregate demand. In a public policy stance committed to full employment, the centralised setting of priorities for the allocation of key investment activities may be a necessary supplement to aggregate demand and financial regulation.

Nothing in these processes precludes, as took place in the electronics sector, competition between firms for contracts, as well as innovations and new ventures initiated from below. Decentralised forms of finance, acting as monitor and risk taker, are likely to play an important role in project allocation. It remains to be seen, in the wake of the housing debacle of the first decade of the twenty-first century, whether financial markets will continue to judge that the pooling of a large number of projects, each of which is monitored by a perfunctory examination of financial data, is a satisfactory method for containing risk, or whether such procedures will largely go the way of the conglomerate era of the 1960s and 1970s, with a return to fashion of the intimate monitoring that has typically characterised risk-taking ventures in high-tech sectors.

The changes proposed here in the functioning of the financial sector are, in truth, of a conservative nature and do not involve the dismantling of existing structures. They are largely focused on a redirection in favour of a commitment to full employment, to the allocation of investment expenditure in the direction of the priorities of the jobs worth doing programme and, as we shall see below, to the exercise of democratic control over the processes undertaken and the decisions made by the institutions concerned.

But for those who consider the proposals above to be fantastic and unrealistic, it is worth contrasting them with mainstream visions for the future of the financial sector. Several authorities, taking for granted the great gains to society from the financial revolution of recent decades, are willing to concede, at least implicitly, its role in increasing the level of risk to households in a financial context, as discussed above, and also its role in aggravating the macroeconomic and, especially, the employment performance of the economy. In a demonstration of the typically constructivist nature of the creation of institutions in capitalism rather than their emergence from a mythical spontaneous order, Alfred Steinherr, Robert Shiller and others have offered up schemes for coping with the insecurities foisted upon households in recent years.⁵⁵ Thus 'At present, liquid markets exist only for a small share of household wealth, and easy hedges are not available for the largest part of household wealth (such as real estate, future earnings, business cycles).'⁵⁶ What are needed, it seems, are public policies to encourage the creation of competitive free markets in insurance policies that, presumably, risk-averse individuals could purchase to hedge against threats to their livelihood, with medical students selling part of future income as a physician on the futures

market and students contemplating a career in cyclical industries such as aircraft engineering hedging away their risk.⁵⁷

One notes here the touching faith in the efficacy of free enterprise to create and sustain such markets (presumably without government assistance, even in a crisis). Among the many questions occurring in this context is how such a system deals with the asymmetries in information invariably present, such as the differences in the ability of households (for instance, the Steinherr or Shiller household compared with the one I grew up in) to evaluate these contracts. The answer, according to Shiller, is the 'democratization' of the financial sector, with people given the ability 'to participate in the financial system as *equals*, with full access to information and with the resources, both human and electronic, to make active and intelligent use of their opportunities', facilitated by government incentives to banks to provide banking services to poor people. If such information had been available to low-income people, we are told (in a 'blame the victim' narrative), '[t]he [subprime] crisis might never have occurred'.⁵⁸

These proposals are, at base, little more than attempts to alleviate some of the egregious insecurities and inequalities emerging in contemporary capitalism by the promotion of market-based solutions to individuals to help them plan their futures in a rational manner. These schemes are what are offered up as progressive solutions. Shiller reminds us that 'social barriers prevent *some* from realizing, and profiting from their talent' and, in a remarkable passage, chastises Marx for the unstated assumption at the heart of his theory of exploitation that 'a poor laborer could never start a business by getting credit from a bank or capital from wealthy investors'. This, according to Shiller, is a serious misunderstanding of the nature of capitalist development on Marx's part, since 'in an ideal capitalist system, people with good business ideas can, in principle at least, do just that'. The present system has not yet achieved this ideal, but help is on the way, because 'there has been a long trend toward the democratization of finance, the opening of financial opportunities to everyone. It is a trend we must hope will continue into the future'.⁵⁹

The above notions are part of what passes for a progressive approach to financial reform, since among more adamantly free-market theorists, as will be noted below, the capitalist firm *already* functions as an arena of free exchange in which, indifferently, workers can hire capitalists for their services, and *vice versa*: there is little need for any government intervention, even of the limited kind specified above, to 'level the playing field'.

The levelling and democratisation proffered above by Robert Shiller, the Nobel Prize exemplification of a left-of-centre approach to finance, is of a very limited kind. According to him, the need for leadership, as embodied in CEOs, is a central fact of modern life- and the public must be reconciled to the dramatic rises in executive remuneration that have come about in recent decades as a consequence of 'improvements in our capitalist system';

if not, there is a danger that 'The political climate may well stifle innovation and prevent financial capitalism from progressing in ways that could benefit all citizens.' The best way to reform the financial sector is not to institute democratic control of its institutions and functions, but 'to build good moral behavior into the culture of Wall Street through the creation and observance of best practices in its various professions – CEOs, traders, accountants, investment bankers, lawyers, philanthropists'.⁶⁰

These mainstream notions of financial reform are wildly fanciful – hinting at an individualistic utopia in which individuals are encouraged, or perhaps compelled, to use financial markets to alleviate problems of economic insecurity that these markets have helped exacerbate in the first place. Democratic control of the financial sector, however, is not on offer in these proposals.

By contrast, public expenditure and finance in a socialist economy will involve projects being carried out by a range of state organs and non-governmental (private or cooperative) contractors, with competitive bidding processes to allocate these contracts.⁶¹ The changes in the conduct of financial activity – a greater centralisation around an entity with a directive for the maintenance of full employment, one that sets priorities for the allocation of investment activities and is integrated with fiscal decisions on tax and expenditure – are inherent consequences of the economic priorities being pursued. Overall, these changes are, if anything, less radical than those the financial sector itself has undertaken in the last several decades, not to speak of the individualistic utopias proffered above by mainstream economists. It would be absurd for socialists to proceed more radically and to suggest that the financial sector and its personnel can be reconstructed *de novo* in a precipitous manner. We will be living with the underlying structures of this sector, including the changes of recent decades, for a long time, with strategies for stabilisation and modification emerging from the existing parameters of the sector.

An important emendation to present practice, however, is the introduction of democratic control at various stages in the process of financial decision making. A key element of democratisation concerns the personnel making the decisions. In present practice, financial affairs, even in the context of central banks with their public responsibilities, are invariably administered by insiders to the profession, with frequently a revolving door between the government and the private (especially the financial) sector; in the older Saint-Simonian vision discussed in earlier chapters, finance is similarly directed by experts from the existing financial sector.

Socialist changes to present practice at central banks and government treasuries will invariably involve the appointment of a range of individuals from outside of the financial sector. These appointees will include representation for the needs of labour, with a special focus on the promotion of full employment and the protection of working conditions, and political

appointees representing the public interest. The latter are not to be merely broad overseers, but individuals capable of, and active in, the detailed regulation of the range of financial functions existing in the contemporary economy, including, for instance, rating agencies.

But even good regulators often find themselves trapped in the system they are regulating, and the ultimate question – far from a trivial one – is how to institute true democratic control over financial processes. The direction of movement in a socialist context is one in which financial affairs, far from possessing a vaunted independence from political, that is, democratic influence, must be politicised – with the public participating in decisions surrounding investment priorities as well as those surrounding the stabilisation of the general economy. Underlining the issue of question of democratic control is the presence of information that is publicly available – what is the appropriate boundary between private business affairs and the public interest? This important issue is addressed below.

Progressive taxation

In a socialist economy, the expanded role for government activity described above is thus meant to play multiple roles. It promotes human and economic development through focused efforts to secure long-term full employment, thus underlining that the latter is a prime directive of economic policy and not a mere by-product of some intermittently successful macroeconomic manipulation of the economy. In addition, the policies described above attack inequality with the public provision of necessities and the wage compression regimes instituted by this public provision. Minimum wage legislation and policies to engender a reassertion of union influence in bargaining (to be discussed below) can also be used to facilitate wage compression.

Progressive taxes on income and wealth will invariably play a key role in income equalisation in such a context. They are necessary, furthermore, simply because there is rarely such a thing as a free lunch, and if, for instance, the opportunities for personal development that the well-to-do provide for their own children are to be offered to all, the resources have to come from somewhere. Much of the literature dealing with taxes from this perspective from the US and the UK has tended to focus on the Laffer–Feldstein problematic described in Chapter 10 concerning the elasticity of taxable income, especially at higher levels – do high earners stop working when taxed too much? This elasticity would be central to determining the revenue-maximising top rate of tax (the highest rate at which gains in revenue exceed losses from any disincentive effect). Academic research in this area emphasises the conceptual and empirical limitations of attempting to make any such calculation; consensus results of the empirical literature find low values for this elasticity – ones that would easily ratify significantly higher

rates of tax on upper incomes than those existing at present. Such a result is unsurprising in the broad context of economic history, with successfully developing countries exhibiting tax regimes that are highly varied in their levels of taxation and the devices used to collect it.⁶²

Two caveats must be introduced here concerning the use of the problematic of elasticity of taxable income as the sole criterion for determining the upper level of tax. First, taxes on income and wealth do not only play a role in the financing of worthwhile projects, but are also, in most of the economies under consideration here, the central mechanism of public policy for the construction of a distribution of resources consistent with human and economic development, as well as economic and political democracy. If present-day levels of inequality are truly thought to be a threat to democratic functioning, one might well reject the single-minded focus in the literature of an optimal top rate as one that maximises potential revenue from current income: confiscatory taxes on large wealth holdings may well be important for the construction of a democratic polity. The present-day plutocratic distribution of wealth has distortionary and destructive effects on democratic processes: why should democratic rule necessarily take second place to an economic calculation?

Second, some of the studies cited above conflate the general question of the extent to which high earners will work less if their remuneration is constrained, and the different questions surrounding losses due to tax avoidance and evasion, including the flight of funds into tax havens abroad. Powerful states such as the US and the UK, as we shall see below, can hardly be treated as helpless or innocent bystanders in the presence of such phenomena.

The research into the effects of taxation has taken place in the wake of the widening inequality of the last several decades, described in Chapter 10, over a range of OECD countries, and the widespread lowering of the top rate of tax. The US and the UK have been of interest in this regard because of the exceptional extent to which income gains have been concentrated in the top 1 per cent of income earners in the context of dramatic reductions in the top rate of tax.⁶³ In the US context, exemptions and other 'tax expenditures' (to be described below) to top earners have dictated that despite a nominal top rate of 91 per cent in 1960, those at the lower end of the top 1 per cent were paying federal taxes of 34 per cent, with an average rate of over 70 per cent for those in the top 0.01 per cent. These rates, however, appear highly progressive compared with those in 2004, with the lower end of the top 1 per cent paying 31 per cent and the top 0.01 per cent less than 35 per cent. The lessening of the tax burden of upper-income earners appears to be due less to reductions in income tax rates (which have been partially neutralised by elimination of many categories of tax expenditure) than to reductions in corporate income and estate taxes.⁶⁴ The rise in the pre-tax income share in the US of the top 1 per cent from 6 per cent in 1976 to 17 per cent in 2007,

most especially in the context of a tax burden at the top that now never exceeds 35 per cent, suggests there is scope for raising significant amounts of revenue from this group.⁶⁵

Progressive taxation undoubtedly played an important role in income equalisation over the twentieth century.⁶⁶ It is, however, only one of the mechanisms available for the promotion of equality, which, as we have seen above, also include the public provision of goods and services and wage compression. Peter Lindert claims that the latter two forms of equalisation in social welfare states such as Sweden, rather than progressive taxation, have been part of a 'pro-growth with equality' strategy in these countries;⁶⁷ others have claimed that taxes on capital income in Sweden played an important role in income equalisation over the twentieth century and that reductions in these taxes in recent years have exacerbated inequality.⁶⁸

The role of wage compression in policies to promote income equalisation will be addressed below. Here, however, a curious fact emerges regarding the public provision of goods and services as a mechanism for equalisation: while gross social spending shows much higher levels (per unit GDP) in typical social welfare regimes such as Austria, Denmark and Sweden (27, 27 and 29 per cent, respectively) than in the UK and the US (21 and 16 per cent), net expenditure percentages in these countries (24, 22 and 25 per cent for Austria, Denmark and Sweden; 26 and 25 per cent for the UK and the US) are quite comparable.⁶⁹ The resolution of this seeming paradox is far from trivial, with a range of difficulties including how to treat, in this context, publicly mandated private provision of sickness benefits by employers.⁷⁰ The major reason, however, why net social expenditure appears comparable in the US and in social democratic countries is the very substantial role played by Tax Breaks with a Social Purpose (TBSB) in the US, with their virtual absence in, for instance, Austria, Denmark and Sweden. The incidence of these tax breaks is difficult to track down, but many of them, such as tax breaks for private health insurance and pensions, tend to be regressive.⁷¹

At the moment – and, it seems, in every country – there is a range of tax breaks, exemptions and other modifications to the tax code that, individually, often appear to encourage worthy expenditure; taxes have also been proffered, at various times, to fulfil specific policy goals – taxes on consumption in general (to encourage saving), or on a specific range of goods (such as luxury goods), or on particular sources of income (unearned income or land); complications to the tax system often emerge from attempts by tax authorities to prevent tax avoidance, especially by the wealthy.⁷²

These complications come at a high cost. At present, our ignorance of the contemporary situation with regard to income and wealth is linked not only to conscious attempts to avoid or evade tax, but to the sheer complexity of the tax systems in place and the conceptual difficulties in evaluating tax incidence. Thus, while 'tax evasion and tax avoidance need to be taken seriously and can quantitatively affect the conclusions drawn [here]...legally

tax-exempt capital income poses more serious problems than tax evasion and tax avoidance *per se*:⁷³ revenue losses in the US in recent years from a range of individual and corporate deferrals, exclusions, deductions, special rates and tax credits to gross income reach the magnitude of 6 to 9 per cent of GDP.⁷⁴

While many of these tax expenditures (exemptions) are not necessarily regressive in their effects on post-tax income, in aggregate they add immensely to the complexity of the tax system, and probably account for the exceptionally wide gap to be found in estimates of the effective tax rates paid by those on the highest incomes,⁷⁵ or on the overall redistributive consequences of the tax expenditures themselves. Thus, the main conclusion of one study for the US was that tax expenditures on average raise after-tax incomes more for upper-income than for lower-income taxpayers,⁷⁶ a finding that does not necessarily contradict, but may be contrasted with, another stating that 'the single most effective program at reducing poverty in 2010 was the EITC (a tax credit to those working on low or moderate incomes)'. To exemplify these complications, until recently, the US government's standard measure of poverty did not include non-cash transfers and tax credits.⁷⁷

Even when the effect of exemptions is to reduce inequality or to promote the public good in some other fashion, such exemptions by their very nature introduce complications to the tax system and add to the difficulty of discerning the incidence of tax, or even the true distribution of resources in the economy.⁷⁸ In the interests of democratic monitoring of public affairs and general coherence, an obvious concomitant of transparency in a tax system is a reliance primarily on income and wealth taxes, which are to be kept as simple as possible; a progressive tax system in such a context is no less transparent than a flat tax. Tax complexity is, on the whole, the enemy of economic and political democracy and is to be avoided even when, in any individual case, the introduction of exceptions and special cases seems desirable; when appropriate, explicit subsidies from the state are a preferable, and more transparent, method for reallocating resources.

The introduction of tax simplicity is a straightforward concomitant of Thomas Piketty's suggestions for global taxes on income and wealth.⁷⁹ The latter will invariably embody a surrender of the notion that a company (corporation) is a 'person', a pretence that reinforces, and helps to perpetuate, a series of absurd practices: the tendency to tax company owners' equity and the income flowing from it differently from any other form of wealth or income that the owners possess; the frequent avoidance of personal liability by managers for misdemeanours and crimes committed by an entity called 'the company'. Most egregious in this context is the right, as decreed by the US Supreme Court, of this 'person' to participate in politics through financial expenditure, at this point merely a minor reinforcement of the capacity of the wealthy to dictate political outcomes in putatively

democratic societies. In the long term, it will be desirable to see through taxes at the corporate level and tax individual income and wealth; in the interim, the role played by corporations in facilitating tax avoidance necessitates the maintenance and enforcement of taxes on corporations. Such taxes will have to be supported by far greater public disclosure of corporate information than at present and, as we shall see below, an expanded role for workers and the public in corporate decision making.⁸⁰

But progressive taxes on income and wealth do not merely serve the purpose of redistribution of economic resources. They are important for the facilitation of political democracy, because present-day wealth distributions permit small groups of people living in their own world to exercise absurdly disproportionate influence over political and economic processes that affect everybody; some aspects of this question will be addressed below.

Political economy: public affairs

What, then, are the elements of a real, functioning democracy? As noted in the Introduction, this term in recent times has been used with little connotation of rule by the people, and debased to signify merely the absence of overt terror exercised by the state. If, however, we take the original meaning of the term seriously, then equality functions as a unifying characteristic not only of the economic programme described above, but also of its political aspect – the ability to exercise democratic control. In its most modest aspect, it is a reasonable democratic demand that the actions taken by public policy decision makers (usually politicians, but ever more frequently billionaire ‘philanthropists’) – should also impinge upon their own lives. Democracy, in this minimal sense, is only a catchphrase when these individuals are the arbiters of the fate of the public school system and of public transport while they and their children frequent private schools and move around the city in taxis.

Equality in its political aspect, furthermore, demands the free flow of information. When little or no detail is forthcoming about important public policy processes, these governmental actions have a way of disappearing off the public’s radar and no longer seem to exist. In a public policy context, the well-nigh infinite flow of information potentially forthcoming at any moment is inevitably sieved and interpreted by a range of intermediaries we usually think of as ‘the media’. But other sources are also of significance, including academic and independent researchers as well as governmental output, both overtly political and bureaucratic (such as agencies dealing with health or the environment). The cognitive particularities and limitations we all possess mean that this flow of information is transformed into a different body of knowledge by each one of us.

A free flow of information is, thus, a necessary but far from sufficient condition for securing knowledge in the hands of the public that is adequate

for democratic decision making. Even beyond the issues surrounding the securing of knowledge, however, we have to consider the mechanisms available for democratic expression of current concerns. In the US and other countries, the declining role of civic groups, most especially labour unions, has weakened the public's capacity to undertake collective action to hold politicians accountable; what is left for members of the public is the relatively passive role of supporting professionalised advocacy groups in the context of specific issues, so-called pressure groups.⁸¹ The diminution of union power has, as we shall see below, been roughly coincident with rising inequality of income and wealth, thus forging a link between secrecy, failures of collective action and rising inequality.

These issues – secrecy, failures of collective action and rising inequality – converge (and sometimes clash) in confronting the influence of the rich on political processes and the question of tax havens. The political role of wealth and income inequalities in the distortion of democratic polity will be discussed below, but one aspect of this question – the role of secrecy – has manifested itself in a peculiar manner in recent times.⁸² In the context of a 5000 per cent increase in the undisclosed financing of political advertising in the US between 2003–4 and 2011–12, Thomas Edsall asked donors to justify their anonymity. The response from the spokesperson for the billionaire (and right-wing) Koch brothers emphasised the role of anonymity in the defence of free speech, especially for dissenters to protect themselves against the threat of retaliation. The citation of a civil rights case from the 1950s involving the National Association for the Advancement of Colored People (NAACP) by the Koch representative left Edsall sputtering with indignation.

But the Koch position is, in the abstract, an impeccable one – the secret ballot has long functioned as an outlet for free expression in the context of elections. Edsall's anger is rightly linked to this tool of the powerless – anonymity – being used as a weapon by those whose power is already absurdly disproportionate and inconsistent with the functioning of a democratic polity. In such a context, openness functions alongside measures promoting equality for the furtherance of democracy.

Many of these issues are exemplified in the interaction of questions surrounding the free flow of information and those concerned with the growth of inequality, tax avoidance and tax evasion. The orders of magnitude are staggering, with a recent estimate that a third of all private financial wealth, and nearly half of all offshore wealth, is now owned by 0.001 per cent of the world's population, and that 'Almost all of it has managed to avoid all income and estate taxes, either by the countries where it has been invested and or where it come from.'⁸³

The ignorance surrounding these data is, however, almost as unfathomable as the numbers themselves, a fact to which all of the researchers quoted here will testify: studies for the US report the 'paradox' of a doubling of the share of the income of the top 1 per cent from 1980 to 2010 but – absurdly – a

rise in the wealth share of the top 1 per cent by less than 6 per cent. Such problems are perhaps predictable, given the survey origins of the wealth statistics in the studies above compared with the income data taken from tax returns.⁸⁴ Even in the latter case, however, distortions are likely to be present, as affluent individuals act to minimise tax liabilities; in general, these data were collected for purposes other than demonstrating the level and change of income distribution in society.

We are thus faced with multiple forms of ignorance: with fewer nations taxing wealth in comparison to income, trends in the former become difficult to measure with any precision, or even to detect. In some cases, such as that of the (legal) use of tax havens by the 2012 Republican US presidential candidate Mitt Romney, the facts were known to the tax authorities but not willingly disclosed to the public. Most especially in the farcical context of these acts being perpetrated by an individual aspiring to a nation's highest office in government, there is much to applaud in Norway's publication of all tax returns on the internet in 2005, an intervention that appears to have served as an inhibition to tax avoidance.⁸⁵

In general, however, there is only a murky distinction between tax avoidance and evasion, and in the gap in our ignorance between levels and trends in income, on the one hand, and wealth, on the other. Tax havens are 'now at the heart of the global economy',⁸⁶ but 'The subterranean system that we are trying to measure is the economic equivalent of an astrophysical black hole', with a significant fraction of global private financial wealth, at least \$21 to \$32 trillion as of 2010, being invested virtually tax-free in more than 80 offshore secrecy jurisdictions. This calculation embodies only financial wealth, and 'excludes real estate, yachts, racehorses, gold bricks ... [that] are also owned via offshore structures'.⁸⁷

Unsurprisingly, these considerations might well cause significant alterations in our perception of the levels and rates of change of inequality worldwide, if only full information were available. The self-righteous complaints emanating from the rich about the devastating effects of corruption on the development of poor countries should be put in the following context: the looted funds invariably land for safe keeping and investment in financial institutions under the ownership and potential control of those very rich nations that are offering their sage advice on the virtues of good governance. Ignorance and confusion on the part of the public and regulatory authorities concerning liability for tax and the very existence of various income streams are exacerbated further at the level of the multinational company. These problems emerge not only due to the existence of tax havens as a repository for profits made abroad, but because of the common exercise by companies of a range of transfer pricing abuses that effect the movement of profits to low-tax jurisdictions.⁸⁸

The political economy of the mitigation or elimination of these abuses has many aspects. Dealing with tax havens involves piercing the veil of

secrecy with fairly straightforward administrative devices, such as automatic information exchange among tax authorities and public registries showing the true owners beneath the maze of beneficial ownership, trusts and foundations:⁸⁹ there do not appear to be any deep conceptual problems involved in dealing with this issue.⁹⁰ The case of correcting transfer pricing abuses on the part of multinational firms is more complex. The institution of unitary taxation⁹¹ – treating the multinational as an entity and then apportioning tax appropriately to the countries involved – will involve dealing with an appropriate allocation of a multinational's profits to each geographical location, a problematic issue because of the interconnections between regional centres in generating the firm's profits, and because these regional centres might not invariably correspond to national boundaries. But, while this is difficult, we are not very far from the classic accounting problem encountered in Chapter 3 of the correct allocation of profits within a diversified firm, in this case to their appropriate geographical location, which invariably has to be solved by multinational managers: starting with a consolidated balance sheet, the provenance of profits must be traced so that the performance of subdivisions within the company can be evaluated. The conceptual issues involved in the taxation and regulation of multinational firms are no more complex than those that have to be solved by the managers of these firms themselves.

