

New Economy, New Myth

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New Economy, New Myth

The 'New Economy' has been criticised greatly of late, and after the speculation and hype that surrounded the Internet bubble and so on, this is hardly surprising. This book, first published in French and updated here, however, treats the 'new economy' as discourse – one that is often misleading.

In order to understand what happened during the Internet bubble and the fuss that surrounded it, a central element – intellectual speculation – needs to be understood. *New Economy, New Myth* treats this speculation as a form of 'ultra-free market' thinking. According to this line of thought, the Internet and the digital revolution – whose importance to major innovations are by no means denied – are acting as a sort of Trojan horse in spreading market deregulation across the globe.

With so much having been written about the new economy, this book employs a mixture of academic rigour and readable prose and comes as a welcome relief. It will be intriguing reading to those interested in the Internet bubble – and the hyperbole that surrounded it.

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For Nicole, Christophe and Anne-Sophie

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Preface to the English-language edition

As far as the new economy is concerned, things change quickly, so quickly in fact that some people are wondering whether we should not already, in 2002, be talking of the 'ex-new economy'. This is not my own view: my subject in this book is the new economy as a discourse, one that is often misleading and placed at the service of powerful private interests. There are good reasons to suppose that this myth will endure for some time, longer in any event than the vicissitudes of the NASDAQ, and indeed for as long as its propagators are in positions of economic and ideological strength or until capitalism devises some alternative economic and intellectual fad.

In the autumn of 2000, just as things were starting to go downhill, one of the advocates of the new economy at the time of its take-off in the United States, Michael J. Mandel, economics editor of *Business Week*, published a well-informed book, *The Coming Internet Depression*.¹ Without abandoning the notion that a genuine, lasting revolution associated with ICTs and the Internet is taking place and that new rules are radically changing the economy, Mandel highlights the risks posed by the chronic instability of this new system and proposes several slight improvements, notably the strengthening of the institutions for monitoring and regulating the global financial system. The present book, written just before the start of the downturn of March–April 2000, is based on different hypotheses to those adopted by Michael Mandel and takes a more sceptical view of the new economy that is supposed to be emerging and the major industrial revolution linked to the Internet that is supposedly taking place. It is true that the Internet and the software revolution have introduced new elements, but we are very far from a radical change in economic practices, production, consumption and ways of life. It is probably because they overestimated the extent of the change in the rules of the economic game that most of the start-ups established during the boom years 1997–2000 have subsequently become 'start-downs'.

However, my book focuses primarily on another argument, which is that, another element, namely unprecedented intellectual speculation, needs to be brought into play alongside technological and stock exchange speculation in order to understand what happened during those slightly crazy years. This wave of intellectual speculation is essentially a variant of 'free-market' thinking, one that is both 'ultra-free-market' and 'high-tech'. According to this line of thought, the Internet is acting as a sort of Trojan horse in the spread of deregulated markets – unencumbered by state intervention – across the entire world; the markets affected are not only those for goods and services (including health, education and culture) but also labour markets and those for social protection, as well as capital markets of course. It is mainly this thinking that this book seeks to attack, not in order to question the obvious 'virtues' of markets but to highlight their diversity and limitations, even in the area of the new technologies.

The first edition of this book was published in France during the summer of the year 2000, when belief in the magic properties of the 'new economy' was still very widespread. A second, paperback French edition was published a year later with a postface that took stock of the debates that had taken place between the summer of 2000 and the spring of 2001.

This English-language edition of the book takes over the contents of the second French edition with a few additions inserted at the end of 2001 for the benefit of English-speaking readers. These readers may take the view that my ideas are influenced by a Continental European and Nordic way of thinking and, more specifically, by French culture. They would be correct: I acknowledge these influences, without seeing in them a source of superiority. I believe in the theoretical and political benefits of an open debate between researchers from different cultures, provided it is sufficiently well argued and calmly conducted. At the same time, however, I am happy to have found a number of American and British researchers, whom I cite in this book, who are putting forward ideas similar to mine, drawing of course on their own arguments and cultures. I am thinking in particular of Robert Kuttner, whose superb book *Everything for Sale: The Virtues and Limits of Markets*, published in 1997, provided much of the inspiration for the last two chapters of my book. This clearly indicates that the ideological foundations of the 'new economy' discourse for the most part preceded the rapid development of the Internet. They were simply reactivated in support of the infatuation with this new technological tool.

Other American analysts have also influenced me considerably. One is Robert Reich, particularly for his exceptional lucidity in analysing the excesses of the American model of capitalism in the 1990s. Two others are the economist Robert Gordon and the sociologist Manuel Castells (even though, in certain respects, I would distance myself from some of his diagnoses). Although

I am not a neoclassical economist and favour a more 'socio-economic' approach, I very much admire the thinking of Kenneth Arrow and Amartya Sen, whose work admirably illustrates the fact that giving priority to moral values and a sense of social justice and the public good can bring together economists with very different theoretical approaches.

When I wrote this book, no economist or socio-economist had, to the best of my knowledge, published a book on the new economy, and very few academic articles had investigated the subject. Since the middle of the year 2000, some studies of great interest have become available. I would like to mention some of them that seem to complement mine. The first is Thomas Frank's brilliant and incisive essay *One Market under God*, published in 2000.² Although it is considerably more radical than my own book, this essay offers, in the words of the *New York Observer*, a 'close reading of the promotional rhetoric of Internet globalization ideology'. In Frank's book, as in mine, the new economy discourse is analysed not only as a technical or economic myth but also as the latest variant of free-market ideology, which Frank characterises as a brand of 'market populism' on which there is a fairly broad consensus among politicians and business elites. Frank explains that 'very little of the New Economy is new. What the term describes is not some novel state of human affairs but the final accomplishment of the long-standing agenda of the nation's richest class.'

In my opinion, Thomas Frank exaggerates the extent to which economists subscribe to this renewed myth. In fact, it seems to me that most academic economists (I am not speaking here of those who write columns in the business press) have remained fairly cautious, quite simply because some of the data available to them do not support the myth. In my book, therefore, I have also drawn on a few serious studies by reputable economists that were available at the beginning of the year 2000. Other economic researches on the new economy have been carried out since then; their conclusions can be summarised in the words controversy, uncertainty and caution. In November 2001, I had the honour of chairing an international conference on 'measuring the economy' held in Paris. It was attended by some of the leading specialists in the world, including Jack Triplett and Barbara Atrostic from the USA, Nick Oulton and John Kay from the UK and Jacques Mairesse and François Lequiller from France. The least that can be said is that the diagnosis of 'new growth' driven by ICTs was hedged in with numerous qualifications, that the methods of measurement were controversial and that the general tone of the conference was closer to Robert Gordon's cautious analysis (see Chapter 3) than to the 'techno-ecstatism' of the high priests of the Internet.

With all its warnings against the dangers of accepting unreservedly the diagnosis of a new, lasting revolution based on the Internet, the calls for

the deregulation of all markets throughout the world or the spread of the new stock-exchange capitalism made in the USA, it might be concluded that my book is little more than a collection of precautionary advice and that it is therefore insipid, hostile to 'inevitable' changes, conservative even. If we are talking about preserving an inherited set of moral values that extends beyond the mere maximisation of individual interests to embrace non-economic goals and social protection arrangements that reduce inequality and insecurity, then I accept this version of conservatism and lay claim to it as a defence against the apostles of the new economy. Faced with the rise to prominence of the ideology of the high-tech-based, ultra-free global market, certain very reasonable precautionary principles tend nowadays to pass for arguments in favour of an extreme radicalism, or at best as pure utopia. I leave it up to the reader to decide whether my caution is excessive, or whether I am giving way to utopianism.

I would like to finish by thanking Thomas Frank for the delectable description he gives, in Chapter 2 of his book, of the furious attack unleashed by sections of the American press and other media at the end of the 1990s against France and the French, who are presented as a stubborn and arrogant people 'swimming mulishly against the current both culturally and economically'. In the *New York Times*, 'Virtually every week in 1997 there was some memorable image or hilarious French foul-up to report: The French intellectual, say, who was writing a dissertation on the impact of the Internet – with a pen! Or that great photo of a French cabinet minister staring at a computer – with an astonished look on his face!'

So I reassure my readers that I am personally, despite the obvious handicap of being a French citizen, a heavy user of the Internet and related technologies. I appreciate them, at least at the same degree as my American colleagues; I love staying and working in the US as often as possible and my book has nothing to do with any supposed French arrogance.³ It is mainly about the 'moral dimension' (to quote the title of Etzioni's remarkable book⁴) and the role of markets and technologies, including the Internet, as tools – among others – for human and social development.

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Introduction

I am very much afraid, my friend, that the Lord Chancellor of England's prediction may be about to come true in France; philosophy, poetry, science and the fine arts fall into decline as soon as people's minds, filled with matters of concern to them, become occupied with administration, commerce, agriculture, imports, exports and finance . . . When minds are engaged in calculation, the taste for ease and comfort spreads and enthusiasm dies out . . . People become sensible and dull, they extol the virtues of the present, they reduce everything to the brief moment of their own lives; a feeling of immortality, respect for posterity are words devoid of meaning that bring forth pitying smiles; they are set on enjoyment and care little about what happens after they are gone . . .

(Diderot, Salon de 1769)

We have entered a new age, we are told. Its characteristics are ill-defined, the issues at stake uncertain, but we are told it is new and that we have to go along with it. The myths put about to stir people into action are flourishing, but little serious thought is being given to the general nature of this new age or to the social risks we might have to guard against. Trenchant turns of phrase and portmanteau words seem to be sufficient. However, these new words and the old ones have many points in common. In most cases, indeed, the new terms can be obtained simply by adding the adjective 'new' to the old words. We used to speak of the economy and of growth; now we speak of the 'new economy' and the 'new growth'. However, our vision of society continues to revolve around its economic aspects, and has growth as its central aim. Technological progress used to be the tool of industrial growth; the 'new technologies' are now the new tool of the new growth. We used to speak of the market economy, and we still do: that at least has no need of updating. It simply needs to be extended to new sectors and new lands; this can be achieved by implementing the new technologies and 'deregulating' those sectors that are dragging their heels. We

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used to have freedom of labour, with the labour force regarded as a mobile commodity to be traded in the market. Now we have labour flexibility, also demanded in the name of economic efficiency.

This new age resembles nothing as much as a heightened version of the old one, at least as far as its fundamental vision of society and progress is concerned. The economy, growth, the market – applied more widely and liberalised – and the availability of labour, capital and natural resources still lie at the heart of social development. It might even be considered a backward step, a ‘great transformation’ in reverse. In his major work of 1944,¹ the historian Karl Polanyi showed that the nineteenth century had seen the emergence of a market economy and society that had succeeded in sweeping away the old order by creating vast markets that were ‘self-regulating’, or sought to be; these markets extended far beyond the confines of the local markets known to our forebears, subjecting labour, land and money to their laws. However, this market system could not be established without destroying social forms and natural resources; these destructive consequences gave rise in turn to tensions that culminated in the crisis of the years between 1930 and 1945. They also led to the ‘great transformation’ that Polanyi thought he saw emerging in the mid-twentieth century, namely the ‘resocialisation’ of the economy and the end of the self-regulating market after more than a century of economic liberalism that was in part mythical (because of its constant reliance on the State and non-market institutions) but nonetheless active and dominant.

Polanyi obviously underestimated the ability of *laissez-faire* practices to bounce back and regain the upper hand. More than fifty years after these analyses, it is the laws of economics that seem to be in the ascendant, with the political and social spheres relegated to the role of handmaid, applying sticking plasters to the wounds inflicted by the market economy. What we have now is the competitive market as a ‘total social phenomenon’ embracing the planet, sport, culture, genetically modified seeds, bacteria, animals and plants, human organs and even the sperm and eggs of beautiful or intelligent individuals (top models are driving up the cost of the reproduction of the species). The laws of the market now apply to prisons, police forces and hospitals. The ‘economic theory of the leisure class’ (in Nikolai Bukharin’s words) seems to have found its second wind thanks to pension funds. In the interests of users, transformed into customers for the purpose, public services are being required to behave like private-sector companies, while local community services, apart from those dedicated to charitable or humanitarian works, are enjoined to embrace the market and to stop distorting competition. And of course there is labour: market value has to be created through acts of transformation (even if that market value is subsequently appropriated in accordance with existing power relationships), the future of which is said to lie in widespread flexibility and

mobility, whether of workers, pay or time, in accordance with the economic imperatives to whose laws all other values and other aspects of life in society are subordinated.

Is this depiction a caricature? To some extent, it is. One of the objectives of this essay is to show that this vision contains innumerable contradictions and that things are just not like this: the new, technologically driven, free-market economy thus described is a myth, as was the 'self-regulating market' in Polanyi's view. And yet these myths, with their simplified, illusory images that nonetheless guide our actions, are extremely potent. They are being adopted on a global scale, and their influence is extending beyond the economic and political actors who might be expected to see them as a means of adding to their own wealth and power. The European left is becoming increasingly susceptible to it. Since there is no theory of this new mythical age, a concrete model takes the place of theory and proof. That model is the American one. However, in order to transform it into a myth, it has to go through a process of purification, with only a set of idealised characteristics being left behind after the others have been discarded.

The purpose of this essay is not to suggest that the policies being pursued by governments of the left in Europe amount to nothing more than the adoption of the myths surrounding the new economy and the American prescriptions. Rather, we would like to focus our attention upstream of these political debates in order to identify the principal characteristics of this technologically driven, free-market model that is both mythical and effective (in the sense that it exerts a direct influence on public and private decisions), to subject them to criticism, to highlight the risks inherent in them, to put forward some 'precautionary principles' that would help us to avoid these risks and to show that, in reality, there are other paths to be taken and other choices to be made. The task of politicians and other decision-makers, particularly in Europe, would then be to do something other than follow in the footsteps of the United States or to boost 'investor confidence' by competing with rivals to see who could put in place the most generous tax advantages and measures to reduce labour costs, leaving it up to the technological and financial networks to decide our fate. In particular, their task would be to create the conditions under which those who would seek to put economic and technological factors in their place as resources for social and human development projects rather than inescapable constraints with all the force of laws of nature could make their voices heard more easily.

This essay, the French version of which was written at the beginning of the year 2000, takes a critical look at certain ideas, some of which are very old (the general superiority of the competitive private capital market as an organisational form for economic activity, that is economic liberalism) and others

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more recent (the notion of the ‘new growth’, based on the new information technologies). At the time of its publication, the new ideas were the subject of amazing media hype, a sort of ‘bubble of intellectual speculation’. Bubbles are not confined to the world of financial speculation, although it is true to say that, in the present case, the financial speculation surrounding dot.com companies and other Internet stocks is certainly the origin of the intellectual speculation about the new economy. However, the old and new ideas commingle, providing further evidence of the flexibility and opportunism of economic liberalism as an ideology. What is being presented to us is, in the words of Anton Brender and Florence Pisani,² ‘a twofold revolution, both electronic and liberal’. This is why we did not wish to separate the fashionable topics (the Internet and Silicon Valley economy) from the ongoing debates on market deregulation and the new corporate governance: today, the two strands are feeding off each other.

1 The new economy

Back to the roots

The new economy is a discourse or, to be more precise, a set of discourses to which various actors in the United States have been contributing since December 1996 and which spread a little later to Europe. The justification for gathering these discourses together and subjecting them to examination is extremely simple: all of them make explicit reference to the terms 'new economy' or 'new growth', all of them seek to define and illustrate these terms and all of them seem to agree on their characteristics. Who is contributing to these discourses, and who is diffusing them? What are the major themes? Are these ideas coherent? The answer to this third question will be developed gradually in the chapters that follow, but the main thrust of our response will be indicated in this chapter. Yes, indeed, there is some degree of logical coherence between these various discourses on the new economy. However, this coherence is limited and has to be partially reconstructed, rather in the manner of anthropologists analysing the structure of myths. And no, there is no scholarly theory of this new mythical age: the only academic studies that might help to underpin these idealised representations of the new order are, by virtue of their scholarly objectivity, potentially critical of these normative discourses. They reveal their Janus-faced aspect, the issues at stake and risks involved as well as the contradictions inherent in them, and therefore encourage us not to adhere to them slavishly. This is particularly the case with the academic theory of greatest relevance to our purpose, namely that of the 'information society', the most accomplished version of which is that advanced by Manuel Castells.

Who is talking about the new economy?

Neither in Europe nor in the United States are academics, economists, sociologists or management specialists the *principal* contributors to the discourse on the new economy. Such experts are summoned or cited as witnesses; some of them seem to give their backing, sometimes without their knowledge or on the

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basis of a partial reading of their conclusions. However, they seldom venture to give the discourse of the moment their unqualified endorsement. *Rather, this discourse is created and diffused largely by actors in the realms of politics and the media:* the economic and business press, stock market commentators and political personalities who rely on the economic press, and vice versa. It is even somewhat surprising to note that the active segment of the economic press in the United States tends rather to attack economists, accusing them of paying insufficient attention to what is 'really' changing.¹ Until the mid-1990s, the neo-liberal discourse paid relatively little attention to technology, and there was no shortage of economists, indeed Nobel prize winners, in Chicago and elsewhere, who were only too willing to give their imprimatur to deregulation, flexibility or economic globalisation. The discourse around the new economy, which, in its most simplistic versions, can be summed up by the term 'high-tech free-marketeering', has not yet found an economic theory to support it. Nor is it certain that such a theory will one day be found.

Let us begin with the influential figures in politics. In the United States, Bill Clinton was himself one of the most active propagandists for these ideas: 'We are only at the beginning of a period that will go down in history as a golden age', he declared while invoking the 'new economy'.² That the American president should become personally involved is readily understandable, since the purpose of his intervention is to export both ideas (a free-market model of an expanding economy in which the diffusion of new technologies is much more advanced than anywhere else) and goods, in particular 'informational' goods and services. At the 'democratic' summit meeting in Florence in November 1999, Bill Clinton even defended his model on the grounds that it reduced social inequality, not only in the developed countries, but also in the Third World. He even went so far as to state, without batting an eyelid, that Africa's problems would be largely solved when every person in the continent had access to a computer and was connected to the Internet. Again in the United States, the main player in the economic and financial governance of the country, Alan Greenspan, Chairman of the Federal Reserve Board, explained on 6 May 1999 that ICTs (new information and communication technologies) were responsible for most of the productivity gains of recent times and the new, inflation-free growth.³

In Europe, the Lisbon summit of European Union Heads of State held in March 2000 saw the emergence of 'e-Europe' as a dominant theme. Essential priorities, such as more extensive and rapid connection to the Internet, the facilitation of e-commerce and the development of electronic cash and on-line financial services, were formulated. The Portuguese presidency's desire to focus attention on European convergence criteria as regards the unemployment and poverty rates was swept aside by the ideology of the new economy.

The media

The economic and financial press and business magazines aimed at managers and company directors are the main printed media for the discourse on the new economy. In the articles and special reports devoted to the subject, the most committed 'witnesses' or experts are given every opportunity to have their say. Others are less likely to be called on to offer their opinions. For their part, stock market analysts comment in awed tones on the soaring value of high-tech stocks, linking it to the new economy. Nevertheless, in reading the burgeoning volume of press articles being published in the United States and Europe, a distinction can be made between a minority of zealots and staunch supporters, for whom modernity and progress are synonymous with the assumed characteristics of the new economy, and another, much more circumspect group of commentators, who take a very different view of their roles as conveyers of information and active participants in the public debate.

In the United States, the official launch of the campaign to promote the new economy dates from December 1996. On the front page of the magazine *Business Week*, a strident headline declaring 'The Triumph of the New Economy' announced 'the emergence of a new economy, based on global markets and the electronic revolution'. The message was taken up by *Wired*, the magazine that specialises in the new technologies. Its editor-in-chief, Kevin Kelly, clarified the 'concept' in 1997, when he defined 'the three pillars of the new economy': it is global (accessible throughout the world), it gives precedence to 'intangible' objects (information, intellectual output) and it is 'interconnected'. Thanks to the Internet, producers are able instantaneously to adapt their goods and services to the wishes of on-line consumers. The potential market becomes unlimited, as do the prospects for growth and profits.⁴ The whole of the American press took up the torch and sought to raise the stakes, coining the term *e-commerce* and then *e-business*. The new economy became the darling of the business media, and the government in turn made it its hobby-horse, its efforts culminating in the publication in June 1999 of the Department of Commerce report. The *Harvard Business Review* became involved, in particular with the publication at the end of 1999 of a flamboyant article by William Sahlman,⁵ professor of business administration at Harvard Business School and a radical free marketer, in which he announced a golden age of Internet entrepreneurship and unlimited, inflation-free growth, provided that the government stood by and let the 'new business model' flourish.

In France, things began to take shape from the middle of 1999 onwards. They really began to gather pace at the end of that same year, with frequent special reports being published in the dailies and weeklies. Most of the articles were given over to the new information technologies and to the American

growth model, with these two characteristics coming together around such key themes as Silicon Valley, the Internet and electronic commerce. We list here some of the titles of the articles contained in one of the most exhaustive reports published in the daily *Les Echos*: 'Markets get carried away with Internet', 'The crazy rise of the New York Stock Exchange: thanks to dot.com shares, the NASDAQ⁶ has seen its market capitalisation soar by 362% in five years', 'High-tech industries are reshaping the geography of America' (according to a report published by an institute 'set up by Michael Milken, the former Wall Street financier'), 'Europe is catching up with the United States. The Europeans are finally pulling all the levers of the new growth: risk capital, stock options, tax breaks for innovation . . .', 'E-commerce: the revolution is under way', 'The irresistible rise of shareholder value', 'The five rules of the new management'. The general tenor of the report is indeed that the rise of the new model is irresistible.

Le Monde and *Libération* – two French dailies aimed at an audience of intellectuals, executives and 'symbolic analysts', to use the words of Robert Reich – were not to be outdone, but *Libération*, which is a little more 'switched-on', opened up something of a lead. Since June 1999, with a peak in November 1999, this daily has been devoting lengthy articles and interviews to the subject of the new economy as it is emerging in America. It has even set up a 'new economy' web site which, incidentally, is of great interest to a researcher writing a book on the subject.⁷ *Le Monde* was not long in following its rival's example. Initially, this daily maintained some degree of balance between the followers of fashion and sceptics, but this balance was subsequently upset by the publication in January 2000 of an impressive series of 'portraits of winners' and success stories: the 'grandma who dabbles on the stock exchange', 'the high-tech Indian', and so on. Only one of the articles in this series looked at some of the downsides of the new economy and showed how 'the rush towards Silicon Valley has led to a housing shortage . . . that has swelled the ranks of the homeless and those receiving food stamps'.

Let us be clear. We are not criticising journalists for relying on interviews, on slices of life or on revealing case studies that might help to capture realities that academic studies generally approach in a way that is inaccessible to a broad audience. On the contrary, academic researchers in this area have much to learn from journalists and their legitimate suspicion of jargon. The point at issue is a different one. We are concerned here not with the way that journalists go about their work but rather with editorial attitudes: are readers really helped to consider the issues at stake in the new economy, that is observable reality in all its multiple aspects, by interviews with five winners and one loser in a small, dynamic sphere of the American economy? Glancing through the French and European press for the whole of 1999 and the beginning of the year

2000, how can one fail to be struck by this very deliberate campaign of media hype conducted by the main newspapers around the same issues, this stage-managing of the very symbols of modernity? The economist Eric Brousseau, an excellent French specialist in the economy of the new technologies, described the method adopted by those seeking to impose the discourse of the new economy in the following terms:

It is a vague, simplistic discourse. It has been constructed by selecting particularly striking facts that are extrapolated, without any proof, in order to justify claims that a new model is emerging. The same examples are always quoted: Amazon.com, Yahoo, Cisco . . . Sometimes the starting point is an anecdotal, poorly documented case, for example a company that has managed to sell a can of cassoulet in Australia. I am not disputing the success and fantastic progress being made by certain firms, just the conclusions being drawn from these success stories.

Eric Brousseau also offers a credible interpretation of the social origins of such a discourse:

This discourse is that of producers and interest groups. It has become that of governments and of many company heads and media executives who simply parrot it without standing back from things and observing the necessary precautions. Thus most of the forecasts about the development of e-commerce emanate from consultancy companies acting on behalf of the major companies in the sector. And it is on these figures that the arguments presented in government reports are based, for example that published in June 1999 by the American Department of Commerce on 'The Emerging Digital Economy'.⁸

The supposed characteristics of the new economy

Most of the existing public references to the new economy invoke in their support a motley series of observations and positions whose overall coherence is not really made clear. Even the most exhaustive press reports juxtapose a number of themes that have little if any connection with each other. In reality, the only point they seem to have in common (apart from the adjective 'new', which is applied indiscriminately at every opportunity) is an idealised and selective reference to the American growth model that emerged in the second half of the 1990s. And yet, among this profusion of normative statements, six recurrent themes can be identified. These themes will be subjected to detailed examination in the chapters that follow.

The first characteristic of the 'new economy' is that it is a *high-growth economy*. Economic growth in the traditional sense of the term is both the result of the five other characteristics and the condition for the model's 'dynamic loopback', that is the durability of its foundations. Furthermore, this growth comes without inflation, except for the price inflation affecting financial assets (stock-exchange quotations, particularly those of Internet stocks). This latter form of inflation is not only tolerated but it is also desirable, since it reflects the dynamism of the economy. Even better, a flourishing stock market helps to reduce inflation, since 'the exuberance of the stock market has actually played an important role in increasing productivity and decreasing inflation . . . putting more competitive pressure on existing players, pushing prices and costs down, down, down'.⁹

The second and third characteristics of the new economy are based on the production and diffusion of the ICTs, which constitute the main vectors of the new growth, and (third characteristic) on *the expansion of service jobs* (service functions within the manufacturing sector and, above all, service activities in the traditional sense of the term). These two growth poles do not conflict with each other because of the cross-cutting, indeed universal nature of ICTs. However, the following distinction can be made. ICTs drive productivity, growth and innovation upwards, and it is on the basis of this growth that the production of and demand for services follow, creating large numbers of jobs. The technological aspect is sometimes highlighted excessively, particularly in magazines such as *Wired* that specialise in the new information technologies, to the point where the new economy becomes synonymous with the Internet economy. The role of services in the new economy (creating a pool of jobs) does not appear in all the discourses. Nevertheless, it is often alluded to in various forms: 'new services', spill-over of productivity gains, leisure society associated with multimedia, etc.

The fourth characteristic of the new economy is that it requires a *highly flexible labour force and labour market*. Previous systems based on 'internal labour markets' (career paths within organisations) or even lifetime employment, wage rigidities and stable or predictable work schedules are incompatible with the imperative of permanent innovation (associated particularly with the diffusion of ICTs), with just-in-time production systems and, even more so, with the conditions of production in the service sector (whether high-tech or not), which must be able to adapt flexibly to customer flows and the demands of service provision. The same applies to geographical and occupational mobility.

The fifth characteristic is that the new economy is a *market economy* or, to be more precise, an economy based on competitive, private capital markets that are free of the impediments of state regulations: 'Barring any government

interference, the new economy is rock solid and here to stay'.¹⁰ The freest possible competition is also essential to kill off inflation: 'The new economy has created such downward pressure on prices that it is safe to say that inflation is dead – dead as a doornail'.¹¹ Thus we should have done with anachronisms such as the institutions of the welfare state and public services, and can reduce public budgets, taxes and the public and non-profit sectors to the absolute minimum in order to entrust companies in the competitive private sector with the task of responding with the greatest possible efficiency to consumers' demands. In other words, what is required is the total or partial *privatisation* of a large number of national or local public services, of social protection (which is to be entrusted to insurance companies and pension funds), of health and education and of certain public administrative functions. This market economy may be local, in the case of 'neighbourhood services', for example, but if it is to come into full bloom, it will have to be *globalised* without restrictions, particularly in respect of those services that are still dragging their heels, such as culture, education, health, professional services and public utilities, that is all those services that developed historically out of concerns with the public interest and with ethical principles that constitute so many obstacles to the new growth. This fifth characteristic has been supported for a very long time by advocates of economic liberalism, but it is finding new justifications in the supposed properties of ICTs, and particularly in the prospects the Internet offers for the expansion, on a global basis, of almost perfect markets. On the one hand, ICTs constitute an 'auction technology' that enables consumers to select the least expensive goods from the information available on the World Wide Web; on the other hand, they open up new opportunities for transforming education and health services into competitive markets for electronic services: electronic extension schools, on-line, degree-granting universities, Internet-based treatment alternatives, etc.¹²

The sixth characteristic of the new economy is that it requires a *new mode of corporate governance* that gives the owners of capital, that is shareholders, the power to influence performance, organisation and strategy. This form of corporate governance is very closely linked to the characteristics of *deregulated financial markets*, which are themselves also new, namely the free movement of all financial transactions, untrammelled speculation and the withdrawal of the State. We will therefore consider these two indissociable elements – the new mode of corporate governance and the new financial markets – simultaneously. Once again, the characteristics of ICTs constitute a powerful basis for these types of system transformation. Moreover, there is a direct link between these technologies and soaring stock market values, such that, in some discourses, the new economy is reduced to this function of stimulating the stock market in accordance with a mimetic process, familiar to specialists in 'financial

bubbles', in which expectations of further rises are continually generated, thereby attracting new buyers.

These major characteristics, which some people seem to accept as obvious facts, deserve closer examination. In the following chapters, we will show that, in each case, different conceptual choices can be made and that credible alternative 'models' of development exist. It will also be shown that these characteristics are largely illusory, mythical and, in some respects, inconsistent, whether it is the internal coherence of each individual characteristic that is being considered or the overall coherence of the entire set. That said, it would be wrong to claim that the advocates of these ideas never seek to establish logical links between the main characteristics of the myth they are propagating. Since their aim is to build belief by appealing to reason, they tend to highlight certain causal relationships between their arguments or predictions. By reassembling them, which has not been attempted in any of the material we have consulted, the structure of the myth can be reconstituted.

The logical sequence is as follows. The new growth, which is strong, stable and inflation-free, is made possible, first, by the diffusion of ICTs, which drive productivity upwards, force costs down and therefore reduce inflation, while at the same time creating high-skill jobs and causing the stock market to rise, and, second, by the flexibility and mobility of labour. On the basis of this new growth, standards of living rise and demand for service workers increases rapidly, leading to the creation of large numbers of jobs that absorb the unemployed. However, this is possible only under three (linked) conditions, in the absence of which these factors could not manifest themselves: (1) the extension of the competitive market into areas of economic activity and regions of the world that are still ignorant of its benefits; (2) a new mode of corporate governance that gives (or returns) power to shareholders in order to sweep away the rigidities and costs of managerial bureaucracies; and (3) liberalised and globalised financial markets, which are the only institutions capable of rationally selecting the fittest types of firms and imposing the new mode of governance. These three characteristics draw fresh support from the new technologies, and it is this that distinguishes the new economy and the high-tech neo-liberal discourse from the neo-liberal ideology of the early 1990s.

Myths and scholarly analysis

It may seem somewhat odd to describe the discourse on the new economy as a mythology, as opposed to a scholarly analysis, when there exist highly developed scholarly approaches to the 'information economy', the 'new technological paradigm' and the 'information society' that ought to be capable

of grounding and legitimating the discourse being analysed. Is this discourse not simply a more accessible version of these theories? If this were so, then the media and politicians propagating these ideas would be the very useful popularisers of complex academic notions. The answer is a resounding no. This can be demonstrated by drawing on the most impressive scholarly synthesis to date of the information economy and society, namely that by Manuel Castells.¹³ We will have other opportunities to draw on his findings, and occasionally to put them into context or criticise them, but we will confine ourselves here to using them in order to illustrate the difference between an *academic* theory of an *observable* model of society and a *normative mythology* such as that of the new economy.

At first sight, Manuel Castells' monumental synthesis seems in many respects to confirm the various discourses on the new growth. In the 'informational economy', writes Castells, 'the productivity . . . of units and agents . . . fundamentally depends upon their capacity to generate, process, and apply efficiently knowledge-based information'; the information technology paradigm is 'based on flexibility'; 'in the long term productivity is the source of the wealth of nations, and technology, including organisational and managerial technology, is the major productivity-inducing factor'; these technologies and the new organisational forms that they make possible encourage the trends towards industrialisation and labour flexibility; finally, this new 'form of capitalism . . . is to a large extent structured around a network of financial flows . . . of global financial markets embodied in information networks', which tend to deprive the management of large companies of their strategic prerogatives.

However, to suggest, on the basis of these few statements taken out of their analytical context, that Castells' theory in some way legitimates the mythology of the new economy would be an abuse. Manuel Castells casts a critical glance over the realities that he observes and links together and conducts a pluralistic comparison of the existing interpretations. He locates these phenomena within the context of economic and social history. For these various reasons, he can be said to be conducting a scholarly study. It can be disputed and criticised, and we will have occasion to do so on certain points, basing our criticism on the very material and arguments – the 'information' if you will – that he so generously places at our disposal. Finally, he rejects the normative statements and idealisation of the 'informational society', preferring instead to describe the tensions, the inequalities and the power structures he discerns in it. The conclusion of his book is anything but reassuring or optimistic. In his view, the future of the society he has analysed is an issue awaiting resolution, in which social control of technologies and knowledge may, depending on the situation, lead to 'the unleashing of unprecedented productive capacity' and give us 'the opportunity of reconciliation with nature,

without sacrificing the material well-being of our children', or, on the contrary, reinforce the three fundamental social cleavages he identifies: 'the internal fragmentation of labor between informational producers and replaceable generic labour; the social exclusion of a significant segment of society made up of discarded individuals whose value as workers/consumers is used up, and whose relevance as people is ignored; the separation between the market logic of global networks of capital flows and the human experience of workers' lives'. We will use Manuel Castells' work, which is a mine of information, not to reinforce the mythology of the new economy but, on the contrary, to criticise it.

Critical discourse versus myth

How can we criticise a discourse and highlight its mythical aspect without making the opposite mistake of pitting other myths against it? The aim of this essay can be summarised thus. On the one hand, there is the 'new economy', a normative discourse that can be discerned in numerous writings, with its themes, arguments and powerful images. On the other hand, there is *the (partially) new economy*, which is observable and gives rise to scholarly analyses that are the subject of debate and are based on surveys, statistics and methods of gathering and interpreting data.

We intend to show that the discourse around the new economy is a myth by adopting the following methods:

- First, we will compare this discourse with the main available academic findings and show that *it certainly reflects certain aspects of observable 'reality'* (which nobody disputes), as that reality is presented in a variety of different texts, *but that it does so in an extremely selective and therefore biased way*, by ignoring or distorting certain fundamental aspects of the (partially) new economy that is currently emerging. In some cases, this process of selection and distortion goes as far as falsification, since some of the propositions are simply indefensible. This may be the reason why few economists have supported the notion of the new economy.
- Second, we will highlight some of the logical inconsistencies in this discourse.
- Finally, since this normative discourse advocates and illustrates a single model, a new path of economic development, we will show that for each of its favoured themes there are other paths and other models, not only in the realm of ideas or myths, but in the reality of national or local experiences that can be observed today and are the object of robust academic studies.

This critical exercise is not intended to deny that the new technologies, innovation and knowledge are playing an increasingly important role in economic activity, since all the academic studies confirm this is so. Nor, for the same reasons, do we dispute the fact that organisations are on the whole evolving towards greater flexibility or reactivity. We are not calling into question either the deep-rooted and enduring nature of a (relatively) decentralised market economy as the principal, though not the sole, mode of exchange, nor the essentially capitalist nature of that market economy. On the other hand, we are most certainly calling into question the existence of normative or optimal models of technology diffusion, growth, flexibility, market and capitalism. Whether or not there might be alternatives to capitalism is a question that, to date, remains unresolved academically, despite the intellectual and political interest of some of the debates conducted, in the United States in particular, by 'radical' economists and sociologists such as S. Bowles, H. Gintis, M. Reich, T. Weisskopf and E.O. Wright. Our more modest objective here is to attempt to shed light on those questions that can be illuminated by academic approaches, while at the same time avoiding the propagation of alternative myths.

Obviously, it will always be a case of pitting one discourse against another. It is well known, particularly in the social sciences, that it is impossible to draw an undisputed boundary between scholarly writings and the legitimating ideologies of certain groups, particularly when such and such an academic circle is hand in glove with the groups in question. This does not stop there being a multiplicity of differences, in terms of method, independence, ethics, caution and, above all, openness to criticism, between the academic works we will draw on here and those writings proclaiming the advent of a new economy. It must be up to the reader himself to assess their relevance.

2 Beyond the limits of maximum growth?

Since Malthus, economists have been debating the ‘limits to growth’ in an attempt to identify those factors that might lead to an inexorable slow-down in growth, or even to a ‘steady state’. At the beginning of the 1970s, the studies carried out by the ‘Club of Rome’ brought the terms of the debate up to date again, drawing on analyses of the increasing scarcity of natural resources. We will not engage with this debate,¹ which is undoubtedly worthy of interest, for two reasons. First, history can be said to have decided the matter, at least up to now: capitalism has repeatedly pushed back the limits in question and given the lie to prophecies inspired by the Malthusian approach. Second, and more importantly, it seems to us that the main question raised by the virtually unanimous assertion that growth needs to be as strong as possible concerns not the rate of growth but rather the concept itself and the tools used to measure increasing wealth. The issues addressed in debates on the limits to growth seldom include the limits of the concept itself, and those limits figure even less prominently in the discourse on unlimited growth, that is the new growth.

The invention of growth

The concept of economic growth, in the sense attributed to it today,² is a relatively recent invention, a by-product, as it were, of industrialisation. It came into its own with Fordism, the three decades or so of growth and prosperity following the Second World War and the national accounting systems of the twentieth century, which were themselves developed in a particular economic context, one that saw the expansion of heavy industry and the mass consumption of standardised goods. What is economic growth? It is the rate of increase, from one period to another, in the flows of goods produced and/or consumed within a given institutional space, which may be a firm, an industry, a national or regional territory, etc. However, if this statistical operation is to be carried out successfully from period to period, there has to be agreement on the nature

of the goods whose 'volumes' are being measured, and these goods should not be continually changing in nature or in quality. The ideal situation is one in which, first, the transformations carried out during the production process affect mainly the quantities of the goods produced rather than the nature and qualities of those goods. In this way, product standards remain unchanged from period to period. Second, there should be stable conventions governing the types of products to be included in the accounts.

Broadly speaking, these conditions were met during the 'Fordist' period, which saw the expansion of the mass production and consumption of highly standardised goods and services that benefited from economies of scale, the mechanisation of agriculture, the heavy and inflexible automation of manufacturing industry (before the advent of the computer), the establishment of large retail outlets and other 'retail factories', the increased take-up of banking services by households and their increasing connection to water, gas and electricity suppliers and to telephone networks, or even the development of 'Fordist' tourism in the 1960s, the ideal type of which is of course the Spanish model.³ While it is true that the quality of these goods and services improved over time, it was the increase in their volume that was the major component of this mode of development, whose progress could be followed as the annual product flows and year-on-year increases were entered into the national accounts, providing a picture of economic growth. As far as households were concerned, the corresponding indicator of progress was the 'standard of living', which was measured in the same way, on the basis of the annual flows consumed. Thus the criterion used to assess economic 'well-being' was the level of consumption: the more goods and services were consumed, the higher economic well-being was judged to be. At the heart of this economy based on growth in the flows of standardised goods and services lay *gains in labour productivity*.

The new economy, growth and productivity

Can the 'new economy' being presented to us rely exclusively on the use of similar tools (growth, productivity, standard of living) to measure and evaluate its own progress? There must be considerable doubt about this.

As far as manufacturing industry is concerned, demassification (a term coined by Alvin Toffler as early as 1970⁴), increasing variety, product innovations that reduce product life cycles and, in some cases, the introduction of individualised or 'customised' products, together with the sale of integrated packages (products/services/after sales), have all served to weaken measurement conventions based on quality standards that were comparable over time.

The difficulties and uncertainties of these measurements are further compounded in the service sector. While some service industries are still at the 'industrial' stage of providing standardised services, many others do not readily lend themselves to the application of the traditional industrial concepts. What do terms such as 'growth' and 'productivity gains' mean when applied to services such as consultancy, education, health, social welfare, research or insurance? Where are the standard product units that would make it possible to compare the quantities produced over time? If the production and diffusion of knowledge is playing an increasingly important role in the new economy, what are these units of knowledge whose increased volume is being followed?

One of the greatest ambiguities in the desperate and generally fruitless search for new 'conventions' that would make such activities amenable to the application of the industrial concepts of growth and productivity can be illustrated by considering the case of health services. In such activities, is the product whose growth we are seeking to measure, and whose definition subsequently determines the measurement of productivity gains and standard of living, synonymous with the *flows* of actions, of medical and surgical treatments and of patients treated? Or should we look beyond these flows and recognise that what counts (the real 'product') is the improvement in the health of the individuals and population concerned? If the flows approach is adopted, successful preventive policies, for example, will lead to reductions in the measurement of growth and standards of living! However, if priority is given in evaluations to *improvements of state*, those same preventive policies could be judged to be positive contributions to the individual and collective quality of life. *This would constitute a shift away from (economic) growth towards (social and human) development.* We would not, for all that, be abandoning the use of statistical indicators of that development (the name of Amartya Sen, a Nobel prizewinner in economics, is associated with important advances in this area linked to studies carried out under the auspices of the United Nations Development Programme), and there would still be a need for proper economic analyses of the effectiveness of the actions and services through which these improvements in state are to be achieved. What is different is the favoured indicator of progress (the others are not entirely dispensed with, however) and the conventions on which evaluation is based.

This example of the health care sector and its output indicators is in no sense specific. Similar dilemmas can be found in most activities based on the production and exchange of knowledge (education, research, consultancy of all kinds), in 'relational' neighbourhood services (help for the elderly, childcare, etc.), social work, insurance, etc., *that is in the vast majority of activities that have seen the strongest growth in employment over the past twenty-five years.* Notions such as the growth in processing flows and productivity gains are of much

less relevance in assessing progress in these sectors, which play a major role in developed economies. The increase in wealth, in value created or value added or in productive efficiency certainly seems to require mechanisms for assessing the effects or impacts of those activities on the proper functioning or development of the realities they operate on, whether they be individuals, organisations or technical or social systems. Does the wealth or value produced by a service that helps to maintain technical, economic or social systems, or even human beings, increase with the number of ‘troubleshooting’ interventions or repairs (which is the solution usually adopted by growth indicators) or, conversely, with the ability of that service to reduce the number and gravity of the dysfunctions? Is the wealth generating capacity of an educational system measured by the number of hours teaching delivered or the number of training sessions organised, in which case the French tradition that inflicts insane timetables on high-school students is adding to the value and wealth of GDP, or should we adopt different conventions for assessing the contribution of the education system to the development of its users’ knowledge, personalities and socialisation?

The new growth, we are told, is based on the new information and communication technologies, which constitute a new, universal technological paradigm. This assessment is somewhat exaggerated, and we will return to it later, but let us accept for the moment that it is true. Can such an economy based on information, communication and knowledge be conceptualised and managed in terms of growth? The answer is obviously no: the relative ‘dematerialisation’ of wealth has gone hand-in-hand with the gradual disappearance of those stable reference units used to measure agricultural and industrial output. True, it is possible to count software programs (or the lines of programming in each package), computers, Internet connections or bank transactions, but it is well known that ‘what counts’ is processing and problem-solving capacity, reliability or the useful information that can be easily obtained by means of ‘intelligent’ and ‘user-friendly’ procedures. Once again, the progress of this information economy lies less in the growth of units produced than in the impact of these ICTs on the functioning of other technical and human systems. This requires the services thus obtained to be evaluated from a *development* perspective that might include certain growth indicators but would not be reduced solely to such measures.

Financial criteria and the discourse on progress

Thus if the main pillars of the new economy are services, permanent innovation, knowledge and the new information and communication technologies, we can reasonably suppose that it requires us *to move away from the economic*

growth paradigm towards a new paradigm based on the evaluation of economic and social development. In other words, we need to shift away from the economics of measuring flows and costs towards the socio-economics of judging improvements in state, quality and individual and collective well-being.

Now the advocates of the new economy, namely some in the world of politics and the media and a handful of economists, have not reached this point. They extol the merits of their new model in the language of the old model, using the concepts that enabled economics to portray itself as a 'hard' science, laying down technical laws comparable to the law of gravitation.

One objection can be raised here. Observation of the management practices adopted by firms in high-tech sectors and the financial institutions that support them clearly shows – and we will return to this at the end of the book – that these major players in the new economy have long understood that the realities they are managing can no longer be conceptualised with the old concepts. They have successfully put the growth paradigm into context. Neither Bill Gates and his kind nor the pension funds that influence the management of an increasing number of companies need the old micro and macroeconomic concepts to manage the performance of the firms in their possession. Their tools are indicators of financial return or, to use the language of the day, of the 'creation of shareholder value'. However, beyond the boundaries of their companies and financial networks, what they need is *a discourse that publicly legitimates* their outstanding contribution to the public good. *This discourse is that of the new economy.* This is where *Business Week*, Bill Clinton, Alan Greenspan and others play their part, making their statements in the name of prosperity, growth and productivity.

There are other ways of putting the growth paradigm into context than by imputing a monetary value to all the activities and all the products in competitive markets or the financial markets. In policy terms, the first point at issue, not in the 'new economy' but in the observable present economy, is not the choice of strong growth rather than slow growth.⁵ Rather, it is the choice of a mode of thinking distinct from both the industrialist mode of judging progress inherited from the Fordist era (based on the notions of growth, productivity and standard of living) and the financial mode of calculating the shareholder value of all activities. This new mode would be one based on a pluralistic evaluation of social development, of quality of life and of the improvement in various individual and collective states. Putting both the growth and productivity paradigm and the financial magnitude paradigm into context simultaneously obviously does not mean we are depriving ourselves of economic and financial indicators, when relevant, as a means of quantifying increases in product flows and the efficiency with which those flows are produced, particularly in activities that produce relatively standardised goods

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and services. These indicators should be part – with others – of the development evaluation paradigm, but their role should be a subordinate one. What does the phrase ‘controlling health expenditure’ mean, for example, if not a policy based, over and above statistical observation of the volume of medical and paramedical actions and their costs (‘accounting control’), on assessments of the *relevance* of these practices to individual and collective health objectives under debate? Should home help services for the elderly be evaluated in terms of their ability to reduce old people’s dependency, to give them as much autonomy as possible by cooperating with their relatives and with voluntary workers to that end, thereby reducing the outside assistance required to the minimum? Or should they be measured on the basis of the volume of visits, actions or hours of intervention, in accordance with the argument that an increase in dependency encourages growth?

To conclude on a similar note, we will mention a modest but interesting attempt to suggest a possible path out of this dilemma. American researchers⁶ have developed a synthetic national indicator of ‘social health’ in the United States by aggregating nine existing social indicators that it has been possible to monitor statistically since 1959: the index of inequality between rich and poor, average weekly earnings, infant mortality, child poverty, the adolescent suicide rate, the rate of violent crime, unemployment, old age poverty and the cost of care for the elderly that is not reimbursed. They then plotted the index of the growth of GDP and this national index of ‘social health’ on the same graph. From 1959 until the early 1970s, the two indexes evolved in parallel with each other. In the mid-1970s, however, they became uncoupled from each other in spectacular fashion: GDP continued its remarkable growth, while the social health indicator fell sharply, particularly during the lengthy period between 1978 and 1993. The main value of this type of research is not that it provides a definitive new objective measure of social progress, even less of Gross National Happiness, but that it feeds into debates on the development of more precise pluralistic evaluations based on a limited number of indicators whose significance lies in the fact they are the product of careful thought and discussion, rather than being chosen unilaterally by researchers or experts. This, among other things, is what makes the work of the UNDP (United Nations Development Program) on indicators of human development so interesting.

Of course, the mere fact of having various indicators at one’s disposal and conducting pluralistic assessments of development is not enough to change the order of things if the national and international economic regulations governing markets favour those firms that manage their affairs solely on the basis of their own commercial and financial interests and disadvantage those seeking to use performance criteria that incorporate some of the social or

environmental impacts of their activities. However, it can at least be agreed that progress towards a new 'socio-economic' approach to development, embodied in the development of credible methods, would help to raise awareness and make the prospects for new regulations less utopian if they can be demonstrated to be technically feasible.

3 New technologies, new growth?

New technologies and services constitute the two core activities in the new economy as it is presented to us. However, they are extremely hierarchised. The new information and communication technologies (ICTs) form the main driving force, creating innovation, growth, productivity gains and skilled jobs in all sectors, starting with those sectors specifically given over to producing them (software, systems analysis, on-line networks and databases, Internet, etc.). Other services to households and firms, dragged along by the growth and purchasing power produced by this 'information revolution', are then able to create the large number of varied jobs that characterise the new economy. This portrayal of the new economy is more than debatable: whether we are dealing with the supposed driving force, the other activities following in its wake or the relationships between the two, the points at issue are not primarily technological. Rather, they are social, and alternative development models exist. Let us begin with the miracle of ICTs.

The notion that the new growth is based on the new information and communication technologies is not a new one. However, it carries more force today, since it is obvious that the convergence of related technologies around the digitisation of data of all sorts and Internet-type networks has created the conditions for the emergence of a new 'technological paradigm', to use the language of specialists in the economics of innovation.

Nevertheless, we have to try to subject these new technicist myths to the test of facts and observations. We also need to assess the risks we now know they may bring with them. In order to do that, it is important to identify the two principal characteristics attributed to the new technologies. The first is their ability to create large numbers of high-skill jobs for specialists in these technologies and consequently to produce value added in these activities. The second, rightly considered the most important, is their impact on productivity in all sectors of the economy, which makes possible a return to strong growth without inflation. Let us begin by examining the reality of the prospects for high-tech job creation.

The new technologies create far fewer jobs than is maintained

What can we learn from the facts if we take as a model the economy that is most advanced in this area, that of the USA? Is it true, for example, that the employment growth of the last ten years has been sustained largely by jobs linked to ICTs? The answer is very simple: no. It is true that a not insignificant share of the jobs created (around one third according to our estimations, which are very much in line in this respect with those of other studies) are undeniably high-skill jobs requiring high-level professional competences. However, the occupations and sectors in which specialists in the new technologies are employed account for only a very small minority of these jobs. We can draw here on data gathered by the American statistical institutions¹ for the period 1986–96, as well as on the projections made by these same institutions (for the period 1996–2006) by extrapolating from the most recent employment trends. It is difficult, if not impossible, to square these data with the image of an American ‘jobs miracle’ driven by the sectors and occupations linked to the new technologies. The overwhelming majority of the jobs created between 1986 and 1996, whether skilled or unskilled, were not in occupations linked to computer and data-processing services or the Internet. It is true that, in the USA as elsewhere, these activities have very high *rates* of employment growth, but since these rates apply to occupations or sectors whose share in overall employment is still relatively low, they do not produce large numbers of jobs. Between 1986 and 1996, for example, 1.6 million jobs were created in the ‘eating and drinking places’ sector, 2.94 million in health services and 2.9 million in state and local government (excluding federal government), compared with only 618,000 jobs in computer and data-processing services.

If we base our calculations not on sectors but on *occupations* (which is essential, since there are IT-related occupations in all sectors), the same conclusions are reached. If we take the thirty occupations which, in the employment projections for the period 1996–2006 (i.e. on the basis of current trends), are set to experience the greatest job growth, and if, among these thirty occupations, we select the eight that require high-level qualifications (bachelor’s degree and above), then there are only three that can be described as specialist IT-related occupations. The others include general managers and top executives, teachers, marketing and sales worker supervisors, social workers, etc. In all, the three high-skill, IT-related occupations are likely to create 1 million of the 8.6 millions jobs the thirty leading occupations are projected to create between 1996 and 2006. This is far removed from the mythology of a boom in high-skill jobs driven by the new technologies (see Box 3.1). This does not mean, of course, that these technologies are not being widely diffused in

our societies and having a profound effect on work and production. However, the teachers, researchers, doctors, nurse or counter clerks who use information technology are not being transformed into IT specialists. The main points at issue in the development of these technologies are linked not to the (real, but limited) potential for job creation in these sectors but rather to the skill required to use them as vehicles for other activities, to the role they are made to play (as sources of productivity gains and cost reductions, or as means of improving quality, diversity, relevance, etc.) and to the employment and working conditions and inequalities of access and control that characterise their diffusion in our societies. This brings us to the second assumed property of the new technologies, namely their ability to produce high productivity gains throughout the entire economy.

Box 3.1 The size of the new information technologies sector, or how to massage the figures

In an official report entitled 'The Emerging Digital Economy' that was circulated and debated across the world, the American Department of Commerce took a very robust and forthright line, predicting that by 2006 half of the economically active population in the USA would be employed in high-tech occupations. It is only through careful examination of Annex 1 of the report (which can be accessed on the Web) that the statistical jiggery-pokery on which these extremely fanciful predictions are based is revealed.

The first incidence of statistical massaging involves the adoption of a definition of the IT sector that goes far beyond what it would be reasonable to accept as such and a certain degree of ambiguity as to which of these technologies are really new (those linked to the Internet, computer hardware and software, mobile telephony, etc.) and those that have already been in existence for several decades. By virtue of this ambiguity, the definition of the new technologies can easily be extended to include fixed-line telephony, telegraphy (!), broadcasting and radio and television sets, the wholesale and retail distribution of such equipment, all industrial measuring equipment, etc.

The second, more technical incidence of statistical massaging concerns the method used to assess the impact of ICTs on overall growth, which is based not on their value added in current prices (which would put their contribution to growth at around 14 per cent in 1998, even with the extended definition of ICTs) but on their value added 'in

inflation-adjusted prices'. Given the sharp drop in the prices of most of the relevant equipment, the IT sector's contribution to growth can be increased from 14 to 28 per cent, doubling the outlay. This is in no way justified, as the report's authors timidly accept: 'The inflation-adjusted measure of the IT sector may overstate its practical contribution to overall economic growth . . .' (p. 6).

The third incidence of statistical massaging involves defining the total IT labour force as *all* those employed in the above sectors *plus* all those occupations in other sectors that are 'IT-related'. Once again, a very broad definition of what constitutes an 'IT-related' occupation is used, since the figures used in the report include electrical technicians, electrical power line installers and repairers, engineering and science managers, electromechanical equipment assemblers, electrical assemblers, etc. Furthermore, it does not occur to the authors that, while it is indeed true that in most sectors of the economy there are specialist IT occupations, it is equally true that in those sectors that produce high-tech goods there are manual occupations, sometimes in very large numbers, that have very little to do with IT. Are all the manual workers on semiconductor, television and photocopier production lines IT workers? They cannot be serious, can they?

The fourth and final incidence of statistical massaging revolves around the assumption that this vast sector of employment defined, misleadingly, in the report as 'IT-related jobs', is going to grow uninterruptedly between now and the year 2006 at the same exceptional rate as in recent years. It is most fortunate that the authors stopped at 2006, because in just a few more years these high-tech jobs would have been employing more than the entire working population of the USA.

Fortunately, Manuel Castells is more circumspect when he concludes at the end of his analysis of these same issues: '. . . if information is a critical component in the functioning of the economy and in the organization of society, it does not follow that most jobs are or will be in information processing. The march toward information employment is proceeding at a significantly slower pace, and reaching much lower levels, than the trend toward service employment' (p. 226).

The impact of the new technologies on productivity

Are ICTs leading the way into a new era of high productivity gains after several decades of 'a slowing down of productivity gains'? Have we succeeded, at the dawn of the twenty-first century, in overcoming the infamous 'productivity paradox' that was expressed by Robert Solow in the following terms: 'we see computers everywhere, except in the productivity statistics'? The paradox was not an insignificant one: during the 1980s, and indeed until the mid-1990s, the American economy saw a decline in its labour productivity gains, despite the fact that it was the developed economy with by far the highest rate of diffusion of information and communications technologies in its productive system. Economists lost themselves in conjecture. Were the methods of measurement incapable of capturing actual gains that did not appear in the statistics? Did these productivity effects not manifest themselves until a certain level of diffusion and expertise had been attained? We will not examine these debates in any detail,² but some of these economists now seem somewhat reassured: labour productivity gains have been greater in the USA since 1995, and it is once again possible to advance the hypothesis that this recovery has its origins in ICTs. The problem is that this hypothesis is disputed and that most studies produce the following results. First, productivity gains in the American economy are currently greater than those for the years between 1980 and 1995 but lower than those recorded during the glory years of the 'old technologies', and particularly between 1960 and 1973. Second, the new technologies certainly played a role in the relative recovery of the late 1990s, but that role is a secondary one. It is easy to understand why these findings irritate *Business Week* and the other advocates of the new high-tech growth. Nevertheless, they should be taken into account and analysed from an economist's point of view. Such exercises are not always futile.

Between 1995 and 1998, the official figures of the Bureau of Labor Statistics show that hourly labour productivity in the American economy as a whole (private sector only, excluding agriculture) rose by 2.1 per cent per year. The average annual rate of increase was 1.7 per cent in the 1970s, 1.1 per cent in the 1980s and 0.9 per cent from 1990 to 1995. Compared with this last period, the current rate of increase is substantial, *but during the 1960s, the rate of increase was 3 per cent*. Incidentally, this point is not made by Manuel Castells, who goes back only as far as 1970 in order to illustrate his debatable thesis that ICTs have had a major impact on the emergence of remarkably high productivity gains.

A shrewd study carried out by the Federal Bank of Dallas³ takes a similar line. It steps back from the immediate present and concludes that the relatively strong economic growth of the second half of the 1990s is not exceptional, that

its durability is far from assured and, above all, that it cannot be attributed to particularly strong growth in productivity. Similar ideas were expressed by Martin Wolf in the *Financial Times* of 4 August 1999 in an article entitled 'Not so new economy'.

Clearly, productivity gains have recently returned to a rate that is *more or less equivalent to the very long-term historical average* (around 2 per cent per year over a century⁴). Can the recovery of the 1995–9 period be attributed to the new technologies? In part, undoubtedly, but to what extent? Assessments vary, but most of the results are very disappointing for the discourse on the new economy. Daniel Sichel,⁵ for example, estimates that the productive capital embodied in computers would at best have contributed to less than one tenth of American growth in the 1990s.⁶ True, there have been enormous productivity gains in the production of computers themselves. However, this industry accounts for only 1.2 per cent of domestic American output.⁷ In June 1999,⁸ one of the leading American experts in this area, Robert Gordon, attributed the upsurge in growth in America to three factors: first, improved measurement of inflation in recent years (with the old measuring instruments, the recorded rate of economic growth would have been lower by 0.4 percentage points); second, a business cycle effect, with an economic upturn still influencing productivity irrespective of any technological revolution (this effect is put at + 0.3 percentage points of growth); and third, enormous productivity gains in the computer manufacturing industry (this effect is put at almost 0.3 percentage points of growth). In the *Lettre de la BNP* of April 1999, Jean-Pierre Petit and Emmanuel Kragen, for their part, show that the growth of the American economy over the course of the 1992–9 cycle, which they describe as 'not so exceptional', was not reflected in higher rates of job creation than those recorded during the previous cycle (1982–9). Furthermore, they stress that this growth was closely linked to the modest increase in labour costs, the drastic reduction in the various 'social benefits' employees used to enjoy (employers' contributions to health insurance and pension schemes) and the fall in interest charges and in the cost of raw materials and energy. Other factors are mentioned in this exhaustive appraisal, notably monetary policy. All of these important factors have little to do with the miracle of the new technologies.

Obviously, various criticisms can be levelled at these broadly similar findings, particularly the one expressed in the previous chapter: is it possible to evaluate the progress of a (partially) informational economy by using the tools traditionally used to measure growth and productivity? There is still very little academic backing for the new economy, and it is understandable that its advocates prefer to confine themselves to describing a string of success stories. However, this does not prevent us wondering whether the economists cited

above are in fact failing to identify certain truly new realities. It is well known that their methods have many limitations. Can we find other arguments, not strictly economic or statistical in nature, that will help to justify an argument that we believe to be correct, namely that *the new technologies have significant effects in many areas, but that their overall impact on labour productivity, and hence on growth, is fairly modest?* It seems to us that further support for this argument can be found by supplementing economic studies with simple observations of work and its outcomes in many sectors of the economy.

The limited impact of ICTs on productivity at the microeconomic level

To begin with, let us take the example of Manuel Castells, both as researcher and producer of a monumental work and as a sociologist who shares more or less uncritically the belief of the moment in a new and durable form of productivity driven by ICTs. Manuel Castells, who writes in California, has at his disposal the best technological tools, the Internet, on-line bibliographical databases, etc. His output is varied (conferences, seminars, articles, books, lectures, etc.), but we will confine ourselves to his major publication of recent years, namely the three-volume work on 'the information age'. We ask two questions: (1) would this book have been fundamentally different if its author had worked with the old tools (library, journals, telephone, pre-Internet computers, 'snail mail' for written communications)?; (2) was this book produced significantly more quickly thanks to the new technologies (productivity gains)?