The major obstacles to regulation and control of both tax havens and the transfer pricing activities of multinational companies are not the objective complexities involved, but the political economy of blockage – the need to battle against ‘the army of bankers, law firms, lobbyists, and public relations firms working at the behest of the beneficiaries of tax havens’⁹² and the broad array of opposition to unitary regulation and taxation that has been mounted by multinational firms.⁹³ Thus, a 2009 agreement of the G20 compelled tax havens to sign bilateral treaties providing for exchange of bank information, but tax evaders appear to have simply shifted deposits to havens not covered by a treaty with their home country;⁹⁴ the Tax Justice Network, commenting on a 2013 OECD report of a new global standard for countries and tax havens to exchange information with each other, has expressed concern ‘that powerful tax haven interests have inserted themselves into positions of influence in the OECD and forthcoming Global Forum Process’.⁹⁵

From a socialist perspective, the leading impediment to the regulation and control of these abuses is a continued adherence to a capitalist ideology of the sacrosanct nature of private property. But there are ambiguities – perhaps even an ambivalence – in mainstream approaches to this question. As noted in Chapter 10, the apologia offered by American liberals for an acquiescence to inequality is its perceived role in the creation of wealth (the ‘trade-off between equity and efficiency’).

With, thus, even American liberals, those mildest of social democrats, making their support for inequality contingent on its delivering the goods,

can we not have some sympathy with those right-wing analysts who view social democrats and American liberals, despite their protestations, as fundamentally socialist in outlook – individuals whose support even for private property itself is no more solid than its delivery of successful economic outcomes? By contrast, the justification for private property for the right-wing economist Milton Friedman is on the far more secure basis, following John Locke, of ‘the ethical proposition that an individual deserves what is produced by the resources he owns...In my judgment, this proposition is...part of the reason why society has accepted the market system and its associated methods of reward.’⁹⁶

This principled, Lockean justification for private property, that ‘an individual deserves what is produced by the resources he owns’, plays a subtle but pervasive role – a kind of cosmic background radiation – that helps to perpetuate abuses such as the tax haven and multinational manipulation to avoid taxes. The most impeccable official sources can tell us that ‘Private-sector transparency is indispensable to business, and can be brought about through the use of standards as well as auditing and accounting practices that ensure access to information in a timely manner.’⁹⁷ But, as we have seen above, public disclosure (and therefore disclosure even to its owners, the shareholders) can be inhibited by the possibility, or the excuse, that valuable information will be passed on to competitors, revealing information to others.⁹⁸ This is the same excuse used by politicians for withholding information from the public – it will also fall into the hands of the enemy. It remains to be seen whether recent action in the European Parliament endorsing the creation of public registers for companies that give details on beneficial owners and trusts will succeed in piercing the anonymity and secrecy that currently is part of the ordinary way of doing business.⁹⁹

There is good reason to think that these reforms, and others like them, will ultimately go nowhere. This is not so much because the fungibility and fluidity of wealth in the modern world make it impossible to trace, nor, in the end, is it merely a question of the overt corruption of the officials monitoring and executing these reforming directives. It is, rather, that tax havens and their equivalents will continue to have durability and a robustness as long as the dominant ideology among those making decisions is the Friedmanite position that ‘an individual deserves what is produced by the resources he owns’, with these decision makers, as wealth holders themselves, the personal beneficiaries of this ideology.

The inviolability of an individual’s ownership of private property underwrites the legitimacy of the secrecy attached to beneficial owners and trusts. The long-held notion of the personhood of a company was perhaps most definitively established in the US, with a Supreme Court ruling as far back as 1819 giving it, by implication, the rights of a private citizen, including rights to privacy in the conduct of business affairs. The public (as well as the company’s workforce) are residual claimants and may interfere in the

conduct of a company's 'personal' affairs, such as its transfer pricing practices, only under exceptional circumstances. In recent years, as noted above, the idea of the company as a person has been imaginatively extended by a range of US Supreme Court rulings to include the freedom to make donations to political campaigns.

Tax havens and secrecy surrounding the ownership of world-spanning companies ultimately gain ballast from the continuing centrality of the seventeenth-century ideology of the inviolability of private property, the ludicrous notion that what a great multinational does is its private business, and from the powerful vested interests supporting these ideas. At the same time, however, as we shall see below, business and company spokespeople pose in the media as disinterested representatives of the public welfare when discussing the economy or even their own businesses. Firms pursuing military contracts gained from authoritarian regimes will not only be applauded for boosting employment in the national economy, but (except in those embarrassing instances when the recipients turn into foes) will receive support from the political leaders of their own countries in acquiring these contracts: this is in contrast to labour unions, which are presented in the media as representing merely a sectarian interest.

Are we, then, to view the working population and the public interest as mere residual claimants in the conduct of economic affairs? A contrary perspective is that 'Without real accounting and financial transparency and sharing of information, there can be no economic democracy. Conversely, without a real right to intervene in corporate decision making (including seats for workers on the company's board of directors), transparency is of little use.'¹⁰⁰ A variant of the latter perspective will be defended below.

The conflict between the public welfare and a privileging of the rights of private property can be seen with particular acuity in the context of patent protection. A broad consensus in the empirical literature of economics has emerged that strong patent systems tend to be dysfunctional and inefficacious,¹⁰¹ with the benefits in the form of weak incentive effects easily neutralised and even reversed by the barriers to entry created by established firms.¹⁰² In a manner consistent with the narrative concerning the emergence of the semiconductor industry in Chapter 9, competition and first-mover advantages, rather than patents, seem to be the prime impetus to innovation from privately owned firms. Academic specialists concerned with innovation are not averse to considering a general abolition of the patent system.¹⁰³

But even if every economist in the US were to support abolition, it would be safe to make the prediction that Elijah will come down in his fiery chariot before the US voluntarily dismantles its patent system. On the contrary, recent times in the US have evidenced 'an enormous increase in the number of patents and in the strength of their legal protection'.¹⁰⁴ The US government, both directly (usually in complicity with other rich nations) and

through its surrogate influence on the World Trade Organization and other organs, promotes stern regimes of Intellectual Property Rights (IPRs).¹⁰⁵ It does so because of the lobbying power of established firms whose economic value is tied to the monopoly rents gained on these IPRs. But there is a second reason: with much of these rents extracted from other countries (often poor ones),¹⁰⁶ strict IPR regulation is seen in the US (and many other rich countries) to serve the national interest. This fusion of the capitalist ideology of the inviolability of private property with nationalism is a common one, and is the antithesis of a socialist focus on the public interest and international solidarity.

These considerations – the free flow of information, the ideology of the inviolability of private property, and nationalism – bear on the question posed above concerning the requisites of a real, functioning democracy. Why have democratic institutions and procedures in the US and the UK done so little to halt the ‘slow, steady slide towards economic oligarchy’ in the US,¹⁰⁷ most especially in the context of a public in the US and elsewhere that apparently supports more egalitarian distributions of income and wealth than those presently existing?¹⁰⁸ Note that from a socialist perspective, democratic decision making is a good thing in itself, and not merely because it might lead to efficacious outcomes. Thus, a disproportionate influence by an economic elite is undesirable even when it emerges in an ‘enlightened’ form.¹⁰⁹

The presence of economic crisis exacerbates the problems of democratic polity, as the great mass of the population may view themselves as mere spectators in a contestation between different elite groupings.¹¹⁰ A public feeling not only bewildered, dispirited and insecure, but powerless, is then viewed by opinion makers as unpredictable, unstable and irresponsible. Elites commonly view practical politics as the art of manipulating a mass public bereft of the knowledge base for rational decisions.¹¹¹ In the absence of real agency on the part of the public – a functioning democracy – politics is perceived as a conflict between elite groupings and special interests, all vying for government favour.

With an implicit acceptance of such a context, contemporary political and economic debate is consumed with minimising the rent seeking that accrues to special interests from government favour. Much of the intellectual ballast for free-market developments, including deregulation, in the last quarter of the twentieth century was the claim by right-wing theorists that the deleterious effects of state–market interaction could be remedied by relying wholly on a market-based spontaneous order through deregulation and privatisation. By contrast, more recent left-of-centre critiques by Joseph Stiglitz and others of the economic order that has emerged after decades of these right-wing reforms focus on the need for explicit public policy intervention to minimise the rent seeking engendered by the persistent, and perhaps increasingly intimate, relations between the state and private

interests.¹¹² In most of these conceptualisations, the public is a passive spectator witnessing the unfolding of these conflicts.

The US is a dramatic, well-documented case of special interest – overwhelmingly, private sector business influence – on state policy. Expenditure by registered lobbyists in Washington has doubled in nominal terms since the beginning of the century, with the leading three sectors being miscellaneous business, health, and finance/insurance/real estate.¹¹³ Real estate has been subject to special scrutiny, most especially in the wake of the financial crisis of 2007–8, for the employment of revolving door lobbyists – those who previously worked for the federal government in sectors for which they are now lobbying.¹¹⁴ The question of special interest campaign finance is a particularly serious matter in the context of US politics. The Democratic Party is by no means immune to reliance on donations from big business: the role of the latter in the making of substantive policy in the Obama administration would appear to be only marginally less than in an equivalent Republican government.¹¹⁵ The personal economic status of politicians in the US (and the UK as well) also creates a distance between their lives and those of ordinary Americans.¹¹⁶

It would be deceptive, however, to paint a picture of capitalist economies so far under the control of special interests that public policy is completely dysfunctional. Among lobbyists in the US, health is ranked second only to miscellaneous business, and the lobbyists' money seems to be well spent: pharmaceutical companies are able to extract prices from health providers that are two to ten times greater in the US than in a range of other countries.¹¹⁷ The obverse of these statistics is that the power of the great drug companies is not insurmountable: intervention by national governments substantially weaker than the federal government of the US permits them to reduce the costs of often life-giving drugs to their citizens. Even in the US, however, the free flow of information can inhibit the largest pharmaceutical companies, with the latter feeling the need to reduce payments to health professionals for promotional speeches in the context of a range of federal lawsuits over improper marketing of drugs; the coming on stream of the Physician Payment Sunshine Act, a part of the 2010 health reform law, requires all pharmaceutical and medical device companies to publicly report payments to physicians.¹¹⁸

Voter ignorance is often seen as reinforcing an alienation from the political processes in generating the public's passive role in public affairs. The suggestion is made that many voters, especially in the US, are confused or even deluded about current affairs, including the present state of inequality,¹¹⁹ a situation that permits manipulation and often leads to demagogic and dysfunctional political behaviour. It is possible, however, to change the emphasis in this analysis and find something positive to say about the possibilities for public policy intervention on the basis of an important study comparing knowledge of public affairs among the general population in

various countries.¹²⁰ It appears that knowledge of substantive issues in the news is consistently higher in countries with a high (Finland, Denmark) or intermediate (Great Britain) level of public service broadcasting compared with the US, whose commercially driven, marketised model is growing in predominance worldwide. Perhaps even more striking, however, is that the gap in knowledge on the basis of income and education is much wider in the US than in countries with an important public service component.

An important corollary of these results is that a fatalistic approach to the public's supposed ignorance of public affairs and its deleterious effects on public life is uncalled for: there appear to be substantive public policy interventions that can affect the level of the public's *in situ* knowledge that are literally in the air. The key result of this study, however, is that 'being interested is the single most important correlate of hard news knowledge in all four countries',¹²¹ a less than shocking result for those of us who have spent our lives teaching classrooms of students. Two questions arise, the first of which was addressed earlier: what are the processes in school that cause such a large percentage of children to perceive that public affairs are not their concern? The second question deals with adults: can full participation in a democratic polity be possible unless involvement and influence are part of the lived experience of individuals in their daily lives, most especially at work? In the absence of an inculcation of democratic habits in daily life, is it surprising that, for much of the population, the conduct of political affairs is somebody else's business?

The political economy of work

As we have seen in Chapter 2, a key aspect of modernity in the functioning of capitalist enterprise was the emergence in the late nineteenth and early twentieth centuries of clear lines of control and delineation of tasks between staff, line and workers. Developments of this kind were indubitably necessary for rational organisation of the giant entities that were emerging. But these changes took place in the context of existing class divisions, and, especially in the US, there was a determined and explicit effort by management to give detailed direction to the work process in the form of Taylorism. These issues – the control of the firm in the form of staff and line delineation, and conflicts over the work process – are thus fundamental to questions surrounding democratic control of the workplace and the work process, and therefore the fabric of daily life.

Unions (trade unions in British terminology) have historically played a key role in determining outcomes in both economic and political spheres. Unions influence economic outcomes, even in the context of worldwide developments favouring capital vis-à-vis labour, by mitigating the effects of this changing balance: a strong relationship appears to exist between union organisation and wage compression across countries, with declining union

representation linked to widening wage inequalities.¹²² These effects tend to spill over to non-union workers even when the latter are not formally covered under collective bargaining agreements, so that the spread of the distribution of wages nationwide is tied to levels of union organisation.¹²³

The changing balance favouring capital vis-à-vis labour also appears to be present in the deteriorating environment within the firm for workers, as we have seen in Chapter 8, with reductions in autonomy, intensified employee supervision and stronger Taylorist-type pay and performance systems. Unions appear to play a role in mitigating the worst effects of these developments, with evidence across Europe of a direct relationship between union power and the extent of task discretion afforded to workers within enterprises.¹²⁴ In many European settings, unions supplement works councils and institutionalised co-determination as forms of worker representation for dealing with worker grievances, as well as conducting negotiations over such issues as the nature of apprenticeships.¹²⁵ By contrast, with the US typically functioning under an employment-at-will doctrine in which the firm 'owns the job', US workers typically find themselves exercising complaints in the form of litigation, often at the individual level. Worker discontent, however, is most commonly expressed by exit from the job, resulting in the distinctively high level of job mobility in the US.¹²⁶

There can be little doubt that, in both the economic and the political domain, unions have been 'very much on the defensive'¹²⁷ in rich countries since 1980, despite no obvious trend in numbers covered by collective bargaining agreements.¹²⁸ In the US and the UK as well as some other countries, however, there have been sharp reductions in union membership and coverage in the private sector, and only a small percentage of this decline can be accounted for by economy-wide movements away from traditionally unionised blue collar work.¹²⁹ In the US at least, the exceptionally high and even intensified level of employer opposition to union organising appears to have played an important role in these developments.

The rationale and the welcome for these developments in many quarters are often linked to a conception of human labour found in orthodox economic theory, in which it functions like any other commodity and is subject to laws of supply and demand. It is hard to imagine any set of facts that would modify this orthodoxy for its adherents, or its corollary – that the key to dealing with unemployment is for labour to become more attractive to employers. The typical mechanisms put forth for promoting this enhanced attractiveness are the removal of inhibitions on management for the setting of low remuneration for marginal workers and, in general, permitting management to use its workers as it sees fit – making it easier to fire workers and place them on flexible contracts, with a minimisation of worker autonomy. In all of these aspects, unions function as obstacles to management exercising freedom of action.

But if this orthodoxy has a modicum of validity, and the only path to full employment is one that validates present-day income inequalities and puts workers' working careers solely at the whim of employers, then so much the worse for capitalism. Present-day developments are offering a range of unattractive economic prospects for much of the workforce, with a decline in union power internationally linked to an exacerbation of inequality and a reduction of autonomy and voice in the workplace. In political terms, the effect of this decline, perhaps most striking in the US, has been to weaken the only significant countervailing force to an ever more blatant and explicit intervention from the interests of capital in the financing of political contests and the conduct of affairs of state.¹³⁰ This declining power of unions has also enervated their ability to support progressive politics in general, and specifically measures, such as the minimum wage, that in the past have mitigated rises in inequality. More profoundly, this decline has constrained the ability of unions to participate in the construction of broadly based alternatives to the neoliberal order. The building of a political economy for workplace affairs will invariably begin with a consideration of the best present-day examples of intervention in capitalist society and then attempt to advance upon them.

Management–employee relations in many rich countries appear to be moving in a direction typically found in the US:

the basic thrust of developments in the industrial relations systems of advanced capitalism, involving the generalized weakening of unions or even the substitutions of unions with other collective actors, the erosion of bargaining coverage and the transfer of ever more regulatory matters to the firm level, and the increase in the heterogeneity of negotiated provisions to match a similar heterogeneity in market conditions, is unequivocally neoliberal in character despite differences in institutional form.¹³¹

How far other countries will move in the direction of US labour relations remains to be seen. As of 2009, one study for the US dealing with union organising reports that 'employers threatened to close the plant in 57% of elections, discharged workers in 34%, and threatened to cut wages and benefits in 47% of elections. Workers were forced to attend anti-union one-on-one sessions with a supervisor at least weekly in two-thirds of elections. In 63% of elections employers used supervisor one-on-one meetings to interrogate workers about who they or other workers supported, and in 54% used such sessions to threaten workers.'¹³² The absence of union power, as in the US, thus appears to impinge not only on economic outcomes in the workplace such as wage inequality, but also on the fabric of life – the human rights connected with the workplace. In sections of the US, with its relatively weak unions, those rights, including the right to organise, are

frequently violated.¹³³ By contrast, union power has continued to inform and shape politics and legislation in many countries.¹³⁴

The economic and political roles of unions are thus intertwined. It is useful in this context to follow a typology outlined by Jonas Pontusson to represent a range of regimes focusing on the role of labour.¹³⁵ First, liberal market economies, epitomised by the UK and, especially, the US, are characterised by weak union membership and coverage (30 and 35 per cent, respectively, in the UK and 12 and 13 per cent in the US), with these unions being seen to have minimal impact on political processes and legislation; labour relations are typically dominated by the employment-at-will doctrine specified above.

At least some of the present-day weaknesses of unions in the UK and the US can be attributed to past failures in the strategies undertaken by organised labour in these countries. In Britain, a seemingly powerful labour movement in the postwar period interacted with the Labour Party to produce a political economy singularly lacking in vision, direction and purpose (see Chapter 5). One conclusion that emerges from the cases of both the UK and the US is the long-term failure of their respective economic approaches, in which unions functioned almost exclusively to improve the pay and conditions of their workers. In contrast with the political approach of unions in Scandinavia, Anglo-Saxon unions often gave relatively little consideration to the broader economic and political context in which they were functioning and showed a lack of consideration for the effects of their actions on the rest of the working public: in the context of a precipitous decline in membership in recent decades, these unions have now been attempting to do what they should have been doing decades ago – to extend representation to women, workers in the public sector and in service industries, the low paid, and ethnic and racial minorities.

Unions everywhere have had to cope with the weakening labour market conditions emerging with the end of the postwar capitalist boom in the 1970s, but the deterioration of union power in these Anglo-Saxon economies has been exceptional. In the UK, the pursuit of an economic strategy played a role in the rise of Thatcherism, with trade union activity seen by a broad section of the public to be opportunistic and merely of benefit to a sectional interest. With an implicit concession of ‘the right of management to manage’, trade unions were perceived to be irresponsible – resistant to the imperatives of technological change and modernisation, but offering up little in the way of alternatives for dealing with these realities. The maintenance in Britain of an archaic ‘trade union’ structure meant that, on occasion, the public was confronted with stoppages emanating from disputes over jurisdiction between trade unions, rather than with management.

US unions have followed a similar path, with an economic strategy for unions declared at the beginning of the twentieth century by Samuel L. Gompers; there followed a more politicised interwar period involving

New Deal legislation and the emergence of the Congress of Industrial Organizations (CIO). In the postwar US, however, the Gompers approach triumphed, with unions hardly participating at all in the formation of economic and social policy, devoting themselves exclusively to the interests of 'their' workers – a category that often excluded, among others, female, non-white and public service workers. The main union body, the American Federation of Labor-Congress of Industrial Organizations (AFL-CIO), was linked to the state in its role as an appendage to US Cold War foreign policy.

The liberal market labour regime is a stylised version of the political economy of unions as it has emerged in the UK and the US since the 1980s, and is viewed unfavourably both in this book and by Pontusson. It is to be contrasted with two kinds of regimes characterised by substantially greater union influence. The second regime, the Nordic (Denmark, Finland, Norway and Sweden), has levels of union membership ranging from 50 to 70 per cent, and coverage from 74 to over 90 per cent.¹³⁶ The third regime considered is a continental model focused around France and Germany, but embracing a range of other countries – Austria, Belgium, Switzerland and the Netherlands – among which the rate of union membership can fall below 10 per cent (France), but where union coverage ranges from 63 to 99 per cent.¹³⁷

In the synthetic representation here, Nordic social democracy is characterised by high levels of commitment to education. Its most characteristic aspect in this regard is an emphasis on late streaming and broadly based learning, with an important academic component present even in courses with a vocational orientation. This broadly based training cultivates flexibility in the workforce, with Nordic-style regimes having relatively limited inhibitions about job shedding by employers and a minimal gap between established (insider) workers and marginal, peripheral workers (outsiders), who are more likely to be young. Complementing these approaches are a range of ALMP to re-equip workers for new jobs and wage compression, most especially as stylised in the Rehn–Meidner model of postwar Sweden.¹³⁸ wage compression supports successful firms by dampening wage gains at the top and by squeezing inefficient firms with relatively high wages at the low end. The efficiency characteristics of this system are reinforced by the provision of universal benefits that obviate the problems surrounding poverty traps on means-tested benefits. The direct public provision of social services financed out of general taxes (rather than earmarked payroll contributions) further facilitates labour mobility in the Nordic model; high levels of female participation in the labour force are promoted by the generous provision of child care and elderly facilities.

By contrast, the continental variant is a more firm-based notion, with worker protection of jobs across cycles, strong laws against worker dismissal and the promotion of safety standards and hours reduction. Job training

and skills development take place inside the firm or are sectorally based, with the specific skills regimes developed closely linked to the specific firm or sector. Such programmes support low job turnover and are reinforced by a political economy of employer support for generous unemployment benefits and job protection schemes. Many of these schemes are occupationally (and sometimes sectorally) based. The close link between workers' remuneration and skills development with the firm or sector in question lends itself to strong on-going union representation and the latter's emphasis on job security within the firm. As a consequence, these regimes put special emphasis on worker voice and democratic control through programmes of worker participation and co-determination.

Versions of the Nordic model often receive support from commentators, including Pontusson and Lindert, because of their presumed relative success in adapting to capitalism in the present difficult period. In Pontusson's case, the Nordic model facilitates economic restructuring by the promotion of labour flexibility. This is in contrast with a continental model that is more tied to security and skills development for workers within established firms and sectors. But, most especially in the period since the eruption of the financial and eurozone crises, all regimes have proved inadequate from the perspective of working people. Both the Nordic emphasis on the need for the creation of opportunities for individual development, especially for young people, and the continental focus on the establishment of adequate levels of job security and continuity of existence are reasonable demands to make of a well-functioning advanced economy that, as we have seen, are not being met.

The perspective here is that both of these stylised variants represent convergent and conflicting aspects in a workplace context of socialist aspirations described in the Introduction. In a crude sense, the Nordic model appeals to the former of the two fundamental aspects of socialism, emphasising individual opportunities for self-realisation and full development of personal capacities. Thus, 'access to upbringing and education from the earliest stages of life that is not contingent on, and compensates for, limitations in household circumstances' is reflected by educational systems of the Nordic variant that emphasise late streaming and broadly based learning, and possess an important academic component even in courses with a vocational orientation. The direct public provision of social services financed out of general taxes in the Nordic model, and the generous provision of child care and elderly facilities, promotes 'a mitigation of the forms of deprivation and insecurities to which households are subject', while ALMP and, in addition, adult education are consistent with attempts to promote 'opportunities for employment that involve full exercise and realisation of personal capacities'.

But a single-minded focus on personal achievement and development can easily turn the Nordic variant into a form of capitalist individualism

flavoured by egalitarianism. The continental model, by contrast, is linked to the perception that, for a large portion of the population, continuity of employment in a particular skill or profession, and in a particular enterprise, is likely to play a key role in the maintenance of household security, most especially for those in mid- to late career. The notions of managerial theorists that we are all going to spend our lives functioning as entrepreneurs, changing jobs and careers every few years, are fanciful and, for many individuals, highly undesirable. The continental variant emphasises the role of collective solidarity within the workforce, with ordinary workers having opportunities to exercise control over the enterprise and also take responsibility for its destiny. These firm-based continental approaches lend themselves to the fulfilment of the notion that democracy must embody 'substantial levels of participation in decision making'.¹³⁹

Extensions of the continental variant, from cooperatives to other forms of worker-controlled organisations, have thus been put forth as theoretical and practical alternatives to capitalism from its earliest days to the present.¹⁴⁰ For John Stuart Mill in the nineteenth century, worker control of enterprises was intimately linked to the progress of democracy:

The poor [a term conflated by Mill with manual labourers] have come out of leading-strings, and cannot any longer be governed or treated like children... Modern nations will have to learn the lesson, that the well-being of a people must exist by means of the justice and self-government... of the individual citizen... The form of association... which if mankind continue to improve, must be expected in the end to predominate, is not that which can exist between a capitalist as chief, and work-people without a voice in the management, but the association of the labourers themselves on terms of equality, collectively owning the capital with which they carry on their operations, and working under managers elected and removable by themselves.¹⁴¹

Thus, alongside a pervasive narrative that has associated capitalism with democratic political institutions, there has been a countervailing one: democratic polity cannot readily be associated with capitalism because the latter is dominated by a work relation that contains the 'capitalist as chief, and work-people without a voice in the management'.¹⁴²

Can organisations owned and controlled by their workers be operated efficiently? The analytical literature yields ambiguous results. It is at the level of the work process itself that the greatest claims are made for the efficiency benefits of worker involvement. Workers' monitoring of fellow employees is likely to be an efficacious way of guarding against shirking by individual employees.¹⁴³ More ambitiously, it has been suggested that 'A large body of evidence shows... the importance of worker involvement in the productivity improvements that contribute to making their own jobs, and the companies

for which they work, competitive on a global scale.¹⁴⁴ If true, this is an issue of importance, given the emphasis placed in earlier chapters on the role of dispersion and adaptation of new technology, as opposed to its creation *de novo*.

In dealings with the wider world, an early theoretical contribution suggested that worker-controlled enterprises, even in a competitive context, might behave in a perverse manner: a rise in the market price will cause firms to reduce output and workers employed (perhaps an implausible assumption in a worker-managed enterprise) in order to maximise profits per head for the remaining members.¹⁴⁵ Of greater substantive interest than this anomalous response in a static context are the divergent ways in which worker-managed enterprises might deviate from capitalist firms in their investment behaviour. A common conclusion is that enterprises with a cooperative or worker-managed orientation will, compared with equivalent capitalist firms, choose capital-intensive technologies when investing in new projects.¹⁴⁶ Such a capital bias was often seen as an obstacle to the generation of employment in the pre-1989 Yugoslav economy, with its widespread presence of worker-managed enterprises. Note, however, that the Rehn–Meidner plan in Sweden, discussed above, intentionally used high wages at the low end of the payments spectrum to eliminate low-wage, labour-intensive employment and as part of a strategy to encourage technological upgrading in the economy.

But the very notion that the worker-managed enterprise might over-invest in capital-intensive projects has been questioned. There are several reasons to suggest that, on the contrary, such enterprises might suffer from a shortfall of capital investment compared with a typical profit-maximising capitalist firm.¹⁴⁷ First, long-term investments by the firm might be constrained by the time horizon of typical members: they may be unwilling to make present-day sacrifices to invest in long-term projects that will be largely of benefit to future members. Second, firms managed and owned by workers may suffer restrictions on the capital that can be raised compared with a typical capitalist enterprise. Worker-run firms are likely to find it more difficult to make creditable guarantees to outsiders that they will constrain remuneration to workers, or that they will not make overly risky investments, leaving outside creditors holding the bag. Contrarily, risk-averse workers who feel committed, or locked in, to a lifetime of employment with a given firm may absent themselves from innovation and choose overly safe, low-return projects.

In general terms, only the capitalist firm has a well-defined objective: to maximise the value of the firm (including taking on the appropriate amount of risk) consistent with the needs and desires of the owner: there is no other constituency. It is in the context of investment, most especially in risky projects, that the well-defined nature of this capitalist constituency comes into prominence: as we have seen in Chapter 5, in the 1980s,

as the telephone industry morphed into the multi-branched telecommunications sector, the formerly nationalised industries in most countries gave way to a range of projects in which the question of how much to invest in these new ventures was largely undertaken by individuals risking their own wealth.¹⁴⁸

The problem of whether a worker-managed enterprise invests 'too much' or 'too little' compared with a capitalist firm is symptomatic of the complex constituency it has to satisfy. Like the capitalist firm, it has a social role to play in the efficient production of goods and services that it needs to fulfil if it is to survive. For perhaps a majority of its own workers, however, the enterprise is key to continuity of employment in a particular skill or profession and the maintenance of household security. These factors will invariably impinge upon firm decision making when workers have opportunities to exert control over the enterprise and take responsibility for its destiny. Other workers within the enterprise, however, will have desires and aspirations to develop careers and change employment, and these intentions will pull the firm in other directions.

This conflict between workers' aspirations that go both in a continental and in a Nordic direction, when combined with the exigencies of fulfilling the demands of the market, have tended to constrain the development of worker-managed enterprises. Unlike capitalist firms, whose growth and development are inhibited by failure, worker and cooperative management of an enterprise can also be shattered by its very success. The prominent electronics firm Varian Associates, discussed in Chapter 9, functioned as a workers' cooperative in the early postwar world, but by the late 1950s this structure began to fall apart, incumbent upon its growth and profitability. As a commercial entity, it experienced difficulties in securing outside finance for expansion because of its ownership structure; the cooperative form also inhibited individual members of the enterprise, some of whom were approaching retirement age, from reaping the full value of their share of the enterprise in an open market because they were required to sell their ownership rights back to the cooperative.¹⁴⁹

The notion of the worker-controlled organisation has played the role of a theoretical antipode and alternative to the capitalist enterprise since the latter's earliest days. But workers' cooperatives have remained 'a peripheral form of organization that prospers only in narrow niches'.¹⁵⁰ Supporters of the worker-owned and controlled organisation as an 'alternative to capitalism' often point to the Mondragón cooperative centred in the Basque region of Spain as a prime example of the form's economic viability.¹⁵¹ Functioning since the 1950s, it is by far the largest such organisation in the world, entering the twenty-first century with the participation of 80,000 workers, 110 federated cooperatives and 147 subsidiary companies. In 2013, Mondragón announced that its historically most important unit, the Fagor Electrodomésticos Group, was filing for bankruptcy protection.¹⁵²

The Mondragón cooperative continues to be a source of controversy because of its symbolic role in the cooperative movement. In recent years, claims to success include a sharp compression, relative to comparable capitalist firms, of the ratio of top executive remuneration to that of its lowest-paid workers,¹⁵³ and its efforts to protect the employment of its members in the severe conditions of the contemporary Spanish labour market. In other ways, however, Mondragón does not serve as a model that could be widely replicated across the capitalist world. The long-term practices in Mondragón – the screening of applicants and the payment of an up-front entrance fee that cannot be refunded until retirement – signal an extreme version of the continental variant that is relevant only to those workers who are content to make a lifetime commitment to a particular enterprise. Furthermore, Mondragón offers only restricted employment protection and benefits to workers in its subsidiary companies, especially those located overseas, and there has been increasing centralisation of the top management structure since the 1990s. These developments reinforce concerns that, in general, the potential scale of viable, democratically controlled cooperative enterprises is severely limited.¹⁵⁴

Mondragón makes no claims to innovation in the work process: at one point, its workers protested against the replacement of assembly line production with Swedish-style work teams, suggesting that they have no greater preference for forms of workplace experimentation that might threaten their remuneration than workers in capitalist firms.¹⁵⁵ Lastly, the question of how firms would interact in an economy dominated by worker-controlled enterprises has never been seriously addressed, even conceptually, so there can be no pretence that this form of organisation offers a solution to the pressing issues of macroeconomic stabilisation and full employment in the contemporary world: worker-controlled enterprises are, therefore, no 'cure for capitalism'.

More modest, but far more pervasive, forms of worker influence in the enterprise have involved elements of worker control without any important component of ownership.¹⁵⁶ In large firms across a range of European countries, worker or employee councils (almost always in the context of strong union influence) have rights to consultation on changes to working practices, dismissals and information about the general direction of the firm. In Germany, Austria, Sweden, Denmark and Luxemburg, these councils appoint representatives to a supervisory board of directors (a tier of control that supposedly supervises the activities of the executive management board). The consensus of research indicates that worker councils and representation on supervisory boards yield little in the way of influence on the fundamental decisions taken by the companies concerned; in recent years, there has been pressure in Germany to weaken the role of worker councils by shifting bargaining to the enterprise level and to weaken worker representation at the supervisory board level.

The establishment in law, however, of the right of workers to information and consultation about the company's future contrasts with the 'employment at will' and 'right of management to manage' of the liberal market regime characterised above. In a practical context, worker consultation probably plays its biggest role in negotiations concerning day-to-day practices, such as the installation of check-in clocks at work, and through its influence on government directives.¹⁵⁷ In recent times, a German job-share model, in which the government compensates workers for much of the lost wages when working hours are cut by employers, has been given credit for preserving employment in the downturn of 2007–8.¹⁵⁸

In a world of rapid change, with workers having a wide range of needs and aspirations, it is inevitable that the political economy of work will have a strong component in the Nordic direction: the enterprise and its surrounding institutions must inevitably be a vehicle for individual development, one that conforms to the need for the cultivation of flexibility necessary for adapting to a range of tasks over a lifetime of work. But such an approach in its pure form could easily degenerate into a liberal market regime, albeit of a relatively egalitarian kind. For many workers, the continental emphasis on the cultivation of a focused range of skills, often within a specific enterprise, and continuous employment are central to their security and well-being. The notions of managerial theorists that demand an entrepreneurial flexibility across the population to accommodate perturbations in the market are unrealistic and, even if possible to fulfil, not necessarily desirable. For much of the population, the key aspiration is likely to be mitigation of what is perceived to be instability and insecurity at work.

Workplace democracy is an essential aspect of democratic polity: the incongruity between notions of democracy for society as a whole and a daily routine of command within the enterprise is manifestly obvious. An important component of worker control over the enterprise in the form of a substantive and not symbolic role in the enterprise's decision making will most probably need to be underpinned by worker holdings of shares in the company by which they are employed. Past successes by workers in improving life through political action, workplace activity and general solidarity are not to be underestimated. But only limited progress overall has been made in getting workplace activities to conform to the needs of those performing the work rather than to the desires of employers or the supposedly anonymous and inexorable forces of technology and the marketplace. Key roles in the cultivation of a new conception of work, one not based on authoritarian principles, will be played by diminutions in present-day class hierarchies, in the first instance by reductions in income and wealth inequalities. An important reinforcement of this *pro forma* equality will be the emergence of a new generation of young people who, as a result of their upbringing and experience in school, have learned to regard as normal a life of motivated work, democratic decision making and human solidarity.

But enterprises invariably have a broad constituency to which they are responsible. The parables above concerning worker control point to the difficulties of presuming that all the issues surrounding the day-by-day running and long-term development of the enterprise can simply be solved by a regime in which management is subject to the will of its workers: there are groups outside the enterprise that need representation in its decisions. In larger enterprises especially, the great majority of shares, in an economy far more egalitarian than the present one, are likely to be owned by the diversified holdings of workers outside the enterprise, most likely in pension funds. Any developing tension between these latter-day capitalists and workers in a worker-controlled enterprise is not necessarily undesirable, and may lead to productive resolutions – impelling equity and debt holders to be responsive to the needs of the workforce, but also reminding workers of the competitive exigencies of the outside world that may force change and adaptation for the sake of survival.

This latter force – that of competition – is often presumed to be sufficient to protect consumers, but a role for the state is widely granted in protecting them from bad business practices (adulteration of food), asymmetric information (the small print on terms and conditions of a bank loan) and monopolistic exploitation. The state, it is generally conceded, also has a role in regulating and disciplining the activities of the enterprise that adversely affect third parties. It is most probable that, in conventional sectors of the economy (that is to say, other than those in which the state will invariably play a leading role, such as in the development of technologies to cope with climate change), the state can best represent consumers and the public in an adversarial relationship to the enterprise, promoting, for instance, consumer protection and anti-monopolies legislation.

A last major issue returns us to the questions confronted in Chapter 8 concerning workplace learning, after which the future of work itself will be considered. For many individuals, the place of work is the main vehicle for the elevation of skills after leaving school. In a socialist context, it is an inherent and essential activity of the enterprise, not, as in a capitalist enterprise, bolted on to, and constraining, its value-maximising imperatives.

The notion of the enterprise as a venue for learning contains, however, a host of troublesome and difficult issues. First is the issue engaged with in Chapter 8: while the interests of the young worker and of the broader society are best served by the enterprise offering the broadest possible training, employers advocate a narrower, directly operational training. But enterprises may choose to satisfy such demands, if they are imposed from the outside, in a perfunctory manner: 'It is far easier to send people on formal training courses than to re-organize production processes or re-design jobs in order to expand opportunities for on-the-job and incidental learning.'¹⁵⁹ Even broad-based knowledge, if it is not to be received by workers merely as

adding to their personal stock of credentials, must make a concrete contribution to the work process that is taking place within the enterprise.

A second consideration complicates the issue even further. In Chapter 8, doubts were raised about the common distinction between hand and brain work, and most especially any hierarchical ranking that privileges the latter. In the contemporary training literature, this critique frequently takes the form of questioning the superiority of abstract learning by individuals over context-dependent learning, the latter often being linked to group interaction in the work environment;¹⁶⁰ it is even suggested that the dichotomy between informal and formal learning is not meaningfully distinct, and that these forms of learning are mutually overlapping.¹⁶¹ These discussions echo Dewey's distinction between activity-based and passive learning, seen in Chapter 7, and, like Dewey, much of this literature points to the efficacy of learning that takes place in a substantive, operational, goal-oriented process. The problem, however, is the ease with which activity-based learning within the firm can elide into narrowly focused task learning that is of only limited use to, especially, young workers confronting a long-term career and the likely need to acquire a broad-based repertoire of skills. The challenges in negotiating a balance between the acquisition of relevant, activity-based learning by workers and the acquisition of purely firm-specific knowledge would exist even within a worker-controlled enterprise, all the more in one engaged with the conflicting interests of capitalists and workers. The task is to construct institutions, and institutional arrangements, to ensure that regimes of broad-based learning for workers are sustainable and in workers' long-term interests.

Perhaps of even greater significance is the intimate relationship between high levels of training for workers and task discretion in the work process – the continuation of the century-old battle between skilled workers and Taylorist tendencies in management practice. As we have seen in Chapter 8, despite significant long-term rises in worker skills in recent decades, there is a clear and widespread perception of decreasing autonomy in job tasks.¹⁶² These tendencies move in the opposite direction from the desired, socialist direction outlined for working life in Chapter 8 – an uplifting of skills accompanied by individual and collective task discretion by the workforce (the latter in itself conducive to learning in a work context), with a re-designing of the jobs themselves in the direction of professional identity, personal dignity and appropriate remuneration. In areas such as care for the elderly, which will inevitably expand in the future, the conflicts are likely to be particularly acute. The well-off will see to it that their own care is intensive, personalised and professional; for the great majority, however, under the banner of efficiency and affordability, a mass-produced service using the cheapest available labour is likely to be the norm. A professionalised service, with skill upgrading and task discretion, will be available only for those able to afford it.

We thus confront the spectre of a renewed form of Taylorism, with lack of task discretion linked to an underlying imperative of standardisation of delivery, and its natural concomitant – little need for high-level training for those workers executing these tasks. Note that a management strategy focused on standardised output and production protocols (such as the preparation of food in fast food outlets) may well take place even in the absence of any decisive forms of technological change that displace skilled workers. But the creation of such protocols sets the stage for the replacement by robots of unskilled workers who do repetitive tasks. Thus, in the recent book by Martin Ford, it is suggested that

It's becoming increasingly clear...that robots, machine learning algorithms, and other forms of automation are gradually going to consume much of the base of the job skills pyramid. And because artificial intelligence applications are poised to increasingly encroach on more skilled occupations, even the safe area at the top of the pyramid is likely to contract over time. The conventional wisdom is that, by investing in still more education and training, we are going to somehow cram everyone into that shrinking region at the very top... [But] the numbers simply don't work.¹⁶³

What is striking about this literature is how such a prospect is now greeted with such universal dread: many in the past would have treated the promise of the elimination of repetitive tasks at work as the dawn of an Athenian utopia of cultural efflorescence and democracy – one based on inanimate rather than human slaves. But Ford, like Paul Krugman (see Chapter 10), sees before him only the prospect of a sea of unemployment, to be alleviated by basic income schemes.¹⁶⁴ Ford and others are willing to indulge in wide-ranging speculation about the future:¹⁶⁵ it is just that their visions do not embody any confidence in the possibility of creative responses to the challenge of technological change that are linked to a comparable elevation in human capabilities.

At present, typical uses for new technology in services, such as on-line higher education or fast food, involve the creation of second-rate offerings that the well-off would not conceive of consuming themselves. But an alternative path is conceivable. Human resources released from tasks that are now done by machines can, in the jobs worth doing programme described above, be redirected to offer to the general population the kinds of services the well-off take for granted in education, health care and care for the elderly. High-level services of this kind are not only labour-intensive in a quantitative sense, but call upon human judgement and task discretion. A focus on the development of these services will involve an elevation of the skills and an upgrading of the job descriptions for these tasks. In principle, such upgrading should be accompanied by a perceived enhancement of the

dignity and status attached to these forms of employment. There appears, in addition, to be no lack of other jobs worth doing, even in rich countries, with a pressing need, for instance, for the reconstruction of the built environment. Such a focus is necessary to deal with the exigencies of climate change and other pressures that human beings are imposing upon nature; a focus on the built environment would also be desirable for the advancement of neighbourhoods suitable for the upbringing of children and the promotion of convivial interaction between households.

Perhaps, at some distant point in this century or the next, the seemingly inexorable development of technology will have so encroached on even the delivery of high-quality human-oriented services as to necessitate a substantial reliance on enforced hours reduction in order to keep the population at work, or to guaranteed incomes schemes. But such a happenstance seems far in the future: at present, there is a great deal of work to do.

The argument presented in Part III offers a path for human development in the form of education, social and economic equality, economic security and full employment. Democratic control of public affairs is facilitated by this human development, by policies to promote transparency in government and business, and by democracy in the workplace. In the last part of the discussion especially, concerned with the control of the enterprise, there is not a great deal to upset any but the most ardent advocates of free enterprise.

* * *

Is it socialism?

Conclusion

What is in a name? Some may argue with the use of the word 'socialism' to describe the ideas and policies adopted in the past chapters. From one perspective, there is little here of true socialism, with the notions presented here lacking many of its essential requisites: the abolition of private property – nationalisation or cooperative ownership of the means of production; a central plan for the coordination of economic activities; the elimination of money, finance and financial instruments as key allocative and distributive mechanisms in the economy.

More generalised objections from a true socialism perspective will observe that, in the programme proposed here, for perhaps the majority of human beings, their labour power will still be bought and sold on the market as a commodity. The alienation characteristic of capitalist life will still be present, with the great mass of the population exercising only limited control and influence over the work process. Furthermore, there is no mechanism comparable to central planning that claims to guarantee full employment. The latter remains here an aspiration rather than a structural characteristic of the economic system, and much of the ownership of the means of production, even if more widely dispersed than is typically found in contemporary capitalism, remains in private hands.

In the present day, the great majority of individuals objecting to the use of the term socialism here, even if they remain sympathetic to the policies presented, approach the question from a different point of view. For them, socialism carries with it a heritage of authoritarianism, adventurism and failure – the use of the term is an unnecessary burden for a programme that, in their view, reduces to little more than an intensive application of social democratic principles.

Why, then, call it socialism?

Let us review the nature of the programme that has been presented here. It is non-revolutionary, and abjures discontinuous change and quick fixes. On the contrary, it focuses on long-term developments and goals. Most worthwhile improvements in human life, whether external or internal to

human beings themselves, take time to construct and for their beneficial effects to be realised. It is destruction that can take place quickly.

The creation of opportunities for the full development of human capacity across the population is to be realised by the intensive programme of child upbringing outlined earlier, most especially up to the age of 13. Tuition after 13 years will also be different from what exists at present, being modified in the context of what happened in the early years of schooling: there will be minimal streaming and segregation of groups by ability and between vocational and academic subjects. Opportunities to pursue interests and affinities in an intensive way will be present, but not to the exclusion of study relevant to citizenship. The ideal of tuition after age 13 is to be seen in the best examples of present-day elite university education, with guidance supplemented by substantial opportunities to pursue self-motivated and self-directed study, one major difference being a role for collective decision making by staff and students in the learning process, in place of present-day top-down directives. Free post-high-school tuition will be available to all, along with a lifetime of opportunities for education and personal development.

Equalisation of opportunities must also take place outside the domain of formal schooling – in the world and at work. Long-term full employment, an essential aspect of human development, is underwritten by macroeconomic stabilisation policies and reinforced by the jobs worth doing programme. And through the priorities and tasks pursued, the jobs worth doing programme, along with progressive taxation, makes a contribution to an equalisation of the economic environment in which households function and in which children grow up.