We do not have at our disposal all the information required to answer these questions (researchers do not use the new technologies to the same extent or for the same purposes), but we can base our deliberations on our own experience and that of our colleagues engaged in the same kind of activity. It is practically certain that Manuel Castells' book would not have been fundamentally different in terms of the arguments it advances and the illustrations it provides or in the breadth of its thinking and that it would have taken almost as long to write (according to *Libération*, the book is the result of fourteen years' work) if its author had produced it in the California of the 1980s. Why should this be so? The answer is that a researcher's work is not primarily *informational* (in the sense of gathering and processing the information contained in books, articles, statistical databases, etc.) but *cognitive*. It not only makes particular demands on *the productivity and quality of the human brain* but also requires, albeit to very variable extents depending on the methods used, *verbal interaction*, whether that generated by interview-based surveys or the often extremely rich interaction that occurs within a community of

researchers. We would need working time budget surveys in order to prove it with figures, but it is clear that social science researchers spend most of their time reading, thinking, writing and conversing. Neither the Internet nor computers offer much, if any, assistance with these four activities. One can be snowed under with electronic messages and connected to all the databases in the world, but they have to be read, assimilated and interpreted. One can participate in electronic forums, but the reading, writing and thinking still has to be done. Such involvement in the virtual world is not without its effect, *but it is not a productivity effect*. Rather, it opens up access to information that would not otherwise have reached us, information that enriches our perception, which forces us to think even more and, on occasions, to spend more time producing an improved academic 'product'. Obviously, productivity is enhanced to some extent by the ability to obtain on-line information that it would have been necessary to acquire from a library or to order from a remote source, as well as by certain survey or data-processing procedures. Nevertheless, this is a relatively minor phenomenon that does not explain the *qualitative benefits* of the new technologies for research.

But, I hear you object, researchers operate in such a different world from most other occupations that any attempt at transposition is automatically invalid. Absolutely not. In an economy in which the two major transformations taking place (even if they too have to be placed in context) are the mobilisation of knowledge (which is in no sense comparable with the inflation of information) and the development of service relationships (with clients and users) and cognitive interactions at work (what some people refer to as 'organisational learning'), the principal activities are not the gathering, distribution and processing of information, but rather those involving reading (of information, instructions, reports), interpretation, thinking, arguing, interacting with others verbally (or in writing or through e-mail, although here too we are dealing with human writing or speech, controlled by brains) and meetings. Modern technological tools are increasingly being used to support these fundamental activities, sometimes to save time (increasing productivity) but, more usually, to enhance their reliability and relevance and to enrich the supply of useful information, which sometimes makes the cognitive processing of that information more difficult and time-consuming.

Nurses and doctors will increasingly have to work with computers; they will be connected to networks, sometimes to monitor their work, their actions and their prescriptions more closely, sometimes to provide them with valuable information on patients, on drugs and on health care networks. This is all well and good, but will this have a significant effect on their productivity as they carry out their core activities, namely gathering information on symptoms, diagnosing, reassuring, treating, prescribing, monitoring, etc.?

The most technically minded teachers may at some time in the future have additional aids at their disposal to improve their lessons by making full use of multimedia technologies. Will their productivity be enhanced as a result? It is already evident that this productivity is in fact tending to decline (depending on how it is measured) because the new technologies do not seem to have a significant impact on learning unless implemented in an environment in which pupils are able to work in small groups, with pupil–teacher ratios that are considerably lower than those found, for example, in the French education system.

Many more examples could be given: consultancy work, personal services, retailing, hotels and catering, tourism or even functional departments in firms in all sectors. We could also point to the role of ‘meetings’ as an essential locus of work. In all situations in which relations, interaction and direct exchanges of knowledge and information play an essential (and often increasing) role, ICTs are not replacing interpersonal relations, in accordance with the productivist principle of ‘substituting capital for labour’; rather, they function as supports, as additional resources, used either to enrich those relations with additional content or meaning, or to monitor them.

Banks and logistics

In the early 1980s in France, most experts in the banking field used to talk of the banking industry as ‘the steel industry of tomorrow’. They stated what many specialists in the new technologies of the time believed to be inevitable, namely that employment in the banking industry would fall drastically as those new technologies (mainframe computers used to automate transactions) were implemented. Employment was expected to fall by more than half within a decade. *This did not happen*: between 1980 and 1990, employment levels in the French banking industry actually rose by about 5 per cent! It is true that from the beginning of the 1990s onwards it began to fall and by 1997 had declined to its 1980 level. Any parallels with the iron and steel industry in all this are very strictly limited. Why is this? It is a fact that computerisation led to considerable productivity gains in that part of banking activity concerned with the recording and processing of transactions (according to our estimates, these gains were running at more than 10 per cent per annum during the 1980s). At the same time, however, as banking products and the use of banking services by households and firms began to diversify and become more complex, and as banks became more commercially minded and began to offer financial advice services, the nature of the banks’ activities began to change. There was a shift from the ‘industrial’ processing of simple

accounts towards the provision of 'value added' relational, commercial and intellectual services (advice and consultancy). This does not mean that employment in the banking industry was not under threat then, or that this is not still the case today (as a result, for example, of disintermediation and the rise of new financial institutions). However, it is at much greater risk from the various forms of competition than from technologies, whether old or new.

Even in activities that can hardly be described as primarily relational or interactive, it is inaccurate to see ICTs as the major source of current or future productivity gains. As part of a partnership with the French Post Office, we have been able to investigate labour productivity gains in postal delivery services since 1970. The volume of mail delivered per postman per day (one of the indicators of productivity) rose from 1983 to 1997 at an average annual rate of 2.6 per cent, greater than that of the American economy of the second half of the 1990s! Now ICTs play absolutely no role at all in postal delivery services, since sorting is a completely separate activity. How did postal workers and their organisation achieve such a result? Several factors play a part, but there are two that stand out as the most important. The first is a 'volume effect'. Over the period in question, the volume of mail delivered per letterbox rose continuously. As a result, delivery services benefited from economies of scale. However, these economies of scale are themselves subject to a major limitation, namely the weight of the postman's bag. For a round of unchanged length, an annual increase of 2.6 per cent in the volume of mail delivered over a period of fifteen years represents a 50 per cent increase in the volume of mail to be carried; moreover, if we take account of the fact that a growing share of this mail is made up of advertising material, which tends to be heavier on average than normal household mail, then postmen's sacks have doubled in weight and can no longer be carried. This is where the main 'technological revolution' in postal delivery services, the one that has made possible these very high productivity gains, actually lies, namely in the introduction of secure deposit boxes located at several points on each round from which postmen pick up the mail for the next stage of their rounds. The precondition for this, of course, was the establishment of an adequate logistical system, with delivery vans stocking up the deposit boxes before the beginning of each round.

Why have we chosen this example, which seems positively archaic in the age of the Internet and Silicon Valley? The reason is that the logistics of deliveries (to firms or to private individuals) and, more generally, of the transport of goods and people, however dependent it may be on ICTs, will always involve moving people and 'heavy' goods in space. It is very unfortunate, but they simply cannot be dematerialised and sent to their destinations via the

Internet. Moreover, since e-commerce figures in all the new discourses, it is worth pointing out that it may well make a breakthrough in the purchasing decisions market but that it too will have to resolve the very 'material' issue of transport and delivery, in which the prospects for productivity gains are uncertain, particularly since it is not clear that the resultant traffic jams and nuisances will be any less severe than those caused by consumers travelling to today's shops. In any event, it is well known that just-in-time manufacturing systems have caused the number of heavy lorries on European motorways to increase to critical levels.

Numerous other examples could be cited to show, sector by sector, that (1) ICTs do indeed lead to very considerable productivity gains in certain activities whose main focus really does lie in automatic data processing, automatic optical character recognition, global data distribution, international finance, and so on, and (2) that, *in most cases*, whether because the activity is mainly relational, cognitive or interactive or because it falls within the scope of a material logistical system that cannot be freed from the constraints of space and weight, the new information technologies have little if any meaningful impact on labour productivity, even though they may have a very real impact on the quality of the work done.

From technological paradigm to social uses

Leaving the enchanted world of Silicon Valley and the Internet as an instrument of universal liberation, we return to the real world in which the new technologies are put to social uses, with all its difficulties and inequalities and its tendency to impose American technical and cultural standards. In doing so, we can turn away from propaganda as a basis for our deliberations to the large number of serious studies that are available but ignored by the new fashion.

In France, Yves Lafargue,⁹ for example, has analysed the Janus-faced nature of these new technologies, which are a source both of interest or pleasure and of stress and mental fatigue, as the case may be, and are capable of facilitating integration or, conversely, producing exclusion. The dual nature of the new technologies *requires new rules*, including those governing the measurement and remuneration of work. Eric Brousseau,¹⁰ for his part, has reminded us, opportunely, that great care is taken not to highlight the fact that one of the specific characteristics of these technologies as deployed in the workplace is that they 'allow management to monitor employees' work by spying on their messages: according to a recent survey of one thousand companies, almost one in two American firms monitor their employees' electronic communications'. He also points out that

the difficulties of access to these technologies are frequently underestimated. It is relatively straightforward to install an intranet facility. With any encouragement to use it and without training, the coffee machine will remain the favoured means of information exchange. Many firms install intranet systems that are not used and set up Web sites without knowing why, which prove to be totally useless.

A remarkable report entitled 'Building the European information society for all' (1996), produced under the auspices of the European Commission¹¹ by a group of experts chaired by Luc Soete, shows that there are several models of the 'information society'. Indeed, the whole notion is downplayed in favour of that of a society capable of transforming information into useful knowledge, of controlling information rather than allowing information to control us, of giving priority to social objectives, of preventing the real risks of dualism, of establishing rights to self-disconnection in order to reduce the risk of one's private life being invaded, of establishing a 'universal service' in the area and of providing collective facilities for learning and of monitoring and curbing the concentration of property rights over information.

In order to extend and investigate these observations more thoroughly, we can draw on two major and, in our view, complementary sources: Manuel Castells' lengthy work on the information society and the 1999 UNDP report, chapter 2 of which ('The new technologies and the global race for knowledge') is a superb example of informed and balanced thinking in the service of social development.¹² In both cases, there is no mistrust or rejection of the *potential* opened up by the new technologies. On the contrary. They are seen as a challenge to our societies which, *depending on the rules that emerge*, could lead to the creation of a harsher, more unequal world, dominated culturally by centrally produced norms or, conversely, of a better, pluralist world in which new forms of solidarity flourish.

The central ambiguity of Manuel Castells' book, which in part reflects the ambivalence of the new technologies, is that, on the one hand, it advances a model of the information economy that appears at first sight to be the only possible one ('Any attempt to reject the Silicon Valley model will be defeated economically and socially. It's as if people had said that the Industrial Revolution must be rejected.'¹³) and, on the other, contains innumerable lucid and critical insights into the risks of that model. In our view, this apparent contradiction can be explained by the fact that, for Castells, the technological model based on Silicon Valley and the Internet is socially neutral or open, and that everything depends on its social uses and the rules governing it. This may be true in certain respects, but one may legitimately doubt the absolute neutrality and openness of tools which, as Castells demonstrates elsewhere,

have imposed standards or 'protocols' and a dominant language, and which are invested in by firms seeking to achieve positions of global monopoly or oligopoly. However this may be, Manuel Castells certainly helps us to identify the issues at stake. In particular, he rightly distinguishes between *the professional and non-professional uses* ('multimedia') of ICTs. As I write this book, the priests of the new economy are privileging the former, whereas a few years ago it was more fashionable to focus on the prospects for growth in the world of multimedia. However, fashion is fickle and turnarounds are always possible, depending on how stock market successes, mergers and takeovers and technological and market breakthroughs evolve.

As far as professional uses are concerned, the focus of Castells' critical thinking is the way in which modern capitalism tends to introduce the new technologies by polarising work and employment:

While a substantial number of jobs are being upgraded in skills, and sometimes in wages and working conditions in the most dynamic sectors, a large number of jobs are being phased out by automation in both manufacturing and services . . . Downgraded labor, particularly in the entry positions for a new generation of workers made up of women, ethnic minorities, immigrants, and young people, is concentrated in low-skill, low-paid activities, as well as in temporary work and/or miscellaneous services. *The resulting bifurcation of work patterns and polarisation of labor is not the necessary result of technical progress or of inexorable evolutionary trends . . . It is socially determined and managerially designed in the process of capitalist restructuring.*¹⁴

Multimedia

Similar social risks are inherent in the rapid development of multimedia in the realm of consumption, leisure and household equipment. This question is of the greatest importance because, according to Castells, 'for the majority of the world's population', the information society manifests itself in the form of multimedia systems, 'the new symbolic environment', under conditions in which 'it is business and not governments that are shaping the new multimedia system'. Now 'business control . . . will have lasting consequences on the characteristics of the new electronic culture'. Not only is there a risk that uses will become dualised, but this dualisation is already manifesting itself and is accompanied by various forms of cultural domination that are indeed contradictory (in some cases, traditional cultures may also benefit from unexpected diffusion following their incorporation into the media) but nevertheless worrying. Manuel Castells highlights the following two characteristics of the

'socio-cultural structure' that is being fuelled by the nascent multimedia industry:

Increasing social stratification among the users. Not only will choice of multimedia be restricted to those with time and money to access, and to countries and regions with enough market potential, but cultural/ educational differences will be decisive in using interaction to the advantage of each user . . . Thus, the multimedia world will be populated by two essentially distinct populations: the interacting and the interacted . . . And who is what will be largely determined by class, race, gender, and country.¹⁵

The communication of all kinds of messages in the same system, even if the system is interactive and selective (in fact, precisely because of this), induces an *integration of all messages in a common cognitive pattern* . . . From the perspective of the medium, different communication modes tend to borrow codes from each other: interactive educational programs look like video games; newscasts are constructed as audiovisual shows; trial cases are broadcast as soap operas; pop music is composed for MTV; sports games are choreographed for their distant viewers, so that their messages become less and less distinguishable from action movies; and the like.¹⁶

Now this common cognitive pattern is both an advantage which 'reduces the mental distance between various sources of cognitive and sensorial involvement', and a risk: that of the standardisation of meanings and the disappearance of cultural expressions that cannot be digitised. 'The price to pay for inclusion in the system is to adapt to its logic, to its language, to its ports of entry, to its encoding and decoding.'¹⁷

These observations may give rise to anxiety or hope, as the case may be. Not everything is determined in advance. Moreover, the development of multimedia is coming up against certain constraints, linked to both available time and content. Leisure time fell by 37 per cent in the United States between 1973 and 1994. 'Most experts of the media industry consider that the real bottleneck for the expansion of multimedia is that . . . the message is lagging the medium.'¹⁸ 'One of the most complete surveys of multimedia demand . . . revealed a much deeper interest in using multimedia for information access, community affairs, political involvement, and education, than in adding television and movies to their choice.'¹⁹

The new technologies from a North–South perspective

Chapter 2 of the 1999 world report on human development, drawn up by the UNPD, provides much food for thought on both the 'tremendous opportunities'

of the new technologies as aids to development and present reality, in which 'the global gap between haves and have-nots, between know and know-nots, is widening', against the background of the 'new rules of globalization – liberalization, privatization and tighter intellectual property rights'.

Let us turn first to the potential of the new technologies as aids to development. This potential stems, among other things, from the fact that 'distance learning, through teleconferencing and, increasingly, the Internet, can bring critical knowledge to information-poor hospitals and schools in developing countries'.²⁰ Network communications have given NGOs the power to create a 'tremendously important countervailing force out of previously silent voices in the global arena'. Numerous examples are cited: a web site in India 'exposes the exclusion of 250 million low-caste people' and coordinates international campaigns in defence of human rights; the Mexican NGO *Mujer a Mujer* (Woman to Woman) uses e-mail and the Internet to campaign against the exploitation of women; in the former Yugoslavia, women were establishing contacts between the various ethnic groups in 1994, while their menfolk were killing each other and slaughtering the women themselves; outlets are emerging for small African enterprises and for 'fair trade' in craft products from fourteen countries in Africa, Asia and Latin America. And so the list goes on.

While this potential needs to be encouraged, it does have its limits. First, if the potential of the new technologies is to be exploited, then infrastructures, institutions and training are required. These are generally lacking. 'A widely accepted measure of basic access to telecommunications is having 1 telephone for every 100 people – a teledensity of 1. Yet as we enter the next century, a quarter of countries still have not achieved even this basic level.'²¹ Thus we are very far from having the minimum level of access required to exploit potential of the Internet and of e-mail. Furthermore,

even if telecommunications systems were installed and accessible, without literacy and basic computer skills people will have little access to the network society. In 1995, adult literacy was less than 40% in 16 countries, and primary school enrolments less than 80% in 24 countries.²²

Above all, the most urgent needs of developing countries are not informational needs. Access to information may help developing countries to respond more appropriately to their urgent needs but, allowing for exceptions, it is not part of those needs. 'Information is only one of many needs. E-mail is no substitute for vaccines, and satellites cannot provide drinking water.'²³ There is even a danger that large-scale high-tech projects, driven forward particularly by large companies from the North and the governments that act on their behalf,

will push certain more urgent needs into the background: 'Our priorities are hygiene, sanitation, drinking water . . . how is access to the Internet going to change that?' asks a nurse in Kathmandu. 'The main constraint is inadequate resources for health and education systems as a whole.'²⁴ One of the participants in the Davos summit held in January 2000, Christine Todd Whitman, governor of the state of New Jersey, declared: 'We are focusing on the Internet, but there are still hundreds of millions of people around the world who do not have access to this mode of communication simply because they have no electricity.'²⁵

Given the current state of affairs, and again according to the UNDP, disparities in access to the new technologies are widening in what seems to be an inexorable way, but only because of the pervading *laissez-faire*:

The typical Internet user worldwide is male, under 35 years old, with a college education and high income, urban-based and English-speaking – a member of a very elite minority world-wide . . . The voices and concerns of people already living in human poverty – lacking incomes, education and access to public institutions – are being increasingly marginalized.²⁶

This superb analysis, reduced here to a few statements that cannot reflect its full richness, concludes with some proposals for new rules governing policy and politics, since 'the rush and push of commercial interests protects profits, not people'. The following are some of the proposals advanced in the report: 'the relentless march of intellectual property rights needs to be stopped and questioned', by assessing their economic and social consequences for each country. 'Alternative approaches to innovation, based on sharing, open access and communal innovation' are possible and indeed already exist. It is also necessary to regulate the 'new economy', to open up the debates on 'domain names, taxation, privacy and protection of intellectual property rights', and, more generally, to extend citizens' participation in the management of technology.²⁷ And in order to finance the communication revolutions on a global scale, consideration also has to be given to the introduction of a 'bit tax', calculated by the volume of data transmitted through the Internet. This tax, the cost of which would be negligible for most users, even those sending as many as 100 e-mail messages per day, each containing a 10-kilobyte document, which is quite a substantial amount of data, could generate almost 100 billion dollars per year across the world, or more than the amount of public money currently spent on development. Is it inconceivable that the elected members of the European parliaments could support such ideas: modest taxes on data flows and a tax on patents? Apart from uncompromising free-marketeers (or

hardline leftists, who will see the taxes as an intolerable attempt to soften capitalism), are there not many people in the developed countries who would support the proposals advanced by the UNDP experts, which reflect the urgent expectations of the developing countries?

4 The new employment

Services and flexibility

The mythology of the new economy communicates various messages about employment and labour. Essentially, setting aside the minority of high-tech jobs already discussed earlier, it propagates a notion of full employment impelled by the growth in services. This growth is, in turn, the result of the general prosperity that is itself produced by the diffusion of ICTs, and it requires labour to be as flexible and mobile as possible, particularly in connection with the extraordinary innovative power of the new technologies. These two notions – growth in services and labour flexibility – are linked in more than one way. First, the new growth cannot, according to its own discourse, guarantee full employment without labour flexibility and mobility. Second, as we shall see, in the Anglo-Saxon model that serves as a reference point, the dualism of service jobs is organised around the dualism of the flexible organisation. However, we shall also see that there is nothing inevitable about this: there are examples in the here and now of alternative, non-dualistic models in which the development of the service sector can be seen to go hand in hand with a high level of organisational flexibility.

Let us begin with the miracle of service-sector jobs. The champions of the new growth never miss an opportunity to point out that the millions of jobs created in the United States during the 1990s were generated almost solely in services and that, in particular, about one third of them were high-skill jobs. They are not wrong, but they commit a double sin of omission.

The first of these omissions is the following: *well before the 'new growth', the American economy had already created millions of jobs, at higher rates than those that prevailed in the 1990s.* There were even some American economists, and some important ones at that, who took the view that the huge numbers of jobs created in the service sector in the United States were, in most cases, merely the counterpart of the low productivity and disastrously low quality of most underpaid jobs. This was the argument advanced by L. Thurow, one of the leading lights of the Massachusetts Institute of Technology.¹ In 1987, two

other renowned economists, S. Cohen and J. Zysman, took the view that the growth in services was a way of absorbing an influx of women into the labour market by channelling them into jobs with low rates of pay and no any real career prospects.²

The few figures cited below will help to put into context the discourse on the miracle of the 'new' employment growth in the USA. The average annual rate of growth was 1.1 per cent during the 1950s, 1.8 per cent during the 1960s, 2.4 per cent during the 1970s, 1.8 per cent during the 1980s *and only 1.3 per cent between 1990 and 1998*.³ Thus as far as the rate of job creation is concerned, the 1990s can be said to be significantly less good than the three previous decades, when the 'old' growth still prevailed! What is more, the American 'jobs miracle' also has to be viewed against the background of the country's strong demographic growth. In 1950, there were 152 million Americans; by 1997, the population had increased to 268 million. Since 1970, the population has been increasing on average by 1 per cent per year. Between 1950 and 1970, the average annual increase was running at 1.5 per cent.

Service society or society of servants?

The second omission is more serious. Even if it is accepted that one third of the jobs created are high-skill jobs of decent status, what of the other two thirds? The reason why they tend to be discreetly ignored is that the answer reflects little credit on the high-tech American growth model and is scarcely compatible with the notions generally propagated. Let us turn once again to the American employment projections⁴ for the period 1996–2006, as calculated on the basis of the trends in the mid-1990s, that identified the thirty occupations likely to generate the greatest number of jobs. American statisticians categorise them as unskilled or very low-skill jobs (requiring only short-term, on-the-job training), averagely skilled or intermediate occupations and high-skill jobs (requiring a bachelor's degree or higher). If this classification is applied to the thirty occupations, seventeen turn out to require no skills other those acquired on the job, whereas just eight require advanced skills or qualifications. Furthermore, of the ten occupations at the top of the job creation league, seven require no skills or qualifications, while two require high-level skills. The leading occupation is that of cashier or check-out operator, with systems analyst in second position, a fairly symbolic ranking.

This situation offers food for thought. If, by virtue of its most employment-intensive sectors, the new economy is perforce a service economy, is it condemned to follow the dualistic model of the American economy with, on the one hand, a cluster of undeniably high-skill or 'professional' jobs and, on the other, a significantly larger cluster of jobs without prospects, status or

decent pay that employ millions of America's 'working poor' and have some of the characteristics of what André Gorz calls a 'society of servants'? Let us go further, still in the company of André Gorz: is the creation of the huge numbers of service jobs that have led to a spectacular decline in unemployment in the United States dependent on precisely this dualism of labour market status and earnings, which encourages the rich to turn to an army of low-cost service providers (the 'new servants', in Gorz's words) to tend to their well-being and security, to maintain their property, to deliver purchases to their homes, to unload their trolleys at the supermarket checkout, to walk their dogs and to perform many other, equally exalting tasks? Does this dualism not reflect a society which, given this extreme inequality, can exist only as a violent, repressive society that stigmatises its dangerous classes, divides itself spatially into rich and poor ghettos, retains the death penalty and has a deeply entrenched gun culture and in which one of the booming service industries is incarceration? Loïc Waquant's observations and analyses of this issue are required reading:

the deliberate atrophy of the welfare state has its counterpart in the hypertrophy of the penal State . . . The growth of the prison population is spectacular: during the 1960s, the demographics of the prison system were on a downward trend . . . By 1975, the number of inmates had fallen to 380,000 . . . However, the curve suddenly reversed and began to shoot upwards; ten years later the size of the prison population had leapt to 740,000, and by 1995 exceeded 1.6 million. In the 1990s, the rate of growth settled down at 8% per annum. By virtue of this threefold increase in 15 years . . . the United States has far outstripped the other advanced nations, since its incarceration rate – 645 prisoners per 100,000 inhabitants – is six to ten times greater than those of EU member states.⁵

In addition to those imprisoned, there are two other groups (which are growing even more rapidly) under the supervision of the penal authorities, namely those on probation and those on parole. As a result, in 1995, 5.4 million Americans were under the supervision of the penal authorities, almost 5 per cent of the entire male population aged 18 and over, and 20 per cent of black men! 'Between 1979 and 1990, State expenditure on the penal system increased by 325% in respect of operating costs and by 612% in respect of construction costs', with a 'boom in private prisons', a lucrative commercial activity listed on Wall Street, with an annual growth rate of 45 per cent.⁶

The penal system makes a direct contribution to the regulation of the lower segments of the labour market . . . during the 1990s, American prisons removed two percentage points from the American unemployment index

. . . however, maintaining this rate at a low level will be dependent on the uninterrupted expansion of the penal system.⁷

Are not these analyses excessively critical, imbued with a vulgar anti-Americanism intent on seeing only the faults of a society that in reality is more complex and more diverse and whose better qualities should also be appreciated? Any reader who harbours such a suspicion is referred to the third volume of Manuel Castells' work (chapter 2: 'The Rise of the Fourth World'), or to one of the better and more complete descriptions of the dualistic American model of the service society, the book entitled *The Work of Nations*, written in 1991 by the man who was to become secretary of labour in the Clinton administration, Robert Reich, and in particular chapters 15, on the excesses of the symbolic analysts, 16 ('American Incomes'), 17 ('Why the Rich Are Getting Richer and the Poor, Poorer') and 20 to 22, on the decline of public action. These books not only corroborate the previous analyses but present a good deal of supplementary material that reinforce them and enhance our understanding of their ramifications, including (1) a taxation system that taxes the poor more heavily than the rich, (2) cuts in the public funding of training, social welfare programmes and public infrastructures and services, (3) exorbitant and untaxed non-wage remuneration for the higher categories of the labour force, and (4) the fact that financial transactions, speculation and 'legal and financial symbolic analysis [have] become a major source of income for a growing number of Americans, as well as a national pastime for many others', causing an enormous 'loss of talent' and engendering 'distrust' (chapter 15). Contrary to the hopes expressed by Robert Reich, whose plea opposes point by point the precepts of the new economy, none of the major dualistic characteristics of American society has been changed since the early 1990s. In fact, certain inequalities have widened even further in recent years, despite the return to growth, as Reich recently and somewhat bitterly acknowledged.⁸

So André Gorz is surely right to alert us to the possible drift towards what he calls a 'society of servants'. Such a drift is clearly discernible in some European countries, where policies have been introduced – in the name of boosting employment levels of course – that offer high-income households considerable tax concessions in order to encourage them to employ 'servants'. However, we should be wary of this notion of servant jobs. It is employment status, the type of wage or subordination relationship, the prospects for training or even professionalisation and for integration into an organisation conducive to individual development and the acquisition of skills and qualifications, rather than the actual nature of the tasks performed, that define 'servant jobs' in the service sector. Thus depending on the institutional context (which determines the subordination relations and the meaning and prospects of the

work in question), home help services for the elderly or childcare, for example, may be defined either as servant jobs or as a profession or occupation with prospects for individual development. Obviously, the wages and costs cannot be the same. And it remains the case that, for certain jobs, from shoeshine boys to trolley pushers, it is difficult to conceive of an organisational context likely to establish them as occupations with a socially acceptable status.

Other models of service development

André Gorz is wrong, however, to suggest that this dualistic model of economic and social organisation, in which service jobs occupy an increasingly important place, is the only one that is possible: 'The development of personal services is not possible, therefore, except in the context of increasing social inequalities.' The service sectors of Northern European countries, for example, are almost as highly developed as that of the United States. However, the service economy model in those countries is significantly different (even though the Anglo-Saxon model is beginning to make its influence felt), reflecting as it does their mode of wealth redistribution (and in particular their taxation systems), their less pronounced social and economic inequalities, the role still played by national and local public services, their developed systems of social protection and their family and gender equality policies. The gap between the two models can best be illustrated by listing a few figures that speak for themselves (for a more thorough investigation of the issues, readers are referred to a recent paper by the Swedish sociologist Göran Therborn⁹). The proportion of the population living below the poverty threshold in 1994 was 15.3 per cent for all the fourteen European countries in question, 13.1 per cent in France and of the order of 20 per cent in the countries of Southern Europe and the UK. It was 6.5 per cent in Denmark, 5.5 per cent in Sweden, 5 per cent in Norway and 4.6 per cent in Finland (despite a high unemployment rate). Among the unemployed, the share of people living below the poverty threshold was 30 per cent in Europe, 27 per cent in France, of the order of 40 per cent in the Southern European countries and the UK and of the order of 8 to 10 per cent in the four Nordic countries. However, it has to be said that, at the same time, the share of the health and social services sectors (public or charitable) in total employment, which in 1994 was 5.6 per cent in Europe, was of the order of 3 per cent in the Southern countries, 6.2 per cent in France, but between 9 and 14 per cent in the Nordic countries.

These data on poverty in Europe are derived from a large-scale survey that provides a basis for more reliable conclusions than those that can be drawn from the mere juxtaposition of national statistics constructed on the basis of conventions that differ from country to country. However, they do not provide

a basis for comparison with non-European countries, particularly since they use a definition of the poverty threshold (half of *average* disposable income per person) that is not the one most commonly used (half of the *median* income¹⁰). The 1999 UNDP reports, which use the standard definition but are based on national data, largely corroborate the differences between the European countries listed above, although the gaps between the Nordic countries and France, Germany and Italy are narrower: for all these countries, the proportion of people living in poverty is of the order of 6 to 8 per cent. In particular, however, they show that, in this dismal league table, it is the United States that beats all the records for poverty in the developed countries, with no less than 19.1 per cent of the population living in poverty, followed by the United Kingdom, with 13.1 per cent.

Against this background, why is it that the national model it is suggested we follow is the American model which, of all the developed countries, is the most inegalitarian, the most violent, the most repressive, the most money-grabbing and the one in which working hours are the longest and insecurity in all aspects of life the greatest? Why does our 'information society' inundate us with information on the merits of this model and ignore the others? Might it be because it is already subject to the laws of the new economy?

To simplify things almost to extremes, what is suggested by both international comparisons and theoretical deliberation is that there are *two typical models of the service economy and society*, both of which are viable and compatible with the new global technological and economic order. The first of these is a *dualistic model*, of which the American economy provides a fairly good example. The second is an *integrated, professional model*, which presupposes a much less inegalitarian society than in the first case and in which service work, even if it is not high-tech, can acquire a gratifying occupational status and meaning. In this integrated model, services that produce 'collective goods', and particularly those, whether they be public or charitable, that contribute to social and territorial integration or cohesion, play a leading role. There is no reason why the State should have a monopoly of such services, but it is usually the guarantor of last resort, particularly as far as the nature, quality and accessibility of collective goods and the professionalisation of service providers are concerned.