In addition to these aspects of socialism associated with personal realisation, democracy must be pervasive in the work context. Participants in the labour process are to be involved in decisions concerning the long-term trajectory of the enterprise and its detailed modes of operation, both as individuals and through collective representation. In a socialist context, the irreplaceable forms of learning that take place at work are an inherent aspect of its functioning and not, as in a capitalist environment, a concession that is, upon occasion, grudgingly conceded to the workforce. In the broader society, a necessary requisite of democracy is transparency – openness in governmental operations and political financing, and also concerning the activities of private entities such as multinational companies. Taxation systems, in order to be transparent, must not only preclude forms of tax avoidance, but must be intrinsically simple. Control of monetary and fiscal policies, as well as the financial sector in its detailed operations, is to be vested in individuals responsive to democratic control.

The binding of this programme under the rubric of socialism gives it a unity, focus and direction it otherwise would not have. Ideas and ideologies play a central role in the shaping of historical events, and are not merely reflections of underlying and supposedly deeper factors such as

contemporaneous social structures and material conditions. The events incumbent upon the French Revolution of 1789, for both good and ill, emerged from a 'revolution of the mind' that had taken place in previous generations, rather than any decisive change in the material conditions of the population.¹ And socialism in the twentieth century was channelled, as we have seen, along a path of planning and centralisation to conform to a particular, and flawed, view of the trajectory of capitalist development.

A passive approach to the role of ideas is not only inadequate as historical analysis, but lets intellectuals off the hook. Principles, creeds and dogmas are often decisive determinants of real-world events. The demonstration of a link between belief systems and outcomes, when possible, not only yields a particularly coherent form of historical analysis, but may also be an appropriate guide to contemporary and future decisions. The abstract notions and schemes that shape concrete events are not purely the products of imagination or whimsy, but often reflect attempts to conceptualise and understand a complex and changing reality.

It is important here to underline the need for a break with present ways of doing things. The failures of contemporary capitalism, most especially the growth of inequality, have not come about because of some easily corrected aberration in capitalist development, such as a market failure or a policy approach gone wrong. They have emerged, as we have seen in earlier chapters, from the unfolding of the logic of the invisible hand, with an increasingly competitive economy greatly enhancing the power of capital over labour. The adoption of the name of an alternative path to capitalism – socialism – signals a movement away from present-day practices and reinforces resistance to the ever-present temptation to offer pragmatic reforms that start with capitalism but promise to 'do it better'.

Contemporary progressive approaches, accepting the realities of present-day capitalism, end up pursuing alleviationist strategies to social reform that are unfocused, defensive and reactive, and involve 'muddling through'. Without a well-defined alternative set of goals, progressive programmes are easily derailed by the practicalities of everyday life and the need to respond in a short-term manner to the crises emanating from capitalism itself. In the absence of a clear alternative strategy for development, capitalism, its attendant Hayekian spontaneous order and even its crises come across as natural, in which case responses typically involve an acceptance and passivity with regard to unfolding events (economic crises or growing inequality) or, at best, attempts at a short term alleviation of these problems. Even more directly, this abstract Hayekian notion that unfolding events in capitalism are spontaneous, natural and, perhaps, inevitable can be used to support market-friendly economic policies: anti-labour and anti-union measures receive rhetorical ballast when high levels of unemployment are perceived to represent not any intrinsic failure of capitalism, but wage levels that have been permitted to rise above their 'natural' level. And

an acceptance of the inherently natural quality of capitalist institutions and relations means that even active, constructivist attempts to create a neoclassical utopia – market-style incentives and Taylorist forms of control imposed upon institutions and professions of all kinds – are seen as simply reinforcing an inherently natural way of doing things.²

At the rhetorical level, capitalism is often supported by a powerful individualism, a confluence of Darwinian survival-of-the-fittest ideas and a moralistic notion of rewarding individuals for hard work and achievement. Without a principled alternative path – which here is called socialism – the capitalist logic is easily internalised, with critiques of the existing order often reduced to slogans such as ‘rewards based on work, not rent’, or some other version of a fair form of capitalist distribution. An extreme form of this defensiveness and confusion can be found in the American liberal (progressive) tradition. Does, for instance, the catchphrase calling for defending the ‘middle class’ include single mothers, running two jobs, changing bed sheets in hotels? And once progressives have accepted and internalised the capitalist, Lockean principle of the inviolability of private property, public policies such as the control of cross-border financial flows by multinationals and the monitoring and control of tax havens can only be done apologetically and pragmatically, since the free disposal of one’s property is a natural right – a part of the spontaneous order. Within the logic of capitalism, the assertion of the public good in these matters is a peripheral consideration.

The alternative, developmental approach presented here attests to the need for society to have goals, standards and directions. It offers a positive vision of the future, one based, first, on opportunities for self-realisation and full development of personal capacities and, second, on social citizenship, with individuals having the ability to exercise democratic control over public affairs on a regular basis, in both the working and the living environment.

The socialist framework centres progressive strategies around human development, social justice and democratic control: this framework then conditions the approach taken to substantive issues. Thus, enhanced education is not, as in the dominant contemporary view, to be promoted in order to accelerate the rate of economic growth, but, rather, serves the goals of self-realisation and democracy. The human focus of the socialist framework, furthermore, militates against the temptation to dub any strategy, such as state ownership and control of enterprises, as progressive simply because it is seen to contain an anti-laissez-faire aspect. Equality, furthermore, is seen in an intergenerational and societal context, rooted in self-realisation and democratic rule. The central question is: how, through time, do we create a society with broad-based opportunities for personal development and with democratic control? Such an approach is less likely than typical static, individualistic conceptions of equality to degenerate into sterile debates about

whether the rewards to a particular individual are fair: the overriding issue is the creation of a good society.

The placing of equality as a central societal goal militates against it being displaced by other considerations in a crisis because it is a mere luxury, one that may well have to be traded off for the sake of greater efficiency. The underlying principle here – equality – gives a human focus to the notion of socialism, one that is absent in conceptions built around central planning. In contrast to a capitalist ideology often linked to a survival-of-the-fittest, social Darwinist individualism, socialism offers an alternative view of society that is rooted in classical (ancient Greek) concepts of personal realisation combined with citizenship and civic participation. Socialism rejects a fatalistic view of the human personality that is hard-wired at birth. In a socialist perspective, the development of the personality and skills of individuals is seen to be highly contingent on societal institutions and the nature of collective interaction, so that, for instance, the question of musical creation is less a matter of gawping at individual genius than of actively cultivating over time a vibrant musical culture from which individual creators can emerge. Broad-based household security can then be seen as a complementary aspect of equality in an intergenerational context, and especially in the earliest years of life, rather than a factor that discourages initiative and activity.

The view of democracy here is deeper than in typical contemporary conceptions. Democracy is seen as an active, on-going activity, and not just a form of negative liberty centred on the absence of state oppression. It is a process from the ground up, inculcated in a school environment that encourages active participation and carries on robustly in the workplace; it discourages a paternalistic notion of what *we* (those responsible for the conduct of public affairs) can do for *them* (the great mass of the population). The conduct of public affairs in a socialist democratic context, furthermore, implies a level of transparency for the monitoring and control of those in power that, by present standards, will appear to invade the privacy of the wealthy and corporations.

The association of the programme here with socialism links it to traditions of international brotherhood and solidarity and an abjuration of nationalism. Rich countries are not in a race or contest with China or anyone else. All nations need to pursue cooperative ventures on a range of common problems, most obviously with regard to pressing ecological issues such as climate change and the control of weapons systems. Such cooperation does not imply, in a socialist context, an accession to the brutal authoritarianism and repression of human (including workers') rights present in, for instance, China, or any other country: ruling groups in capitalist countries are often only too eager to look the other way in these matters under the guise of practicality, if there is good money to be made. Socialist ideology focuses on the support of oppressed people

worldwide, rather than seeing international relations as a battle between 'us' and 'them'.

More positively, the socialist tradition of solidarity, cultivated within one's own country across broad groups in society, is the school from which rich countries can learn to cultivate a new relationship to the poorest ones. Within countries, socialist solidarity suggests that problems encountered domestically, such as poor levels of educational achievement or high rates of violent crime, are to be dealt with as issues that 'we' – the whole nation – must confront, rather than by way of vilification of specific ethnic, religious or immigrant groups: the socialist solidarity approach corresponds to that which would be used by most families having to deal with such issues. And solidarity also inculcates mutual respect between sections of the community, rather than simply imposing the dominant norms on 'lesser' groups. In an international context, for instance, residents of rich countries may wish to learn from a range of traditional methods of food preparation around the world on how to eat well without consuming large amounts of beef, given the negative ecological consequences of this practice.

In a more material context, socialist policies *within* rich countries are likely to be a necessary prerequisite for any new relationship *between* rich and poor countries. Such a new relationship will invariably involve, using various mechanisms, substantial transfers of resources to poor countries, whose resources and the fruits of whose labour rich countries purchase so cheaply. Whether a broad public in rich countries will support such policies is likely to be contingent on both economic and political considerations existing within these countries. Necessary, if not sufficient, economic conditions for the creation of a broad base of support in rich countries for economic transfers are, first, a wide perception that the burdens borne are to be shared in an equitable manner and, second, that the population functions in a context of sufficient material security to be able to contemplate the sacrifices necessary. Politically, broad-based accession to such a programme is more likely if the relevant decisions are seen as having been made in an open and democratic context, rather than having been imposed or executed by stealth. Thus, the economic and political considerations relevant to the creation of a new relationship between rich and poor countries correspond to those which lie at the centre of the construction of socialist democracy. The restricted focus in this book on the cultivation of socialism in the richest countries is by no means because rich countries' problems are of greater urgency or importance than those of poorer countries. Quite the contrary: a central purpose here has been to forge a strategy that is compatible with worldwide development and improvement in a concrete, realistic manner.

There are major obstacles to be confronted in the process of making the link between national or supra-national (e.g., the European Union) economic policies promoting equality, full employment and economic security, on

the one hand, and international solidarity, on the other. Economic policies to secure these national goals might well involve, at the very least on a short-term basis, restrictions on the free movement of labour across borders and, directly or indirectly (for instance, a bias in government procurement favouring national producers), limitations on free trade. Such policies in a broad sense militate against efforts to promote international economic solidarity, and will, in some cases, be seen to harm the interests of poor countries.

These difficulties are real, but most likely not insuperable. Longer-term solutions reconciling the desire of rich nations to maintain equality, full employment and economic security and those of poorer ones to pursue economic development through trade are conceivable. They can be seen in incipient form in the directives of the International Labour Organization covering remuneration and working conditions, stipulations most particularly relevant in the poorest countries. If carefully designed and successfully enforced, such directives permit trade expansion but inhibit a race to the bottom in wages and conditions, so that increased trade can take the form of genuine economic development in poor countries. But any reconciliation of this kind will only come about in the presence of a desire on the part of rich and powerful countries to bring it about, a development more likely to take place when the domestic environment of these countries is already committed to equality, full employment and economic security for their own residents.

If the state of affairs described above appears to be unsystematic and imprecise, and if it seems to demand, on the part of rich countries, a form of forethought, long-sightedness and even altruism that rarely occurs in the real world, the alternatives to a reconciliation of this kind border on the unthinkable. One possibility, a generalised submission by nations to the dictates of the market, might promote economic growth for some poor countries, but could well take place in the context of high exploitation of the workforce and an increasing inequality that promotes little true economic development. For many rich countries, such a regime is likely to engender, under present-day conditions, such powerful tendencies in the direction of inequality, unemployment and economic insecurity as to make the domestic political economy of such a situation increasingly unstable and unsustainable. An alternative strategy of generalised economic nationalism, often taking the form of the generation of sustained economic surpluses in the international arena by some nations, even when successful for the few, is likely to be a zero sum game for the system as a whole and, once again, to be unsustainable and unstable.

Most contemporary national economic strategies appear to be a combination of the two approaches above. There is a widely accepted notion of the necessity of submitting to the dictates of the market, in the sense that the forces of international competition are seen to be inexorable and to

constrain the pursuit of domestic policies promoting equality, full employment and economic security. But, far from adopting the classic, and optimistic, Ricardian position that free trade is universally beneficial, this market-based orientation is commonly accompanied by the assertion that 'we' are in a race or an embattled state with other nations, in which successful nations 'win' the battle. The notions suggested above concerning the need for a harmonised international reconciliation of the domestic needs of individual nations invite condescension from those for whom the international arena is, of necessity, perpetually embattled. But there is nothing realistic or hard-headed about the institutionalisation of such a state of conflict. It is, as suggested above, not likely to be sustainable from an economic perspective. Furthermore, such a state of rivalry and non-convergent, conflicting objectives takes place in the context of an imperative need for cooperation on ecological problems and weapons control, developments not likely to emerge from a psychology of 'war against all' between nations in the economic arena.

There is, thus, nothing in the programme discussed here that poses a solution to the gaps in income and wealth between rich and poor nations, international economic instability, weapons control, or a range of problems associated with the natural environment, most especially climate change. But a necessary precondition to dealing with these issues would involve, in rich and powerful nations especially, a population that responds to these problems in a flexible and rational manner, prerequisites that would appear to be coincident with a socialist programme: the cultivation of cognitive facility across the population, permitting rational evaluation of these problems, high levels of economic equality and economic security (including full employment) in order for the population to feel that burdens are being shared in an equitable manner, and democratic decision making, giving legitimacy to what may often prove to be difficult decisions. The perception and the reality of the presence of socialist democracy may thus be necessary components of a long-term strategy for survival.

We must take a positive approach to a socialist future. In *The Sane Society*,³ the psychoanalyst Erich Fromm follows Marx in developing a picture of truly human, unalienated work as a manifestation and enjoyment of creative capacity – the satisfaction of a human need. This is a concept with which the elite of society are familiar: many of their peers will not rush to retire upon reaching pensionable age, as their work is part of, not a subtraction from, life. A well-functioning school system will attempt to give assistance to young individuals in finding and pursuing their interests, recognising that, as a by-product, such a procedure, rather than the pursuit of narrowly defined vocational goals, is likely to release the maximum level of creative and productive energy in an individual. And if such an approach is complemented by free and life-long learning, it will permit these interests to evolve and mature.

Marx and, even more explicitly, Fromm conclude that a concomitant of alienation is that life satisfaction is sought away from the work environment. By the time Fromm was writing, in the postwar US, this search for satisfaction typically took the form of a focus on consumption, often perceived by Fromm and others to be at an obsessive level, even for ordinary workers. It is probable that these circumstances will not disappear in the foreseeable future by making all employment intrinsically satisfying: Fromm was naïve in suggesting, for instance, that many people would look forward to a working life extracting the jewels of the earth in coal mining.⁴ Indeed, a great number of professions, even common ones, are unlikely to be chosen for the intrinsic satisfaction they yield and would, ideally, be eliminated in their present form. The profession of urban bus driver yields no praise for successful negotiation of the host of obstacles offered up by traffic and passengers, but substantial liability for failure. In the context of contemporary technologies, however, only a limited kind of alleviation of these difficulties can be offered, in the form of rational organisation of traffic in cities, including restriction of private vehicles in urban centres. For workers in professions of this kind, perhaps the most attractive development likely to take place is a reduction in the norm of hours worked per year for a fully employed person.

These problems intrude into nominally more prestigious forms of employment. The role of school teacher in the contemporary world (other than elite contexts) is a debilitating one. For the sake of both pupils and teachers, the wasteful and brutal ritual of schooling as it commonly exists, and has existed, for the great majority of the population will have to be reconsidered and restructured at every level in a socialist context, with resource provisioning commensurate to its centrality to human civilisation. In the long-term reconstruction of education, the profession of teacher emerging from this process would have only a tangential resemblance to anything presently observed in education for the masses. But other aspects of alienation – the feeling that decisions at work and in society are in the hands of others who will not be paying the price of hard decisions – are more readily dealt with. Democratic control and the perception of equal sacrifice (the latter, especially, has proved important in all countries in wartime conditions) are prerequisites for public acceptance of the kinds of policies that might well be necessitated by society's laggard response to climate change.

From a socialist perspective, consumption is to be seen in the broader context of the enjoyment of life, with individuals in their early years given the skills and capacity to cultivate affinities for athletics, the mechanical and visual arts, music, food growing and preparation, as well as more stereotyped intellectual pursuits such as reading. In, especially, urban areas, conviviality can be encouraged with the cultivation of public spaces, recreational facilities and high density, the latter permitting an adequate provision of public transport, so that car ownership turns from a necessity to

a luxury. The optimistic perspective is that possible slowdowns, or even reversals, in the rate of growth of consumption necessitated by ecological constraints will not be perceived as a catastrophe by the population in a socialist polity.

The socialist programme of human development and democratic control presented here is, thus, congruent with the exigencies of long-term global survival. The approach is optimistic in two senses. First, many of the paths have already been mapped out: they can be seen in the substantive achievements of past and present societies, and then built upon. There is little need for speculative ventures in the programmes to be pursued. Second, there is an unashamed optimism about the productive and creative possibilities latent, and often manifest, in human nature. Jürgen Habermas points to the need to struggle against 'the cynical defeatism of the so-called realist who fails to realize that the most pessimistic diagnosis does not excuse us from trying to do better':⁵ a cynicism with regard to improvement in the conditions of life for the great mass of humankind is a typical contemporary stance, but is little more than a self-fulfilling prophecy that acts as an impediment to confronting the issues before us. 'A radical approach to social transformation is... neither utopian nor fanciful. The programme is realizable in terms of substantive, concrete proposals in the domain of public policy, and is linked to the highest aspirations of civilization. Perhaps only a pervasive and fashionable pessimism stands in our way.'⁶

Notes

Introduction

1. Summers (2014).
2. Einstein (1949).

Part I Socialism and Central Planning

1. Auerbach (1992), p.10; footnote omitted.

1 Planning and Spontaneous Order

1. Marx (1867), pp. 283–4.
2. Descartes (1637), pp.7–8.
3. See Israel (2011), part II.
4. Kula (1986), chapters 21–3.
5. Acemoglu et al. (2011).
6. Carlisle (1974), p. 451.
7. Gide and Rist (1948), p. 232.
8. Such banks represented ‘the realization of Saint-Simonian plans’ Hayek (1952), p. 316, footnote omitted.
9. Gerschenkron (1962a), pp. 11–14.
10. The terms ‘liberal’ and ‘liberalism’ will be used throughout this book in their British, free-market sense, as when Friedrich Hayek and Milton Friedman referred to themselves as liberals. When the term is used, as in American English, to denote a mild form of social democracy, it will be qualified – ‘American liberal’.
11. Gerschenkron (1962a), pp. 22–3; Gide and Rist (1948), pp. 236–8.
12. Carlisle (1968), p. 434.
13. Kunstler (2001), p. X.
14. Kunstler (2001) p. 32; Shapiro (1982), p. 486; Gandy (1999), pp. 23–4, 27.
15. Porter (1999), p. 416.
16. Simon, as quoted in Halliday (2007), p. 119; Halliday’s insertions.
17. Spencer (1843), pp. 244–5, 247.
18. Porter (1999), p. 412; Halliday (2007), pp. 26–7.
19. Spencer (1857), p. 290; Spencer (1853), pp. 279–80, 304.
20. See Evans (2005).
21. Fogel (2004), p. 37.
22. Bauman (1976), pp. 13, 15; see as well Hayek (1982), volume 1, pp. 64–5.
23. Hayek (1944).
24. Hayek (1982), volume 1, p. 118.
25. Hayek (1982), volume 3, p. 167; emphasis in original.
26. Hayek (1960a), pp. 397–8, 399.
27. Hayek (1982), volume 2, p. 136; footnote omitted.
28. Hayek (1952), pp. 49–50.
29. Hayek (1982), volume 2, p. 5.

30. Hayek (1952), p. 154.
31. Hayek (1960), pp. 24–5.
32. Hayek (1982), volume 2, p. 5.
33. Hayek (1982), volume 1, pp. 84–5.
34. Hayek (1982), volume 1, p. 82.
35. Hayek (1982), volume 2, pp. 9, 109 (footnote omitted); Hayek (1952), p. 249.
36. Hayek (1952), p. 179.
37. Hayek (1982), volume 1, p. 22.
38. Hayek (1982), volume 1, p. 25 and note 37.
39. Hayek (1982), volume 1, pp. 11–12.
40. Hayek (1952), p. 392.
41. Hayek (1952), pp. 173–4; see also pp. 221–2.
42. Hayek (1977).
43. See, for instance, Graaff (1967).
44. In 1951, Kenneth J. Arrow elaborated upon the possibility, pointed out in the eighteenth century by the Marquis de Condorcet, that majority voting procedures might not converge with a consistent ordering of preferences on the part of the public (Arrow, 1963).
45. See Hayek (2011), pp. 35–7.
46. Scott (1998), pp. 59–61, 82.
47. Shapiro (1982), p. 487; on dispossessions, see as well Caro (1998).
48. Josephson (2002).
49. Scott (1998), p. 5.
50. Kunstler (2001), pp. 45–6.
51. Scott (1998), p. 104.
52. Jacobs (1961), pp. 238, 241, quoted in Scott (1998), p. 142.
53. Jacobs (1961), pp. 158–9, 167, 241–3.
54. Hayek cites Jacobs' *Death and Life of Great American Cities* in Hayek (1982), volume 1, p. 15.
55. Gans (1968), p. 33.
56. Hayek (1960), pp. 340–1.
57. Hayek (1960), pp. 349–50.
58. Coase (1960).
59. Stigler (1966), pp. 110–14; Chung (1996).
60. Jacobs (1961), p. 241.
61. Acemoglu et al. (2005).
62. Horwitz (1977) substantiates this argument for the evolution of the law in the pre-Civil War US, as does Skowronek (1982), chapter 1.
63. Polanyi (1944), pp. 181–2.
64. Polanyi (1944), pp. 141–2.
65. See Simons (1948).
66. Pareto improvements: Hayek (1982), volume 2, p. 139; equality and stagnation: Hayek (1982), volume 2, pp. 6, 122, 188, note 24; Hayek (1960), pp. 42, 49, 430, notes 9 and 12.
67. Cronon (1991), pp. 109–19.
68. Hayek (1982), volume 2, pp. 33, 142.
69. Jacobs (1961), p. 241.
70. Hayek (1944), pp. 72–6; see also Sowell (1980), pp. 213–14.

2 The Giant Firm and the Plan

1. De Vries (1994). This notion had been anticipated by the 'aspirational principle' of Sir James Steuart in the eighteenth century: see Allen (2009), pp. 12–13.

2. Voth (2003).
3. Chandler (1992). This article is perhaps the clearest expression of his distance from mainstream theorising on the nature of the giant firm. Chandler reiterated these themes many times, most notably in Chandler (1977) and Chandler (1990).
4. Chandler (1992), p. 81, quoting Chandler (1990), p. 24.
5. The modern notion of perfect competition, in which advertising and marketing are an impossibility, only emerged with the publication of Frank Knight's *Risk, Uncertainty and Profit* of 1921: see Stigler (1957).
6. Hughes (2007), p. 1.
7. Leonard (2009).
8. Maddison (2006), pp. 184–7. Tooze (2007), chapter 5, casts an even more negative view of the progress of living standards of German workers in this and later periods.
9. Japanese per capita income approximately doubled over this period (Maddison, 2006, p. 206).
10. Chandler (1977), part II.
11. Landes (1983), pp. 285–7.
12. See Alexander (1929), chapter III 'Company Standardization'. The authorship of this book is ambiguous: 'The present investigation was made, and this volume was prepared, under the supervision of the Conference Board's Staff Economic Council, by Mr. Robert A. Brady of the Conference Board's Research Staff' (p. vii).
13. Hughes (2007), p. 210. A faith in the ability to monitor the performance of the divisions within large firms with financial measures probably reached a peak with the fashion for conglomerates in the 1970s (see Chapter 5). There then emerged an emphasis on firms pursuing their 'core competencies' and using, where possible, a comparison with market alternatives as a mechanism for judging the efficiency of the firm's diverse activities.
14. Jacob (1997), chapter 9 and Mokyr (2002), chapter 3.
15. Nelson and Wright (1992), p. 1941.
16. On the evolution of the role of science in technology since 1860, see Mowery and Rosenberg (1989), chapters 2 and 3.
17. Noble (1977). This issue will re-emerge in later chapters.
18. Gerschenkron (1962a).
19. 'Un jour M. de Fontanes [le Grand-Maître de l'Université] vantait à Napoléon Ier la centralisation admirable de l'organisation universitaire: "Sire, il est trois heures: eh bien, je puis assurer à Votre Majesté que dans ce moment même les écoliers de toutes les classes de quatrième de l'Empire font un thème latin" ' (Le Clère, 1864, p. 955).
20. The discussion below is reliant on Noble (1977), chapter 5, Hughes (2007), chapter 5 and Auerbach (1988), pp. 274–8 (and references therein).
21. Sawyer (1954). Its roots have been traced to the procedures of the eighteenth-century French arms-making industry: Friedel (2007), pp. 322–6.
22. Noble (1977), pp. 72–3; Wengenroth (1997), pp. 146–7.
23. Noble (1977), pp. 69–70; and see Smil (2005), pp.83–9, concerning Edison's (losing) battle to defend electrical transmission using direct current.
24. Adams (1919).
25. Alexander (1929); a brief biography of Alexander may be found in Noble (1977), pp. 52–4.
26. Hawley (1974), pp. 117–25; Noble (1977), pp. 81–3; see Alexander (1929), p. 11 and all of chapter 3.

27. Noble (1977), p. 79; Hughes (2007), p. 203.
28. Hughes (2007), pp. 204–5, 207.
29. Smil (2005), p. 126.
30. Kanigel (1997), pp. 494–9.
31. On the links between scientific management and cost accounting: Kaigel (1997), pp. 267–9, Alexander (1929), pp. 30–2 and Auerbach (1988), pp. 108–18.
32. In Marxian theory, the value of the labour power embodied in a pair of shoes is not linked to the number of labour hours that *happen* to be used in their fabrication, but to a *socially normed* accounting of the necessary labour hours, one that emerges through unspecified economic processes representing, presumably, ‘typical’ effort (enforced or voluntary) and manual facility.
33. Chandler (1977).
34. Coase (1937).
35. Williamson (1971), pp. 117, 122. Williamson’s major statement on these questions is to be found in Williamson (1976).
36. Lamoreaux et al. (2002) put forth a new synthesis to account for the demise of the Chandlerian system in later decades, an issue to be discussed in the following chapters.
37. Chandler (1992), p. 87.
38. Chandler (1992), pp. 92–3.
39. Lazonick (1991), p.8.
40. Chandler (1992), pp. 86–7; the notion of learned routines was originally developed in Nelson and Winter (1982).
41. Chandler and Hikino (1997), p. 25.
42. Chandler (1992), p. 83.
43. McGraw (2007); Schumpeter (1911), p. 64.
44. See Baumol (2002), chapters 2 and 3.
45. Schumpeter (1928), pp. 384–6.
46. Schumpeter (1947), chapters VII and VIII; Hayek (1949a).
47. Rosenberg (1976), pp. 63–5; Auerbach (1988), pp. 265–7; Smil (2006).
48. Smil (2005), p. 11.
49. Wengenroth (1997), pp. 143–4.
50. Hughes (2007), pp. 150–1.
51. Friedel and Israel (1987), p. 117.
52. Smil (2005), p. 49; Friedel and Israel (1987), pp. 69, 227.
53. See Smil (2005), pp. 58–9 for sources of this quotation.
54. Smil (2005), p. 50 and Friedel and Israel (1987), p. 67.
55. Friedel and Israel (1987), pp. 52, 228.
56. Friedel and Israel (1987), p. 40.
57. Elbaum and Lazonick (1986a).

3 Technocratic Planning and the Emergence of a Socialist Orthodoxy

1. Bairoch (1993), pp. 32–51.
2. Cain and Hopkins (1993), pp. 209–25; Zebel (1967).
3. Stocking and Watkins (1948), p. 19.
4. See the discussion in Lazonick (1991), chapter 5.
5. As noted in Chapter 2, the present-day notion of perfect competition was still emerging in the 1920s.

6. Marshall (1922), p. 621.
7. Marshall (1920), p. 156.
8. Marshall (1920), pp. 321–2.
9. Marshall (1922), p. 316. A comparable ‘common-sense’ balancing can be found even later from one of Marshall’s key successors – see Robinson (1931), chapters II and III.
10. Chamberlin (1933); Robinson (1933).
11. Cain and Hopkins (1993), p. 12.
12. As quoted in Hofstadter (1955), p. 45.
13. Steinmetz (1916). The key section used is entitled ‘The Individualistic Era: From Competition to Co-operation’.
14. Burns (1936), pp. 8–9; a British parallel to Burns may be found in Levy (1936).
15. Hamlin (1930).
16. National Industrial Conference Board (1931) ‘Rationalization of German Industry’, pp. 6–7, as quoted in Mason (1931), pp. 641–2; the author of this quotation is identified as Mr Vaso Trivanovitch in Brady (1932), p. 30. Movements in the direction of cartelisation are reflected in the plans offered by Gerald Swope, president of General Electric, and from the US Chamber of Commerce, both in 1931: see Balisciano (1998), p. 163.
17. Alexander (1929), chapter XIV. In Brady (1933), chapter XII, in a book otherwise sympathetic to rationalisation, it is suggested that this process, as it had proceeded in Germany, might well have exacerbated the contemporaneous downturn. Even this example underlines the consideration being given in pre-Keynesian thinking to a link between microeconomic restructuring and business cycle fluctuations. The ‘regularization’ literature from 1924 on in the US was part of a movement to mitigate macroeconomic fluctuations through managerial regulation of microeconomic decisions – see Alchon (1985), pp. 124–5.
18. Brady (1932), p. 527.
19. Maier (1970), pp. 27–9.
20. Maier (1970), pp. 45–50.
21. Alexander (1929), pp. 32–3, passages slightly rearranged.
22. The major US (peacetime) venture in this direction took place under the New Deal, from 1933 to 1935: the failure of the National Recovery Administration (NRA) is summarised in Balisciano (1998), pp. 166–7.
23. As quoted in Porter (1995), p. 57.
24. Veblen (1924): see chapter V, ‘The Pecuniary Standard of Living’. A prime example of the technocratic ‘waste’ tradition is Chase (1926).
25. Veblen (1904), pp. 47–8.
26. Veblen (1921), pp. 82–3; chapter 1 is entitled ‘On the Nature and Uses of Sabotage’. See as well Hobson (1936), chapters 4 and 5.
27. Veblen (1923), pp. 372–3; note as well (p. 10) his favourable citation of Walter Rathenau’s article on the ‘new economy’.
28. Layton (1962); Noble (1977), chapter 4.
29. Weber (1922), volume II, pp. 973–4, 979–80, 987–8; emphasis in original.
30. Dardot and Laval (2013), p. 3; emphasis in original.
31. Dardot and Laval (2013), p. 84, footnote omitted.
32. For the linkage at the origin of capitalism, see Israel (1995), pp. 267–75, and Hoffman (2015).
33. The construction of the state apparatus in the US from what were, by Weberian criteria, weak foundations is developed in Skowronek (1982).

34. List (1841), from chapter IV: 'The English'; emphasis in original.
35. Marx (1845); emphasis in original. The fact that this article only surfaced long after Stalin's death (in Russian in *Voprosy Istorii* K.P.S.S. No. 12, 1971) may reflect the difficulty of reconciling Marx's words with the Soviet 'socialism in one country' doctrine emerging in the 1920s.
36. Lee (1991), p. 6.
37. Tooze (2014), p. 502.
38. Tooze (2006), chapter 4.
39. Tooze (2006), pp. 96–7, calls into question the objective reality of Nazi success in dealing with unemployment.
40. Sassoon (2010), p. 12.
41. See Sabel and Zeitlin (1985).
42. Sassoon (2010), pp. 6–8.
43. Slightly modified from Roth (1963), p. 201.
44. Bernstein (1899), pp. 90–7.
45. Engels (1877) and Engels (1880); emphasis in original.
46. Lenin (1917), pp. 119–22.
47. Ibid.
48. Lih (1992).
49. Engels (1877) and Engels (1880); emphasis in original.
50. Shanin (1983).
51. These quotations come from a series of articles originally published in *Vestnik Evropy* in 1915–16, which were then collected and published as Y. Larin, *Gosudarstvennii kapitalizm voennogo vremeni v Germanii* [*State Capitalism in Wartime Germany*], Moscow, 1928; the translations are from Auerbach et al. (1988). The page numbers in brackets are from the book published in Moscow; all emphases in the original.
52. For further elaboration, see Auerbach et al. (1988).
53. Feldman (1966), pp. 45–55, 169, 262–73.
54. See Merkle (1980), pp. 105–27.
55. Roberts and Stephenson (1968).

4 Socialist Theory and Practice

1. Szamuely (1974), pp. 34–5; the author (pp. 24–5) derives the Bolshevik approach directly from the Erfurt programme of the German Social Democratic Party in 1891, written by Karl Kautsky.
2. Szamuely (1974), p. 34; Malle (2002), pp. 165–7.
3. Gregory (2003), pp. 34–40; for an alternative but not incompatible discussion, see Allen (2003), pp. 78–87.
4. Zaleski (1971), p. 71.
5. Lieberman (1983); Harrison (1988).
6. Harrison (1998), p. 39; on Germany, Tooze (2006), pp. 584–9; Overy (1995), chapter 6.
7. Samuelson (1961), p. 830.
8. Allen (2003), p. 37.
9. Allen (2003), pp. 167–8; a similar argument had been made in Dobb (1966), pp. 22–5.
10. This conclusion is confirmed in Cheremukhin et al. (2013).
11. Allen (2003), pp. 202–11.

12. Smil (2006), chapters 2 and 3.
13. Maddison (1969), pp. 61–3, 129–30.
14. Gregory and Stuart (1994), pp. 211–16.
15. Wilhelm (1985).
16. Gregory (2003), pp. 117, 216–17.
17. Roberts (1971).
18. Barber and Harrison (1991), p. 189.
19. An important exception to this general proposition may well have been present in the agricultural sector. The residual effects of the Stalin-era antagonism to the enrichment of the peasantry and the focus on heavy industry impeded attempts to improve agricultural performance even after Stalin's death. Branco Milanovic (Milanovic, 2011, pp. 53–60), a World Bank researcher from the former Yugoslavia, makes some brief remarks on the disincentive effects of 'too much' equality in formerly socialist countries. These passing comments on this central issue (see Chapter 10) are likely to receive undue weight because of his prominence in research on worldwide inequality.
20. Gregory and Stuart (1994), p. 274.
21. Montias (1959), p. 972; Rutland (1986).
22. See Carr (1952), pp. 62–90, 224–9, for a discussion of the Bolshevik rejection of any important component of workers' control of enterprises during war communism, and the subsequent suppression of the Workers' Opposition Bolshevik faction.
23. Malle (2002), pp. 36–8.
24. Lenin's views on Taylorism and Fordism are summarised in Merkle (1980), chapter 4.
25. Siegelbaum (1988), p. 2.
26. See Merkle (1980), pp. 127–34, for the links between Taylorism and Stakhanovism.
27. Nove (1969), pp. 40–3; Siegelbaum (1988), pp. 42–3.
28. Siegelbaum (1988), p. 296.
29. Shmelëv and Popov (1989), pp. 88–9.
30. One unsympathetic discussion of planning from the pre-revolutionary period concludes: 'it is obvious how fantastic those doctrines are which imagine that production in the collectivist regime would be ordered in a manner substantially different from that of [capitalism]' (Barone, 1908, p. 289).
31. The recent summaries of this debate have been largely from an Austrian perspective, such as De Soto (2010).
32. Lange (1938), p. 97 note 50.
33. Roberts (1971a).
34. Heal (1973), pp. 79–80.
35. Stiglitz (1994), chapter 2.
36. Lavoie (1985); the argument is summarised on pages 20–4.
37. Neurath (1910).
38. Mises (1920).
39. See Chaloupek (2007).
40. Uebel (2004), p. 66 and Chaloupek (2007), p. 67.
41. Neurath (1910), pp. 173, 163, 193; emphases in original.
42. Neurath (1917), pp. 238–9.
43. Gulick (1948), chapter XIV.
44. Gulick (1948), p. 153.
45. Keynes (1936).

46. Wilczynski (1972), pp. 129–30.
47. Nove (1969), p.188; see as well Zaleski (1971), chapters 2 and 3.
48. Kornai (1972).
49. Meek (1953).
50. See Gregory (2003), chapter 8.
51. A perspective which Nathan Rosenberg also attributes to Marx: see Rosenberg (1982), chapter 2.
52. Hayek (1945), pp. 82, 89–91.
53. Hayek (1945), pp. 85–6.
54. Hayek (1945), p. 79.
55. Hilferding (1910). All quotations are from chapter 15.
56. The accommodating, passive nature of credit extension to firms in the Soviet economy is indicated by the fact that ‘automatic extension of credit was required...to validate any distortion, whether it resulted from uncontrollable causes, administrative failures, misjudgement in planning, or mismanagement of real resources’ (Garvy, 1977, p. 121).
57. Voznesensky (1948).

5 Ironies of History: Markets, Planning and Competition

1. Tinbergen (1952).
2. See Oulès (1966). Oulès was a professor of economics and former French civil servant.
3. Burnham (1941); Whyte (1956).
4. Baran and Sweezy (1966); Galbraith (1967).
5. Berle and Means (1932). Aspects of the exposition here follow from Auerbach (1988), chapter 5.
6. This new book acted in part as a replacement for his own earlier vision of the presence of forces of countervailing power constraining the activities of great firms; see Galbraith (1956).
7. Galbraith (1967), p. 40 note 6. For the difficulties empirical researchers find in disentangling the ‘large’ versus the ‘monopoly’ relationship to innovation, see Kamien and Schwartz (1982), chapter 2.
8. The book was published in 1969 as *Novoe Industrial’noe Obshchestvo* (The New Industrial Society), Moscow: Progress Publishers.
9. Galbraith (1958).
10. Lilienthal (1953); Berle (1965); Friedman (1970).
11. The doctrine of convergence in this relatively benign form was first expounded in Tinbergen (1961). More sinister versions of such a convergence can be found earlier in Burnham (1941) and George Orwell’s 1984.
12. Steindl (1952).
13. Cowling (1982). A general critique of this literature can be found in Auerbach and Skott (1988).
14. A Soviet variant of the same thesis can be found in Fedorovich (1979).
15. Phillips-Fein (2009).
16. Kolko (1963).
17. University of Chicago upholders of Marshallian orthodoxy rejected these innovations, claiming that they were empirically intractable: see Stigler (1949).
18. The revival of these doctrines at a later date had little to do with their initial impetus – to formalise and model the departure from an earlier age of

competition. Instead, as in the case of Paul Krugman's use of the model of monopolistic competition in international trade (Krugman, 1979), their role has been to facilitate the solving of particular problems in economic theory, rather than to function as a replacement for perfect competition as a general model of the functioning of the business economy.

19. The only exception I have been able to detect is an article in, admittedly, an obscure source: Nutter (1954).
20. See, for instance, Baumol (1959).
21. Servan-Schreiber (1968).
22. Auerbach (1988) pp. 1, 3–4; much of the material below follows from chapter 9.
23. Ritschel (1997), p. 4.
24. Notable in terms of the politics of the Conservative Party is Macmillan (1933).
25. Ritschel (1997), p. 25.
26. Ritschel (1997), pp. 110–12.
27. Barnett (1995).
28. On this period, see Chick (1998), especially chapter 2.
29. Chick (1998), pp. 83–4.
30. Panitch (1976), pp. 245–50.
31. Glyn and Sutcliffe (1972). See as well Armstrong et al. (1991).
32. The details here of the AES programme owe a good deal to Wickham-Jones (1994), especially chapter 3.
33. See Rowthorn and Wells (1987).
34. See Tomlinson (1996).
35. Crosland (1956); Holland (1975).
36. De Grauwe and Camerman (2003).
37. See Ietto-Gillies (1993).
38. See Auerbach (2007a).

6 Education and Economic Growth: The Statistical and Historical Record

1. Kiernan (1969).
2. Walsh and Gram (1980), chapters 1–4.
3. Harrod (1939); Domar (1946).
4. In Harrod's work in particular, this conclusion could be modified by the introduction of Keynesian issues of deficient demand and the potential instability of the equilibrium growth path (the 'warranted path', in Harrod's terminology).
5. Solow (1956); Solow (1957); Swan (1956).
6. Stone (1980). The main work under consideration is Denison (1979); Denison's original empirical research emerged earlier: Denison (1961).
7. A prime example is Romer (1990); a general review may be found in Aghion and Howitt (1998).
8. See Sianesi and Van Reenen (2003) for a general survey. A prominent example of those expressing doubts about the education–growth relationship is Pritchett (2001); a recent study claiming support for the relationship is Cohen and Soto (2007).
9. Note, for instance, the substantial variance in adult literacy scores between countries for given levels of educational attainment: OECD (2014), p. 52.
10. Sianesi and Van Reenen (2003), p. 163.

11. Representative examples include: Hanushek and Woessmann (2008); Hanushek and Woessmann (2010a); Hanushek and Woessmann (2010b). The last paper is of particular relevance to the role of education in rich countries. See as well Hanushek and Woessmann (2012).
12. See Hanushek and Woessmann (2008), table A1, p. 661.
13. Grek (2009).
14. Even the relatively simple 'years of schooling' variable has, as we have seen above, some ambiguous aspects, since it has a volitional component at levels beyond the compulsory requirement, and a signalling component; if we attempt to introduce even purer measures of the inputs devoted to school education, such as expenditure per pupil or teacher-pupil ratios, the links that these factors possess to the development of cognitive capacity are matters of significant controversy.
15. See Hanushek and Woessmann (2008), pp. 609-16; Hanushek and Woessmann (2010b), pp. 6-7.
16. Zeira (2009); Acemoglu (1998). And see the discussion in Hanushek and Woessmann (2010b), pp. 16-18.
17. Hayek (1960), p. 382, suggests that for 'maximum economic return from a limited expenditure on education [society] should concentrate on the higher education of a comparatively small elite'.
18. Hayek (1949a), pp. 95-6.
19. Womack et al. (2007), chapter 3. Mainstream economic orthodoxy concedes the possibility, in specific contexts, of violations of the presumption that available resources and technologies are used optimally on a universal basis, such as X-inefficiency on the part of monopolistic producers (Leibenstein, 1966) or the supposed 'advantages of backwardness' possessed by newcomers. But to an outsider to the economics profession, the orthodox notion that resources, to a first approximation, are always being used efficiently seems at odds with everything one knows about human existence and, less portentously, makes one wonder why vast resources have been allocated to the profession of management if this task is so readily accomplished.
20. Griliches (1996), pp. 11-12, suggests this possibility but does not necessarily endorse it.
21. Young (1995).
22. Young (1995), p. 675.
23. Krugman (1995). The exchange was discussing Krugman (1994a).
24. Nelson and Pack (1999).
25. Green (2013), p. 77. Footnote omitted.
26. Yoong-Deok and Kim (2000); see the comments by Ishrat Husain in the Krugman (1995) letter exchange, p. 173; Amsden (2001), pp. 17-19; Wade (1990), p. 38; Lee (1997).
27. Rosenberg (1976), pp. 63-5.
28. Edgerton (2008), pp. 100-2.
29. Edgerton (2008), p. 105.
30. 'By assigning so great a role to "technology" as a source of growth, the theory is obliged to assign correspondingly minor roles to everything else, and so has little ability to account for the wide diversity in growth rates we observe'; Lucas (1988), p. 15.
31. Nordhaus (1997), in Bresnahan and Gordon (1997), pp. 29-66.
32. See the review of climate change 'solutions' offered in Levitt and Dubner (2009) by Kolbert (2009).

33. Mandel (2004), p. 76.
34. Nelson and Wright (1992), pp. 1934–9; Edgerton (2008), pp. 109–13.
35. As argued in Gomory (2010) and Edgerton (2008), pp. 70–4.
36. '[A] simple, linear, modernization model of literacy as a prerequisite for development and development as a stimulant to increased levels of schooling, will not do. Too many periods of lags, backward linkages, setbacks, and contradictions existed to permit such cavalier theorizing to continue without serious challenge and criticism'; Graff (1987), p. 13.
37. Nicholas (1990) in Tortella (1990), pp. 47–67.
38. Cipolla (1969), p. 71. This statement has received support in Becker et al. (2011).
39. Easterlin (1981), appendix table 1 – primary school enrolment rates for various countries; Lindert (2004), chapter 5 on the popular basis of school expenditure; Goldin and Katz (2008), chapter 5 on the high school movement in the US.
40. Goldin and Katz (2008), pp. 172–81.
41. For a sample of the literature discussing the efficacy of education, especially of a vocational kind, for German economic development and the complaints in Britain about failures in this realm, see Lee (1978), pp. 453–59 and Sanderson (1999), chapters 2 and 3. A minority have dissented from this consensus, suggesting that, even for Germany, where supervisors and skilled labourers received scientific training, the most important skills were those they developed on the job; for the common worker, it is suggested that even minimal literacy was unnecessary: see Mitch (1990), pp. 33–4.
42. Nelson and Wright (1992), pp. 1940–1; Lazonick and O'Sullivan (1997) in Chandler et al. (1997), p. 499.
43. Lazonick and O'Sullivan (1997), pp. 500–4.
44. In this context, see Noble (1984), p. 146: 'The Darwinian ideology of technological progress...does not so much side with technical or economic superiority as with social power...it blinds society to the full range of possibilities available to it as well as to the realities of its own history, structure, and cultural make-up.' See as well Schumacher (1973).
45. Braverman (1988), pp. 102–3; emphasis in original.
46. A review can be found in Meiksins (1994).
47. Katz and Margo (2013).
48. Goldin and Katz (2008), pp. 102–18.
49. Clarke (1994), chapter 2; Goldin and Katz (2008), p. 40.
50. Morikowa (1997), pp. 321–6; Altshuler et al. (1984), pp. 205–10.
51. Solow and Temin (1978), p. 630 note 15.
52. Smil (2005) and Smil (2006). Only a few new technologies made an important impact in the first two decades after 1945, such as synthetic petroleum-based products and antibiotic drugs from the pharmaceutical industry: see Panitch and Gindin (2012), p. 85.
53. 'The capacity of a modern industrialized society is best measured by its steel production'; Crankshaw (1962), p. 28.