The dualistic model of labour flexibility

It was during the 1980s, at the same time as unemployment was increasing sharply in virtually all countries, that firms and organisation fighting to survive in a harsher competitive environment began to demand labour flexibility. This change in attitude called into question earlier 'internal market' systems based

on stable jobs and, in many cases, promotion paths associated with established 'trades' or 'occupations'. The 1990s saw a further strengthening of this demand for flexibility, in both manufacturing industry and services, but especially in the latter, some of whose specific characteristics (the variability and relative unpredictability of customer flows, for example) make them particularly subject to the flexibility constraint. Thus services will be the main focus of attention in what follows. We will see that service organisations, for which the main reference point from the mid-1980s onwards has been the *dualistic Anglo-Saxon model*, which remains dominant today and is perfectly in tune with the precepts of the new economy, can in reality be given the flexibility they require by adopting a second, more 'Continental' model of work organisation and labour mobilisation. In adopting this model, I am extending the concept of flexibility so that it is no longer necessarily attended by precariousness or by a *dualistic employment system (core-periphery) based very often on an organised division of labour between men and women*.

The dualistic flexibility model has at its heart a strict segmentation of jobs and employment statuses between a firm's core workers, on the one hand, and, on the other, workers in so-called 'atypical jobs' who constitute the main source of labour flexibility. The core workforce, which is relatively stable but of very much reduced size in the hyperflexible variants of the model, is made up of the following categories.

The first comprises high-level specialists, technicians, engineers and professionals (functional managers), who were recruited in growing numbers in the 1980s to perform functions linked to firms' core businesses (R&D, for example) or more horizontal specialist functions (IT, finance, human resource management, communications, etc.). These groups occupy firms' functionally specialised 'thinking zones', which are increasing in number and playing a more and more vital role.

The second comprises certain non-specialist employees, including senior executives, line and project managers and relatively multi-skilled employees, whose spheres of responsibility are considerably wider than those of their counterparts in service firms of earlier periods (e.g. the 1960s).

These two components of the core workforce comprise employees with a relatively favourable status (although internal career prospects have tended to decline, which is a source of dissatisfaction and tension), due mainly to the fact that they are the conduits through which the knowledge and know-how that constitute firms' core businesses or intellectual functions are transmitted.

The following groups are located on the periphery of this employment system, which is frequently larger than the core.

The first of these peripheral groups is made up of part-time employees, with no real internal career prospects, although the tasks they perform and

the qualifications they have are not necessarily low-level. It is in this segment of the employment system that flexible labour management methods (variable manning levels, working hours and wages) are most frequently applied. In general, these employees occupy jobs involving direct customer contact (counter staff, checkout operators, sales assistants, staff manning booths outside the main sales floor). One of the principal contradictions in the management of this segment of the workforce is that between the high service quality demanded of 'front-line' staff and the flexible labour management methods adopted to keep wage costs as low as possible. This group is directly exposed to economic conditions and tensions in the labour market. In most countries, the use of part-timers (and of the attendant additional hours) has, in some parts of the service sector, notably large-scale retailing and the catering industry, become the key variable not only in the organisation of flexibility but also in the segmentation of labour into the 'primary' components of the core workforce (with their more favourable status) and the 'secondary' segments of the internal workforce,¹¹ the majority of whom in virtually all cases are women.

The second of these peripheral groups comprises workers on fixed-term employment contracts (including university and high-school students, in varying proportions according to the country and the cost of education), only a minority of which will lead to permanent jobs. Such jobs are particularly widespread in sectors such as tourism, hotels and catering and large-scale retailing where seasonal fluctuations in activity can be considerable.

The third peripheral group is made up of temporary agency workers employed for specific assignments or periods of time.

The fourth group in the secondary workforce is made up of personnel from external companies working for the client company either on a specific assignment or on a permanent basis and carrying out tasks that may be highly skilled (IT staff, specialist technicians) or unskilled (security, shelf-filling). This group could also include self-employed or freelance workers, some of whom may be highly skilled and genuinely independent, while others, frequently unskilled, are heavily dependent on clients/employers who use them from time to time, thereby avoiding the regulations and costs of the wage relationship.

In addition to these workforce categories, all of whom work within the physical boundaries of the organisation, there are also employees in subcontracting, client or partner firms or organisations who may be called on from time to time in the interests of flexibility.

The animating principles underpinning this model mean that the technical and temporal constraints and uncertainties generated by the productive system¹² impact directly on employees, who are subject to management techniques that individualise work schedules, wages and the evaluation of competences and

require maximum availability. The fundamental objective is to reduce labour costs; there is little interest in building staff loyalty, except for the minority of employees in the core workforce. The corresponding management tools are based on a neo-Taylorist¹³ specialisation and control of the tasks performed by employees in the flexibility zone (often the majority of the workforce).

The new technologies have played a role in strengthening this model, which preceded them. For employees in the peripheral segments of the workforce in particular, the new technologies are used primarily to control or monitor working times, task execution and productivity, within firms or their subcontractors, in accordance with the principle of placing the powers of technology at the service of the technology of power, to use Manuel Castells' phrase. More generally, as Castells puts it:

the prevailing model for labor in the new, information-based economy is that of a core labor force, formed by information-based managers and by those whom Reich calls 'symbolic analysts', and a *disposable labor force* that can be automated and/or hired/fired/offshored, depending upon market demand and labour costs . . . Often all these forms are lumped together in a self-serving strategy to present as inevitable what is in fact a business or policy decision.¹⁴

It is precisely the ineluctability of this model that we intend to challenge, although not before we have mentioned another relationship between the Internet economy and neo-Taylorist labour flexibility. As is shown by an excellent article entitled 'Les soutiers d'Internet' ('The Internet drudges') that appeared in *Le Monde*,¹⁵ over and above the 'success stories of the young lads starting from scratch, tinkering in their garages and making their fortunes on the Web', there is 'the submerged part of the Internet iceberg', where, 'as in the age of triumphalist Fordism, these jobs do not necessarily go hand in hand with creativity and astronomical salaries but rather with repetitive work and precariousness': call-centre workers doing round-the-clock shifts in order to maintain 24-hour access to suppliers' hotlines, netsurfers supplying directories and HTML graphic environment operators spending their days 'cutting and pasting'. According to N.M. Blancheteau, an expert on work in such organisations who is cited in the same article, these people are 'the production-line workers of the 21st century': high turnover, diabolical work schedules, no human resource management or staff representatives, not even a staff register.

An alternative model of flexibility

The dualistic employment system described has come to be regarded, particularly in the Anglo-Saxon literature, as a model of best practice. *It is absolutely consistent with the dualistic model of the service economy associated with the American form of 'new growth'*. In recent years, however, various research projects carried out in the field in Europe have shown that things are not so simple. Undoubtedly, organisational flexibility, that is the ability to adapt and react to demand both quantitatively and qualitatively, is tending to become a necessity for service organisation, particularly in the private sector but also, and increasingly, in the public sector as well. However, adoption of such a dualistic model is not the only way of achieving the flexibility required. There is another, observable model whose aim is also organisational flexibility but which achieves it by different means.

The model in question is an *integrated model of organisational adaptability*, in which the constraints are managed in a more concerted way. The principal objectives of human resource management are maximum workforce involvement and the building of staff loyalty, even at the expense of offering better pay and working conditions. Most employees belong to the core workforce. Management relies primarily on so-called internal flexibility (the tools for achieving which are described below) and, in doing so, breaks with the principles of Taylorism by reducing the extent of segmentation and the individualisation of employment statuses.

It might be imagined that this second model, which seems much more demanding and difficult to implement than the first one, is idealistic, that it cannot be applied in service activities requiring only modest skill levels, is feasible only if applied to functions involving a certain level of responsibility or even that it is too costly to stand up to the first one in a competitive environment. This is not so. We have been able to observe situations close to this model, even in large-scale food retailing and in outlets competing on price (see Box 4.1).

Box 4.1 Two concepts of flexibility

A and B are two hypermarkets of average and identical size (2500 m²), both located in working-class suburbs of French cities. They are part of the same chain, which has a policy of allowing store managers to manage their staff as they see fit, provided that certain recommended management ratios are more or less adhered to, particularly that representing the share of labour costs in total turnover. These stores are positioned primarily to compete on prices.

Both A and B are subject to the same flexibility constraints (opening hours, irregular customer flows that fluctuate according to time of day and day of the week) and sell the same products, with more or less the same proportion of full-service and self-service departments and the same proportion of food and non-food products.

In store A, flexibility is achieved through the adoption of a short-termist, neo-Taylorist HRM system. Most employees are part-timers, often on short-hours contracts, who work a significant but variable volume of additional hours; work schedules for checkout operators are largely unpredictable (some are telephoned at home when large numbers of customers arrive unexpectedly), hours are worked but not paid for, there is no fixed day off, no training or consultation and no pay scale or bonuses. The store manager defends these practices by saying they conform to the standard norms for the efficient management of flexibility. Ideally, he would like part-timers to work only 20 hours per week: 'when they're on 20 hours, you get 20 hours' work out of them. If you put them on 39 hours, they don't work 39 hours. There are breaks, time wasting when they arrive and leave, there's always time lost for a certain period . . . '.

In hypermarket B, the same level of flexibility (ability to respond to uncertainties) is achieved but in ways that differ in every respect from those adopted in store A. The store manager defends his strategy in the following terms: 'I want a stable workforce, one that is involved in its work, and that is best achieved with full-timers, except when a full-timer genuinely prefers to go part-time'. The part-time rate in this store is only 11 per cent; all part-time work is voluntary not imposed, and contractual weekly working times for part-timers are long at 30 hours. The most recent recruits have been full-timers and very few additional hours are worked. Even on the checkouts there are only three part-timers out of a total of nineteen. Little use is made of fixed-term contracts and none at all of temporary agency workers. In order to build staff loyalty, management has put in place a payment, promotion and bonus system that is more generous than the provisions of the national collective agreement. In addition, there is a profit-sharing scheme, which currently provides the equivalent of an additional two months' salary per person! Work schedules are negotiated, with due account being taken of family constraints. Any overtime worked – and the volume is low – is made up with time off in lieu in the weeks that follow; management does not want overtime to be rewarded with cash payments, in order to prevent supervisors getting used to operating with excessive hours. One essential point is that functional flexibility or inter-departmental mobility is built into

the system as an alternative means of managing externally imposed flexibility constraints. Interviews conducted with employees reveal a high level of job satisfaction, and annual staff turnover is astonishingly low (2 per cent). The store uses all the funds that the law requires it to set aside for continuing training. The owner regularly meets with the works council. Since it opened in 1983, the store has had no industrial disputes, and most of the people recruited at that time are still part of the workforce.

International experts on labour market flexibility will of course retort that this high-quality flexibility is attractive, but at what cost? Such a mode of personnel management undoubtedly suits employees, but if it undermines the store's competitiveness, is it not damaging in the long term? The question is a judicious one. For several years, store B, like the other two in the same region that have adopted the same management principles, has had a labour costs ratio that is lower than the average for the hypermarket chain of which it is a part. Conversely, hypermarket A, with its short-termist, neo-Taylorist form of hyperflexibility, has a higher than average labour costs ratio and is slowly losing its share of the local market, while store B's share is rising.

How do we explain this situation, in which *the management of flexibility through the development of staff involvement and loyalty*, which would seem to incur substantial 'loyalty costs', is ultimately reflected in better economic and financial results than those produced by a rigorous *neo-Taylorist mode of flexibility management*? In fact, the answer is very simple. There are three factors that combine to make this *investment in staff loyalty* profitable. The first is the direct effect this involvement in work has on productivity. The store that has adopted the 'sustainable flexibility' approach achieves results that are some 20 per cent higher than those of the other store in terms of sales per hour worked. The same applies – and this is the second factor – to the intelligent organisation of functional flexibility, which is a subtle way of reducing unproductive dead time without imposing impossible work schedules on employees. Finally, and perhaps most importantly, this store avoids *the vicious circle of neo-Taylorist flexibility*: the more such flexibility is reinforced, the more turnover and absenteeism there is and the more short-term flexibility there has to be in order to provide cover for absentees. The consequences include additional overtime and recruitment costs, the dismantling of established work groups and a resultant deterioration in staff cooperation.

Nevertheless, once it has been revealed that alternative models of flexibility are indeed possible, models that are economically viable and have very different effects on employees' working and living conditions, there is one question that has to be asked. If there are no changes in the general regulation of the labour market (and, beyond that, in the regulation of markets and of economies), is it conceivable that such 'positive' experiments can survive, proliferate and become something other than exceptions, certainly worthy of interest but the product of favourable circumstances that come together all too seldom and are therefore vulnerable to changes in economic conditions or of management? In the example described above, the relatively exceptional contingent element is the existence of (a small minority of) store managers with the desire and opportunity to adopt personnel management practices that go against the current of the prevailing norms in the industry, of which they are, of course, fully aware. The most 'favourable' cases we have examined (as well as the most negative ones, it has to be said) are ones in which the managers are also the owners of the store (they belong to chains of independents) and not simply employees of integrated, centralised chains that impose their management norms on their salaried managers. Centralisation of ownership and control almost always goes hand in hand with a reduction in atypical behaviour patterns and the imposition of management tools on the units owned or controlled by the group, despite the discourse on decentralised management based on an obligation to produce results.

It seems clear that there is no chance of these social innovations being disseminated against the current (1) of the management tools and rules that dominate such markets and (2) of the rules (or absence of rules) which, with a few exceptions, do not oblige any management to *negotiate flexibility*. This is why it is essential to take 'these exceptions that work' as a starting point for developing legal conventions and rules that might constitute a new framework that would be more conducive to non-regressive forms of organisational flexibilisation. Some of these will be mentioned at the end of the chapter. Before this, another form of flexibility, namely job mobility, will be put briefly under the spotlight.

From labour flexibility to job mobility

In the current discourse on flexibility, two 'demands' are combined which have to be separated out for the purposes of analysis, even if in reality they mutually reinforce each other. The first, which has just been examined above, is *flexibility of work organisation* in a given establishment. The second is *job mobility*, which is required of individuals in the name of economic efficiency and dynamism or of their own professional development, or both at the same

time. An excellent illustration is to be found in a critical book by the sociologist Richard Sennett,¹⁶ who has himself been criticised, albeit in a qualified way, by Nicholas Carr, one of the editors of the *Harvard Business Review*.¹⁷

The American economy did not wait for the advent of ICTs to impose strong spatial mobility norms on labour. In the USA, 'the average family moves house every five years. The average American changes job every three years. Almost 40% of those who lose their jobs move to another state of the Union.'¹⁸ In the discourse on the new economy, however, this characteristic moves centre stage: 'We have to go with the flow, slipping from assignment to assignment, from team to team, from company to company . . . The avatars of the new economy thrive on this kind of flexibility.' According to N. Carr, this creates a multiplicity of opportunities for personal development and for individuals to select the occupations that appeal to them. The failures that result are legion, but even they enrich individuals' experience and pave the way for future successes: 'In Silicon Valley, the cradle of the new economy, people take pride in their failures. They view them as opportunities for growth and as evidence of a willingness to experiment. If you've never failed, you're suspect.'

Richard Sennett shows that this type of flexibility and mobility, which is far from being widespread but is on the increase, is accompanied among those individuals he surveyed by a loss of ties – to people, to places, to communities or to a company – and by a 'corrosion' of personality and character:

We don't bond with each other; we 'team' with them. We don't have friends; we have contacts. We're not members of enduring, nurturing communities; we're nodes in ever-shifting, coldly utilitarian networks . . . The long view ceases to concern us . . . We come to think of ourselves as temporary workers, whether employed by a big company or running our own business.

Sennett, who quotes an ATT manager ('We have to promote the whole concept of the workforce becoming contingent, though most of the contingent workers are inside our walls'), observes the professional, personal and familial malaise that results, the feeling of having lost control over one's own life, the emotional isolation.

Consideration also has to be given to the myth and reality of this socially questionable model of 'Silicon mobility'. It is a model that may suit, for example, certain young people seeking to establish themselves in the labour market or a minority of skilled professionals in a favourable labour market, although the 'corrosion of character' observed by Sennett also manifests itself among such groups. For the great majority of workers, however, it amounts to

nothing less than 'enforced mobility', comparable to involuntary part-time work but significantly more damaging in its capacity to destroy personal and family ties.

Finally, the alleged superiority of the American economy when it comes to job creation and destruction and new start-ups must be placed in context: there is, for example, no difference in this respect between France and the US.¹⁹ Once again, we are confronted with a mythical discourse, which does not, incidentally, mean that public initiatives intended to foster entrepreneurship or to create the social conditions required for voluntary mobility are futile.

Towards negotiated and accepted flexibility and mobility

Just as there are non-regressive examples of efficient organisational flexibility, so it is possible severely to limit enforced mobility and labour turnover without undermining economic efficiency. There are other success stories than those based on 'Silicon-style' mobility, and some management books, written by authors favourably disposed to capitalism, go to great lengths to describe them and to draw lessons from them. In particular, they highlight the fact that, in many areas of economic activity, customer loyalty is virtually impossible to sustain over the long term against a background of high labour turnover. Peter Drucker, one of the 'high priests' of American management, has frequently returned to this notion, while at the same time bemoaning the fact that very few managers see fit to act on it: we have to ask why. An excellent book by Frederic Reichheld,²⁰ director of the business consultants Bain, describes some spectacular examples of companies, including some of the most flourishing in their sectors, that have put in place explicit, organised strategies designed to *build staff loyalty* that use all the tools of human resource management to that end. These tools include recruitment on the basis of criteria likely to increase long-term commitment (thereby ruling out poaching by competitors), internal promotion paths (preferably without geographical mobility), distrust of stock options (a position also supported by Drucker), as well as higher salaries, bonuses and benefits than elsewhere, a rejection of financial criteria as the sole basis for assessing individual performance (introduction of service quality and customer satisfaction as additional criteria), significant investment in training, significantly lower than average differentials between the top and bottom of the pay scale, remuneration packages for directors below the norm for the sector or for comparable companies and strenuous efforts to avoid redundancies in periods of economic difficulty. All this seems unbelievable, particularly since the sectors in question are very diverse, ranging from brokerage firms to fast-food chains. And yet it is perfectly true, and Reichheld explains it all, figures and cash flow at the ready, in terms very similar to those we used at the end of

Box 4.2, but with greater accounting precision. There is no doubt that this is a rational and economically efficient strategy, particularly in terms of the quality of the service provided to customers, 'customer value', but also in terms of internal management efficiency.

The question is obviously to ascertain why such strategies are seldom implemented, as Peter Drucker acknowledges. The answer here is the same as in the case of flexibility models: such strategies go against the current of the system's prevailing rules. Is it conceivable that a chief executive whose job depends on the quarterly scrutiny of the 'shareholder value' he has produced or managers recruited from rival organisations whose short-term earnings are calculated as a percentage of the extra business they bring with them and who follow on a day-to-day basis the stock market prices that determine the value of their stock options will develop a long-term approach to building staff loyalty, an approach that is, moreover, costly in the short term and *requires a change in the entire organisational 'mindset'*? It also has to be admitted that the edifying examples described by Reichheld are taken from firms whose management philosophy has remained unchanged for a long time and have often been run by the same person, in contrast to the theory of the 'competitive market for the control of firms' that governs the financial capitalism of the twenty-first century.

Thus there is no chance of these fortunate exceptions being disseminated of their own accord within the current system of corporate and market governance. However, as far as the rules and legislation governing work and employment are concerned, there are proposals, which could be implemented without delay, that could slow down the spread of the dualistic mode of labour flexibility and enforced mobility. In the United States, a group of Democrat senators chaired by Jeff Bingaman has proposed, for example, the creation of a new category of 'certified' firms that would benefit from various forms of public aid (tax breaks, less stringent regulation, financial assistance for training and modernisation) in exchange for verifiable commitments (quantified criteria are planned) on participation, training and the building of staff loyalty.²¹

In Europe, the most advanced and most promising contribution has been made by the recent studies carried out under the supervision of Alain Supiot.²² These studies contain proposals for major institutional and legal innovations whose combined effect would be to facilitate the reconciliation of occupational mobility and guarantees of long-term occupational status to a much greater extent than is currently possible by establishing new rights and responsibilities for workers and employers. The terms used are the 'occupational state' of individuals and 'social drawing rights' (for example, rights to training leave, to time savings accounts, etc.). This does not settle everything, since it may well be necessary to improve *both* the rights enjoyed by individual workers ('professionalisation') *and* the means of building the loyalty of personnel already in

post, which are based on agreements and guarantees that are currently under threat. These new rules governing the labour market and employment conditions, currently at the planning stage, clearly fly in the face of the dominant model of flexibility and, more generally, of the ideology of the new economy. If implemented, they would help to provide Europe with an effective counter-model. They would have to be accompanied by the introduction of compulsory negotiations on flexibility and mobility, or at least by various incentives to do so. However, they are unlikely to make a great impact if, at the same time, market models, competition regimes and modes of corporate governance remain attuned to the precepts of the new economy. It is to the question of the market and the regulation thereof that we now turn.

5 Market diversity and regulation

One of the principal characteristics of the discourse on the new economy, as its advocates seek to promote it, is the expansion of the competitive, profit-making market towards areas of activity that have hitherto remained outside its orbit (public and non-profit services and social protection) and into areas of the planet that have not yet been conquered. As we shall see in the next chapter, it is also this obligation to pursue commercial freedom that lies at the heart of the normative practices and statements relating to financial markets and modes of corporate governance in the new economy. None of this is really new and existed well before the advent of the Internet and digital technologies. However, these technologies have made new tools available and aroused hopes of new conquests.

In the face of this expansion, which some see as a new form of market-based imperialism, the natural (and sometimes justified) defensive reaction is to say 'no': 'the world is not a commodity', 'the planet is not for sale', 'stop the commodification of society, the human body, relationships, knowledge, etc.'. Compromise positions are articulated. The most recent of these, and the one most widely broadcast in France, is that expressed by Lionel Jospin, the French prime minister, on the occasion of a visit to Tony Blair, 'yes to the market economy, no to the market society'. This statement, taken up with enthusiasm by Tony Blair, is diametrically opposed to Polanyi's analysis, for whom 'a market economy can function only in a market society',¹ the reason being that, in Polanyi's view, such an economy transforms the central elements of life in society, and in particular labour, nature and money, into commodities.

Such statements are of little help in clarifying the terms of this vital debate on *the desirable place and nature of market mechanisms in economic and social development*. My own position is summarised in the following two statements.

1 *The market takes different forms*. It is never the abstract economic mechanism that determines the prices and quantities of commodities exchanged

through the free interplay of competing supplies and demands. Before accusing it of all the evils in the world or, conversely, celebrating the virtues of a single version of the market economy, before setting the State (or the organisation) in opposition to the market, we have to ask what a market is or, more precisely, in the light of their diverse modes of operation and social characteristics, what markets are. We will draw on studies that have shown that ‘the market economy’ is not, and never has been, a sphere that exists in isolation from society but is rather *embedded* within society. Market diversity arises out of the diversity of ways in which markets are integrated into society. In other words, each individual society has the markets that it allows to develop. There are choices to be made, including the rejection of models that some actors are seeking to impose as the only feasible and effective ones.

- 2 However, this statement is not intended to suggest that markets, however regulated they may be, can take responsibility for everything: *there are good reasons for seeking to contain the expansion of markets in many areas*. Despite the diversity of forms it takes and the flexibility offered by political regulation, the market has its limits, some of which are associated with major risks. However, they are not exactly the ones invoked by Polanyi in his references to the risks a society runs when it transforms labour, land (nature) and money into specific commodities (‘fictitious commodities’, in his view).

These two statements have one point in common: they both imply *socio-economic and evaluative approaches to markets* that draw on arguments, concepts and methods that are ignored in the economic tradition but have been used to great demonstrative effect in contemporary studies in the social sciences. These studies will form the basis of the argument advanced here.

The market is not what it is believed to be

What is a market? For traditional economists, this question elicits a simple response: a market is the coming together of a supply and a demand expressed independently of each other on the basis of preferences and production choices that are themselves also individual, with the encounter between the two leading to equilibrium because, if competition and information are perfect, price acts as an adjustment variable, going down if supply exceeds demand and up if not. It is sufficient for the actors to be pursuing their own individual interests for the market to function and, moreover, the result achieved by means of this totally decentralised mechanism is optimal: any attempt to constrain or regulate merely aggravates the situation.

What do contemporary, socio-economic studies of markets in general, and those for services and labour in particular, show us? Essentially that the market as defined by traditional economists cannot be seen to exist anywhere in the market economy! Well, you might say, this is only to be expected: an abstract concept cannot actually exist, simply because it is abstract. Nevertheless, even as an abstraction, it can be a simplified or 'purified' but still pertinent representation of 'real-world' practices that depart from it to a greater or lesser extent. Granted, real markets have various 'imperfections', but that in no way diminishes the fundamental importance of the 'perfect' model. Indeed, the opposite is the case, since it is the reference point that allows imperfections to be corrected. However, the findings of the socio-economic studies on which I draw here point in a completely different direction, since they suggest that virtually all markets in existence today – and the same was true in the past – are characterised by *rules*, by *institutions*, with their power games, and by *social networks* that manage and influence both the formation of supply and the expression of demand, the social conditions under which they come together and the determination of prices and quantities. Supply and demand, the alpha and omega of the traditional market, are social constructs that have collective aspects and are virtually never the results of decisions taken independently by individuals. Of course, such individual, decentralised decisions do exist and are very important, but they are always shaped by, or embedded in, social structures that have collective dimensions.

Thus all markets function *both through the interaction of these individual, decentralised decisions and under the influence of the social rules, institutions and networks* within which they find expression. This is why markets are so diverse and cannot be reduced to a single abstract model, which emerges in fact as more of a normative reference point (that some consider desirable)² than a scientifically based abstraction. True, supply and demand exist, there may be imbalances between the two and prices exert some degree of influence. Nevertheless, once that statement has been made, there is little in it to help us conceptualise markets in all their diversity or to guide our decision-making in this area. The examples presented below illustrate this general notion of markets as systems of rules and networks of exchanges.

The Utopia of a market without rules

Let us begin with the theoretical market of traditional economics, the one based on 'the general equilibrium of pure and perfect competition' and assumed to be devoid of all collective rules. What are the implicit assumptions behind this abstract or normative notion?

- The first is that the protagonists have perfect information. However, since information does not fall from the sky, *institutions* are required to produce and diffuse exhaustive information on products, prices, technologies, etc., together with *rules governing access*. Kenneth Arrow, undoubtedly the most important of the contemporary economists who formalised general equilibrium theory around the 1950s, has himself subsequently contributed a great deal to analysis of this essential public informational context. The provision of information cannot even be left to the tender mercies of a specific market, since it would not be perfect for all agents because of the inevitable inequalities of access.
- The second assumption is that people do not cheat or steal, even though such behaviour would in fact be consistent with the dedicated pursuit of individual interest. Thus institutions are required, along with sanctions, a police force, a judicial system, a department of competition and prices, some form of monitoring and enforcement, etc.
- Institutions are also needed to establish and enforce the ownership rights that are necessary for market exchanges. The necessity of such institutions is clearly seen today in the fight against the ‘pirating’ or illegal copying of a wide range of informational goods (software, CDs, books, brands, trademarks, etc.), a fight that amounts, paradoxically, to ‘artificially’ (i.e. through institutional means) re-establishing scarcity so that the market can function properly once again, although in other respects the economy presents itself as a fight against scarcity.
- Finally, it is assumed that individuals never form alliances in order to defend collective interests, and even that they have no influence over each other. Thus laws and institutions are required in order to prohibit and suppress these alliances, trade unions, trusts, etc.

The list could be extended by including several other crucial hypotheses, all of which require rules and institutions (‘visible hands’) if the alleged ‘invisible hand’ of the market is to function properly. Thus even the perfectly competitive market, which is assumed to be devoid of rules, is unable to function without a vast array of rules and institutions. It is sometimes said that a stock exchange is as close as it is possible to get to a perfectly competitive market, with free and individual expression of supply and demand and virtually instantaneous adjustment of these two variables. However, as everybody knows, stock markets are riddled with rules and institutions, they have ‘watchdog’ committees to oversee their operations and arrangements for stamping out insider trading, there are networks of personal connections and ‘tip-offs’, alliances, public interventions at national and supranational level, influence exerted by central banks, etc. Thus stock markets are very far indeed from being perfectly competitive. They too are ‘embedded’.

We have available to us a superb study of the conditions that have to be met if a market is to operate in accordance with norms that are as impersonal and competitive as possible and if the principles of the self-regulating market, freed from the social contingencies of local markets and their networks of personal connections, are to be implemented as rigorously as possible. I am referring to a study carried out by Marie-France Garcia of the 'social construction' of a 'modern' market for strawberries in Fontaines-en-Sologne.³ The study shows how this (successful) experiment proceeded through various phases of heavy investment in institutional and technological development, with the aim of standardising products, behaviours and ways of thinking and analysing, and centralising an auction system. In other words, the closer one seeks to get to a perfectly competitive market, the more old norms and networks have to be replaced by new rules and institutions. This has nothing to do with ordinary 'deregulation' or 'self-regulation'.

The case of the labour market

Things are even clearer when it comes to the actual markets to which I now turn, namely the labour market and the markets for various services. I begin with the labour market, breaking it down for the purposes of analysis into the three stages of price determination, definition of the 'goods' or 'products' to be traded, and the bringing together of users and suppliers.

Wages (that is, prices in the labour market) are not determined freely from day to day through the competitive working of supply and demand (except perhaps in some illegal markets) because of the existence of a multiplicity of rules and institutions: national minimum wage, negotiated wage agreements, promotion rules (some economists speak of 'internal labour markets', but they do so precisely in order to define them as *rules* not governed by the laws of the competitive market), social security contributions, labour legislation on pay, non-discrimination, etc.

Jobs, positions and working time (that is, the 'goods' traded in the labour market) are not competed for every day or every month, as they should be in a completely deregulated market. There are fixed-term and permanent contracts, tenured civil service jobs, corresponding labour legislation, etc.

Even the 'external' market, in which employers recruit and individuals look for vacancies, that is the market in which the supply of and demand for labour are brought together, does not operate at all in accordance with the principles of the anonymous competitive market. Such a market would take the form of a sort of commodity exchange where standardised announcements from suppliers and users would be listed, rather like the Sologne strawberry market. Such labour markets do exist, but sociologists who specialise in such questions, chief among them Mark Granovetter,⁴ have been showing for a long time that this 'external

market', is largely made up of networks of personal connections and family and social ties, which play a dominant role in individuals' attempts to find employment. This applies not only to the managerial and professional categories but also to blue-collar workers. Indeed, as early as the 1950s, it was shown that manual workers were more likely to find a job through personal contacts than by any other means (job advertisements, direct approaches to employers, etc.).

At this point in the argument, several questions arise. Let us assume that the labour market is indeed highly regulated and integrated into a multiplicity of personal connections and networks. Is this desirable? Should the labour market not be adapted, in part at least, to competitive market norms?

If we focus very closely on the labour market's very many 'imperfections' (rules, relative job security, promotion, minimum wage, trade unions, etc.), one of the major findings of the socio-economic studies referred to above is that these alleged imperfections are not always disadvantages. In many cases, indeed, they are compromises of benefit to both the economy and the wider society, and even have advantages for employers. Thus as early as the late 1960s, the theoreticians of 'internal labour markets'⁵ showed not only that a certain degree of job security, internal promotion prospects, a lack of constant competition for jobs from external candidates and the ability to join trade unions are viewed positively by most 'insiders' but also that these various 'non-competitive' arrangements can be economically beneficial to firms, for various reasons: they can reduce turnover, recruitment and training costs, promote the development of competences through the experience effect, increase productivity and staff motivation, etc.

The other markets: all regulated to a greater or lesser extent

These observations on the labour market can also be applied, with a few modifications, to the markets for a wide variety of services, which puts into context Polanyi's notion that the labour market is radically different from other markets. While it is true that it is a market 'unlike others', there are many markets that are also 'unlike others'. Markets for personal and professional services, for example, have many points in common with the labour market, and analyses couched in terms of internal labour markets, relationships based on trust and loyalty, price setting on the basis of enduring norms, trade unions, recruitment through personal connections, etc., can be transposed to them. Polanyi maintained that the labour market is a fiction that cannot be sustained in the long term without destroying society, because of the 'human nature of this supposed commodity'. This humanist point of view is more than worthy of respect, but it is rooted in a confusion that occurs frequently in 'The Great

Transformation' between 'real-world' markets in all their diversity and the ideal type of the self-regulating market, which is, nevertheless, described as utopian. It is true that wage work 'goes hand in hand with life itself', but the 'human nature' of what is traded is also found, for example, in the majority of markets for personal and professional services: what the customer purchases is the right to use, for a given period, the 'living' competences of a service provider who places himself at his or her service. Can we say that markets cannot exist in such cases? Clearly not. It is true that the average wage relationship is based on a more lasting commitment and on a greater degree of hierarchical control. However, it is also true that the average duration of these commitments to work for a given employer is tending to fall, and it is not certain that this is to be attributed solely to the 'flexible' mode of employment management. The current demand for professional status for all, mentioned at the end of the previous chapter, could even bring the characteristics of the labour market close to those for certain professional services. The labour market certainly exists and, even on the level of individual liberties, it is a resource, one that enables an employee to decide to leave an employer in order to look, in that same market, for a better job. It is the role of the regulations governing that market to ensure that this theoretical liberty remains a real liberty. It is true that unemployment reduces it considerably, but that is another question.

Let us return then to our survey of market regulations, beginning with the markets for so-called professional services (lawyers, architect, doctors, accountants, etc.). They have their professional bodies, codes of professional ethics, entry requirements and rules governing the exercise of the profession, prohibitions on advertising in some cases and networks of personal contacts. The cumulative effect of all these arrangements is to determine how supply and demand are expressed, the conditions under which they are brought together and the rules governing pricing and what constitutes a 'fair price'. In the case of France, the studies of lawyers and, more generally, of 'quality markets'⁶ by the sociologist Lucien Karpik constitute an essential point of reference in this area. Many other markets for services in the so-called competitive sector are strictly regulated, with controls on prices and on entry to the profession, lists of recognised qualifications, processes of certification, guarantees, etc. This applies even more to tradeable public services, such as postal services, water, gas and electricity supply, telecommunications, urban services, etc., with their 'universal service' obligations, to public and private health services and to community services, which combine voluntary work, public services and market resources in the provision of non-profit-making services. In reality, this high level of regulation and the shaping of markets through social relations is characteristic of virtually all the activities that have experienced the strongest

job growth over the past twenty-five years. And in addition to these examples, all of which relate to services (which account more than 70 per cent of the value produced in developed economies), mention could also be made of the regulation of markets for industrial and agricultural products in respect of safety, 'traceability', guarantees, the prohibitions of certain discounting practices, differential rates of VAT, etc.

All these markets are regulated to varying degrees and do not operate in accordance with the precepts of the abstract and mythical model of the competitive market. They are thoroughly social in nature. While it is true that they are part of a *decentralised market economy*, they can be defined as *a diverse set of market institutions and social networks that determine the form and frequently the success of market mechanisms*.

Two types of justifications for rules

The first justification for these regulations is that, in a large number of service activities (essentially the least standardised), the protagonists – and particularly individual consumers or users – are prey to considerable uncertainties, both as to the nature and quality of outcome of such services, which cannot be fully described in a contract, and in respect of the service providers. How are they going to behave, how committed are they going to be and what are their actual competences? The uncertainty also extends to the conditions of the transaction: the notion of what constitutes a fair price may well be unclear, and public information on prices is sometimes lacking. Thus an initial set of market rules and institutions seeks to reduce these individual uncertainties, which are mainly technical in nature, and to produce trust and guarantees. Indeed, it is not an exaggeration to say, in contrast to the prejudices of those who advocate perfect competition, that such markets requires rules and institutions *in order to be able to develop and to promote their own commercial interests*. These rules are not solely, or even mainly, social and political constraints hampering such development. These characteristics, which are common to many markets for services, also apply to industrial and agricultural goods as soon as various technical uncertainties arise as to their quality and reliability, particularly since consumers tend to become increasingly demanding over time as to the level of risk they are prepared to accept.

A second set of rules and norms governing markets fall within the scope of 'civic' principles regarding social cohesion, or of certain notions of the public interest. Technical or financial norms that allow disabled people or the unemployed access to certain services are examples of this category of rules. In this case, the aim is no longer simply to reduce individual uncertainties of a technical nature as to the quality of services, goods or transactions

but rather to lessen collective risks in accordance with prevailing notions of the public good or of the long-term future of the community and its environment.

The markets most affected by such regulations based on the public interest and civic principles are probably the labour market (we need think only of the minimum wage, social security contributions, anti-discrimination legislation, etc.) and (national or local) markets for public services or sectors that fulfil certain public interest objectives, such as health. However, most products and markets are governed by rules derived from this group of justifications. That said, it is not always easy to agree on what actually consists the 'public interest', an eminently historical and political notion that varies considerably depending on national context. Some might take the view, for example, that it includes the rules establishing 'fair' competition in public services, or that regulations seeking to reduce inequalities (of earnings or in access to certain goods and services defined as basic) or to establish a minimum wage are contrary to the public interest. I will confine myself to noting the variability of conventions, which merely reinforces the need for democratic debates on what 'a good society' is. Such debates will contribute to the construction of conventions on the public interest.

The distinction made above between those rules and arrangements that seek to reduce the technical uncertainties that beset individuals contemplating or engaged in transactions and others that aim to introduce collective obligations that originate outside the market (even if, subsequently, they may be taken over by professional institutions, trade unions or consumers' organisation that are active in such and such a market) has two limits which I will merely note. First, certain norms fall within the scope of both of the two sets of justifications outlined above. Thus the ethical rules of many professions are justified both in the name of the public interest and of the reduction of user or customer uncertainty in respect of service quality. Second, even seemingly very technical rules (anti-pollution regulations, for example) may also have a collective, moral, aesthetic or political dimension as part of a more general approach to the civilisation of markets.

The stars of the new media economy

Some of the new labour markets in the economy of the 1990s have surprising characteristics. The rules by which they operate, *which draw particularly on the new technologies and the media*, allow a tiny minority of 'star employees' to amass colossal fortunes in a very short space of time. The case of high-level sport as show business in the era of global information makes this phenomenon easier to understand, but this winner-take-all model, to use the term coined

by Philip Cooke and Robert Frank,⁷ can also be applied to many other situations.

Professionalism has existed in certain sports since the nineteenth century, but has only recently become widespread. In the early 1970s, the term 'amateur' still featured in the Olympic oath and any athletes who were seen to depart from the amateur ideal faced serious punishment. Money really began to enter sport from the 1970s onwards, and the principles of amateurism were gradually 'deregulated' during the 1980s. From this time onwards, the earnings of the highest-profile sportsmen (real or sham professionals) began to rise, albeit with a very high degree of segmentation, not only within the same discipline but also between disciplines, in accordance largely with the televised broadcast of sports events and advertisers' (i.e. companies') assessment of the commercial impact of the advertisements shown during the broadcasts. The 'show-business' system, which affects many other spheres as well, then began to establish itself in sport or, more precisely, in a small part of the sporting world.

Thus we are dealing with a threefold transformation: (1) the transformation of sport into show business; (2) the televised broadcast of sports events; (3) the intervention of advertisers, who are prepared to spend vast sums to purchase airtime on this most favoured of media, making them the main sources of finance for the networks that carry the broadcasts. In November 1997, for example, the NBA, the governing body of the principal professional basketball league in the USA, concluded a four-year, 2.5 billion dollar agreement with the NBC network and the cable network run by CNN boss Ted Turner. During the Super Bowl final in January 1999, each minute of advertising airtime was sold for 170 million dollars. We in Europe are lagging behind: during the 1998 World Cup final in Paris, the price charged by broadcasters for a minute of advertising at half-time was 25 times less, about 7 million dollars.

The way in which these enormous injections of money create a star system in which a few performers swipe virtually the whole stake, while the vast majority play bit parts (at least in financial terms) is fairly easy to understand. The entire media system overvalues a handful of champions by intensifying identification phenomena and globalising them. As vehicles for brands and top-of-the-bill stars, this tiny handful of sportsmen become both the targets and tools of the marketing men, and the principle of message simplification that drives global marketing dictates that very few of them can play such a role. As a Nike manager, quoted in the *Le Monde* of 8 February 2000, explained, 'a brand like ours needs emblems . . . Our strategy is to concentrate on two or three players per country who convey an image throughout Europe, or even the whole world'. *Le Monde* rightly points out that this 'selection takes place to

the detriment of second-string players, whose sponsorship contracts have been revised downwards'. The stars in question are sometimes astonished at the result: 'It's unbelievable that I'm paid so much just to hit a ball over a net,' said the tennis player Boris Becker. 'We take what we're given,' declared footballer Michel Platini.

There are indeed grounds for astonishment, but some stars have got used to it. Michael Jordan's salary was put at 33 million dollars in 1998, and he was estimated to have earned a further 45 million from his advertising contracts. However, and this brings us close to the essential point, *even these sums are a mere drop in the ocean* compared with what the monthly *Fortune* has labelled 'the Jordan effect', which the magazine puts at some 10 billion dollars for the NBA alone and at 350 billion dollars for the American economy as a whole. Thus the sale of the broadcasting rights to all those sports events capable, in the words of the managing director of a French television channel, 'of delivering not programmes for an audience, but an audience for advertisers', and the simultaneous, media-driven transformation of a few individuals into stars provide the income streams required to pay those stars sums of money that seem extravagant by the usual standards of the wage-earning class, however highly qualified, but bear no comparison to what the presence of these stars can put back into the 'new entertainment economy'.

Sport is not the only sphere affected by this particular form of the new entertainment economy, and television, on which we have focused here, is not the only mass medium that produces such effects. The cinema and its stars offer similar examples.⁸ The administration of justice is another excellent topic for televised entertainment in the United States: court proceedings broadcast live, with real judges, real cases and real sentences. The French weekly *Télérama* devoted an excellent report to it, published in January 2000 and aptly titled 'Tribunal de grande audience', a pun that might be rendered in English as 'Courting the Ratings'. A small number of judges, who have themselves become stars, preside over their courts live on the specialist cable channel *Court TV*. Audience figures are excellent, commercial success is guaranteed. Rather than setting up cameras in the courts and accepting the slowness of the proceedings, everything takes place in studios in Los Angeles and Chicago within a limited period of time (15 minutes). There is no need to feel sorry for the plaintiffs: their travel, accommodation and legal costs are paid, albeit on condition that they do not dispute the judgement. It is not wholly constitutional, but a blind eye is turned to that inconvenient fact. Nor should we feel sorry for the judges: they are paid a fee of 150,000 dollars per week. Politics also has its show-business aspect, whether or not it is broadcast through the media: 'There was a time when former president Harry Truman

refused on principle to accept any money “that might undermine the dignity of his public office”. Times have changed: Ronald Reagan pocketed 2 million dollars for a one-week promotional trip to Japan.⁹ Other examples of this media stardom in the age of globalisation are given by Robert Kuttner,¹⁰ who focuses on the astronomical remuneration packages the most sought-after chief executives can command, particularly for their ability to cut the pay of all other employees.

If we set aside all moral judgements on the fabulous wealth that accrues to the tiny minority that benefits from the system, what links can be established between these situations and the rules governing the various markets? Possibly that there is nothing inevitable about the fact that the talents and competences of individuals, whether employed or self-employed, enable them to accumulate fortunes of varying sizes. *Everything depends on the rules of the system within which they deploy their talents.* If they are the best in the world in a particular sport or other activity that attracts little media attention, they will derive only limited commercial gains from it. If in their profession or sector there is, for example, a code of ethics that limits the opportunities for spectacular wealth accumulation *by prohibiting, for example, any links between their remuneration and the commercial or financial success of a third party (advertiser, client, media)*, then such excesses will not occur. If they are lawyers in the USA and their remuneration is contractually fixed at 30 per cent of their clients’ financial gains from any legal case, they can make a fortune out of just one case. If this form of remuneration is prohibited, as it is in many other countries, and their profession lays down reasonable guidelines on fees in accordance with the complexity and nature of the services rendered, things will be quite different. And in all cases, of course, income tax can be an effective mode of regulating these bubbles of personal wealth, in which some pocket everything on offer while others stagnate.

In other words, there is always a way of regulating earnings inequalities. It is obviously not easy, for if some countries take a moral stance against such excesses and others encourage them, the talents in question can always choose to move elsewhere – even though the risk of such a talent drain is greatly exaggerated, at least as far as individuals in developed countries are concerned – and there will be great pressure for the policies aimed at reducing inequalities to be abandoned and for a return to price competition. This applies both to this ‘high-price’ competition, which is confined to a few stars, and to so-called ‘social dumping’ as currently practised in Europe, which involves millions of ‘low-cost’ non-stars. This serves merely to make the task of regulating these slightly crazy new economy markets all the more urgent.

Globalisation and regulation

By grounding our analysis of the virtues and limitations of markets in an examination of the rules that govern them, we are able to reformulate the central problem raised by economic globalisation. What we are dealing with is a form of globalisation in which the overriding objective is to impose the greatest possible freedom of trade (free competition), with scant attention being paid to other aspects of regulation, particularly the rules governing social cohesion, environmental standards or even human rights. And the consequence? *The various sets of national regulations find themselves caught in a competitive downward spiral, with each country seeking to outdo the rest in its efforts to reduce prices* (including the 'price of the State', through the required reduction of public expenditure) in which, according to the French economist Robert Boyer, 'bad regulation drives out the good'. 'Bad' in this case means that it has negative human, social and environmental consequences. Thus globalisation has unleashed bitter competition between rules, with the main factor in that competition being the (short-term) monetary cost of compliance.

It is on this basis that some companies transfer their operations to countries where the cost of complying with the social and environmental rules is lower, which in turn creates pressure to reduce costs in their country of origin by lowering social norms. It is in this way that 'brains' (or sports stars) are recruited from developing countries. It is this global competitive market that, according to the 1999 UNDP report, 'imperils solidarity', both community solidarity (aid work) and that mediated by public aid services: in both cases, such solidarity merely gives rise to costs that have to be reduced.

This global competition between the various sets of national rules, which leads to changes in the rules in order to reduce the cost of compliance, is facilitated by the mobility of capital and labour and sometimes by information technologies. It has also relied heavily on drastic structural adjustment programmes.

However, this approach also suggests the type of solution that might be envisaged, at least theoretically. First, international rules should be established for the (human, social and environmental) management of the competition between national regulations and, second, any new attempt further to liberalise trade without such measures should be treated with the greatest caution. Such a solution would involve not the alignment of all national standards but their gradual and simultaneous improvement. This is why moves in Europe, within or around the WTO, or elsewhere to put in place new rules governing both the market and the practices of multinationals are of the greatest importance. For its part, the UNDP report (chapter 5) comes out in favour of 'global governance' based on ethical and social principles to which states, companies and

individuals would be subject and which would be monitored by new institutions: a revived United Nations, a world environment agency, an international criminal court with extended powers, a global central bank, global investment funds, etc.

A society has the markets it creates for itself

Thus the distinction between the market economy (considered desirable) and the market society (to be rejected) is now more than questionable, since the market economy is a set of social structures and rules which, under certain conditions, may both encourage economic development (the expansion of markets) and place it at the service of society by civilising markets.

In other words, and to the extent that it is not dominated by others, a society is largely responsible for the economic and social characteristics of its markets. A society's markets reflect the qualities and faults of that society's rules, laws, institutions and ethical norms. This is particularly true of labour markets and the markets for certain public or private services, including financial and insurance services.¹¹ In this respect, the critical 'anti-market' ideology is as one-sided as the ideology of the so-called free-market economy that seeks to locate all transactions within an individualistic but impersonal and asocial framework and reduces the intervention of the political and social spheres to limited corrections to competitive economic mechanisms – adjudged to be optimal – based on each individual's pursuit of his or her own selfish interests. However, as Phelps¹² shows (and he is hardly an extreme radical), trust, loyalty and sometimes even altruism are essential if certain markets are to operate effectively. However, they are not goods that can be bought but rather the result of collective arrangements, of rules, of networks of personal contacts, of ethical codes, etc. As Arrow wrote in 1968: 'One of the characteristics of a successful economic system is that relations of trust and confidence between principal and agent are sufficiently strong that the agent will not cheat even though it may be 'rational economic behavior'.¹³ This topic has subsequently been developed considerably by more heterodox economists, particularly Albert Hirschman and Amartya Sen.

Thus the question is not whether 'market-type mechanisms' are able efficiently to coordinate *the majority* of acts of production, consumption and saving in a developed society. The real issue lies rather in the political definition, on a case-by-case basis, *of the social content of markets and of the rules governing them (and more generally the market economy)*. This form of 'market governance' requires serious socio-economic evaluations of the possible alternative models and of their impacts on society. Markets are not ends in themselves but one of several means of allocating resources and stimulating social innovation.

Should they seek an independent existence of their own, they need to be put in their rightful place, in the knowledge that 'they' actually always denote actors, groups and lobbies whose interests might very well be served by such independence.

As Amitai Etzioni notes, 'competition is a form of conflict, namely contained conflict'.¹⁴ It is this that explains how it can produce beneficial effects by easing or preventing conflicts of interests, while at the same time requiring rules to contain those conflicts in order to avoid the self-destructive escalations inherent in 'unbridled capitalism'. Depending on the evaluations carried out, this could lead either to the introduction of a large number of strict rules, with certain activities perhaps being withdrawn from the market altogether or public monopolies being maintained, albeit with closer monitoring, or, in other cases, to a 'lighter-touch' regulation that fully recognises the virtues of fair but supervised competition. Such a point of view would be based on principles that go beyond the distinction between market economy and market society in order to highlight the political imperative of *civilising markets and competition* as a precondition for sustainable social development.

6 The limits of the market

To stop at this point would be to display rash optimism as to the possible extension of the bounds of the market to most social transactions. Indeed, as soon as rules introducing social and collective considerations into the principles governing markets are laid down and enforced, markets seem to be perfectly capable of responding to all human needs backed by purchasing power, even if in certain cases the regulatory state plays a role in providing the purchasing power to back demand. To accept this point of view would constitute progress in some respects, since it would mean that a society, if it so decided, could manage its markets in accordance with non-commercial and non-economic values and in such a way as to foster collective projects. However, that would be idealistic and unwise, for various reasons that we are now going to discuss. The question of the risks inherent in applying competitive market relationships to all social transactions, and that of the precautionary principles that are necessary, are extremely sensitive ones. We will not be addressing them from the perspective of moral and political philosophy. Rather, we will rely essentially on the socio-economic analysis of markets, drawing on two examples. The first, borrowed from Michel Callon,¹ is that of scientific research. We will attempt to extend it to other activities. The second, which is based on our own research, is that of public services and their role in the production of social cohesion.

The production of knowledge: a first precautionary principle

Why in all countries is most basic research publicly funded? Why is such research not governed by the rules of the market? If the market, once properly regulated, is able to accommodate various political imperatives, it should be able to take responsibility for the production of theoretical knowledge by organising the construction of supply and demand and the conjunction of

the two in accordance with certain rules and mechanisms. In order to explain this apparent 'market failure', economists have traditionally had recourse to the notion of 'public good'. This term is used to denote a good whose principal characteristic is (to simplify somewhat) that a potential user cannot be excluded by the establishment of property rights that limit use of the good to those who pay to benefit from it: the beam of a lighthouse and street lighting, for example, are public goods, as long as no arrangements are put in place to compel individual users to pay for them, which would appear difficult.

Michel Callon demonstrates convincingly that, in the case of science, this explanation is not tenable, since science is not a public good. And indeed, there would seem to be no serious technical or economic argument prohibiting the establishment of property rights over scientific findings. Moreover, for some of these findings at least, demand backed by purchasing power exists:² there are purchasers eager to acquire ownership of these findings, as there are in the case of patents arising out of so-called applied or 'development' research. And even in basic research there are some contracts – between companies or governments and public-sector research institutes – that contain confidentiality clauses or clauses prohibiting the publication of results without the funder's assent. Such clauses may well be contrary to the professional ethics of academic scientists, but they are sometimes imposed and accepted. In this way, competitive market principles can prevail over the profession's non-commercial values, or at least succeed in 'purchasing' behaviour that contravenes those values. This is all the more likely to happen the more public-sector researchers spend their time looking for resources rather than results.

Is this 'commercialisation' scenario really such a great threat? Might it not enable researchers to focus more sharply on the 'outlets' for their research, on 'social demand'? Why should we defend a situation in which most basic research takes place outside the market? Michel Callon's argument runs as follows. The market's main failing has its roots in the fact that, for the needs of its own economy, it seeks to exploit economies of scale or 'increasing returns to adoption'.³ To this end, it imposes and generalises standards⁴ in order to kill off other potential ones and puts in place various forms of cooperation with the aim of sharing the costs and uncertainties of research among networks working towards the same ends. As a result, *goods and processes tend to become standardised, which in turn gives rise to irreversibilities that reduce the range of scientific and technological options*. One notorious example is that of the QWERTY keyboard, which is the subject of a superb little study in economic history published in 1985 by Paul David.⁵ Why did the QWERTY keyboard prevail in the English-speaking world over other designs, despite the fact that they have been shown to be more efficient in terms of typing productivity (by between 5 and 20 per

cent, depending on the estimates)? The main reason is that around 1870–80, just as typewriters were beginning to be widely used in the United States (there were only 5,000 such machines in the USA in 1880), it was the one that seemed to minimise mechanical difficulties. However, the technical reasons that determined this choice were subsequently to lose their relevance. One might have imagined that the market would then ensure that more efficient keyboards were introduced. And yet it was the QWERTY keyboard that prevailed, largely because thousands and then millions of typists learnt to type on it, making the situation virtually irreversible and leading manufacturers and purchasers to *adapt the new machines to established practices rather than vice versa*. There are many other examples of such irreversibilities, in which the initial choice of a technical standard becomes virtually impossible to ignore as soon as it reaches a certain adoption threshold (a certain market share). There are various reasons for this. A register of such cases has been compiled by another leading specialist in these questions, Brian Arthur,⁶ who cites the case of the VHS video standard. Another, more recent example is that of Microsoft's MS-DOS operating system and, more generally, the company's other main software products, such as the Windows interface software. It should be added, however, that their dominance is due not only to the factors mentioned above but also, in this case, to monopolistic imposition strategies.

Thus, if we subscribe to these arguments, it would be desirable, as a sort of precautionary measure, to retain a huge area of scientific research not bound by the laws and reckonings of the markets, *in the long-term interest of economic development itself*.⁷ Mention should also be made of the long-term significance of social development (through the knowledge that a society might acquire of its own relationships, tendencies and conflicts, and of its own history) and of *human* development, based on the human and social sciences. Wholly market-led research, subject to the reckonings of the market and the imperatives of demand, would fail to produce the intellectual resources (ideas, concepts, methods) on which practical, economic and social innovations could subsequently be based. One interesting case in this respect is the astonishing dynamic of the 'freeware' phenomenon, those computer programs and applications usually made available to users free of charge that are developed on a non-commercial basis but at the moment without any significant public funding either. The process of 'cooperative creativity' by which freeware is produced contrasts strongly with practices in the rest of the IT sector, an industry dominated by large companies, and in particular by Microsoft. François Horn⁸ has published a stimulating analysis which shows that here, too, even at the heart of the new economy, the market fails to produce variety, originality or flexibility in responding to needs or anticipating new solutions. Rather, it is in this inventive 'free' sector, where money plays less of a role, where developers'

rewards are often symbolic and where standardisation is not the objective, that some of the intellectual resources required for the industry's future development are to be found. At the same time, however, there is a risk that, in the absence of public support and encouragement, this creative model, with its reliance on 'craftworkers in love with their art', will have its life made difficult by the actors that dominate the market or that it will itself be dragged down by market principles.

Culture and creativity, information, biodiversity and mutual aid

Research is not the only activity to which this precautionary principle applies. Many artistic and cultural activities should also be covered, with public subsidies and action programmes being put in place in order to preserve and extend the existing range of ideas, cultural phenomena and art forms, thereby contributing to the enrichment of our shared cultural heritage. Similarly, the production and diffusion of information of all kinds (economic, social, scientific) should in part be considered in the same light as public goods and services that fall outside the bounds of the market, or as shared informational assets. This does not prevent some information from being sold for profit. Kenneth Arrow himself advanced some very convincing theoretical and practical arguments to justify the collective management of information on goods, prices, etc., in order to allow markets to operate efficiently.⁹

A similar precautionary principle might lead us to remove innovations relating to living organisms such as agricultural seeds, bacteria, genetically modified animals and vegetables, as well as genes themselves, from the sphere of patentability (and therefore from market exchange), irrespective of any other regulations governing the marketing of any products developed from them. This would also have the advantage of reducing the risk of small and medium-sized growers becoming industrial subcontractors, forbidden to replant seeds, for example, and totally dependent, therefore, on the seed companies and unable to contribute to the current and future diversity of their produce.

The UNDP report expresses a similar demand, which would seem to be particularly vital for developing countries:

many major corporations are seeking patents for the innovation of linking genetic characteristics to chemical triggers. What for? One likely use is to create seeds that will germinate and bear fruit only when used with the company's brand of fertilizers or herbicides – increasing sales through dependency on inputs. [Now] local plant breeding is essential for adapting seeds to the ecosystem and maintaining biodiversity.¹⁰

Furthermore, because the five largest biotechnology companies in Europe and the USA control more than 95 per cent of all gene transfer patents and because it takes several years to bring a corresponding product to market, these companies protect their innovations and concentrate their research on high-yield markets. This research is geared to the needs and desires not only of growers and consumers but also, and particularly, of the food-processing industry and of the distribution networks in the rich countries, which want

tomatoes with longer shelf lives or herbicide-resistant soyabeans and yellow maize to be used mainly for poultry feed. Seed varieties are engineered to be suitable for mechanized mass production . . . Far less time and money have been given to the needs of farmers in developing countries: increasing nutritional value, disease resistance and robustness. Similarly, research is lacking on water-saving plant varieties for smallholders.¹¹

Finally, the wealth of social relations through which mutual support and assistance are provided, whether in families, neighbourhoods or over wider areas, also seems to be a valuable resource for the local market economy. However, if such relations were to become the object of commercial transactions in a competitive market (which some people regard as one of the markets of the future), then the result might be impoverishment, standardisation and, above all, a loss of meaning. In this area as in others, the market does not automatically recreate meaning but tends rather to restrict its scope and to channel it along predetermined routes.

Similar arguments are found in the UNDP report cited above: 'Globalization is putting a squeeze on care and caring labour.' Why? Because

the expansion of markets tends to penalize altruism and care. Both individuals and institutions have been free-riding on the caring labour that mainly women provide . . . Globalization's shift in employment patterns have promoted and to some extent enforced the participation of women in wage employment . . . Nonetheless, women in most countries continue to carry the 'double burden' of care services – ending up exhausted . . . The market gives almost no rewards for care. Much of it is unpaid – most of it provided by women, some by men. The market also penalizes individuals who spend time in these activities, which take time away from investing in skills for paid work or from doing paid work.¹²

This list of 'common goods' and shared assets that have to be shielded from the reckonings of the market and the laws of competition must certainly include the strictly civic field of political activity; in virtually all countries, the

funding of political parties or individual politicians, whether secretly or openly depending on the legislation in force, has given rise to scandals. The 1996 American elections (for the presidency, the legislature and at local level) cost almost 4 billion dollars. Now if the former senator Bill Bradley is to be believed, 'those who sign the cheques make the laws'.¹³ It might be thought that the subservient attitude of some governments towards the business world is not wholly unconnected with this situation in which those who hold economic power are in a position to offer various forms of reward in order to influence the behaviour of certain players in politics and the media. Etzioni has shown¹⁴ that the one-sided discourse that attacks the 'competitive distortions' caused by state intervention in the economy always ignores the 'political distortions' that are caused when those in positions of economic power intervene in public institutions. In many cases, of course, their interventions are possible solely because of their 'purchasing power'.

These findings reveal an initial and not insignificant limitation of markets, namely their inability to create, on a commercial basis, all the intellectual, cultural and social conditions for economic and social development of sufficient quality and variety to be sustainable. Markets are powerful and flexible and can offer freedom of choice in the short term. In the long term, however, they are reductive, since they need to stabilise the identity of their objects, of their agents and of the framework within which their reckonings take place.¹⁵ The principle that animates markets is that of rationalisation, a process that 'seeks to contain reality within a coherent system. Everything that, in reality, contradicts that coherent system is dismissed, forgotten, put to one side, seen as an illusion or mere pretence'.¹⁶ Through their very logic (and particularly if supply is concentrated), some markets produce relatively 'locked-in' trajectories, to use a term favoured by specialists in the economics of innovation who derive their inspiration from Schumpeter's thinking. As Michel Callon notes, there is an inverse relationship between the degree of organisation (and, one might add, of concentration) in a market and the extent to which choices are open and not predetermined.¹⁷ Now if economic and social development is to be achieved, then there need to be, at one and the same time, opportunities for making choices that are not determined in advance and decisions on production leading to the adoption of a limited number of possible options for organising their 'economy'. It is only in the second case that the market is potentially efficient. One important justification for the public funding of certain creative activities, for the preservation and development of certain living, social, cultural, technical and informational 'assets' is that these activities are *judged* in the long term (after a process of evaluation and public debate, therefore) to be a 'source of variety and flexibility'¹⁸ in all the various compartments of social life.