7 Education as a Social Process

1. Hofstadter (1948), pp. 68–92.
2. Becker (1962), pp. 28–9, and see the Marshall quotation in note 34.
3. See Becker (1962), p. 10, footnote 2 for citation of sources.

4. Fisher (1930); Becker and Mulligan (1997), p. 752 postulate a possible reverse causation by which wealth generates patience, one reason for which is that 'many investments in future-oriented capital may occur during childhood and richer parental households have more resources to make the investments'.
5. An example of a well-behaved situation is an investment in which outlays take place in the present, with an expectation of gaining net returns in the future: a simple two-stage process. By contrast, the pattern of returns for investing in a nuclear reactor is not well-behaved: substantial investment outlays take place in the present and there is an expectation of a net stream of returns subsequently, but then a large outlay has to be made several decades later when the reactor has to be decommissioned. The prospect of retirement makes decisions surrounding human capital somewhat of this messy type, with net outflows at both the beginning and the end of life.
6. Friedman (1962), p. 227; see as well his University of Chicago colleague: 'Concern about inequality... is emotional rather than rational', Johnson (1973), pp. 53–4.
7. Becker (1962), pp. 46–7.
8. Stiglitz (2013), pp. 134–5. The mobility advantages accruing to the well-off (partially in mitigating downward movements) are discussed in Reeves and Howard (2013) (for the US) and McKnight (2015) (for the UK).
9. A standard critique is that prohibitions on slavery and legal inhibitions on indenturing mean that the market in human capital is inevitably imperfect: Friedman (1956a), p. 8. Becker (1962), p. 43, denied that there is a problem of this nature specific to human capital, but latterly was willing to consider this issue: see the review in Björklund and Jäntti (2009), pp. 494–6. The presence of student debt in, especially, the US and the UK raises the question of whether *de facto* forms of indenturing of students' future incomes have been instituted.
10. Streeck (1989), pp. 92–3.
11. For a discussion covering mid-century UK, see Jackson and Marsden (1966), pp. 225–9.
12. Stigler (1966), p. 110.
13. See Sianesi and Van Reenen (2003), pp. 160–1 and Hanushek and Woessmann (2008), pp. 615–16.
14. Krueger and Lindahl (1999), p. 35; Acemoglu and Angrist (2001); Kling et al. (2007); Breton (2010) and as corrected in Breton (2010a). A small literature giving special prominence to externalities will be noted below.
15. This point is noted by Breton (2010), p. 68: 'The finding of a lagged effect on personal income is an indication that the external effects of schooling on national income also may occur with a lag. If there is a long lag, then even accurate estimates of the effect of changes in schooling over short periods will under-estimate the full effect, perhaps to a substantial degree.' In the research by McMahon (1999), p. 12, lags are considered that may be as long as 10 to 25 years. The time scales under consideration here can, in various historical contexts, extend much longer.
16. Pioneering efforts to elucidate these external effects may be found in Haveman and Wolfe (1984), pp. 382–6; see as well McMahon (1999) and Wolfe and Haveman (2002). General reservations about the kind of statistical modelling used in these studies have been expressed in Chapter 6.
17. The approach taken here has affinities with the 'diffusionist' approach to education and growth in the economic history literature: see Tortella and Sandberg (1990), pp. 10–11.

18. 'A nation's firms which lack sophisticated home buyers...face grave difficulties in innovating more rapidly than rivals who possess them' Porter (1990), p. 145.
19. De Waal (2001).
20. The generation of high-technology industry clusters of firms in recent decades has led to the notion that Marshall had pre-figured a successful alternative to the technocratic planning approach, one that emerged from market-based forms of firm interaction and co-ordination. Porter (1990), pp. 144, 166; Langlois (1992).
21. Lucas (1988), p. 39; emphasis in original.
22. The stations included commercial ones such as WNCN, WQXR, WEVD and WOR, the listener-sponsored WBAI, and non-commercial stations such as WRVR, WKCR and WNYC; the British equivalent of the latter would have been the output of the BBC, most especially the Third Programme.
23. See McMahon (1999), chapter 1.
24. Streeck (1989), p. 90.
25. Gould and Lewontin (1979).
26. Cipolla (1969), p. 92.
27. Tawney (1952), p. 19.
28. The literacy campaign of the Protestant king of Sweden Charles XI had as its major goals 'piety, civility, orderliness, and military preparedness'; Graff (1987), pp. 13, 149–50.
29. Cipolla (1969), p. 65.
30. Bowles and Gintis (1976), chapter 5.
31. Noble (1977), p. 170.
32. 'Some skills are "general": they can generate higher value wherever they are applied...Most skills are transferable among employers to some extent, but not "general". This fact implies that workers are unable to gain the full wage increase warranted by their increased skills, thus giving the employer an incentive to invest.' Green (2013), p. 85.
33. This is the fundamental message to be found in Wolf (2011); see pp. 7–12.
34. Study from the UK in 2004, cited in Barnard (2015).
35. Hillmert and Jacob (2002), pp. 329–32, raise the possibility that the availability of vocational training (as in Germany) could be a pathway steering young people (especially from the working class) away from university.
36. A prominent example for the US: Buckley (1951).
37. Lords Select Committee (2012).
38. A representative discussion for the US may be found in National Commission on Excellence in Education (1983).
39. Hirsch (2010), pp. 2–6, 24–5.
40. In Ravitch (2000), p. 15, p. 527 n. 6, a literature is cited that questions the extent to which progressive education was in fact implemented in American public schools. A critique similar to that of Ravitch had earlier been voiced by Antonio Gramsci against the class aspects of the (roughly contemporaneous) Giovanni Gentile reforms in fascist Italy: Gramsci (1935), pp. 71–4.
41. Dewey was, however, directly influential on Soviet educational developments: see Fitzpatrick (2002), p. 7.
42. Dewey (1915), pp. 23–4.
43. Dewey (1915), pp. 21–2.
44. Dewey (1902), pp. 118–19.
45. Dewey (1915), pp. 8–9; emphasis in original. Recent empirical studies seem to corroborate Dewey's approach in the context of science teaching at the university level: 'At the college level, the evidence is clear; science students learn less when

they are expected to listen passively': the scientist and educator Carl Wieman, quoted in Kantrowitz (2014), p. 60; similar claims are made for the efficacy of interactive learning methods in science teaching for young children (Wysession, 2015). Support for more traditional methods may be found in Paul (2015), which gives evidence for the efficacy of repeated testing for, especially, students from more deprived backgrounds.

46. Dewey (1902), p. 119.
47. Dewey (1915), pp. 19–20.
48. Dewey (1915), p. 24.
49. Dewey (1915), pp. 10–11.
50. Bowles and Gintis (1976), pp. 45–7, 181.
51. Hofstadter (1963), pp. 361, 367.
52. Ravitch (2000), p.95.
53. Bowles and Gintis (1976), p.59.
54. Ravitch (2000), pp. 51–2, 76, 169.
55. Ravitch (2000), p. 59.
56. Dewey (1915), pp. 19–20.
57. Ravitch (2000), p. 276; footnote omitted.
58. Nussbaum (2010), p. 18.
59. Gardner (2002), p. 24; this Harvard Professor of Cognition and Education feels it appropriate to cite the example of his own four-year-old children as representative of human learning processes.
60. Hirsch (2010), pp. 35–6, 163. On the cognitive efficacy of fact-rich learning, see Willingham (2006).
61. Hirsch (1987), p. xiii.
62. Hirsch (1987), pp. 124, 127, 134, 136.
63. Hirsch (1987), p. 11; see Bauerlein (2008), chapters 1 and 2; the complaint that there is a deficit of substantive knowledge in the US even among the university population is a long-standing one – see Barzun (1959), chapter 4. It is likely that Barzun was using his own superlative (elite) preparation as a vantage point from which to perceive a general decline in standards; overall, levels of academic achievement were increasing in the US and elsewhere. Similar complaints were made in the preface to Hindemith (1949), in a period in which technical proficiency among musicians was rising rapidly.
64. Ravitch (2002), pp. 17–19.
65. Kim (2005).
66. UK Department for Education (2013).
67. Gove links his policies to the writings of E. D. Hirsch, Jr, who identifies himself as an American liberal: O'Grady (2013), p. 5.
68. Researchers are quoted as justifying the study of the latter subjects on the basis that 'Much evidence suggests that students who study creative arts do better at more traditional academic subjects such as mathematics and computer science': Garner (2012).
69. Evans (2011).
70. *Guardian/Observer* (2013).
71. The latter being academies without a predecessor state school.
72. Such tendencies exist simultaneously with attempts to impose uniform national standards through regularised testing, as exemplified by the development of the Common Core programme in the US. Such tests, as we shall see below, are being used not only to monitor pupils' educational progress, but to discipline teachers by measuring their 'performance'.

73. Ladd (2002); Belfield and Levin (2005); Rouse and Barrow (2009).
74. Charter schools: *Economist* (2012); Academies: Department for Education (2015).
75. Adonis (2012), chapter 7; *Economist* (2011).
76. BBC News (2012).
77. Benn (2011a), pp. IX–X.
78. Angrist et al. (2013).
79. Center for Research on Educational Outcomes (CREDO) Stanford University (2013); Machin and Vernoit (2011); Machin (2012).
80. Ravitch (2010); Mansell (2015) claims that 60 per cent extra funds are received by England's free school pupils compared with the bulk of the state sector.
81. *Economist* (2012).
82. Hanushek (2005); Hanushek discussed the firing of teachers in the film 'Waiting for "Superman" ' (cited in Ravitch, 2012).
83. Marx (1873).
84. Bowles and Gintis (1976), pp. 27, 52.
85. Bowles and Gintis (1976), pp. 230–1, citing a range of contemporaneous authorities supporting these views.
86. Bowles and Gintis (1976), p. 114; and see p. 76.
87. Bowles and Gintis (1976), p. 246.
88. Bowles and Gintis (2002), p. 15.
89. Illich (1973), pp. 43–4.
90. Illich (1973), p. 70 (footnote omitted).
91. Illich (1973), p. 111.
92. Illich (1973), pp. 95, 100.
93. Illich (1973), p. 14.
94. Illich (1973), pp. 93, 90.
95. Illich (1973), pp. 103–4.
96. Illich (1973), p. 96.
97. Illich (1973), p. 57.
98. The school inspectors in the UK: Office for Standards in Education, Children's Services and Skills (2007).
99. Ravitch (2000), p. 393. In the early 1970s in the US, there was a movement for the teaching of African-American syntax in ghetto neighbourhoods using a lexicon containing a grammar, including verb conjugations, of African-American English. The practical role of this lexicon was to serve as a bridge for the teaching of English to these supposedly dialect-speaking children. Some purveyors of this approach suggested that, having established the legitimacy of this African-American dialect, the teaching of standard English to such children would be an oppressive, hegemonic act. Under such conditions, the ability of these children to function in the modern world was to be sacrificed at the altar of a political agenda in which it was questioned 'whether a command of the standard language is really necessary for educational purposes at all' (Torrey, 1970, as reprinted in Keddie, 1973, p. 73).
100. A case in point is interwar social democracy in Austria: Gulick (1948), chapters XIV–XVI.
101. OECD (2012); see the table on p. 5.
102. Sahlberg (2011), p. 100.
103. Sahlberg (2011), p. 101.
104. Sahlberg (2011), p. 127.

105. Sahlberg (2011), p. 134, slightly rearranged.
106. OECD (2014), pp. 207, 437.
107. Sahlberg (2011), p. 76.
108. Using US data, Chetty et al. (2014) claim empirical support for the efficacy of firing 'poorly performing' teachers on a regular basis.
109. Sahlberg (2011), p. 21.
110. Green (2013), chapter 9.
111. Sahlberg (2011), p. 118.
112. Ravitch (2012).
113. Andrews et al. (2014), pp. 1, 22–3.
114. Ravitch (2010), p. 24; Sahlberg (2011), pp. 45–7.
115. Green (2013), chapter 8 and references therein.

8 The Working and Living Environment

1. Bruner (1972), p. 69.
2. See Rose (2004), chapter 7. As Aditya Chakraborty pointed out in his critique of Richard Florida and his focus on the 'creative class' as the source of economic renewal, 'what really stuck out was how Florida fenced off creative work. You were either a knowledge worker or a factory worker – as if the other stuff didn't require brains' (Chakraborty, 2011).
3. Apologies here to the film 'Field of Dreams'. This notion reached perhaps its most articulate expression in Reich (1992), epitomised in a later quotation from him: 'Forget the debate over outsourcing. The real question is how to make Americans so competitive that all global companies — whether or not headquartered in the United States — will create good jobs in America': Reich (2012).
4. Chang (2010), pp. 135–6, 189.
5. Crump (2007), chapter 4.
6. Mokyr (2009), pp. 61–2.
7. Becker and Woessmann (2009); Cipolla (1969), pp. 72–4.
8. Allen (2009), pp. 10–11, referencing Mokyr (2002).
9. Mokyr (2009), pp. 111–12.
10. Epstein (2008), p. 80.
11. Fogel (1964).
12. Chandler (1977), chapters 3–5.
13. Some of the material below derives from Auerbach (2007).
14. As Alfred Marshall commented with reference to English industrial districts, 'The mysteries of the trade become no mysteries; but are as it were in the air, and the children learn many of them unconsciously' (Marshall, 1922, p. 271, as quoted in Sabel and Zeitlin, 1985, p. 152).
15. Easterlin (1981), p. 9 note 21; Veblen (1914), p. 312.
16. Rostowski and Auerbach (1986).
17. De Grazia (2005), p. 206.
18. This literature is reviewed in Acemoglu et al. (2014).
19. Vernon (1966).
20. Wiener (1981); Cain and Hopkins (1993).
21. Guagnini (1993), p. 37.
22. For the US, see Stein (2010).
23. Duhigg and Bradsher (2012).

24. President's Council of Advisors on Science and Technology (PCAST) (2004).
25. Panitch and Gindin (2012), p. 186; Van Reenen (2013).
26. Franco (2002); Bloom et al. (2012).
27. Panitch and Gindin (2012), p. 188.
28. Freeman (2007), p. 36.
29. Streeck (1989), p. 98; Grubb and Lazerson (2004), pp. 171–3; Green (2013), chapter 6.
30. OECD (2015a), first quarter 2015.
31. For a survey, see Røed (1997). Some writing in this area pursues a 'blame the victim' strategy: rather than focusing on skill and reputational deterioration from involuntary unemployment, one paper reviewed (p. 398) explains the hysteresis effect in terms of unemployment (more leisure in the past) cultivating a preference for leisure and thus the likelihood of future unemployment. Deleterious effects of unemployment on the economy's longer-term capacity are discussed in Stockhammer and Sturn (2012) and Reifschneider et al. (2013).
32. Eichhorst (2011), p. 49.
33. See Bennett and Kaufman (2004).
34. Pencavel (2005), pp. 70–1, 74.
35. Freeman (2005), p. 129.
36. Freeman (2007), pp. 4–16. As of 2012, a broad range of European Union countries have better records than the US (and the UK) in the generation of employment in the prime age group of 25 to 54 (OECD, 2013a): a point underlined in Krugman (2014).
37. Farber (2010), pp. 223–5. The quotation continues: 'Potential motivation for employers to implement such changes range[s] from a need for added flexibility in the face of greater uncertainty regarding product demand to avoidance of increasingly expensive fringe benefits and long-term obligations to workers.' Another possibility is that these changes simply result from increasing exploitation of workers in the present period. On changes in the bargaining power of capital vis-à-vis labour, see Schmitt and Jones (2012) and Kalleberg (2011).
38. Farber (2011).
39. Green (2006), chapters 6 and 7. Chakraborty (2010) notes that 'management thinkers such as Tom Peters and Charles Handy have spent decades telling us that the workplace of the future is a shiny, hi-tech grotto where people are free to exercise initiative and innovate. Yet the reality is that innovation is imposed on staff and where initiative is encouraged it's within heavily circumscribed borders.'
40. International Labour Office (2013), pp. 4–5, 11–13, table B1: most statistics are for 2012.
41. International Labour Office (2010), p. 42; International Labour Office (2013), pp. 43–4.
42. See various approaches in Beecroft (2011), Mulligan (2013) and Farber and Valletta (2013).
43. A general survey can be found in Card et al. (2010).
44. Paul Osterman, quoted in Shapiro (2012). A subdued assessment of the effects of ALMP can be found in Lindert (2004), pp. 253–5.
45. The seriousness of the state of youth unemployment has, however, continued to evoke calls for initiatives that 'more tightly couple labor market demand with education and training': Sum et al. (2014), p. 1.
46. Green (2013), p. 81.

47. Dustmann and Schönberg (2012), p. 37.
48. Harhoff and Kane (1995), p. 4.
49. On early streaming, see Tremblay and Le Bot (2003), p. 7.
50. Green (2013), p. 86; footnote omitted.
51. Steedman (2011), pp. 95–6, 98–9.
52. Tremblay and Le Bot (2003), pp. 15–16.
53. Méhaut et al. (2010).
54. Despite the unsubstantiated claims in Wolff (2002), there is no sign, either from contemporaneous reports (including his son's extensive biographical sketch) or from the narrow and backward range of literature in his book collection (after having lived for decades in a city, Leipzig, famous for its book fair), that Bach was 'learned' or possessed intellectual curiosity about any area outside of music.
55. Powell et al. (2012), p. 255.
56. Hacker (2008), introduction and chapters 1 and 2. See, as well, Gottschalk and Moffitt (2009) for evidence of increasing wage instability for especially low-paid and male workers.
57. Borio (2007), p. 5.
58. Merton (2003), p. 23.
59. Carnoy et al. (1997), pp. 27–8, 47.
60. OECD (2011a), pp. 30–1. Coates and Lehki (2008) discuss the range of parameters that impinge upon the notion of job security, and their relationship to concepts of job flexibility and the notions of 'good work'.
61. Freeman (2005). Freeman notes (pp. 137–9) the extravagant claims that have been made by the IMF for the efficacy of such policies.
62. De Grauwe and Polan (2005), p. 119.
63. See Harmon and Oosterbeek (2003), where none of these considerations are dealt with.
64. Despite having high mobility in general (see Björklund and Jäntti, 2009, pp. 494–6), Sweden's 'intergenerational transmission of income is remarkably strong at the very top of the distribution... the most likely mechanism for this is inherited wealth': Björklund et al. (2012), p. 483.
65. Harmon and Oosterbeek (2003) focus on the possibility of children 'inheriting' from [highly educated] parents stronger tastes for schooling, lower discount rates and higher ability (p. 119).
66. The following story will not sound strange, or particularly amusing, to those from working-class backgrounds: 'The day that Leonard Susskind [the physicist] decided he was not going to follow his father into the family plumbing business, his parents were appalled. "My father was a tough guy," says Prof. Susskind with a chuckle. "He said: 'What do you want to be: a ballet dancer?' I said: 'No, I don't want to be a ballet dancer, I want to be a physicist.' He said: 'You aint going to work in no drugstore.' I said: 'No, not a pharmacist, a physicist.' He said: 'What's a physicist?' I said: 'Like Einstein.' That shook him and from that moment he got it. My mother was crying and saying, 'We're going to be broke,' and he just looked at her and said: 'Shut up – he's going to be Einstein.' " De Bertodano (2014).
67. Checchi et al. (1999), pp. 351–93.
68. See Duncan and Murnane (2011a), especially pp. 7–12. Some prominent contemporary research has questioned the notion that poor people are locked in a 'culture of poverty' that generates errors in decision making. The poor, to paraphrase the proverbial Scott Fitzgerald–Hemingway exchange, are very much like

the rest of us (in the rationality of their decision making), but they have less money. As a result, the consequences of bad decisions are particularly high: see Bertrand et al. (2004).

69. Becker and Tomes (1986) deal with differential wealth endowments and capital market imperfections, as well as cultural and genetic endowments. Galor and Zeira (1993) focus on the role of credit market imperfections in income distribution. Hacker (2008), chapter 3, underlines the risks for workers in the contemporary economy in 'investing' in skills for which a return may cease to be forthcoming.
70. Goldin and Katz (2008), pp. 351–2.
71. Bale and Greenshields (1978) and Anderson and Tyers (1987).
72. Li (2004).
73. Samuelson's textbook used this case to instance how such policies could impoverish a country. Samuelson (1964), chapter 20, especially p. 413.
74. Clarke (1992).

9 The US as Exemplar and Paradigm

1. World Bank (2015).
2. Wills (1999).
3. Hofstadter et al. (1967), pp. 266–7.
4. See Novak (2010) and Lind (2013).
5. Weinstein (1984), chapter 3.
6. In Lipset and Marks (2000), especially chapter 3, it is suggested that the failure of the Socialist Party to make a successful link with unions was central to the demise of socialism in the US.
7. Sombart (1906), pp. 116, 119.
8. Elements of unequal sacrifice were, of course, present, with riots from 1863 undoubtedly provoked in part by the provision that conscription could be avoided upon payment of \$300 to the authorities: Hofstadter et al. (1967), p. 435.
9. Carpenter (2001).
10. Sombart (1906), p. 115.
11. Implementation of a secularist agenda in France has, on occasion, been used as an excuse for populist, anti-Muslim actions (such as the banning of head scarves) by the state; comparable actions in the US (the banning of 'Sharia law') have, as yet, been localised events.
12. Rossiter (1979), p. 242. George Washington had originally advocated the founding of a national agricultural department in 1796 (Carpenter, 2001, p. 179).
13. Rossiter (1979), p. 211.
14. Rossiter (1979), p. 213; Bowman (1962), p. 527.
15. Arrow (1962).
16. Ferleger and Lazonick (1993), p. 73; Evenson (1982), pp. 237–41.
17. Rasmussen (1962), pp. 588–90; Clarke (1994), chapter 1; Evenson (1982).
18. Rossiter (1979), p. 247.
19. Bowman (1962), p. 542.
20. Hounshell (1984), pp. 25–65.
21. Baran and Sweezy (1966), chapter 7.
22. Peck and Scherer (1962), especially chapters 16–19.
23. Tirman (1984a), especially pp. 5–13; Dunne (1990).
24. Abbate (2000).

25. The continued importance of the state in US technological development is underlined in Block and Keller (2011) and Mazzucato (2013), chapters 3 and 4.
26. '[T]he rhetoric of disruption [is] a language of panic, fear asymmetry, and disorder... [it] is competitive strategy for an age seized by terror.' Lepore (2014), p. 31.
27. Schumpeter never used this example. He might have hesitated to do so, since AT&T was a quintessential example of the kind of managerially run firm that for Schumpeter augured the demise of capitalist entrepreneurial innovation.
28. This is the title of part I of Gilder (1989).
29. Wilson (1985).
30. Braun and Macdonald (1982), pp. 24, 36; Gertner (2012), pp. 83–91.
31. Levin (1982), pp. 58, 66–7; Flamm (1988), p. 16; Gertner (2012), chapter 4.
32. Braun and Macdonald (1982), p. 1; Riordan et al. (1999), p. S336.
33. Riordan et al. (1999), pp. S342–343; Braun and Macdonald (1982), pp. 43, 57–8. A rejection of this dichotomy in the context of the early history of modern science can be found in Roberts and Schaffer (2007).
34. Lécuyer (2006), chapter 1; Sturgeon (2000).
35. Sturgeon (2000); Lécuyer (2006), chapters 1 and 2 and pp. 292–4.
36. Schumpeter (1947), p. 84.
37. Rosenberg (1972), pp. 83–6.
38. Braun and Macdonald (1982), p. 75.
39. Lécuyer (2006), p. 77.
40. 'Silicon Valley owes its present configuration to patterns of federal spending, corporate strategies, industry-university relationships, and technological innovation shaped by the assumptions and priorities of Cold War defense policy.' Leslie (2000), p. 49.
41. Levin (1982), p. 13.
42. Lécuyer (2006), p. 139 (footnote omitted).
43. Levin (1982), p. 63, table 2.17.
44. Flamm (1988), p. 16.
45. Levin (1982), p. 67; Holbrook (1995), pp. 137–8.
46. Levin (1982), p. 67; Holbrook (1995), p. 137.
47. Lécuyer (2006), pp. 130, 160, 164–5.
48. Levin (1982), p. 65.
49. Holbrook (1995), p. 135; 'No major innovations emerged directly from government-funded R&D... But... when a breakthrough occurred in the private sector it found enthusiastic support and substantial aid.' Levin (1982), p. 73.
50. Levin (1982), pp. 47–57; Braun and Macdonald (1982), pp. 60–1.
51. Lécuyer (2006), pp. 167, 255–8.
52. Lécuyer (2006), p. 264; Kenney and Florida (2000), p. 100.
53. Lécuyer (2006), p. 165.
54. Levin (1982), p. 44.
55. Leslie (1993).
56. Lécuyer (2006), pp. 53–5; Levin (1982), pp. 47–9; Leslie (1993), chapter 1.
57. Dumas (1984), table 7–1, p. 130.
58. Goldin and Katz (2008), pp. 261–83; Braun and Macdonald (1982), p. 64; Levin (1982), p. 83.
59. Kenney and Florida (2000), pp. 98–123 and Suchman (2000).
60. Lindert (2004), pp. 115–22; Rosenberg (1972), pp. 35–9; Goldin and Katz (2008), p. 222.

61. Ueda (1987), chapter 7.
62. Transistor manufacture in the 1950s typically had yields of 20–30% (Braun and Macdonald, 1982, pp. 66–7); on manufacturing protocols, see Lécuyer (2006), pp. 220–38.
63. Abbate (2000), p. 183.
64. Lécuyer (2006), p. 1.
65. Gertner (2012), pp. 12–13.
66. Hacker (2009), p. 38.
67. Lécuyer (2006), pp. 81–2, 98–9, 123–8, 162–4, 264–5.
68. Riordan et al. (1999), p. S337; Stafeev (2010).
69. Johnson (1982), pp. 226, 277–80; Amsden (1989), pp. 81–5.
70. Block (2008); Lazonick (2009); Mazzucato (2013).
71. Atkinson et al. (2011), p. 49.
72. Tranter and Booth (2015) suggest that while climate change scepticism is high in the US, it is as high or higher in countries such as Australia, Norway and New Zealand.

10 Economic Growth and Inequality

1. See Kendrick (1970), especially pp. 304–9.
2. United Nations Development Programme (2015).
3. Baumol et al. (2007), p. 16.
4. Carey (1992), chapter 4.
5. OECD (2015). Prescott (2004) accounts for this change since the 1970s solely in terms of the lower marginal tax rates in the US generating greater incentives to work. Offer (2006), pp. 298–9, more plausibly attributes the exceptional levels of hours worked in the US to high and rising levels of economic insecurity, as discussed in Chapter 8.
6. Atkinson et al. (2011), pp. 9–10. By contrast, see Van Reenen (2013), where income distribution considerations are given a parenthetical consideration.
7. Stiglitz (2005), p. 128.
8. Hicks (1946), p. 172.
9. Parker and Harcourt (1969), pp. 1–30.
10. Kaletsky (2004), p. 56.
11. A range of approaches may be found to these issues: see the websites of the European Commission (2015a) and Creative Commons (2015).
12. Baumol et al. (2007), p. 18.
13. The contrary notion that the reconstruction of the urban environment to support the car in Los Angeles was part of a ‘democratic impulse’ is supported in Bottles (1987).
14. Data on growth rate per capita are from Maddison (2006), table A-j, p. 206.
15. Easterlin (1981), appendix table 1 – primary school enrolment rates for various countries; Hanley (1990); Ohkawa and Rosovsky (1973), chapter 1. The comparable figures for 1910 are 79 per cent in Germany and 88 per cent in France.
16. Sen (2006), p. 111, cites a source suggesting that ‘Between 1906 and 1911, education consumed as much as 43 percent of the budgets of the towns and villages for Japan as a whole.’
17. The stresses of Westernisation in this period are discussed in Sukehiro (1989), pp. 496–8.

18. In another historical context, it has been claimed (Field, 2003) that the depression-era economic conditions in the US in the period from 1929 to 1941 have masked the fact that it was an era of substantial increase in economic capacity, being 'the most technologically progressive decade of the century'.
19. Goldman et al. (2008). In an analogous argument in the context of physical capital, Robert C. Allen (Allen, 2011, pp. 139–45 and references therein) suggests that large investments in physical assets in the agricultural domain in the pre-1978 period may have played a substantial role in the subsequent success of post-reform agriculture in China.
20. Playfair (1852).
21. Sandberg (1982): see table 1, p. 687. See also Easterlin (1981).
22. Nilsson and Pettersson (1990), pp. 209–22.
23. Maddison (2006); Myllntaus (1990).
24. Feldstein (1995).
25. Alvarado et al. (2013), p. 6.
26. Brandolini and Smeeding (2009), especially pp. 82–97, Alvarado et al. (2015) and OECD (2011a).
27. See the contributions to Gautié and Schmitt (2010).
28. Piketty and Saez (2007), pp. 18–19. This question will be re-engaged with in Chapter 12.
29. Goldin and Katz (2008), especially part 1. In Murnane (2013), a reversal of the stagnation in US high-school graduation rates is reported for the twenty-first century, but no claim to full explanation is made.
30. Autor et al. (2003), p. 1279. A more recent contribution that emphasises the continuing bifurcation of the labour market as a result of technological change is Autor and Dorn (2013). A critique of an exclusive focus on technological explanations to explain these developments in a US context may be found in Mishel et al. (2013). Note, however, that even neutral technical change not biased in favour of those with higher skill levels will stretch out the wage distribution if employers can choose 'overeducated' workers in preference to those with lower skills: Skott and Auerbach (2004).
31. This is the approach to be found in Schumpeter (1939), pp. 137–50 from chapter IV, section D.
32. Glyn (2009). For the US, labour's share of business net value added moves decisively downward since the 1980s when the top 1 per cent of remuneration is omitted (p. 113). See as well European Commission (2015b); International Labour Organization (2013), pp. 43–4: adjusted labour shares for Germany, the US and Japan 1970–2010; and Karabarbounis and Neiman (2013). Claims that this tendency is largely a statistical artefact can be found in Bridgman (2014).
33. Bebchuk et al. (2002); Mishel and Sabadish (2012), p. 5; Smith and Kuntz (2013); Mishel and Bivens (2013); House of Commons Library (2009).
34. Jensen and Meckling (1976).
35. Skott and Guy (2013).
36. Freeman (2006). See also Autor et al. (2013).
37. Freeman (2009), p. 575.
38. Freeman (2009), p. 576.
39. Influential figures have also been willing to invoke the theory of monopoly capital (see Chapter 5) on fragmentary domestic evidence: 'increasing business concentration could be an important factor in stagnating demand for labor, as corporations use their growing monopoly power to raise prices without passing

- the gains on to their employees'. Krugman (2012). Krugman cites as authority the sketchy presentation in Lynn and Longman (2010).
40. Richardson (1995), p. 51, and Krugman (1997), especially chapters 2 and 3; Krugman appears to have modified his position in recent times.
 41. Okun (1975), pp. 1, 2, 89, emphasis added. An upgraded version of the equity–efficiency trade-off may be found in Mulligan (2012), pp. 253–6.
 42. Kuznets (1955).
 43. Galor and Moav (2004) suggest that, in the contemporary era, with human capital emerging as a prime engine of economic growth, economic equality alleviates the adverse effects of credit constraints on human capital accumulation and thereby stimulates the growth process.
 44. The article by Trabandt and Uhlig (2009) tests the Laffer notion under the assumption that 'The government collects distortionary taxes on labor, capital and consumption and issues debt to finance government consumption, lump-sum transfers and debt repayments.' With all government expenditure (including on infrastructure and education) being classified as 'consumption', there is little surprise that some nations' tax rates reach a Laffer threshold of 'overly' high taxation. Even in this framework, US taxation rates are well beneath that threshold.
 45. There are, however, serious claims that Jean Sibelius's relative compositional silence in the last three decades of his life was in part engendered by his success in paying off his debts and his increased income from the tightening of Finnish copyright laws: Sibelius (2015) and McKenna (2012).
 46. Diamond and Saez (2011), p. 165.
 47. Rawls (1999), pp. 65–6 and Rawls (1993), p. 6.
 48. Lamont and Favor (2009), section 3.
 49. Rawls (1999), p. 56.
 50. Rawls (1999), pp. 118–23.
 51. Nozick (1973), a slightly updated version (despite the publication dates) of the equivalent section in Nozick (1974) pp. 57–61, a section entitled 'How Liberty Upsets Patterns'.
 52. Nozick (1973) says one million people (p. 57).
 53. See Wilkinson and Pickett (2009). On the by-products of inequality, see, as well, Offer (2006), chapter 12.
 54. Collins (2013).
 55. For African-Americans and Hispanics in the US, the gap in living standards relative to other citizens results not only from differences in remuneration but in holdings of stocks of physical and financial wealth, including housing. In recent decades, the wealth gap has deteriorated much more egregiously than that for income. See Kochhar et al. (2011).
 56. Berlin (1969), pp. 123, 131, 144.
 57. Sen (2009), pp. 227–31. See as well Sen (1999), especially chapters 1 and 3, and Nussbaum (2011).
 58. Conlisk (1974) indicates that such a conflict is unlikely to take place.
 59. Nolan and Marx (2009), p. 325; Björklund and Jäntti (2009), p. 516. And see OECD (2009), Isaacs (2009) and Schütz et al. (2008).
 60. OECD (2011b). And see Smeeding et al. (2011), especially Pfeffer (2011) and Zissimopoulos and Smith (2011) on wealth transfers and mobility, and Nolan et al. (2011) on the role of social institutions.
 61. See Corak (2013). Chetty et al. (2014a) find intergenerational mobility to be stable in the US for birth cohorts born between 1971 and 1993, a period coincident with

- rising inequality; other studies similarly confirm this stability for much of the postwar period. Putnam (2015), pp. 293–4, suggests that the general conclusion of a lack of change in mobility for the past several decades in the US, a period of increasing inequality, may be premature, given the presence of substantial lag effects in the registering of intergenerational mobility in the data. The ‘socioeconomic gradient’ (the level of intergenerational immobility), however, remains highest in the US when compared with a range of European countries, Australia and Canada (Ermisch et al., 2012a).
62. Schütz et al. (2008), pp. 304–5; OECD (2010), pp. 167–8. Critics of PISA (Carnoy and Rothstein (2013)) do not contest the latter result, but claim that ‘Because social class inequality is greater in the United States than in any of the countries with which we can reasonably be compared, the relative performance of U.S. adolescents is better than it appears when countries’ national average performance is conventionally compared’ (p. 3). This defence of US educational standards is tempered by the statement that ‘At all points in the social class distribution, U.S. students perform worse, and in many cases substantially worse, than students in a group of top-scoring countries (Canada, Finland, and Korea). Although controlling for social class distribution would narrow the difference in average scores between these countries and the United States, it would not eliminate it’ (p. 4). A review of the literature on the education-inequality gradient in a US context can be found in Ladd (2012). The US ranked last in a survey of adult literacy among 23 nations considered for those with below secondary education, ahead of only Poland and Spain for those with non-tertiary education, and slightly below the average of the group for all levels combined (the UK was slightly above average for the combined levels): OECD (2014), p. 35.
 63. Institute of Education Studies (IES) National Center for Education Statistics (2009).
 64. OECD (2014), p. 13. Some studies have contested the notion that societies with greater economic mobility have better average results on standardised tests: Schütz et al. (2008), p. 305 and Institute of Education Studies (IES) National Center for Education Statistics (2009).
 65. See Schütz et al. (2008), pp. 281, 304–5, and the discussion here in Chapter 11.
 66. Domar (1957a), p. 151.
 67. Osterman and Shulman (2011), pp. 11–12.
 68. A discussion of the underserving poor may be found in Rector and Sheffield (2011). For a critique of this position, see Edsall (2013a).
 69. United Nations Children’s Fund (2007); Gould and Wething (2012); OECD (2011b).
 70. Stigler (1945), updated in Stigler (1952), p. 2.
 71. Mankiw (2008), p. 90: ‘most people view doctor visits as a *necessity* and sailboats as a *luxury*. Of course, whether a good is a *necessity* or a *luxury* depends not on the intrinsic properties of the good but on the preferences of the buyer’ [emphasis in original].
 72. ‘Nutrition, health and education are important for fuller labour utilization ... They have been neglected because in advanced societies they count as consumption and have no effect on human productivity. The only exceptions that have been admitted in the literature until recently are some forms of education.’ Streeten (2003), p. 95.
 73. Townsend (1979), pp. 5–8.
 74. Atack and Bateman (1992). The article on page 133 refers to various elements mitigating the harshness of steel work, but Costa (1998) underlines the presence of a class of low-paid workers working very long hours.

75. Friedman (1999), pp. 27–8.
76. “Having a low minimum wage is not a bad thing for this country,” says billionaire Republican presidential candidate Donald Trump in phone interview on MSNBC. “We can’t have a situation where our labor is so much more expensive than other countries that we can no longer compete. It’s the United States against other places”, where the taxes and wages are lower”: Dodge (2015).
77. De Grauwe and Polan (2005), p. 105; the text is slightly rearranged in the quoted passage.
78. This is the conclusion reached in De Grauwe and Polan (2005).
79. Krugman (1994), p. 35.
80. Lindert (2004), pp. 227–45.
81. Lindert (2004), p. 227.
82. “[T]he especially large decline in labour share in the Nordic countries [in recent years] relates ... to the fact of their increasing integration into global capitalism and the consequent intensified competition among corporations and states anxious to attract or retain capital. States with a more egalitarian income chose, or were compelled — given those pressures and their commitment to globalization — to move more rapidly towards the international “norms.” ’ Sam Gindin, quoted in Edsall (2013b).
83. Sala-i-Martin et al. (2012), p. 4.
84. Sala-i-Martin et al. (2012), pp. 6–7.
85. Dustmann et al. (2014), p. 184.
86. Bilbao-Osorio et al. (2012), p. 58.
87. Baumol et al. (2007), pp. 24, 91.
88. Lindert (2004), pp. 233–5.
89. Baumol and Bowen (1965), p. 500.
90. Cowen and Tabarrok (2014), p. 519.
91. Vaitheeswaran (2007).
92. Krugman (2011).
93. Nussbaum (2010), p. 112; footnote omitted.
94. Arnold (1882).
95. Arnold (1875). Arnold is quoting his father in an excised portion from the 1875 edition.
96. Lindqvist (1997).
97. Brighouse (2006), pp. 2–4.
98. Sutton Trust (2010).
99. As in his poem ‘Dover Beach’. A salubrious way of digesting the poem’s toxic message is by consulting Samuel Barber’s setting of it in the performance sung by the composer:<http://www.youtube.com>.
100. Tchougounnikov (1957).
101. Gordon (2012), pp. 12–14. This research has been extended in Gordon (2014).
102. Gordon (2000), pp. 50–7.
103. Gordon (2012), p. 20.
104. Gordon (2012), p. 21.
105. Daly (2011).
106. Manyika et al. (2013), p. 4.
107. Krugman (2013).
108. This issue will be re-engaged with in Chapter 12 in the context of the recent claims in Ford (2015) of an inexorable process by which human labour is being replaced by robots.

11 Education in a Free Society

1. Hayek (1982), volume 2, p. 84.
2. Hayek (1982), volume 2, p. 10.
3. Hayek (1982), volume 2, pp. 9–11.
4. Hayek (1982), volume 2, pp. 84–5; emphasis added.
5. See, for instance, Reporters without Borders (2015).
6. Hayek (1982), volume 2, pp. 70–4.
7. Hayek (1982), volume 2, p. 74.
8. A contemporary example is Mankiw (2013).
9. Burt (1957), pp. 64–5.
10. As quoted in Ravitch (2000), p. 133.
11. University of Pennsylvania (2011).
12. Gardner (1993); Goleman (1996).
13. Bouchard and McGue (2003); Bouchard (2004).
14. For the US: Ravitch (2000), p. 155 and Gould (1981), pp. 292–6; for the UK, Simon (1953).
15. For the UK, for instance, see Saunders (2010); the US case will be considered extensively below. On rare occasions (Bowles and Nelson, 1974, pp. 47–8), the IQ measure is used in the context of research concluding that ‘the genetic inheritance of IQ is a relatively minor mechanism for the intergenerational transmission of economic and social status’ [footnote omitted].
16. Clark (2008); Lynn and Vanhanen (2002).
17. Wintour (2013): ‘[T]he most influential adviser to the education secretary in the past five years [argues that] ... Education in England is no better than mediocre, and billions of pounds have been wasted on pointless university courses and Sure Start schemes for young children ... educationists need to better understand the impact of genetics on children’ [slightly rearranged].
18. Jensen (1969).
19. Turkheimer et al. (2003).
20. His early notoriety was linked to his intervention in the race–IQ controversy in Herrnstein and Murray (1996). In recent years, this consistently held focus on biological endowment has been combined with admonitions to the [white] working class to behave itself: Murray (2012). He has been a prominent influence on a range of Republican contenders for the US presidency, including Mitt Romney and Jeb Bush.
21. Murray (2008b) and Murray (2007).
22. Murray (2008b).
23. Murray (2009).
24. Murray (2009).
25. Murray (2008b).
26. Murray (2009).
27. Murray (2008a).
28. Murray (2008a).
29. Lange (1938), p. 57.
30. Turkheimer et al. (2003).
31. Bouchard (2004), p. 149, and the critique in Richardson and Norgate (2006).
32. Caplan and Miller (2010).
33. Flynn (1978) as described in Flynn (2009a), chapter 2; Flynn (2009b); Ramsden et al. (2011).

34. Flynn (2009a), p. 41; see, as well, Horwitz et al. (2003).
35. Sternberg (2004); see also Nisbett et al. (2012).
36. Bateson and Marnett (2007), pp. 818–19.
37. Stiles (2009), p. 196.
38. Kolb et al. (2015).
39. Ericsson et al. (2007), p. 3.
40. Macnamara et al. (2014).
41. The early-twentieth-century pioneer against racism and biologicistic determinism, Franz Boaz, never rejected the role of biology in heredity and human development; it is questionable whether any significant social thinker in modern times has ever dismissed the role of biology. See Degler (1991), pp. 80–2.
42. Smith (1776), p. 15.
43. Rose et al. (2009); Hoynes et al. (2012) claim to see a positive impact of the US food stamp programme from 1961 to 1975 on health and human capital in adulthood because of the resources provided earlier in utero and during childhood.
44. Lewontin (2012), p. 18.
45. Waldfogel and Washbrook (2010) and Fitzpatrick and Pagani (2012).
46. Gopnik (2010), p. 81.
47. Gopnik et al. (1999), p. 181.
48. Rubenstein and Heckman (2001) and Goodman and Gregg (2010).
49. Abel and Göncü (2009), p. 257.
50. Hart and Risley (2003), pp. 111–12.
51. Hart and Risley (2003), pp. 116–17.
52. Fernald et al. (2013).
53. Dickens et al. (2006) and Heckman (2008), Cunha and Heckman (2008), Chetty et al. (2011).
54. For the UK, see Bamfield (2007); for the US, Currie (2009).
55. Bouchard and McGue (2003), pp. 5–6.
56. Thus, at least some of the educational deficits accruing in parent–children relationships in Hart and Risley for the US do not appear in the same form in other countries: Canadian parents with low education read to their children as often as highly educated parents in the US, the UK and Australia (Bradbury et al., 2015, p. 58). More recent research comparable to that of Hart and Risley has found differences in linguistic facility linked to income at very young ages, but due to differences in the quality, rather than the quantity, of non-verbal and verbal interactions that children had received (Hirsh-Pasek et al., 2015).
57. Lareau (2003); Tudge (2008); Dreyer (2013).
58. Ladd (2012).
59. Kim (2011). Deming (2009) reaches a similar conclusion, but emphasises other positive aspects of the programme of a non-cognitive nature.
60. Positive cognitive results: North Carolina Abecedarian Project (2015); positive non-cognitive results: Day et al. (2012). Duncan and Magnuson (2013) find that the significant cognitive benefits from preschool programmes dissipate in subsequent years of schooling; the gains through young adulthood (greater likelihood of high-school graduation, less likelihood of arrest) are attributed to the behavioural and non-cognitive gains from such programmes.
61. A general critique of the irreversibility of early childhood deprivation may be found in Bruer (1999).
62. What we would call ‘creativity’ or ‘imagination’. Bach might well have rejected our modern descriptions as being, respectively, sacrilegious or an indication of insanity.