Adopting a cautious approach to the precautionary principle

These analyses may give rise to three misunderstandings, however. First, nothing in what has gone before implies that research activities, craft production, neighbourhood relational services, information, etc., must be *wholly* removed from the market and funded *in their entirety* from the public purse. Judgements and evaluations can be helpful here in striking a balance – and it is a balance that has varied over time within each of these sectors – between what can be given over to a suitably regulated market without damaging long-term development or reducing the range of future options and what should be removed from the market. Moreover, while we should rightly be suspicious of certain ‘reductionist’ tendencies inherent in the market (such as its tendency to reduce future options by standardising products and closing off trajectories), we should obviously heed the lessons of history for what they reveal of the state and the ever-present possibility of a drift towards an authoritarian or even totalitarian approach to the direction of scientific research, control of cultural and artistic activities, access to information, etc. Precautionary principles in respect of the market are meaningless unless a vigilant attitude towards state interventionism is adopted at the same time. In some authoritarian regimes, oppressed minority cultures may well find the market to be a source of support and assistance. For example, it was by bringing in private capital that the Kurds were able to set up their own television service. More generally, the need for public initiatives and resources to foster diversity, creativity, the development of common goods and shared assets or pluralism does not in any way imply that these activities have always to be publicly managed. Fortunately, there are various forms of encouragement and regulation likely to guard against any drift towards authoritarianism.

Finally, it is not only the State that has to be watched for any possible drift or abuses of power likely to give rise to ‘irreversibilities’ prejudicial to free creation. The same applies, sometimes, to the ‘learned professions’¹⁹ when they are not subject to external democratic judgements and claim sole control (which is another form of self-regulation) over the conditions under which they operate, recruitment to the profession and evaluation of the scholarly aspect of their activities. Under such circumstances, they too can produce ‘irreversibilities’ if one influential group (perhaps supported by those holding political power) succeeds in reducing the pluralism of approaches in the name of an orthodox theory regarded as the only legitimate one.

This brings us to the second misunderstanding. How is it possible to defend the ideas outlined above and at the same time accept, as we have done and as the facts clearly demonstrate, that ‘post-Fordism’ is characterised by the

decline of mass production and an increasing variety of goods and services available in the market?²⁰ Does not the market constantly demonstrate its ability to overcome such limitations? In reality, there is not a shred of doubt that what is actually diversifying is, on the one hand, the number of variations on the same *basic matrices or products* (a model of car, an insurance policy, a 'standard' meal in a restaurant or a night in a 'standard' hotel room, a software program modified on the basis of the same 'source code', etc.) that are produced by *adding one or more of an increasing array of easily incorporable options* and, on the other, the products obtained by *assembling or combining* components, modules, elements, etc. It is these basic products, the components and these modules to which the earlier observation applies, not the innumerable variations or combinations that might result from them. The most rapidly developing form of cooking today, even in France, is what might be called the 'modular assembly' of meals, which is found not only in fast-food restaurants but also in most restaurant chains of a decent standard and in the restaurants of hotel chains.²¹ And it is not difficult to argue that the mere fact of having access to fifty television channels does not necessarily increase the variety of basic components (programmes): that depends largely on the policies put in place to support creative programme-makers. In the absence of such policies, the television channels – however numerous they might be – will be condemned to offering standardised programmes based on a limited range of ingredients which taste and look the same. The same would be true of cheeses and wines, to mention only the two products that symbolise the French gastronomic heritage, if the 'economies of scope' principle were to eliminate the genuine diversity of non-industrial or artisanal production.

Finally, let us dispel one last misunderstanding. We do not intend to harness for our own ends the discourse on the 'short-sightedness' of the market, which is said to be concerned primarily with the 'maximisation of short-term profits' and to be therefore incapable of guiding rational, long-term decision-making. This is true of certain speculative markets, particularly financial markets (and this would justify the proposals, to which we will return later, that seek to curb speculative activity by imposing appropriate taxes and controls), but not of most 'real' markets. In managing their chosen trajectories, actors in the market, and particularly those who structure supply, obviously look further than the end of their own noses. They have effective analytical tools at their disposal for the purpose. Obviously, they can make mistakes, but they generally take account of medium and long-term considerations in managing their own trajectories. Indeed, they probably do so to a greater extent than some political elites, those whose actions in government are determined by an electoral cycle in which the next election is always just around the corner. Thus our observations have nothing to do with any inability of the markets (or of their

leading players) to plan their future trajectories. What is at stake is the diversity of possible trajectories, the potential for opening up new trajectories and the evolution of the stock of knowledge, relationships and living species. In these areas, markets are not short-sighted but incompetent and dangerous. And yet in the long term they probably need the unpredictably open forms of knowledge and culture, natural environment and social relations that make up an evolving ecosystem that cannot be wholly controlled but can, nevertheless, be turned to good account.

Activities serving the common good: a second precautionary principle

The second example we would like to draw on, because it reveals other limitations or risks inherent in the principles animating the competitive private capital market, is that of activities that are still denoted by the term 'public services', although this could pretty soon become obsolete with the new economy. We will confine ourselves to public services in the 'market sector', those whose resources are derived mainly from the sale of services. Indeed, there are other public services that are 'free' in the sense that their resources are derived largely from the public purse rather than from the sale of their services. We will not dwell on them, although questions have been raised about a possible shift to the market sector, at least in the case of those for which there might be a demand backed by purchasing power (for example, the sale of government statistical data that used to be free of charge, the sale of various services by publicly funded universities, etc.).

Let us take the case of the French Post Office, an organisation that is fairly typical of a public service operating in the market sector; most of its activities (mail handling and financial) are subject to competition although it still has a monopoly on part of its mail services (mainly letters, parcels weighing less than a kilo and direct mail) in the name of *public service obligations*. The Post Office is *obliged* to transport and deliver mail throughout the entire national territory at a uniform price, even to remote rural areas. It is also obliged, under the terms of contracts concluded with the public authorities, to maintain post offices (possibly on a reduced scale) and collection points in areas where such activities are not 'profitable'. And unlike the private banks, it cannot refuse applications from people of limited resources wishing to open bank accounts or simple savings plans. These public service obligations reflect a particular political attitude, a certain vision of citizenship and social cohesion in the modern world, in which certain basic 'network' services are part of individuals' fundamental needs in a developed society and are tending to become universal rights. To be deprived of these services, or not to have access to them at an

affordable price, is considered to be a loss of rights, a drastic curtailment of an individual's social identity. To be deprived of mail services and to be without a bank account (or the equivalent), drinking water, a telephone connection (and therefore to be unable to call the doctor or the fire brigade in an emergency) or electricity are all indicators of second-class citizenship.

Moreover, the Post Office provides a neighbourhood service open to all, particularly through the local post offices it operates. The quality of that service varies and is sometimes problematic, particularly in terms of waiting times. Nevertheless, something important takes place in these local post offices, which again is related to social cohesion. Post Office counter staff devote a not inconsiderable amount of their time to helping people with various difficulties or 'handicaps' (illiteracy or difficulties in understanding procedures, poverty, isolation, etc.) that are linked to various identifiable forms of social exclusion. They do so in an unselfish way that is part of a 'public service mentality' that is frequently alluded to in explanations provided by staff and is readily observable on the ground. At the moment, the organisation tolerates such behaviour, which is unprofitable because it takes up working time in order to deal with 'social problems' faced by people who in most cases are already unprofitable customers; it is able to do so partly because the monopoly in some areas of its activities allows it to make the necessary resources available. However, pressure is beginning to grow for a reduction in such unprofitable activity.

Thus the Post Office contributes to the production of social integration – which we regard as a collective good – on two levels, the territorial and the social, in order to provide the whole population with access to 'network' services such as postal services, money orders, giro accounts and savings accounts that are an essential part of membership of a developed society. The first level of that contribution is the most easily formalised. It can be measured more or less accurately and is liable to be incorporated into 'contracts' concluded between the Post Office and the public authorities at national and local level. The second level consists of non-formalised behaviours that are not measured in any formal way but are an integral part of the Post Office's value systems that is transmitted through 'on-the-job' learning processes.

The impact of exposure to competition

What might happen, in these circumstances, if this public service is forced to expose all its activities to the market principle of 'fair' competition, if what is left of its monopoly in certain areas is reduced or abolished by allowing new entrants to compete with it? Will it be possible, provided it is still considered worthwhile of course, to maintain its contribution to the production of social

cohesion at this dual level, even though that contribution is known to be unprofitable in terms of the company's balance sheet?

The answer is clearly no if there is to be no regulation or subsidy. New entrants will arrive, intent on 'creaming' the market by positioning themselves in the most profitable segments; inevitably, they will drive down prices in those segments, thereby reducing the revenue out of which the 'public postal operator' (PPO) used to be able to fund its unprofitable activities. As a result, those activities will disappear.

However, as we have seen, the market can also be regulated with the intention of maintaining the production of these collective goods, if they are considered indispensable for political, social or general economic reasons. This is what is currently being striven for in Europe (and in other developed countries) with the notion of 'universal service obligation'. For example, every 'operator' with a presence in the profitable segments could be obliged to pay into a fund that would be paid back to the PPO, who would then continue to take responsibility for the unprofitable obligations. Alternatively, the PPO could be allowed to retain its profitable monopoly in a part of the market and to use its monopoly surplus to subsidise its unprofitable activities. Or the universal service obligation could even be put up for 'negative auction', and so on.

All of this is possible and, in some cases, experiments are already under way. However, there is one absolutely essential precondition for the implementation of such regulations. It is that these collective 'obligations' should be *calculable*, that the resources committed have to be accounted for in money terms relative to the public-service activities they are used to fund, which themselves have to be formalised and quantified. Without this calculability, any attempt at regulation will be either impossible or destined to produce 'distortions of competition'.

This brings us to another limitation of the market, however regulated it might be. It is likely that the first level of collective obligations fulfilled by the Post Office, namely the maintenance of a basic network of services easily accessed by all at no additional cost to the least profitable of these users, can meet the calculability condition with reasonable reliability, even though there are still considerable uncertainties as to the economic method to be adopted (estimates of the 'cost of the universal service' vary considerably depending on the method employed): acceptable compromises may possibly be found.

The same does not apply to the second level, the one rooted in individual and collective behaviours, in a mentality that leads counter clerks to consider it legitimate to devote as much if not more time to users in difficulty or on the margins of social exclusion as to profitable 'customers', thereby blatantly

contradicting the profitability imperative that normally governs behaviour in a capitalist firm and the 'commercial approach' principle that leads inexorably to a focus on the most profitable customers. True, these actions, these contributions to social cohesion can be *evaluated* in terms of both process and effects, and it might even be possible roughly to estimate the volume of work devoted to them.²² However, can they be incorporated into a computational framework that would be sufficiently rigorous to provide the basis for regulation of the same type as could be put in place at the first level, thereby making it possible to preserve the 'margin' of altruistic behaviour on which they are based? Is it possible that the national or international rivals of such a company will take at face value the assertion that such behaviour is socially useful and accept that they should be subsidised in one way or another? The fact that the cost of these actions is much less easily calculated, to say nothing of the impossibility of putting a monetary value on their social benefits, makes it difficult to put in place any form of market regulation intended to preserve or develop them in one direction or another. *In such cases, therefore, a second type of precautionary principle might be necessary*, whereby any further extension of the trust placed in the competitive market is rejected, first, because of the uncertainties surrounding the calculations that have to be made as a precondition for civilising this market through appropriate regulation and, second because such calculations might put at risk the existence of unselfish behaviour, which is not susceptible of calculation but worthy of interest in other respects.

Such a precautionary principle lies at the heart, for example, of the proposals currently being put forward by the European Liaison Committee on 'services of public interest'. This Committee has proposed that a 'charter of fundamental rights' should be incorporated into the European Union treaty. This charter

would guarantee individual integrity, liberty, equality, dignity, well-being and development. Services of public interest are one of the elements that help individuals to exercise their fundamental rights to essential goods and services such as food, personal safety, employment, housing, culture, education and training, health care, transport, energy, information and communications (post, telecommunications, Internet, broadcast media), access to banking and financial services and consumer protection.

Urban services, hospitals

This twofold contribution to the common good is also found in urban services, analysed by Yves Janvier.²³ The waves of economic rationalisation to which they have been subjected have (more or less) preserved one type of obligation, namely the availability of supply in areas with few customers. What has been

sacrificed is their less visible and less easily quantified contribution to 'the relationship between the community and the individual citizen', which is a

very effective means of conveying to the citizen the community's attitude towards him. The significance of urban services in this respect seems obvious . . . when it has disappeared. A caricatured example can be found in the case of public transport (buses, trains, etc.), which have become a locus for the expression of urban violence. The reduction in staffing levels to the absolute minimum required for operational purposes and the diminishing role of staff such as drivers and inspectors may seem good policy in management terms, since the trains and buses continue to run and the tickets are franked by machines. As a consequence, however, transport staff are no longer the medium through which the community focuses attention on users and the social relationship becomes nothing more than a machine-user interface.²⁴

The increased violence, whose causes go well beyond the rationalisation of public transport but which is given free rein by the 'dehumanisation' of services, 'has encouraged the transport companies, paradoxically also in the name of good management, to put staff back on to the trains and buses, with the sole task of talking to users!':

Under the pressure of events, therefore, the social cohesion for which urban services are by their very nature a vehicle is on its way to rehabilitation after the damage it has sustained; however, it is being restored in a very partial and fragmented way that makes it a sort of marginal 'add-on' and does not really re-establish the dual nature of the service.²⁵

That public services are not limited in their scope to discharging their quantifiable functional obligations – which can be easily entrusted to private organisations as long as the regulatory authorities see to it that they fulfil their remit – is further illustrated by the evidence we were able to gather on the behaviour of the public hospital and a private hospital in a French city following the storm that raged one night in late December 1999. In the immediate aftermath of the storm, there was an explosion in requests for admission from people who had been injured, were suffering from shock or required treatment for a variety of other reasons.

In the public hospital (an establishment where the trade unions are active and generally disinclined to accept any deterioration in working conditions), it was all hands on decks, doctors and other personnel alike. Everybody agreed to work exceptional hours, departments helped each other out, secretaries and

managers were drafted in as stretcher bearers, staff took serious risks to get into work despite the storm, others volunteered to work through the night. All of this was motivated by a strong and shared understanding, rekindled by events, *of the public good that gave meaning to the work hospital staff were doing and the sacrifices they were making*. ‘It was hard work, but we did some good’: how can such statements be understood without bringing into play a notion of solidarity that is both interpersonal and part of a concept of a society that is itself solidaristic?

At the same time, the neighbouring private hospital was experiencing problems with its electricity supply and could not therefore function normally. Its management was asked by the public hospital to help out by sending over any personnel not working. However, the private hospital’s management refused to do so on principle and decided to declare their workforce technically unemployed, justifying their action in terms of the need to balance their books. The supervisory authority (the Regional Hospitals Authority) intervened to force the private hospital to cooperate, but its management successfully demanded substantial financial compensation. The lesson to be drawn from this example is not that individuals are more or less solidaristic or altruistic – which is true of course – but that the mode of regulation, the relationship to the market and the management tools in use end up by changing individuals’ behaviour and by eliminating what, in some cases, gives most meaning to their work.

Beyond the public services

Thus the second precautionary principle concerns the risks associated with the ‘deregulation’ of services and of public monopolies (including health and education), that is the introduction of the rules of private competition into all or part of the corresponding markets. We have examined this risk in the light of the possible disappearance of behaviours and values that are more or less incompatible with the principles of calculated self-interest and financial profitability. Three observations are called for here.

First, these ideas could be applied to so-called ‘third-sector’ or ‘non-profit economy’ undertakings (such as associations in the market sector producing goods and services that serve the common good and are publicly acknowledged as such), where the same type of risk might emerge if the institutional framework in which they operate were to become more favourable towards private market competition and less so towards voluntary activities and the participation of users with altruistic inclinations and commitments. The example of the private hospital, which is, in theory, non-profit-making, clearly shows that the typical capitalist undertaking is not the only form of enterprise in which accounting and financial imperatives tend to take precedence over any other

form of guiding principle. Thus the future of any possible 'third sector', which might play a positive role in the consolidation of civilised markets by instituting development projects with explicitly social objectives, depends very heavily on economic and legislative intervention by the State, and in some cases on new forms of cooperation with government departments and the public services. In other words, what is needed is an appropriate *mode of regulation* and *evaluative framework*, even though the internal dynamic of this sector depends above all on local initiatives. This makes it unlikely, and indeed undesirable, that it will develop within new or old public services, even if they were decentralised.

Second, the debate on the advantages and disadvantages of competition and monopoly is not limited to the aspect outlined above, in which the main focus is on the meaning that agents give to their work. Hirschman has brilliantly shown, in *Exit, Voice and Loyalty* (1970), that competition is not necessarily superior to monopoly when it comes to improving service quality. It depends. In particular, it depends on the opportunities users or clients enjoy 'to make their voices heard', and on their ability to take advantage of any such opportunities. Competition, which encourages 'exit' (users defect from the failing organisation in order 'to go to the competition'), also has a tendency, in some cases, to accentuate social dualism in access to certain basic services. While affluent users turn to lucrative and expensive private services, what is left of the 'universal' public service deteriorates in quality and declines in status from a public service for all to a minimal service for the poor. Hirschman applies his argument to American schools in particular, but it could equally well be applied to health, postal and banking services, and indeed many other basic services that could be forced to adopt a dualistic approach that accentuates social disparities (and feeds on them in return).

Finally, as is well known, capitalist competition, through its characteristic concentration of capital and economic power, can lead to the establishment of new monopolies, private ones this time. The most recent example is that of Microsoft, a company which, according to Judge Jackson, who gave a ruling on its case in 1999, has acquired 'prodigious power in the market and immense profits' on the basis of its financial power, its marketing and its ability to close off the market by imposing its own standards and forcing hardware manufacturers to sell PCs bundled with Windows. It has achieved this position of power despite the fact that experts agree that its products are sometimes of mediocre quality (compared with what the producers of 'freeware' are able to offer, often at no cost) and lack diversity. Now it is not clear that governments find it any easier to control private monopolistic practices than to put an end to the improper or 'lazy' practices of certain public monopolies. Here too, serious evaluation is required.

The 'laws of the market': a third precautionary principle

The examples outlined above have taken us into an area that is essential to an understanding of how markets work, that of the economic reckonings and management tools that structure and shape markets, that is the 'space' occupied by the cognitive frameworks constructed and mobilised by the actors in the market. We draw once again on some of Michel Callon's work in this area, although the conclusions we reach differ somewhat from his. The most significant result is the following: the agents that intervene in markets are calculating agents²⁶ whose behaviour and decision-making are heavily dependent on conceptual frameworks and analytical methods developed in the disciplines of economics and management (and, we might add, of law also). As we have already noted, the diversity of markets is largely a result of the diversity of rules, institutions and social networks mobilised as resources or as constraints on agents' behaviour. Michel Callon limits his investigation to the first of these 'frameworks' that shape markets, namely rules, and more specifically to just some of them. Indeed, at the heart of the rules that shape markets and give rise to various types of behaviour are scientific categories and *methods of economic calculation and management* developed jointly by professional researchers in these disciplines and professional practitioners in the business world. Now these tools may be slanted in various ways. Michel Callon draws on examples in which the accounting tools 'chosen' favour the long or the short term, on the diffusion of the American EPS (earnings per share) standard for measuring 'shareholder value' and on the way in which marketing 'preforms' markets. Since the frameworks within which economic calculations take place are historically and socially contingent artefacts, they lend themselves to imposition and domination strategies, for which companies, consultancy firms and transnational institutions are the principal vehicles. Today, these strategies are reflected in the fairly widespread, albeit contested diffusion of American management culture, which is summarised thus: 'The American way of organising markets accords a privileged position to the notion that the only people who have any right to inspect a firm's activities are its shareholders and that companies' sole concern must be to maximise shareholder value.'²⁷ For their part, Richard Farnetti and Ibrahim Warde explain how 'the German giant Daimler-Benz was not allowed to raise capital in the United States until it had adopted American accounting methods. Any firm seeking to launch a bond issue in the biggest market on the planet is forced to do likewise.'²⁸

Why, on the basis of these considerations, should we adopt a third precautionary principle to help us stand guard against the extension of markets? For the following reasons. First, it seems to us quite true that these economic and management tools are frequently the principal elements in the rules that

underpin markets and explain their diversity. Second, these tools are constructed and evolve largely through interactions between researchers in these disciplines, corporate managers and shareholders and, in some cases, although usually only in fits and starts, representatives of the State. The conclusion is fairly clear: with a few exceptions, neither employees and their representative organisations nor consumers and their associations are involved directly or indirectly in the construction of the cognitive and technical frameworks within which business decisions are taken. In the current state of affairs, such decision-making is a matter for the business world and experts in economy and management, with the large consultancy companies in the English-speaking countries acting as essential mediators.

Incorporating social costs into the rules

Thus there are good reasons for mistrusting markets 'shaped' and 'tooled' in this way, if it is believed that employees, consumers and, indeed, citizens in general should have their say, in the same way as the actors who currently decide on the rules of the game, on the relevance of the tools used and calculations made and on the principal indicators of development. This brings us back to the arguments outlined in Chapter 2. What are we to make, for example, of this principle of good management in the new economy outlined by Jean-Pierre Rodier, chairman and chief executive of P  chiney: 'We set the minimum rate of return on capital invested at 11% before tax. Any operation that cannot produce at least this minimum rate of return will be sold off or shut down'.²⁹ Undoubtedly some would see it as sound management, but is it an instrument for optimal social development? Is a developed, democratic society that cares about the direction in which it is heading condemned to accept this form of economic calculation? What are its advantages, and what social costs does it entail? Is there no way of modifying the rules, for example by making it obligatory to include certain social costs, in accordance with a principle of the 'polluter pays' type? This idea is expressed in some of Pierre Bourdieu's work: 'All critical social forces must insist that the social costs of economic decisions be incorporated into economic calculations.'³⁰ True, it can be objected that it is easier to say this than to put it into practice. However, the economics profession, which is sometimes rightly accused of powerlessness, is far from being impotent in this regard: in this area, political will lags behind academic methodology. For example, we have at our disposal empirically and theoretically robust studies that provide a basis for evaluating the health costs of atmospheric pollution. It is not simple. Strong relationships have to be established between public health indicators and pollution levels (by means of epidemiological studies and technical studies of the main forms of

pollution). Monetary values have also to be imputed to the various nuisances that harm people's health, which requires conventions that emerge from debate. Uncertainties persist, but orders of magnitude can be calculated and argued over at a later stage; they will provide an adequate basis for public action to put in place regulations that can be revised from time to time. In academic terms, there is no reason not to encourage and fund studies of the same type on the social 'externalities' of companies' major decisions.

This third precautionary principle is clearly based on a fairly pessimistic diagnosis of the imbalance in the power relationships that currently characterise the 'social construction of markets' and on an even more pessimistic diagnosis of the American version of the new economy. Such an imbalance, the optimists will say, is not inescapable. This may be so, but one never knows, and it is precisely in this type of situation that caution is required, particularly since, as can easily be ascertained, we do not live in the 'market economy' but rather in a diverse set of market economies that do not all contain the same level of risk. At the present time, this set of economies is clearly dominated by its highly developed elements: financial institutions, transnational firms and more or less speculative markets. The 'laws' and rules of economic calculation governing these highly developed sections are not those that prevail in the markets in which small producers or local services operate. It is above all the 'laws' governing the return on the investments of controlling shareholders, those who seek to evade all control, that should be controlled most rigorously, since the 'major risks', including those of international economic, financial and monetary instability, are all on that side. It is not enough to seek to regulate markets in general; what needs to be regulated above all is the pretensions of financial capital in its most concentrated forms to 'self-organisation'. However, before we consider how that might be achieved, we need to look more closely at the increasingly close links between modes of corporate management and the financial world.

7 New modes of governance for firms and financial markets

The mythology of the new economy does not stop at the market, that locus of exchange, of (supposedly) free competition, disencumbered of public constraints. It also contains normative propositions about a new mode of corporate governance linked to some of the new characteristics of financial markets. The term corporate governance denotes a way of exercising powers of decision-making and control and the management tools deployed in support of those powers.

We have already touched on this subject when discussing the tools used in making economic calculations, their historical and contingent nature and the current widespread use of tools of American origin that have criteria based on financial return at their heart. We now have to return to this question and clarify its terms. It needs to be addressed on two, interrelated levels: that of the rules governing competition in the capital market and that of the rules governing the management of firms and the modes of controlling corporate performance. The first level equates, in common parlance, to the notion of the *regulation* or *deregulation* of markets (financial markets in this case). The second level is associated with the term *corporate governance*. In reality, these are two highly interdependent forms of regulation/deregulation. And in both cases, the 'high-tech free-market' discourse creates the image of new technologies as powerful instruments for the liberalisation and globalisation of the financial markets, the sophisticated control of companies and stimulation of the stock market.

Managerial control or the power of the 'technostructure'

The large industrial firms that flourished in the three decades following the end of the Second World War (what Jean Fourastié called the 'thirty glorious years' of economic prosperity) were, it is true, capitalist enterprises (although in some countries publicly owned enterprises were a major part of the industrial

fabric), but power lay only partially in the hands of stockholders. J.K. Galbraith was one of the first to analyse, in *The New Industrial State*,¹ this ‘massive change’ in power. Focusing on the American economy in the 1950s and 1960s, he developed the notion of the ‘technostructure’. According to Galbraith, the ‘technological requirements of modern industry’, its ‘need for planning’ and its ability to control its own markets demand that power be exercised by groups made up of individuals in possession of highly specialised knowledge. ‘Effective power of decision is lodged deeply in the technical, planning and other specialized staff.’² This new industrial state ‘replaces the entrepreneur, as the directing force of the enterprise, with management’, which has become ‘the guiding intelligence – the brain – of the enterprise’, what Galbraith calls ‘the technostructure’.

Stockholders, let us be assured, are not absent from such a system. And obviously they need to be rewarded. However, in this ‘transfer of power from owners to managers’, the technostructure can content itself, in order to be secure in its autonomy, with offering stockholders ‘a minimum level of profits’, returned to them with some degree of regularity.³ Its specialist planning capabilities enable the technostructure to behave in this way in a context in which the large firms or conglomerates of the time, benefiting from their positions within an oligopoly,⁴ controlled a significant share of the market. Moreover, and this is an essential phenomenon, the post-war period saw a dispersion of stock ownership that reduced the power of the principal stockholders.

For their part, the members of the technostructure do not see it as their primary objective to maximise returns to capital. Nor is pecuniary interest their primary motivation,⁵ and it can even be said that their ethical codes prohibit them from making considerable personal profits. Their main motivations are the lasting success of the organisation, growth, technical innovation and ‘identification’. ‘A secure level of earnings and a maximum rate of growth consistent with the provision of revenues for the requisite investment are the prime goals of the technostructure.’⁶

It is impossible, reading these observations, which Galbraith always grounds in a solid empirical base, not to be struck by the radical upheavals that have taken place since the time they were written. Before returning to these upheavals, it should be noted that Galbraith’s analysis was challenged by Marxist and radical economists in the USA, who were annoyed by a theory that relegated capitalists to the background. Galbraith may have overstated his case a little, but the essence of his diagnosis seems to have been confirmed, even by the numerous and ultimately successful attempts by stockholders to return to positions of control.

France and Germany have attracted similar observations, although the context is very different, both in France, where it has been possible to speak

of 'State Fordism', and in Germany, where there have historically been very strong links between the banks and the major industrial groups, under the aegis of a modernising State, with both sides regarding shareholders as poor relations.⁷

So this was the situation in respect of the governance of large corporations in the 1960s and 1970s in the United States, a situation that was to persist in Continental Europe until the beginning of the 1990s. What happened, and how did the United States come to lead the rest of the world by more than ten years in formulating the new rules that emerged from the 'massive turnabout' that was once again to put the owners of capital and of financial assets into positions of control in the productive system? How was the pairing of technostucture and State pushed aside, the first more or less unwillingly, the second compliantly and even enthusiastically?

A competitive market for corporate control

The revolution was, at one and the same time, theoretical, political and institutional, and it is very difficult to identify one primary cause among all the factors at work. In theoretical and ideological terms, the movement began to grow in size in the early 1980s with the development of the economic theory of the market for corporate control,⁸ which is characteristic of the approach of the Chicago School, for whom all social relations (including marriage, procreation, altruism, etc.) can be analysed as markets. What does this theory have to say about the present case? It states that corporate control (the term governance would be used today) is quite simply a market, a space in which rival teams willing to pay a greater or lesser price in order to acquire the right to take control of firms manoeuvre for supremacy. The financial struggles that take place for the control of firms (hostile takeover bids, mergers and acquisitions, leveraged buyouts) are all part of the normal working of competition. If it remains unchecked by restrictive regulations, that competition normally leads to an improvement in the situation, with the more efficient teams replacing the less efficient ones. Those teams prepared to pay a higher price are the ones that forecast higher profits and are most likely to obtain them; in particular, they are the ones best suited to bringing managers into line in order to make them deliver maximum profits. According to this type of theory, the market for stocks and other derivatives is rational and efficient: it optimises the 'allocation' of capital. There is nothing harmful about financial speculation. On the contrary, it is merely one way of producing general economic optimality.

Financial deregulation

Let us move now from theory to practice and its history. Institutionally, and in terms of its dominant economic and financial conventions, therefore, the American economy between the 1950s and the 1970s was a managerial economy, in which the power of stockholders and of financial institutions exercised only limited power over corporate decision-making. This was no obstacle to the growth of economic variables or to that of the stock market. The state regulation of banks and financial institutions that was a result of the New Deal contributed considerably to this growth.⁹ The regulated banking system was the main provider of credit to firms; it did not indulge in excessive speculation, and had little control over corporate management. Things began to change during the 1970s, with the rise in inflation (triggered initially by the Vietnam war, the disappearance of the Bretton Woods monetary system in 1971 and the first oil shock). The interest paid to depositors (savers of all kinds) fell abruptly to a level well below the inflation rate. This situation led to financial innovations and to considerable pressure for them to be institutionalised. The result was a first form of deregulation, namely the recognition of new investment and deposit instruments (interest-bearing accounts, mutual funds) that produced higher rates of return, because they were based on stock market investments, but provided fewer guarantees. At the same time, a second form of deregulation, linked to the first one, was to become widespread. This was the process known as 'disintermediation', in which depositors (mainly firms) withdrew their savings from banks in order to invest them, without the mediation of the banks or other controlled institutions, in instruments promising a higher rate of return (mutual funds, commercial papers, risk capital, mortgage market, etc.).

With the support of the regulators, some large firms (Sears and Roebuck, for example) started to set up subsidiaries offering banking services and loans, as well as brokerage and insurance services. Despite the fact that they did not enjoy the same public guarantees as the real banks and were not subject to imposed risk coverage ratios, they gained market shares. In a few years the profits made by Ford's financial services exceeded those of its car manufacturing activities. The retail banks, which were not allowed to trade in securities, were excluded from these innovations, which the new 'deregulation' (in reality a new mode of regulation) reserved for other, institutionally more favoured organisations.