63. David and Mendel (1966), pp. 37–9. On human ‘musicality’ in general, see Blacking (1976) and Ball (2010), especially chapters 1 and 2.
64. Chin and Phillips (2004), p. 185.
65. Such conditions have far from disappeared, even in rich countries: Quinn (2013).
66. Reynolds (2012).
67. Huntington (2000), p. xv.
68. Landes (1999), p. 29.
69. Huntington (2000), p. xiii.
70. Chang (2007), chapter 9.
71. Naipaul (1964). The one-sided view in the latter book may be contrasted with the nuanced approach taken to South Asian culture in Myrdal (1972): see the discussion of religion on p. 42.
72. Lewontin (1997).
73. See the examples in Hobsbawm and Ranger (1983).
74. Wright (2013).
75. Hofstadter (1963), p. 237.
76. Hofstadter (1963), p. 434.
77. Molotsky (1988).
78. Linn (2004), p. 1.
79. Steinberg and Kincheloe (2004a), pp. 11, 16.
80. Steinberg and Kincheloe (2004a), p. 18.
81. Steinberg and Kincheloe (2004a), pp. 23–4.
82. Basie (1987), pp. 41–68.
83. Heckman et al. (2013); for the UK, see Gorard et al. (2012).
84. Himmelstrad (2010).
85. Hamer and Fisher (2012)
86. See Chin and Phillips (2004); Stephens et al. (2014).
87. A phrase associated with the educational policies of interwar Social Democratic governments in Vienna. See Gulik (1948), pp. 509–29, 544–82.
88. This description is taken from Krueger (2002), p. 8.
89. Both sides of the debate may be found in the articles in Mishel and Rothstein (2002).
90. Chetty et al. (2011). A contrary conclusion had been reached using data from a recent Texas schools project: Rivkin et al. (2005).
91. Mishel and Rothstein (2002a), p. 6.
92. For the UK, we read: ‘the available evidence...suggests that class size reduction policies are not the best option in terms of value for money to raising pupil attainment, compared to others such as increasing teacher effectiveness. Broadly, evidence suggests that class size reduction policies have an uncertain and diminishing effect on pupil achievement in the long run.’ Department for Education (2011), p. 1.
93. Hanushek (2011); Krueger (2003). Possible cognitive and non-cognitive spillover effects are briefly mentioned on p. F59; Chetty et al. (2011).
94. Krueger (2003), p. F54.
95. Hanushek (2011), pp. 467–8.
96. Isenberg et al. (2009).
97. See the discussion in Chapter 7. For the UK, a recent example of this approach is Sutton Trust (2011).
98. Podgursky and Springer (2007).

99. Hanushek and Rivkin (2004), pp. 14–17.
100. McKinsey & Company (2010).
101. Hanushek and Rivkin (2004), pp. 21–5.
102. Haycock (2004), p. 241; footnote omitted.
103. Haycock (2004), p. 146.
104. OECD (2014), table D4.1, p. 484 ‘Organisation of Teachers’ Working Time (2012)’: column – working time required at school in hours.
105. The issues of classroom discipline and order are nowhere addressed in Haycock (2004).
106. Krueger (2003), F58–9.
107. Duncan and Magnuson (2011), p. 55.
108. Reardon (2011), pp. 91–2; note the dramatic expansion in recent decades in the US on ‘enrichment expenditures’ for the children of the well-off (Duncan and Murnane, 2011a, p. 58).
109. Niall Ferguson, BBC Reith lectures 2012, as quoted in Murray (2012).
110. Anderson and Ohm (2012) and Dixon (2013), table 8.
111. BBC News (2011); Chowdry and Sibieta (2011), figure 2, p. 7; and Stanford (2012).
112. Anderson (2013). Several anonymous comments on the situation described above found nothing to mock but only wished that these conditions were available for their own children: ‘I am so unbelievably jealous of the education these kids are getting. Please note the lack of standardized testing – these kids are busy actually learning, going to museums, building, learning language, and at a 9 to 1 ratio. I wish, oh how I wish, that our public school kids could get an education like this. It would bring everyone up so much.’
113. Powell (1996), p. 42.
114. Lurie (2008), p. 31.
115. Anderson and Ohm (2012).
116. Benn (2011), p. 7.
117. Peshkin (2001), pp. 20–1.
118. Anderson (2013).
119. Anderson and Ohm (2012).
120. Green et al. (2011).
121. Wilby (2013).
122. Edemariam (2013), p. 31.
123. Powell (1996), p. 17.
124. Edemariam (2013), p. 31.
125. ‘The school choice of private-independent schools in France, UK, USA and Japan is mainly driven by school characteristics, especially the school composition, student-teacher ratio and better resources in the private-independent schools.’ Dronkers and Avram (2009), p. 906. In the UK, there has been a ‘steady decline since before 1980 in the independent sector’s pupil-teacher ratio, dipping below 1 in 10 by 2004.’ Green et al. (2008), p. 392.
126. See Lightfoot (2010).
127. Green et al. (2008).
128. Tough (2012), p. xiv.
129. See Mighton (2007), especially pp. 46–7.
130. Questions surrounding excellence are issues of public concern: Sellgren (2013).
131. Kohn (1998).

132. OECD (2014), p. 230. The high figures for the US are partially accounted for by the unusually large percentage of the population under 15 in the US (20 per cent), compared with Finland's more representative figure for rich countries of 17 per cent (Eurostat, 2012).
133. Esping-Andersen (2008).
134. Corno and Xu (2004), p. 228.
135. France 24 International News 24/7 (2012).
136. 'Is homework one of the bad guys? Supporters of homework say that it's a way of getting parents involved in their children's education by bringing school into the home, and that has to be a good thing. But it's also likely (contrary to President Hollande's assumption) that the people most hostile to homework are affluent parents who want their children to spend their after-school time taking violin lessons and going to Tae Kwon Do classes – activities that are more enriching and (often) more fun than conjugating irregular verbs. Less affluent parents are likely to prefer more homework as a way of keeping their kids off the streets. If we provided after-school music lessons, museum trips, and cool sports programs to poor children, we could abolish homework in a French minute. No one would miss it.' Menand (2012).
137. In Houtenville and Conway (2008).
138. Paton (2013).
139. Mani et al. (2013).
140. See the frosty approach taken to these questions in Morozov (2013).
141. Huizinga (1938).

12 Equality and Democratic Control

1. For a review, see Skott (2015); a mainstream Keynesian approach may be found in Summers (2015).
2. Thornton (2012); *Official Journal of the European Union* (2012).
3. Bien (2015).
4. Bien (2015); Janson (2015) cites the prospect of persistent unemployment as the motivation for Swedish opinion supporting guaranteed income; see, as well, Caputo (2012a), p. 4.
5. Bargain and Doorley (2011) find a modest disincentive effect of a French minimum income scheme offered to uneducated single males over the age of 25. They note (p. 1097) that these results are of the same order of magnitude as previous estimates for the US labour market.
6. Caputo (2012).
7. Etzioni (2008), p. 4.
8. Janson (2015).
9. Murray (2015) p. 2.
10. Murray (2015), pp. 7–8.
11. Carnegie (2012).
12. Frase (2012).
13. Katz (2011).
14. Cingano et al. (2010).
15. See Kaboub (2007).
16. Kaboub (2007), p. 12.
17. Traub and Hiltonsmith (2013). In the UK, the public sector appears to have experienced a less extreme widening of pay differentials than private firms,

with the exception of local government and National Health Service remuneration. The latter conclusion has to be qualified because of opaqueness in the pay arrangements at upper levels of management: Hutton Review of Fair Pay (2011), pp. 13–19.

18. Bergholm and Bieler (2013).
19. This concept is explored in Kalleberg (2011), chapter 1, Osterman and Shulman (2011), chapter 1, and Coates and Lehki (2008), chapter 1.
20. Piketty (2014), pp. 481–2; Atkinson (2015), chapter 1.
21. Empirical studies (Kling et al., 2007 and Gibbons et al., 2013) plausibly suggest that short-term interventions, such as rezoning and housing vouchers, that involve a mere shuffling of cohorts are not likely to generate any exceptional improvements in a range of parameters (such as the test scores of the 11–14-year-olds involved in the first study). Substantive social intervention is likely to be of a long-term kind, effecting change simultaneously at the level of the household, school and neighbourhood. The methodological and empirical difficulties in isolating the impacts of neighbourhoods on the educational development of children are explored in Burdick-Will et al. (2011) and Harding et al. (2011).
22. Lerner (1943).
23. ‘We do not believe that securitization alone caused the crisis, but by channelling money from investors to borrowers with ruthless efficiency, it may have allowed speculation on a scale that would have been impossible to sustain with a less sophisticated financial system ... the inefficiency of a more traditional financial system might have proved a blessing during this time, as it could have prevented overly optimistic borrowers and investors from finding each other.’ Foote et al. (2012), pp. 140, 174.
24. Schularick and Taylor (2012), p. 1057; and see Borio (2012).
25. Borio and Disyatat (2011).
26. Schularick and Taylor (2012), p. 1031 and Borio (2007), p. 6.
27. See, in general, the discussion in Shefrin and Statman (2012), and the quotation therein from Minsky, p. 121.
28. ‘Certainly few would agree that a Soviet-type central planning system is likely to make better allocation decisions.’ Malkiel (2012), p. 90.
29. See Barro (2009).
30. Dos Passos (1936); Steinbeck (1939); Packer (2014).
31. Schumpeter (1939), p. 173. A summary of Schumpeter’s explanation for the overall causes of business cycles is on pp. 181–2. Hayek took different positions over time on the role of finance in business fluctuations, but in his most elaborate statement, his approach was congruent with that of with Schumpeter’s real factors approach: ‘though in the short run monetary influences may delay the tendencies inherent in the real factors from working themselves out, and temporarily may even reverse these tendencies, in the end it will be the scarcity of real resources relative to demand which will decide what kind of investment, and how much, is profitable ... Ultimately, therefore, it is the rate of saving which sets the limits to the amount of investment that can be successfully carried through’ (Hayek, 1941, p. 393).
32. Much of the discussion below follows from Auerbach and Siddiki (2004), sections 1 and 2.
33. Modigliani and Miller (1958); and see Auerbach (1988), pp. 163–7 and Gilchrist and Zakrajšek (2012), p. 40.
34. Pensieroso (2007), p. 135.

35. See the critical discussion of such doctrines in Sotiropoulos et al. (2013), chapter 7, especially p. 136.
36. See Auerbach (1988), pp. 226–9 and Winslow (1973).
37. See Steinherr (2000), especially chapters 1 and 5, and Borio (2007); this section borrows material from Auerbach (1988) pp. 188–201.
38. See Steinherr (2000), chapter 5.
39. A discussion of these events from a slightly different perspective may be found in Panitch and Gindin (2012), chapter 5.
40. Hodgman (1963).
41. For a contemporary manifestation of these developments, see Doidge et al. (2013).
42. Steinherr (2000), pp. 36–9.
43. Philippon and Reshef (2013), pp. 74–5.
44. The following uses material from Auerbach and Siddiki (2004), pp. 237–8.
45. It might be thought that such a saving of cash would increase the net supply of investable funds. But in a system of national fiduciary money, any such savings – increases in monetary velocity – are merely the equivalent of monetary creation, which can be done by governments at zero cost. By contrast, savings of non-fiduciary monies (such as silver) may increase national wealth by increasing net claims on foreign resources.
46. Steinherr (2000), chapters 7 and 8; Borio (2011).
47. Steinherr (2000), pp. 42–5, 202; Sotiropoulos et al. (2013), pp. 116–20.
48. '[T]he current approach to regulation and supervision of banks is rapidly becoming ineffective for the most important part of the financial system, namely the global risk-managing banking institutions.' Steinherr (2000), p. 207, and see pp. 132–3, 152–4; Panitch and Gindin (2012), p. 306 give the example of 'special investment vehicles' (SIVs) created by banks in the first part of the twenty-first century to avoid regulation by the Federal Reserve.
49. Steinherr (2000), pp. 221–6.
50. Jarrow (2012).
51. For a historical overview, see Allen (1993).
52. See Borio (2011) and Steinherr (2000), chapter 9.
53. De Grauwe and Ji (2013).
54. See, for instance, Alperovitz (2005).
55. A useful critical review of these doctrines can be found in Erturk et al. (2007).
56. Steinherr (2000), p. 279.
57. Steinherr (2000), pp. 103, 255; Shiller (2008), pp. 164–8; Shiller (2012), pp. 67, 117.
58. Shiller (2012), pp. xiv, 43–4; Shiller (2008), p. 126; emphasis added.
59. Shiller (2012), p. 5; emphasis added.
60. Shiller (2012), pp. 22, xvii.
61. All such activities will have to contend with the forms of lobbying and special interest pleading to be found in the contemporary world. Thus, recently proposed legislation in the US to set up a bank providing funds to state and local governments for infrastructural projects is likely to be compromised by tax concessions to multinationals contributing to its start-up financing. See Hungerford (2014).
62. Piketty et al. (2014), p. 232; Saez et al. (2012), p. 42 and table p. 45; McClelland and Mok (2012); Diamond and Saez (2011), p. 171; Mirrlees et al. (2011).
63. Atkinson et al. (2011), pp. 125–32.
64. Piketty and Saez (2007), pp. 11–13.
65. Atkinson et al. (2011), pp. 9–10.

66. In general, see Atkinson (2004) and Piketty and Saez (2007).
67. Lindert (2004), chapter 10; Piketty and Saez (2007), pp. 19–22.
68. See Roine et al. (2009), pp. 367–8.
69. Adema and Ladaïque (2009), table A3.1.a p. 84; and see Fishback (2010).
70. Adema and Ladaïque (2009), p. 28.
71. Adema and Ladaïque (2009), pp. 14, 44.
72. Shaxson (2011), pp. 13, 45.
73. Atkinson et al. (2011), p. 40.
74. Rogers and Toder (2011), p. 1.
75. See McIntyre (2011) compared with Carter (2014).
76. Toder and Baneman (2012).
77. Burman (2013), pp. 589–90.
78. The enormous obstacles to limiting these exemptions are reviewed in Toder et al. (2013).
79. Piketty (2014), chapters 14 and 15. For reasons of simplicity alone, Piketty's scheme is to be preferred to other taxation regimes, such as taxes on consumption that make claim to greater efficiency (see Auerbach and Hassett, 2015, especially pp. 40–2).
80. See Piketty (2014), pp. 569–70.
81. Mayersohn (2014). And see Skocpol (2003).
82. Edsall (2014).
83. Henry (2012), p. 36.
84. Atkinson et al. (2011), p. 29, note the consistently lower shares for income for the top 1 per cent in survey data compared with tax records.
85. Bø et al. (2014). Since the beginning of 2011, access to the tax lists now takes place through a personalised log-in system for accessing online public services, which involves a pin-code and a password.
86. Shaxson (2011), p. vi.
87. Henry (2012), pp. 3–5.
88. Henry (2012), p. 20.
89. Henry (2012), p. 44.
90. Palan (2002), pp. 158–9, reviews a right-wing literature that justifies tax havens as protection against the monopolistic power of the state.
91. Picciotto (2012).
92. Henry (2012), p. 41.
93. Picciotto (2012), p. 14.
94. Johannesen and Zucman (2014), p. 65.
95. Tax Justice Network (2014).
96. Friedman (1962), p. 196.
97. Sala-i-Martin et al. (2012), pp. 4–5.
98. Decker (2013).
99. Financial Transparency Coalition (2014).
100. Piketty (2014), p. 570.
101. Boldrin and Levine (2013); see as well Lerner (2009).
102. Moser (2013).
103. See Boldrin and Levine (2013), pp. 4, 18–19.
104. Boldrin and Levine (2013), p. 3.
105. Stiglitz (2013a).
106. The head of a British drug company called an Indian manufacturer a pirate for coming out with a generic version of one of its AIDS drugs: see Goldacre (2009).

107. Hacker and Pierson (2010), p. 6. Such a view is now a fairly orthodox one: 'economic elites and organized groups representing business interests have substantial independent impacts on U.S. government policy, while average citizens and mass-based interest groups have little or no independent influence.' Gilens and Page (2014).
108. Bonica et al. (2013). Unsurprisingly, very rich people have a more tolerant attitude towards inequality than others. Surveys commonly indicate that the public views present-day inequalities to be too wide, especially at the top (Orton and Rowlingson, 2007, for the UK and Andersen and Yaish, 2012, covering 20 countries). But strong claims for a substantial gap between actual and desired distributions (Norton and Ariely, 2011) may partially reflect confusion among interviewees on the distinction between income distribution and the much more skewed wealth distributions with which they were confronted. In general, surveys asking the public to respond to abstract questions of this kind can only give a very partial indication of public attitudes towards inequality as part of a society's lived experience.
109. Thus, with cutbacks to public funding for research and growing wealth inequalities in the US, it has been suggested that scientific research is progressively being shaped 'by the particular preferences of individuals with huge amounts of money'. Steven A. Edwards, quoted in Broad (2014).
110. In Europe, alienation from political processes appears to be particularly strong among lower-income social groupings. See Stoker (2011), p. 12.
111. Hacker and Pierson (2010) suggest that 'To call [most US citizens'] knowledge of even the most elementary facts about the political system shaky would be generous', a fact that 'in serious political discourse it is usually considered to be bad manners to point out' (pp. 108–9). Whether such a generalisation is universally valid is less certain than the fact that elite groupings in most countries would perceive it to be so.
112. Stiglitz (2013), chapter 2. Stiglitz is also concerned with a range of market failures that will inherently emerge in contemporary capitalism, most especially because of the presence of asymmetric information between market participants.
113. Open Secrets (2015).
114. POGO (2013).
115. Ferguson et al. (2013).
116. Biegelsen (2011). For the UK, Hackett and Hunter (2015).
117. International Federation of Health Plans (2013).
118. Ornstein et al. (2014).
119. This literature is reviewed in Hacker and Pierson (2010), pp. 151–5.
120. Curran et al. (2009).
121. Curran et al. (2009), p. 22.
122. Freeman (2005), p. 137, suggests that it is now a consensus view that unions reduce inequality of pay, a view also held by Card et al. (2004).
123. See Western and Rosenfeld (2011) and Farber (2005).
124. Coats and Lehki (2008), pp. 38, 41–2.
125. Kocher et al. (2012); Pencavel (2005), pp. 86–7, discusses unions' role in worker grievances.
126. Freeman (2007), pp. 13–14, 93–4.
127. Pencavel (2005), p. 69.
128. Pencavel (2005), pp. 66–7, and Schmitt and Mitukiewicz (2012), pp. 1, 5–7. Note that there can often be, as in France, a broad gap between union membership

(less than 10 per cent) and union coverage in collective bargaining (90 per cent). Pontusson (2013), p. 800, cites Visser (2013) with data from 1960 to 2011 for 22 OECD countries, all showing a decline from peak levels of union density.

129. Freeman (2007), pp. 78–9, and Bryson and Blanchflower (2008).
130. Public sector unions remain the only large source of funds in the US acting as a countervailing force to right-wing political donations. The relevant information can be disinterred from Open Secrets (2015).
131. Baccaro and Howell (2011), p. 550: 15 advanced capitalist countries considered.
132. Bronfenbrenner (2009).
133. See Gross (2003a).
134. Freeman (2007), p. 11, fig. 1.2 indicates a positive relationship between collective bargaining coverage and social expenditure as a share of GDP for different countries. In Pontusson (2013), p. 813, it is suggested that the relationship between union density and both earnings inequality and redistributive policies has weakened since 1995; on pp. 807–10, a positive association between union density and electoral turnout across countries is reported.
135. Pontusson (2009). This typology is used by Pontusson to draw conclusions about the real-life efficacy of these regimes as they function in various countries. Here, these different categories are used more abstractly to characterise a range of relationships between capital and labour. The continental variant depicted here is perhaps particularly distant from the countries to which it is attached in the text.
136. Scandinavian social democracy's right-wing admirers have sometimes chosen to ignore the role of union involvement in its construction. See the reminder of this fact given by Schwartz (2013) in response to Wooldridge (2013). Recent decades have witnessed a decline in both the economic and the political role of unions in Scandinavia (with some variance between countries), though in both contexts they retain substantial power relative to other countries. The decline of the political power of trade unions is described in Allern et al. (2010).
137. The figures for all countries are from Schmitt and Mitukiewicz (2012).
138. Pontusson (2009), pp. 7–8.
139. It was, perhaps, dissatisfaction with the low level of worker influence over the destinies of firms in the Nordic model that led to the ultimately unsuccessful promotion in the 1970s by Rudolf Meidner of wage earner funds that would lead gradually to the transfer of the assets of the firm to its employees: see Sassoon (2010), pp. 706–15.
140. Note the discussions in Chapter 3 and see, for instance, Schweickart (1980).
141. Mill (1870), chapter VII, section 2(2), p. 537 and section 2 (6), p. 543.
142. Perhaps feeling defensive in this regard, supporters of capitalism have put forth a view of firm functioning as the voluntary interaction of a team. The central agent (the capitalist) typically hires workers to perform tasks, but it might just as well have been the other way around – workers could have hired a capitalist, whose specialised skills would facilitate team production: '[In] the classical firm ... the central agent is called the firm's owner and the employer. No authoritarian control is involved. The contractual structure arises as a means of enhancing efficient organization of team production.' Alchian and Demsetz (1972), p. 794.

143. Kruse et al. (2010a) in Kruse et al. (2010), pp. 1–4. The discussion here is largely in the context of Employee Stock Ownership Plans (ESOPs) in the US, situations in which workers gain (some) ownership of the enterprise, and therefore a direct material interest in its fortunes, but do not, as a rule, formally control it.
144. Lazonick and Huzzard (2014). The range of ‘employee involvement’ ranges from ESOPs to co-determination (to be discussed below). These themes are expanded upon in Lippert et al. (2014).
145. Ward (1958), p. 575.
146. Vanek (1970), pp. 298–300.
147. Dow (2003), pp. 152–6, 236–8.
148. The important question of the state’s role in the initiation of these technological developments is discussed in Chapter 9.
149. Lécuyer (2006), pp. 98–9, 123–8, 192. The solution to this problem proposed by Dow (2003), p. 154, is for worker-managed enterprises to have a market in membership rights for the enterprise.
150. Dow (2003), p. 47.
151. See Wolff (2012).
152. Alperovitz (2013).
153. Alperovitz (2013).
154. Dow (2003), pp. 59–64.
155. Thomas and Logan (1982), pp. 35–6, 70.
156. The sources consulted on co-determination have included Dow (2003), pp. 83–91, Michel (2007), and Becker and Paulusma (2011) in Anderson et al. (2011), chapter 8.
157. Germany’s employment ministry has banned its managers from calling or emailing staff out of hours except in emergencies: Vasagar (2013).
158. Hutchins (2014).
159. Feldstead et al. (2009), p. 5.
160. Hager (2004).
161. Colley et al. (2003).
162. Green (2006), chapters 6 and 7. Merkle (1980), chapter 2, had properly dismissed the notion that Taylorism was a once-and-for-all fashion to be exclusively identified with the early twentieth century.
163. Ford (2015), pp. 252–3. Frey and Osborne (2013) suggest that around 47 per cent of total US employment involves jobs which ‘could be automated relatively soon, perhaps over the next decade or two’. What remains the mainstream consensus view is less calamitous: ‘journalists and even expert commentators tend to overstate the extent of machine substitution for human labor and ignore the strong complementarities between automation and labor that increase productivity, raise earnings, and augment demand for labor’ (Autor, 2015, p. 5).
164. Ford (2015), pp. 257–61.
165. See Ford (2015), chapter 9, ‘Super-Intelligence and the Singularity’, concerned with computers of the future that exceed human intelligence (whatever that means).

Conclusion

1. Israel (2006), pp. 15–26; Israel (2010), especially the preface and chapter 1.

2. Note, for instance, the widespread use of value-added measures to judge teacher performance based on changes in students' test scores from year to year, and between students: see Dillon (2010).
3. Fromm (1956).
4. Fromm (1956), p. 293.
5. Habermas (2015), p. 64.
6. Auerbach (1992), p. 35.

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