The final assault on the old American banking regime came from financial globalisation, which gave financial institutions with foreign subsidiaries an opportunity to exploit differences in national regulations and, with the agreement of the new regulators, to offer their customers transactions permitted in

London, Tokyo or Zurich but prohibited at the time in New York. The original example is that of Eurodollars. A Eurodollar is created when its owner decides to deposit it in a bank located outside the United States or in a European subsidiary of an American bank. This practice was already in existence in the interwar period, but it really began to explode from the second half of the 1960s onwards and led eventually to the collapse in 1971 of the fixed exchange rate system (the Bretton Woods system). At this point, American multinationals and banks began to make massive use of such transactions, which were more lucrative because of the considerably stricter regulations in place at the time in United States territory (prohibition of payment of interest on demand deposits, as well as various other constraints). During the 1970s, and until 1982, petrodollars filled the vacuum left by the collapse of the Bretton Woods system: in order to finance the non-oil producing Third World countries that were then the main borrowers, the international banking system, and particularly the American banks, recycled the petrodollars accumulated by the OPEC countries. The over-indebtedness of the developing countries dates from this period.

The result of these new rules was an explosion in speculative investment (lending to Third World countries, property lending, etc.) on terms that the bankers and regulators of the previous generation would never have accepted. They led the banking lobby to appeal to Congress for a new round of deregulation or re-regulation that would allow them to take part in this new trade in high-yield, high-risk investments. The Reagan administration wasted little time in reacting to the bankers' pleas and in 1982 introduced the Garn-St Germain Act, a sort of official authorisation for generalised financial speculation. It has to be said that this same administration was faced with the problem of funding its own enormous budget deficit, which it sought to resolve by recourse to this type of market. The massive liberalisation of capital movements saw the abolition of taxes, exchange controls, compulsory reserves and prior authorisation for the launch of new financial products.¹¹ Most of the other industrialised countries gradually followed the American example. In France, the main measures abolishing exchange controls were introduced in 1985 and 1986. However, this deregulation, which triggered an exceptional expansion of financial transactions, increased the risks (fluctuating exchange rates, interest rates, stock prices, etc.) and

gave rise in turn to a need for new instruments to insure against these risks. This triggered an unprecedented expansion of the trade in derivatives, which do not even appear on the balance sheets of the financial institutions and increase the overall level of risk hanging over the system.¹²

The first major catastrophes occurred in the late 1980s and early 1990s (the crash of 1987, the mini-crash of 1989, virtual stagnation in 1993 and 1994, and then the explosion of stock prices from early 1995 onwards) when, first, the loans almost recklessly granted to Latin American countries proved impossible to repay and, second, the property market collapsed. The Latin American borrowers paid a heavy price, suffering a decade of recession. However, the American economy was itself to suffer lasting consequences, since the Federal Reserve maintained excessively high interest rates in order to preserve the banks' precarious financial equilibrium. This did not halt the pursuit of deregulation, which was accompanied by a massive upsurge in junk bonds (high-yield, high-risk securities, usually issued to finance a takeover), derivatives and leveraged buyouts.

The new financial governance

The theory of the market for corporate control could then be applied. It had already begun to make itself felt and influence the deregulation of the financial system. It was to benefit, in return, from that deregulation.¹³ Until the 1970s, hostile takeovers had been practically non-existent in the United States. The mode of regulation scarcely lent itself to such manoeuvres, nor did the conventions that then predominated. The banks, the main providers of credit, would never have lent a company the sums required to purchase another company against its will. Such takeovers were not illegal, but they did not conform to the customs of the day. In order to gain control of another company, it was necessary either to purchase a sufficient number of shares or to negotiate a friendly merger. The institutional investors themselves (pension funds, mutual funds, life insurance companies) adhered to the so-called Wall Street Rule, according to which they abstained from intervening in the management of any companies which, in their view, were being badly run. They contented themselves with selling their holdings.

These rules changed radically during the 1980s, as new financial instruments (including junk bonds) became available and, particularly, as the regulatory framework became more favourable. This is just one more illustration of how so-called 'deregulation' is in fact always accompanied by the formulation of new public rules, particularly fiscal rules. Deregulation is the result of action taken by the State, which is itself influenced by the various business lobbies. In the present case, the 1981 Economic Recovery Tax Act (ERTA) gave 'raiders' seeking to take control of companies tax advantages that had not previously existed and, more generally, helped to improve companies' balance sheets and to stimulate the stock exchange. Takeover bids, 'raids' and leveraged buyouts then became the concrete manifestations of the theory of the

market for corporate governance. These financial manoeuvrings were supported by new tools of management control: an obsessive preoccupation with the quarterly bottom line, more direct interventions by outside financial auditors and accountants, and the introduction of financial profitability indicators at both general level and that of individual activities. More recently, during the 1990s, various indicators, all based on the vague but rousing notion of 'shareholder value', have been brought into play by the major consultancy firms in the English-speaking world. Some of them are stock market ratios, such as earnings per share (EPS) and the price-earnings ratio (PER), which is the relationship of the preceding ratio to share price. Others are so-called profitability ratios, whether economic (ROA, or return on assets) or financial (ROE, return on equity). The one most in vogue at the end of the 1990s was EVA (economic value added), which was popular because of its alleged capacity more effectively to isolate the contribution of the various levels of the firm to the creation of 'shareholder value' (although there is something of a gap between the discourse of the consultants seeking to sell it and its real effectiveness in guiding management actions).

Studies of the performances of companies acquired in this 'market for control' have tended to produce disappointing results. Most of them show, first, that the acquisition of companies by 'raiders' does not improve the management of those companies, except perhaps in one respect: 'the reduction of the earnings of the oldest employers . . . which is not an efficiency gain but simply a transfer of earnings and wealth from workers to the new owners'.¹⁴ Thus we can say that the work of managers and employees has been subjected to the discipline of the financial markets in order to change the distribution but not the level of value added. Second, these studies show that it is often the accompanying tax advantages that make the difference.¹⁵ Third, they show that these acquisitions give rise to enormous 'transaction costs' in order to pay the large numbers of people involved: auditors, lawyers, financial intermediaries, etc. Moreover, the managers of some companies likely to be targets for hostile takeover bids have started to turn the same weapons to their own advantage, purchasing control of their companies under the same dubious conditions. The new governance regime 'has reinforced a major defect of American capitalism, namely its short-termism'.

The pension funds: the principal architects of the new governance

Let us return to the pension funds, since they now operate at the junction between the new rules governing a major segment of the financial markets (see Box 7.1) and the new modes of corporate governance. They are not the

chief culprits as regards speculation, although they do contribute to the instability of the system. For example, an IMF study has shown that ‘institutional investors were the major players in the waves of speculation’ that triggered the monetary crisis of September 1993 and led to the virtual breakup of the EMS. Similarly, the head of the IMF, M. Camdessus, commenting on the financial crisis that shook Mexico in 1994–5 in the wake of a massive withdrawal by the American pension funds, stated that ‘their reaction is always to go with the herd, and is sometimes brutally excessive’.¹⁶ However, stock market speculation is not the main way in which the pension funds exert their influence over the new rules. Their aim, rather, is to shift the distribution of value added as far as possible towards profits by intervening directly in corporate management: ‘The pension funds are on the way to becoming the new controllers of capital’ . . . and ‘with just two or three per cent of the capital, they are able to exert a decisive influence over company management’.¹⁷ In most cases, they are minority shareholders ‘whose power cannot really be compared with any earlier form of capitalist power. They follow every decision and every event in the life of the company on a daily basis and do not hesitate to contact managers directly in order to denounce the weaknesses and deficiencies they believe they have discovered’:¹⁸ the financial director of Saint-Gobain has stated that he holds more than 200 meetings per year with investors.¹⁹ Their power comes from a combination of financial muscle and notoriety. ‘They provide a guarantee of trustworthiness that is almost comparable to that of the old majority shareholders . . . a certificate of good conduct for managers.’²⁰

Box 7.1 Financial and equity markets

The transformation of financial markets began in earnest in the early 1980s; the real turning point was 1982, the year when Mexico stopped repaying its debts, followed by Argentina and Brazil, and when the hardening of central banks’ monetary policies and deflation made financial assets increasingly attractive in their own right, since it had now become more profitable to hold such assets than to invest them in order to create wealth.

Financial markets are of three kinds: the equities market, the bond market and the currency or foreign exchange market. It was the first, the equities market, that was to play the leading role. We will not discuss the other two here, despite their importance and the links that exist between these three major markets.

The equities market, in turn, can be divided into three segments on the basis of the principal financial products traded in them and the institutions supplying the products. The first is the pension funds which, by their very nature, seek long-term yields from a highly diversified share portfolio. They monitor the companies whose stocks they hold very closely, even if they own only a small percentage of the total capital, which is usually the case. The second is the so-called hedge funds, which are the most speculative and risky; they seek out the short-term capital gains that under-quoted companies might produce. Finally, there are the mutual funds. These 'are the institutions that are really responsible for the extravagant rises that have occurred in various centres over the past fifteen years' (J.L. Gréau, *Le capitalisme malade de sa finance*, p. 19) because of their activities as 'revaluers', buying bullishly in order to keep the value of the shares they already hold constantly on the up, rather than jumping speculatively from one stock to another as they would if they were operating on the basis of a competitive principle requiring permanent stock arbitrage.

However, the reasons why large companies and their former majority shareholders accept, sometimes unwillingly but sometimes also deliberately, this intrusion and this finicky monitoring of their activities, are not to be found solely in the arguments outlined above. Why, asks Thomas Coutrot,²¹ does 'Edouard Michelin, who scarcely needs to do so, have his company's stocks quoted on Wall Street and include the American pension funds among his shareholders?' There are two main reasons. First, like many others, he wants to be recognised by the financial markets in order to enhance his ability 'to be a major league player, to launch raids and takeover bids and make acquisitions costing billions of dollars', in an economy that is allegedly liberal but which, in most sectors, is an international oligopoly. The second reason is less frequently alluded to and is linked to corporate efforts to use the financial markets as a source of disciplinary tools:

The shareholder alibi is an ideal way of sloughing off all social responsibilities and forcing the workforce to accept permanent restructurings. One might well wonder whether François Michelin is not giving the game away when he states: the day I receive a letter from a foreign pension fund that holds Michelin shares requesting me to stop investing in France because tax levels are too high and the 35-hour week is intolerable, what will I do?²²

Jean-Luc Gréau confirms this diagnosis in his own way:

The funds' initial efforts were directed towards reducing employment and the wage bill to the absolute minimum compatible with the maintenance of efficient production. Do those workers who subscribe to the funds realise that they are indirectly operating the guillotine that will cut their own jobs or those of their fellow workers?²³

From liberalised financial markets to the 'neo-liberal firm'

The myth of free financial markets with the flexibility and mobility required to promote the most efficient investments is mirrored in the myth of the firm that is rationally managed in order to produce this maximum efficiency. And the reality of the financial markets, which is that a small minority of financial institutions lay down the law on the basis solely of short, medium, or long-term profitability criteria, certainly seems to reflect the reality of the 'neo-liberal firm', which Thomas Coutrot has analysed so skilfully and in terms that are perfectly suited to our approach, both as a 'new capitalist utopia' and a set of management practices inspired by that doctrine, albeit not without contradictions.

The utopian nature of this firm lies in the following principles: (1) the firm's survival and expansion depend on acceptance of the financial markets' rules, namely the highest possible level of profitability as judged by international standards; (2) to this end, the firm must rid itself of all activities that do not meet shareholders' expectations and subcontract at reduced cost everything that can be outsourced; (3) however, in order to retain or increase market shares, the firm must be able to mobilise employees' initiative and creativity around objectives such as productivity, quality, deadlines and customer satisfaction.

Now it is not easy in reality to manage the tension between the first two imperatives and the third. Efforts to do so have led to the emergence of two types of practices: on the one hand, subcontracting (denoted by the term network organisation, which conceals its true hierarchical nature), which shifts this tension on to others in a subordinate, less privileged position, and, on the other, the setting of financial targets (cost centres, profit centres, target centres, internal tendering) and technical targets (productivity, quality), which employees are supposed to attain with a greater degree of operational autonomy than they used to enjoy in the Fordist era.

Up to a point, it works, particularly since the human and social cost of these management practices does not appear on any balance sheet and because unemployment and weakened trade unions reduce both the 'exit' and 'voice'

options. At the same time, new instruments for inculcating these performance norms have been put in place through individual and collective training, the dissemination of a corporate culture that emphasises the imperatives of the economic war and, increasingly, by bringing into play 1) the customer and his demands, (2) quality norms of the ISO 9000 type as new disciplinary mechanisms and (3) the new information technologies as tools for displaying and monitoring targets. 'Controlled autonomy', individual and collective self-exploitation, the acceptance of crazy working hours (in the course of our surveys we have met department heads in supermarkets paid around 1,200 dollars per month and regularly working 60 to 70 hours per week, which means their hourly rate is below the national minimum wage in France), the marked increase in average annual working hours in the USA and the corresponding decline in leisure time²⁴ have been the object of innumerable studies by economists, sociologists and industrial psychologists. In 1990, an American employee worked on average 163 hours per year more than in 1970, the equivalent of about an additional month's work per year. True, working time per job held has tended to decline, but many more people now have more than one job. As some employees say: 'A large number of new jobs has been created. I should know, I've got three of them.'²⁵ Business flows and individuals are under strain. Society as a whole is under strain. The pathologies associated with this controlled autonomy, with the freedom granted to individuals to exploit themselves (which is reminiscent of that accorded small-scale producers in the pre-industrial 'putting-out system') develop like blisters that might burst or simply swell GDP by increasing expenditure on health care and medicines. This is the reality behind the myth that has employees transformed into dynamic, functionally flexible and autonomous entrepreneurs, able and willing to serve their customers inside and outside the 'network firm', efficiently supported in their efforts by ICTs, which in this context should be renamed intensification and control technologies.

These observations lead us to formulate two further precautionary principles in favour of controlled economic and social development. The first is targeted at the financial markets, while the second has in its sights the 'shareholder' mode of corporate governance (in which the major players are actually the institutions that represent shareholders' interests, or claim to do so). However, the reasons for exercising such caution, and the regulatory principles to which they give rise, are in fact quite different.

Another precautionary principle, regarding the financial markets

What is the main risk associated with the deregulation of most of today's financial markets, which is often encouraged in fact by favourable fiscal measures, in other words by a propitious mode of regulation? It is the risk of short-termism and chronic instability, or 'systemic risk'. In the mythology of the new economy, the deregulation and decoupling of these markets are supposed to reduce the cost of finance (thereby stimulating growth) and lead to a more efficient 'allocation' of capital between countries and sectors. In reality, this liberalisation has given rise to, or aggravated, the over-indebtedness of developing countries and constrained their growth. It has directed capital not towards investment projects but towards purely financial holdings, reflecting the increasing decoupling of financial activities from the production of goods and services. It has led to incessant movements of capital between financial centres that follow a logic entirely of their own, and aggravated speculative 'bubbles', some of which have nothing at all to do with the economic health of the countries in question. This was the case, for example, with the stock market 'euphoria' that became apparent in financial centres in 1993. Market prices rose by 45 per cent in Germany and by 22 per cent in France in 1993, at the very time that both countries were going through their worst recession since the end of the Second World War.²⁶ This instability costs firms dear, since they have to hedge as a matter of course in both the forward and derivatives markets. These markets, in turn, become sources of risk.²⁷ Economic policies lose their autonomy and effectiveness. 'Contrary to what the free-market credo asserts, the international financial system is inherently unstable. It cannot regulate itself. This is why a supranational public regulatory apparatus is required in order to make stabilisation policies effective again.'²⁸

So what are the solutions being put forward by those who, without calling into question economic and financial globalisation, consider that the international financial system poses serious risks to national economies, in both the North and the South?

A report by the Twentieth Century Fund²⁹ published in 1992 under the title *Who's Minding the Store? Market Speculation and Corporate Governance* offers a very critical analysis of the new emphasis on finance and speculation in American capitalism. In particular, the authors of the report recommend a change in the capital gains tax regime in order to discourage short-term speculative investments. The so-called Tobin Tax is a proposal of a similar nature at international level, while Senator Nancy Kasschaum put forward a draft bill (which, unsurprisingly, was not adopted) that sought to tax pension funds' short-term speculative gains at a rate of 5 or 10 per cent.³⁰

Most of those who advocate stricter regulation of financial markets are not anti-capitalist. On the contrary: their aim is to save capitalism by underpinning and stabilising its foundations, which in their view means limiting the power of the financial world. This is obviously the case with George Soros, himself a financier and speculator and author of *The Crisis of Global Capitalism*, a plea against 'market fundamentalism', and with Jean-Luc Gréau, author of the remarkable essay *Le capitalisme malade de sa finance*.³¹ All these analysts even agreed that, in the alleged 'return to power by shareholders' (the mythical version of the new economy's mode of corporate governance), shareholders always get the blame: they have scarcely any more power (shifting from myth to observable reality) than at the time of Galbraith's 'technostructure'. In fact, power has shifted to another 'structure', one that is more concentrated than the old industrial 'technostructure', namely the upper reaches of financial capitalism. It is here that the shareholders who control the large corporations are located: the investment institutions and funds, the pension funds, the large brokerage and financial auditing companies and a few tax havens. We are a long way from the argument, advanced by Manuel Castells, of a capitalism without identifiable capitalists or of a 'faceless collective capitalist, made up of financial flows operated by electronic networks'.³² On the contrary: there are many actors and 'manipulators of symbols' at the entrances and exits of these networks. What is true, however, is that the overall result of their manoeuvrings eludes both their own control (the spectacular stock market successes of George Soros were followed shortly afterwards by an even more spectacular debacle) and that of citizens and of States.

In order to put an end to 'market fundamentalism' and the 'instability of international finance', George Soros, for his part, recommends that world financial centres should be regulated, with a real supervisory and control authority being set up as part of the IMF. This authority would have the power to guarantee international loans, particularly those to developing countries, within fixed limits, and would rely on licensed banks that would be 'as strictly regulated as the banks in the United States were after the collapse of the banking system in 1993'. Michel Aglietta, for his part, believes that the central bankers' 'club' could (but under what pressures and with what democratic control?)

put in place an early warning arrangement with shared information and analytical systems. Such systems could provide information on the interdependencies between financial markets, identify the financial institutions that play crucial roles in determining market quality and monitor the capital flows and asset price fluctuations that might be symptoms of destabilising speculation.³³

On this issue as on many others, the UNDP's 1999 world report on human development puts forward some of the most soundly based proposals for 'reducing the threats of financial volatility and the disruptions it causes, as well as the human costs'. These proposals, which are based on observation of the difficulties being experienced by developing countries but are much broader in scope, are seven in number: more cautious liberalisation of the capital account (so that countries can have greater control over the pace and phasing of their development); greater transparency in the financial institutions of developing countries; better integration of macroeconomic policy and social policy; a strengthening of the international regulatory and supervisory apparatus for banking (particularly in the area of short-term bank loans and speculative fund activity); a freeze on debt service in respect of the IMF, the World Bank and the regional development banks; more effective early warning and crisis management institutions, and in particular the establishment of a genuine lender of last resort, for example in the form of a world central bank; and finally, the creation of an international lending organisation of last resort for individuals and populations that suffer losses and risks arising out of financial crises.

We do not claim to be contributing to such debates here, except to emphasise that a systemic precautionary principle in respect of new international rules, taxation and international institutions should be put on the policy agenda of major international meetings by those who take the view that financial markets are too important to be left to financiers and speculators, whose expectations are partially decoupled from non-financial productive activities. This precautionary principle would amount in essence to regarding money, or more precisely monetary stability, as a global public good, or a 'common higher interest' within an international monetary 'constitution', to use Michel Aglietta's words.³⁴

A precautionary principle and innovations in respect of governance

One final precautionary principle relates to the particular linkage between pension funds and the new mode of corporate governance. We have already seen that the formers' role in imposing purely financial management norms gives rise to a number of negative 'externalities'. The question this raises is a formidable one, since it concerns nothing less than the exercise of decision-making powers at the highest levels of capitalist enterprises and the possible involvement of actors other than the 'controlling shareholders' in deciding the broad direction of corporate policy. There is no space here to do anything more than allude to some of the solutions currently being put forward.

In the United States and Great Britain, the notion of stakeholder³⁵ or partnership capitalism has been debated as a basis for proposals that draw their inspiration in certain respects from the German and Scandinavian institutions of co-determination and works councils. Stakeholders, as opposed to shareholders, are all those who have an interest, whether monetary or otherwise, in a company's development; the criteria for such interest may vary depending on the groups concerned. The idea is a seductive one. For the moment at least, the proposals are less so. First, the range of actors invited to get involved as partners is somewhat narrow. It includes suppliers, subcontractors and employees, but seldom customers (but which ones and how?) and hardly ever citizens or their representatives. Second, stakeholders' powers are limited to consultation rather than joint decision-making. Third, and perhaps above all, there is little chance of such a mode of governance becoming established if markets themselves are not organised in such a way as to encourage it, which would require the creation of pluralist regulatory bodies making use of all possible tools to achieve that end: regulatory constraints (for example, the obligation to negotiate on certain decisions), contracts, taxation, incentives, etc. In the United States, in addition to the notion of stakeholder capitalism, currently a very modest proposition but one possibly capable of real development in future, more radical but also more speculative proposals have been advanced. They revolve around the notion of 'market socialism', an approach that advocates a major devolution of ownership rights.

Other hypotheses have been advanced.³⁶ In order for there to be some diversity in the governance criteria the pension funds impose, which would allow them to take account of long-term development issues and the legitimate interests of employees, one solution would be for employees themselves to play a part in defining the performance criteria for these funds by establishing themselves as private shareholders, whether as a group or through their trade unions. Such participation might take various forms, which the State could promote. It is not one of this book's objectives to assess the strengths and weaknesses of these proposals. The debate is still going on. It might even lead eventually to the establishment of national savings funds for wage earners managed by the trade unions. An initiative of this kind in Sweden was wrecked by vociferous opposition from the employers. In France, most trade unions are hostile to the idea of becoming shareholders in institutions whose principal function is to invest in the stock market and exert financial control.

Finally, we might profitably hark back to a long established and too often neglected form of governance that seems to be experiencing something of a revival today. This is the cooperative or mutual sector (the so-called 'third sector'), most of which operates in the market sector. Its basic organisations are not capitalist in nature. They are not necessarily democratic or

participatory either, but they are not subject to the dictates of the financial markets. Provided that quality criteria are put in place and its social contribution is properly evaluated, this form of governance could be fostered if appropriate regulations were put in place. Such regulations would recognise its ability to gain acceptance for performance criteria that are not strictly financial and for more participatory forms of management. 'Social enterprises' certainly exist; they have explicit social objectives, producing both individual and collective goods and services, display entrepreneurial dynamism and offer genuine participation for numerous different stakeholders.³⁷ Legislation introduced in Belgium in 1995 provides a framework for the establishment of 'companies with a social purpose' that 'are not dedicated to the acquisition of wealth for their members' and, in Austria, of 'limited liability companies with a social utility'; similar legislation is also in force in Italy (1991), Spain (1999) and Portugal (1998). These measures to encourage social entrepreneurship have gone hand in hand with national or regional support policies that can be described as regulation based on partnership.

In sum, by combining a genuinely participatory or 'mixed' form of governance for firms in the capitalist sector, a mode of regulation and governance for public services that guarantees the maintenance or extension of their contributions to social cohesion and public support for the development of a third or social sector, we have developed a pluralistic model of governance and regulation that is clearly incompatible with the current realities of the free-market economy. To that extent it is somewhat idealistic, but in a good society it might well work to the advantage of very diverse groups of stakeholders.

Conclusion

The new economy is a technicist, neo-liberal mythology. It highlights in a very selective way certain characteristics of the American economy, stressing to a greater degree than did the neo-liberal ideology of the 1980s and early 1990s the idealised role of the new information technologies as instruments of strong economic growth, with no inflation other than that in the value of financial assets. It is a vehicle for the dissemination of systems of thought, management and economic calculation that are presented as a new 'one best way'. It is a highly effective, solidly entrenched mythology propagated through institutional intermediaries, both public and private. And like most myths, there is a modicum of truth in it.

However, there are other models and other visions that also have much to commend them. There are other models of organisational flexibility (observable, and complete with rational management tools) than the dualistic system of labour flexibility, other models of the service society (with different rules and institutions) than the dualistic American model, other ways of producing, using and diffusing television, films and electronic data than the AOL-Time Warner model and other modes of corporate governance than those that give all power to a minority of shareholders. The market, however regulated, is not the rational future for all human transactions, and economic growth (allegedly) fuelled by ICTs is not a properly evaluated vision of social development. Thus the economist Frank Knight, quoted by Polanyi,¹ wrote that 'no specifically human motive is economic'. And yet, the invasion of the laws of the market could, if it goes unchecked, end up by proving Knight wrong, since it will gradually reduce the motives for human action to economic and financial considerations that will have become ends in themselves.² For people change when they become immersed in cognitive systems that privilege economic and financial calculation, when stock options or pension funds mean that their incomes start to become dependent on the stock market and no longer solely on more stable sets of rules governing pay and distribution based

on a shared concept of distributive justice. They change when their company requires them, in the name of the economic war, to treat their subordinates or customers of modest means more harshly. Sometimes, as Christophe Dejours shows,³ they may end up by regarding the suffering they cause others as commonplace or even – in the name of the economic realism required by the laws of this ‘necessary’ war – as indispensable. Of course, this does not prevent them from being ruled by fear as well. When they are doctors in America’s ‘new economy’, they become the vassals of the insurance companies, under pressure from them to limit or refuse certain treatments;⁴ when they are teachers in Brooklyn and their pupils’ examination pass rates determine the performance-based elements of their pay, their career prospects or the funds allocated to their school, they end up teaching their pupils one of the fundamental skills of the hyper-competitive new economy, namely the art of cheating.⁵

There is no doubt that the economy of the new millennium has certain new elements in it, particularly as regards the diffusion of information technologies in productive organisations and in the private sphere. However, it does not have to take the form of the technicist, dualistic, segmented ‘new economy’, the destroyer of social cohesion and public goods whose markets encroach on social life and collective values, invoking consumers’ needs when in reality it is the controlling shareholders that are calling the shots.

Various counter-models can be identified: evaluated social development rather than maximum economic growth; information technologies placed at the service of human development rather than guided by the financial markets and used to strengthen control of behaviour, whether at work or in the private sphere; a solidaristic and humanistic service society rather than a dualistic and technicist one; organisational flexibility and labour mobility based on durable occupational statuses rather than dualistic and exclusionary forms of flexibility; socially controlled markets with limited pretensions to hegemony rather than deregulated markets. All these counter-models share an ethical and political preference for solidarity in its two meanings: the solidity or strength that comes from social cohesion and a more integrated society (based on an affirmation of rights and obligations underwritten by the State) and interpersonal solidarity or ties of reciprocity consciously entered into within autonomous public spaces (as Habermas would put it).

In order to combat the major social risk of our times, namely that of dualism and social fragmentation, both within the countries of the North and between the North and South, a risk we are being dragged towards by the new economy and on which it feeds, we need both to put forward precautionary principles (linked to measures to oppose the risk) and to promote realistic counter-models that are both economically efficient and socially sustainable. The social forces that might contribute to these efforts are at the moment less powerful

and less well organised than those that trumpet the merits of the new growth. Even the latter are encountering difficulties, however, particularly in societies that have not yet achieved the 'desirable' level of inequality and selfishness.

Intellectuals and researchers in the social sciences can help to develop counter-models in at least three ways. First, they can develop soundly based critiques of the misleading evidence and myths surrounding the new economy, the new technologies and the sole permissible variant of the 'market economy' and analyse the way in which they are diffused or imposed. On the face of it, this should be fertile territory for many social science researchers, if it is accepted that critiquing preconceived notions is part of their stock in trade. This is not always the case, particularly for many economists and management specialists.

Second, academics could play a role in the theoretical and empirical construction of credible alternatives. In so doing, they could draw on existing experiments at both national and local level in order to demonstrate that, if the rules of the game were changed, these socially preferable models, regarded with some contempt today, could become more widespread. We have provided a few examples in this essay. There is less need for a theoretical model of the great social upheaval than for better scientific knowledge of the scale of what is happening now as individuals, groups and organisation battle against the current of financial neo-liberalism and the fratricidal wars which, in many cases, are financed for economic reasons.

The third area, even more neglected, in which academics might make a contribution is in the definition of new tools for economic and social management, organisational management, market regulation and evaluation of economic and social performance. Indeed, there are close links between, on the one hand, private economic policies and strategies and, on the other hand, the cognitive frameworks within which they are formulated (tools for calculation and evaluation, methods of performance measurement, the principal indicators used to guide decision-making). If priority is to be given, for example, to objectives that promote individual and collective well-being, quality of life, quality of social relations, quality of work, social cohesion and sustainable development, the balance of political power will certainly have to tilt in that direction, which is scarcely the case today. However, it is also necessary to have available indicators, tools and methods for measuring and evaluating the progress made and the resources to be deployed to that end. Such indicators, economists, statisticians and managers will say, are doomed to be imprecise, to be based on questionable conventions, on 'subjective' values. Of course. However, these same economists seem to forget that the indicators they currently use are no less fragile, conventional and questionable, as the American debate triggered by the extremely official 'Boskin report' shows.⁶ Although it

remains cautiously within the existing conventional framework, the Boskin report estimated that the growth of the American economy had been underestimated by at least 1.1 per cent per year during the last two decades, because of the inadequacy of the conventions used to measure inflation!

Thus there should be every encouragement for a social, political and academic debate, which could draw on the findings of existing studies, some carried out a long time ago, of social indicators or indicators of human development and sustainable development. This debate should also consider how these indicators might be incorporated into management tools for firms, associations and government departments and instruments for regulating production and markets. It would contribute to the development of different cognitive frameworks for public and private decisions and to the definition of rules for a 'new' economy that placed social development at the heart of its objectives. It is unlikely that, in such frameworks, expenditure on education, health, culture, social welfare or on general public and community services would continue to be considered essentially as costs to be contained, even though it remains essential to evaluate the validity and effectiveness of such expenditure. 'Compulsory deductions', which have negative connotations in the current intellectual framework in which, according to Jacques Attali, 'to increase expenditure on health and education is to reduce the profitability of capital',⁷ would be seen rather as preferred means of producing human and social wealth, environmental quality, competences and well-being and laying the foundations for a different future from the one the 'new economy' is currently dragging us towards in the wake of financial neo-liberalism.

Clearly, such a shift would call into question the work of economists and specialists in management sciences, casting serious doubt on their concepts and methods and on the parts they play in public debate. Galbraith was certain this was so:

A serious, as distinct from a purely oral, concern for larger social goals would have an increasingly disturbing effect on economics as it is professionally practised. Some adverse reaction can even now be detected. The espousal of non-economic goals has an aspect of menace from which the professionally sensitive automatically recoil. They dismiss such extra-economic concerns as 'soft', which is to say that they are professionally sub-standard. Yet professional convenience and vested interest are not the safest guides in social thought.⁸

This point of view is now more topical than ever. It is not in any way a condemnation of the economics and management sciences professions. On the contrary, it holds out the prospect of a new future in which there would be no

less of a need for economic categories and management tools but in which the social and scientific construction of such categories and tools would be based on more open cooperation with actors currently relegated to the background or even wholly excluded, chief among them being people and intellectuals from developing countries.

Is it merely idealistic to call for such a shift, with little hope of enforcing it? This is far from being the case, as can readily be proved. If the sole purpose of this essay were to recommend further reading, we would have absolutely no hesitation in choosing the UNDP's annual world reports on human development, particularly the most recent editions. It provides as good an example as any of this other way of doing economics, placing the discipline at the service of human and social development and taking account of people's needs in such a way as to produce scientifically and politically relevant analyses and indicators. The reports open a window on the activities of a large international organisation as it mobilises the collective intelligence of economists and development specialists from various countries in both the North and South in order to discover not how each country might encourage 'investor confidence' on its own patch by destroying its public goods and its own forms of solidarity through the perverse and ultimately destructive workings of competition but rather how other rules might put the economy, the market and technology in their place as socially controlled tools deployed in the interests of an 'economy of happiness'.⁹

Postface

What is left of the 'new economy'?

The first edition of this book was published in France in the late summer of the year 2000. The manuscript had been submitted to the publishers in March 2000, a few weeks before the first NASDAQ 'mini-crash'. This was a period of heady optimism, fuelled by stock indexes that were soaring dizzily and, so it seemed, unstoppably. There were just a few of us, lonely, isolated voices, who were maintaining that what we were actually living through was a double 'bubble' of intellectual as well as stock market speculation. However, we were accused of being 'killjoys', unable to understand that new economic rules were emerging and that new, ever freer markets were going to conquer the planet. A new industrial, or post-industrial revolution was under way – a digital revolution based on the Internet. The traditional actors of the old economy were going to suffer, while the newcomers, the 'start-ups', represented the creative avant-garde of this revolution that was ushering in the network economy and society. The stock exchanges were merely doing their job, namely selecting in advance the species with the greatest potential in the rush to create value.

It was against the backdrop of this continuing media frenzy that the first debates in which I participated in the weeks following the book's publication, in the autumn of 2000, took place. Fuel was being added to the fire by certain economic interest groups that had embarked on an all-out marketing campaign in support of activities and services in which they had invested heavily. The downturn in stock indexes was beginning to worry investors and the first spectacular failures of start-up companies that had previously been praised to the skies had occurred during the spring and summer of the year 2000. The explanation being offered was that these failures had to put into perspective and were probably best seen as a 'correction'. In their great wisdom, the stock markets were punishing the most reckless, but the basic trend of the new economy was still very much in evidence.

As I write this postface, in the spring of 2001, the caution and scepticism I evinced in my book have become common currency. The discourse of the new

economy has lost its shine. The shares of dot.com companies have now returned more or less to the level they were at in early 1998, before the bubble. 'Normal' capitalism has always had its start-ups, its failures, its closures: this is the very essence of what Schumpeter called its 'creative destruction'. What is less normal is the destructive creation that resulted from the collective high-tech, free-market madness surrounding that splendid tool, the Internet. The madness may have been collective, but it was orchestrated by actors who bear a heavy burden of responsibility for this bout of fever and the ensuing and very dramatic nose dive. This perfectly illustrates the inherent instability of the new stock-exchange capitalism that began to emerge in the English-speaking world in the later 1980s, and which gained a foothold in Continental Europe in the second half of the 1990s. The Internet and its enthusiasts, of whom I am one, have nothing to do with it.

Is there nothing left of these two or three years of media-driven boom and bust? Was it all merely an intellectual fad that has had its day and will soon give way to the next one, such as biotechnologies and the genetic revolution? This is not my view, whether we look at the facts or the ideas. The facts do not support the view that the 'net economy' (this term, less ideologically charged than the 'new economy', denotes the activities and professions that use the Internet as a key technological tool in order to produce services of all kinds) is the new post-industrial revolution of the decades to come. It is, rather, a splendid wave of innovations. These innovations are going to produce a multiplicity of effects, in terms of markets, work organisation, communication and support for network-based projects, both in the commercial and public spheres and in private, associative and political life. We are dealing, therefore, with a very open-ended set of issues, which are more social than technological in nature.

As far as ideas are concerned, the intellectual speculation and mythic discourses surrounding very real technologies will not fade away with the bursting of the stock market bubble. The fight goes on to put into context, using well-founded arguments, the new technological religions that capitalism periodically tries to put forward as myths which, it hopes, will inspire brilliant minds and creative spirits to rally to its cause. And the governments of the day will not be the last to take refuge in the 'information and communication society' in order to conceal their inability to place the major social questions, such as those related to social Europe, for example, at the top of their agendas and decision-making. At the European summit held in Lisbon in March 2000, the Portuguese presidency bravely put forward convergence criteria for unemployment and poverty rates. Their proposal was brushed aside. Other convergence strategies prevailed instead, those relating to Internet connection rates, for example, or the facilitation of electronic commerce and finance.

In the rest of this postface, I have gathered together in the form of a reconstituted interview some of the questions put to me between autumn 2000 and April 2001 during interviews or public debates. These questions, together with my answers, supplement and update some of the arguments put forward in my book.

Interview

Q: How can the discourse of the new economy said to be mythic when it is clear that both digital and Internet technologies and the norms and practices of Anglo-Saxon capitalism are spreading rapidly? Is this discourse not based on very real phenomena?

A: All myths reflect real phenomena in their own way. It is the presence of certain ideological processes displaying reality in a distorted, idealised way that justifies their characterisation as myths. In the present case, but probably more widely as well, there are three ideological processes at work: omission (of anything that might run counter to the myth), exaggeration (of elements likely to reinforce the myth) and universalisation (the myth is a single, ineluctable, universal norm).

Omission denotes the following process. Of all the phenomena observed, it is those trends and facts that validate the myth – the success stories, the sunny aspects of the story being told – that are selected, while its darker sides are expunged. In the case of the new economy myth, this process of omission applies in particular to the socially worrying aspects of the new model of capitalism, which are especially evident in the United States. Although the USA is a beacon of the new economy, it also holds some of the developed world's less enviable records, such as those for social inequality and poverty, urban segregation, violence and crime, rate of imprisonment, and so on.

The exaggeration of trends likely to reinforce the myth finds expression in the present case in the positive, indeed magical impact of new technologies on economic progress, on employment and on skills. Let us begin with the question of employment. We were told that the widespread diffusion of the new technologies was going to make it possible to create large numbers of skilled jobs. This is largely untrue. In the American employment projections published by the BLS (Bureau of Labor Statistics, 2000), of the thirty occupations that look set to create the most jobs between now and the year 2008, only four have anything to do with the new technologies and they account for only 13 per cent of the jobs these thirty occupations are expected to create. Conversely, sixteen of these thirty occupations are considered to require no skills other than those acquired 'through brief, on-the-job

training'. Thus there is a huge discrepancy between the myth and reality. The American economy creates many more bad jobs than good ones; it is a two-tier economy and this will not change over the next ten years.

Q: Be that as it may, the general opinion surely is that the strong growth of the American economy between 1995 and 2000 was linked to the new technologies?

A: We should be wary of the 'general opinion'. The new technologies have certainly had an impact on growth in America, but probably only a modest one. I say 'probably' because assessments vary, as is often the case with economists. We will probably have a clearer picture in two or three years. The American economy grew strongly between 1995 and 2000, by 4.3 per cent per year on average. However, it seems that the second quarter of the year 2000 saw the end of the cycle, with growth rates of 2.2 per cent in the third and 1.1 per cent in the fourth quarter. What did the new technologies contribute to this renewed growth? The estimates vary between zero, which is excessively pessimistic, and 1.1 percentage points of growth. Even in the most optimistic hypothesis, this would explain one quarter of this strong growth. The correct figure is probably around 15 to 20 per cent, that is a figure close to the contribution of high-tech occupations to employment growth. Again, this is a long way from the myth.

Q: You say that the third distortion relates to the claim that the new model of capitalism being put forward is ineluctable and the only one that can possibly exist. What arguments can you advance against this?

A: This discourse does indeed present its model of the new Anglo-Saxon capitalism as the only possible and realistic one. I am one of those economists who think that economics should not be separated from economic and social history and that there are no economic laws outside of institutional contexts, notably national ones. Once this position is adopted, it becomes clear that there have been, and still are today, several different models of capitalism. Whether or not they are going to converge towards a single model, under the aegis of American capitalism, is a very open question. Indeed, it's the principal issue at stake in the great conflicts within and around the European Union, the OECD, the WTO, etc. surrounding attempts to define the rules of the world game which, depending on the outcome, will either ensure that the Anglo-Saxon model becomes pre-eminent or enable other models to exist on a lasting basis. For my part, I believe it is possible to have a European model of capitalism or, if you prefer, I believe it is possible to have a different, specifically European version of the 'new economy'. From this point of view, I am particularly interested in the performance of the Nordic countries. I will return to this point at the end of the interview.

Q: It cannot be denied that a real technological revolution of a ‘generic’ type is taking place around the digital and Internet technologies, that is a revolution that is spreading to all sectors and affecting both production and consumption. This was the case in the past with the electricity and transport revolutions. Under these circumstances, why do you reject the notion that we are witnessing the beginnings of a revolution comparable in scale to the industrial revolutions of the past, which may lead to a long period of prosperity?

A: Those who define the new economy on the basis of computer technology, the Internet and telecommunications should revise their history: the telephone dates from the last century, computers and large-scale information processing systems emerged at the end of the 1940s, while the widespread deployment of such systems in large firms dates from the 1960s and corporate intranets from the 1980s, as do EDI networks (electronic data interchange between companies). So there have certainly been new developments in recent years on the production side, driven by the Internet, but this wave of new developments has come on top of many other waves, it is not the wave of the century. Viewed as a whole, these various waves do indeed constitute a genuine revolution, the so-called digital revolution, which affects all sectors and all activities, or virtually all. When it comes to deciding whether it is a revolution that can stand comparison with the major revolutions of the past, particularly the one that started at the beginning of the twentieth century (with electricity, the internal combustion engine, petroleum, natural gas, chemicals, plastics and pharmaceuticals, telephone, radio, motion pictures and television, running water, etc.), I take the same view as the American expert Robert Gordon.¹ By all the criteria that he uses – long wave of productivity gains (as was the case in the United States between 1913 and 1973, despite the depression of the 1930s), radical transformation of the modes of production and an upsurge of new business activities, new products and services and new machines, etc. – this is far from being the case. According to a survey of 871 chief executives of large companies throughout the world, carried out by the consultants Pricewaterhouse between July and October 2000, the impact of the Internet on their companies’ activities was judged to be zero by 22 per cent, moderate by 53 per cent and significant by 22 per cent, while 2.5 per cent said it necessitated a complete restructuring. The answers varied from industry to industry, but nowhere did the proportion of those stating the impact to be significant or very significant exceed 40 per cent.

Turning now to consumption and lifestyles, can it really be said that the Internet and the services that are going to develop around it (what I have

called the net economy) will constitute a major revolution? I doubt it very much. The most significant revolutions of the last fifty years in this respect have been the automobile and television, and in my view the net economy will never have a comparable impact in terms of changing lifestyles, people's use of time and their relationship to space and to other cultures. I am not disregarding the innovations created by the Internet in the private sphere, and particularly the widespread diffusion of e-mail, which is far and away the greatest – and least costly – success, which required no marketing drive to achieve its spectacular breakthrough. In one year, the number of messages transmitted throughout the world leapt from one billion to six billion! People will also increasingly download music and images from the Internet, but these are much less radical innovations than the automobile, radio and television. I quote Robert Gordon: 'Does today's web access compare in excitement with the first live electronic contact with the outside world achieved as radio spread in the early 1920s and television in the late 1940s?'

Furthermore, it should not be forgotten that the main constraint on such uses is the time people have available for them, and the extent to which existing practices will be replaced by these new activities. This will happen only within limits. Working and travelling times are falling in some countries, but they will continue to be a heavy burden, and in the United States working time per person has increased by the equivalent of one month's work in twenty-five years, so that leisure time has declined considerably.

None of this leads me to diagnose a major revolution, contrary to the declarations made by the spokespersons of the economic interest groups that have invested most in the so-called new economy. I understand them, they are defending their businesses and their shareholders, they are doing their job, but I am not with them on this, precisely because I am doing mine.

- Q:** Could you give some examples to illustrate how this mythology has led to biased judgements, mistaken diagnoses or acknowledged failures?
- A:** The most obvious examples, in business, relate to so-called 'start-ups', those new firms setting up web sites in order to offer a very diverse range of services, some of which experienced, for a few months or even a few years, a level of growth unparalleled in economic history. The illusions that went hand in hand with this phenomenon were not the monopoly of young entrepreneurs sorely lacking in management experience: financial analysts, consultants and the venture capitalists who made available the necessary start-up funds were in just as much of a frenzy. More prosaically, some of them also had an interest in sustaining the frenzy, since they were

benefiting from it by being paid for their dubious 'expertise' or their ability to interest the stock exchange in these young shoots that were viewed as so extraordinary. In October 2000, just as things were beginning to take a turn for the worse, the Paris School of Management, one of the best places in France for studying economics and management, organised a debate on these start-ups, for which they brought together four specialists, consultants or chief executives in this field. Here are some of the statements they were making: the creation of value is no longer taking place in large public or private organisations but rather in start-ups, because 'those working in them are not bound by the contingencies, liabilities and inertias produced by the marketing departments, distribution networks, etc., that conventional firms rely on', 'human resources are extremely easy to manage', and so on. These are all just so many naïve beliefs that are not unconnected with the spectacular collapse of companies that thought they could abolish certain commonsense rules, such as: winning over a customer costs money, particularly in this line of business and for new entrants; keeping a customer costs money and is particularly difficult on the Internet; distribution requires expertise and costs money; establishing the loyalty of staff and of other collaborators is important, difficult and expensive; providing free services on the net by relying on advertising revenue or the sale of customers' details is extremely risky because the returns for advertisers in such a volatile medium are very low, particularly if this revenue comes from other, equally fragile sites; the accumulation of enormous losses is not necessarily an indication of substantial profits in future, etc.

- Q:** Would you go so far as to say that the new digital technologies have not changed the laws or rules of economics at all, and that in this sense there is no such thing as the new economy or new business models? How are we to account for the novel situation in which most sites open to the general public are accessible free of charge?
- A:** I do not know whether there are any 'laws' of economics, but what is certain is that there are rules, cost and market structures and development trajectories, and that these business models are very diverse, as are the corresponding markets. In this respect, there is something really new about the informational goods and services delivered on digital media or transmitted via the net: design costs may be enormous and marketing costs are sometimes very high (although not always: e-mail has spread across the whole world without any marketing at all), but reproduction costs are virtually nil and transmission costs are often low, except in situations in which it is necessary to earn a return on heavy investments in networks, cables and 'pipes' of various kinds (as is the case with high-speed Internet

technologies and projects involving the new UTMS mobile telephony standard). This situation is fairly new historically and has helped to feed the myth of free delivery or the impossibility of establishing lasting rights of ownership over these new 'intangible' goods.

Is the flood of free copying and (almost) free downloading on line a threat to the new capitalism? Well, we should remember that capitalism, which lives on ownership and access rights, has always been very imaginative in creating barriers by means of which those making copies or using motorways can be made to pay for the privilege. The justification advanced for such actions is the (legitimate) defence of authors' rights, but this is only a smokescreen. Payments to creators are a mere drop in the ocean compared to the earnings of the firms that profit from them. Either there will be toll, or users will have other costs to pay: they might have to accept intrusive advertising, see their own personal details sold for marketing purposes, and so on. The new technologies will themselves be at the heart of these innovations in ownership rights, through encryption technologies and discriminative access codes. Evasion and piracy will increase at the same time, although the fact that current estimates suggest that 40 per cent of the software installed throughout the world has been pirated has not prevented Microsoft from becoming in 2000 the company with the highest stock market capitalisation in the world. So the Internet has a splendid capitalist future ahead of it as a tool for market exchanges.

In addition to these market uses, which are more or less well regulated depending on the stance taken by politicians, it is true that the Internet and the associated software are and will continue to be used as virtually free mediums for exchange and cooperation with a view to building up new networks made up of actors who have decided to share knowledge, plans and, in some cases, fantasies of various kinds. The example of free software is instructive in this respect, with its open cooperation networks based on the free copying of 'source codes', which can lead to the production of high-quality software. This situation, which is close to that of the non-market communities found in publicly funded research, has its own inherent limits. Over and above this associative and voluntary aspect, the world of free software also depends on both the public and the market economy. Many members of these communities are in fact – like those who developed the Internet – researchers and academics in publicly funded research institutes, who use public infrastructures in their work. The heaviest users of free software are in government departments and public services, particularly education. And while it is true that the software is free, its diffusion is funded in part by the sale of related services by private firms. Thus the future of free, open source software depends, first, on the market economy,

second, on direct and indirect public aid and resources and, finally, on legal rules in the shape of ‘rights to non-patentability’, that is rights to exclude certain knowledge from the scope of patents. If these conditions are not met, it may well be that the sirens of the market will attract some of these disinterested designers and that they will be forced to lodge patent applications in the name of fair competition! Now these public incentives to engage in associative cooperation are probably conducive to the lasting development of the net economy and of the software economy, since left to its own devices the market tends to create, even more quickly in these areas than in the ‘old economy’, lock-ins (standards and communications protocols, domain names, etc.) and monopolies that are damaging to innovation and improvements in quality.

Q: Do you think that the overall effect of the new technologies on working conditions is positive or negative?

A: The new technologies themselves are not responsible for anything – what matters is how they are applied in a given social context, with its pre-existing power relations. I will take the example of working conditions.

For optimists, the abbreviation ICT (information and communication technologies) might well stand for ‘intelligent and cooperative technologies’, denoting a trend (a very real one in some cases) towards a sociable use of technologies for the benefit of ‘learning’ organisations. However, observation of the facts suggests that the abbreviation might equally well stand for ‘intensification and control technologies’, denoting a constraining, hierarchical mode of use for these tools that contrasts sharply with the optimistic discourse on the unrestricted, horizontal flow of information within new ‘reactive’, ‘learning’ and ‘cooperative’ organisations.

There are worrying reports on this negative trend; they are more frequent in the unskilled segments of the ‘new economy’ but affect managerial staff as well.

The first category of risks and stresses identified by specialists in these matters, particularly ergonomists, are *physical* ones, principally those linked to electromagnetic radiation, posture, fatigue and so on. Among these risks, recent studies have particularly highlighted problems with joints and muscular and skeletal problems affecting the shoulders, elbows, wrists, etc. that have become the leading cause of occupational disease in developed countries. On top of these problems, there are now the various recently identified risks associated with the use of mobile telephones. The second major aspect of the evaluation of working conditions is the *mental* stresses involved. All the evidence points to the fact that that the volume of information to be read and digested, particularly by managerial staff, has increased prodigiously with the spread of NICTs. ‘According to Denis

Ettighoffer, author of the book *Le syndrome de chronos*,² a person in a managerial position receives ten times more information than ten years ago. A study conducted in Great Britain in 1998 in the 1000 largest companies and government departments³ found that an average of 169 messages were sent and received each day by managerial and clerical staff.⁴

Not only is the volume of information received and sent increasing rapidly, but other factors that make the sensory and cognitive processing of this information more complex are also coming into play and, in the current state of things, aggravating the *demands on workers' vision* (need to read small characters of different densities and colours, ill-suited software). 'The ergonomics of software' is now a very important issue. It has not been considered as such by designers (who have scarcely involved users in their processes, if at all), and it is only recently that evidence has been gathered to show, for example, that the mental fatigue experienced by the busiest operators could be caused by the inadequacies of their companies' computer systems. The subcontracting of integrated computer systems to outside companies does not always make it easy to take such realities into account.

It should be emphasised that this informational intensification and overload may in some cases result from the 'incorrect' use of NICTs or, conversely, be reduced and controlled by the intelligent use of these technologies. For example, the negative impact of certain disruptive factors in the workplace (unexpected telephone calls, proliferation of information sources, and so on) can be mitigated if users are able to control at least some of the attempts to communicate with them by using answerphones, avoiding untimely telephone calls though the use of e-mail or having a mobile office that enables them to remove themselves from the disruptions. As far as screen work itself is concerned, there are now clear recommendations on task switching and the introduction of regular breaks that can be varied depending on the tasks in hand.

In the current state of things, the 'positive' variants of the use of NICTs seem to be spreading more slowly than the 'negative' variants. In a poll conducted by IFOP in France in 1998, 63 per cent of those questioned considered NICTs to be one of the factors aggravating stress.

- Q:** Despite these causes for concern, the new technologies certainly seem to be encouraging greater autonomy, do they not?
- A:** Not necessarily. Again there are two trends, one positive, the other negative. The positive trend arises out of the fact that the modes of work organisation in which NICTs are deployed are often less constraining and more open and require workers to use their initiative. The technological tools themselves facilitate this aspect, since they can be used to perform many repetitive, uninteresting tasks, thereby releasing workers to concen-

trate on more creative work. They also give workers access from their workstations to a vast amount of useful information on which to draw. This information may be directly relevant to their work or relate more broadly to the life of the company they work for and be made available as a result of the development of corporate intranets.

In other cases, however, computer technology is the medium for increasingly prescriptive and tightly controlled modes of work organisation; in such cases, working conditions can justifiably be described as 'computer-assisted neo-Taylorism'. Of course it is in telephone services (information and help lines, telesales) that the most rigidly prescriptive forms of work organisation are often found. This strict supervision of work is also found in other service industries, where the new versions of computer applications reduce autonomy and turn workers into mere adjuncts of their machines, which lay down the framework within which they must work and, what is more, are able to monitor their performance with hitherto unheard of accuracy, speed and powers of analysis. Even if we disregard the so-called 'trash tests', in which a manager may call an operator at any time and pass himself off as a customer, computer technology makes it possible to monitor every action performed by operators on their computers (periods of interaction, sites visited, time spent on line, number of entries, etc.) or their telephones (data on calls, duration, number called, etc.), as well as their movements (badges in the workplace, monitoring of vehicle movements, etc.). With mobile telephones, workers are able to acquire greater autonomy both at work and in their lives as a whole; on the other hand, they can be called at any time and in any place, even outside of working hours and at home. Some companies have even considered introducing a 'right to be switched off'.

All in all, this just goes to show how far the increasing use of NICTs in virtually all areas of economic activity, and particularly in certain 'informational' services, is a *very open-ended issue* and may lead to an improvement or a deterioration in working conditions and in work intensity and autonomy depending on whether these questions have been thought about, given due consideration in organisational restructurings and negotiated appropriately. The current situation seems to be mixed, varying as it does according to the industry, occupation and company in question; overall, however, it is rather disappointing relative to the opportunities opened up by NICTs and the expectations they arouse.

- Q: According to you, the new economy is a normative model based on American capitalism of the 1990s, a model you object to because of its social characteristics. But are there any acceptable alternatives, a different kind of 'new economy', anywhere in the world?

A: My book does not put forward any political programme, attempt to define an 'acceptable' form of capitalism or advance any hypotheses as to possible alternatives to capitalism. I confine myself to listing a certain number of precautionary principles to be applied to the most worrying developments currently taking place in the technology and finance-driven brand of ultra-capitalism that has gained much ground in recent years. Thus my intention is a modest one (no great rupture is proposed) although given the current state of the balance of power, even the most modest proposals seem to be idealistic.

Suppose we adopt a different definition of the 'new economy', one that is less boneheadedly technicist and financial in its orientation than the one that has prevailed until now. The term 'new economy' might then denote a highly innovative economy that fosters the diffusion of new technologies but is also capable of reconciling economic performance with good social performance, as reflected in a low unemployment rate (below 5 per cent), decent job quality, working conditions and social protection, even for workers at the bottom of the pile, limited earnings inequalities, reduced gender inequalities both at work and in access to positions of political responsibility, as low a poverty rate as possible, a high level of participation in public life, acceptable industrial relations in the workplace, with employees being informed and consulted, and good environmental protection.

If this were the case, we would have to turn through ninety degrees and look not to the West (the American model) but to the North. The five Nordic countries (Denmark, Finland, Norway, the Netherlands and Sweden) are obviously leading candidates for any prizes that might be awarded for the establishment of a 'new economy' that is both socially and environmentally sustainable. They have good economic growth and high living standards and hold, by some considerable margin, the European records for the diffusion of computer technology, Internet access and mobile telephony. Per capita expenditure on research and development ranks among the highest in the world, Sweden even equalling the United States in this respect, at the head of the league table.

What of unemployment and job quality? In January 2001, the unemployment rate ranged between 2.8 and 5.3 per cent in four of the five countries. The employment rate for the 15–64 age group was of the order of 70 per cent, a very high level. The long-term unemployment rate is very low. And the share of employees taking part each year in a course of training funded by their employer is in excess of 50 per cent.

As for inequalities and poverty, the UNDP report for the year 2000 ranks countries on the basis of a synthetic indicator of human poverty. The

five countries in which there is least poverty are, in descending order, Norway, Sweden, the Netherlands, Finland and Denmark. Germany comes sixth and France eighth. The lowest placed of the rich countries are the United Kingdom, Ireland and the United States (ranked 20th), that is three of the countries in which the Anglo-Saxon model is most firmly established. And there are fewer poor people among the unemployed of Denmark and Finland than there are among those in work in the United States. And when it comes to the ratio of the incomes of the richest 20 per cent to those of the poorest 20 per cent, it is 8.9 in the United States, 6.5 in the United Kingdom, 5.6 in France, 4.7 in Germany and only 3.5 in the five Nordic countries.

What of social protection? The five Nordic countries, which have long had a highly developed welfare state, head all the league tables when it comes to 'generosity' of social protection. Of course the counterpart of such generosity, which could be more accurately described as risk sharing, is record levels of 'compulsory deductions', equivalent to 57 per cent of GDP in Sweden, compared with 45 per cent for the European Union as a whole. These countries also have the highest shares of public-sector employment in total employment, while the share of the health and social services sector is even greater in relative terms: up to 14 per cent in Sweden, compared with 6 per cent in France and 3 per cent in the Southern European countries. Life expectancy is the highest in the world. These high levels of public expenditure, of 'welfare' and of redistribution do not seem to be an obstacle to their economic development, perhaps because, in contrast to the received wisdom of liberalism, the quality of individual and collective life, social cohesion and good public services are both assets in their own right and factors encouraging dynamism. The indicators measuring the eagerness of the unemployed to find a new job are higher in these countries, with their generous levels of social protection, in flagrant contradiction of the allegations put forward by advocates of the argument that too much protection against the risk of unemployment undermines the willingness of the unemployed to seek re-employment.

What of the inequalities between men and women and the indicators of democratic life? Again according to the UNDP, these five countries top the league table when it comes to the participation of women in political and economic life.

I could extend the list even further. Together with Germany, these countries top the table of indicators for waste recycling, road safety and low imprisonment rates (with Japan), and so on. It is not a question of transforming them into off-the-peg models or of propagating an alternative

myth that glosses over the difficulties and tensions these countries, in all their diversity, are experiencing; we can say, however, that they represent the currently most civilised form of capitalism and market economy.

April 2001

Notes

Preface

- 1 Published by Basic Books, New York.
- 2 Originally published by Doubleday, New York. Second edition by Anchor Books, 2001.
- 3 It is always fascinating to see how some people, who consider themselves and their country as leading the way, which is perfectly right today about the US in many respects, view any community or country that resists the cultural and symbolic domination as arrogant.
- 4 Published by The Free Press, New York, 1988.

Introduction

- 1 *The Great Transformation*, Boston, Beacon Press, 1957 (1944).
- 2 *Le nouvel âge de l'économie américaine*, Paris, Economica, 1999, p. 1.

1 The new economy: back to the roots

- 1 Thus in the issue of *Business Week* dated 17 November 1997, the editor-in-chief Stephen Shepard wrote, with reference to the new economy: 'This is the sort of thing that economists don't pick up quickly in their models of statistics – and often reject as anecdote. But such changes are precisely what journalists are often first to observe.'
- 2 *Le Monde*, 21 December 1999.
- 3 Paper given at the 35th Annual Conference on Bank Structure and Competition of the Federal Reserve Bank of Chicago.
- 4 *Libération*, 22 November 1999.
- 5 'The New Economy Is Stronger Than You Think', *Harvard Business Review*, 77(6), November–December 1999.
- 6 'The emblem of the new economy, the NASDAQ, the exchange for performance stocks set up in 1971, overtook the New York Stock Exchange (NYSE) in terms of the volume of transactions in 1994. In five years, its capitalisation has increased by 362%, compared with 196% for the NYSE.'
- 7 www.liberation.fr/multi/neweconomy
- 8 *Libération*, 12 November 1999.

- 9 W. Sahlman, *Harvard Business Review*, 77(6), November–December 1999.
- 10 Ibid.
- 11 Ibid.
- 12 Ibid.
- 13 *The Rise of the Network Society* (volume 1 of *The Information Age*), Oxford, Blackwell, 2000. The other two volumes of this work are no less important, but it is the first volume that contains the analysis of the technological and economic foundations of the ‘network society’.

2 Beyond the limits of maximum growth?

- 1 See the introduction to my book, *Services: la productivité en question*, Paris, Desclée de Brouwer, 1996.
- 2 Our contemporary concepts have more distant origins, since they date from the early days of the Industrial Revolution, and in particular from the work of Malthus. However, it was not until the State took control of ‘industrial policy’ and planning (in Europe, just after the Second World War) that these ideas led to the development of measuring tools, institutions and figures that could be fed into the public debate as indicators of progress.
- 3 Cf. Pascal Cuvelier, *Anciennes et nouvelles formes de tourisme*, Paris, L’Harmattan, 1998.
- 4 *Future Shock*, New York, Bantam Books, 1970.
- 5 How, for example, can we explain the fact that the average annual growth rate of the American economy between 1994 and 1999, the years regarded as the start of a period of exceptional ‘new growth’, was about 3.8 per cent, compared with 4.6 per cent during the 1950s, 4.4 per cent during the 1960s (5.2 per cent between 1962 and 1968) and even 4.4 per cent during the six years between 1982 and 1988, a figure that is all too frequently ignored. Are we to infer from this that the new growth performs less well than the old growth, or that the use of the growth rate as a tool for measuring economic performance is increasingly less suited to the new forms of wealth being produced?
- 6 See Marque-Luisa Miringoff and Marc Miringoff, ‘The Growing Gap Between Standard Economic Indicators and the Nation’s Social Health’, *Challenge*, July 1996.

3 New technologies, new growth?

- 1 *Statistical Abstract of the US*, 1998, figures based on BSL estimates.
- 2 On this point, J. Gadrey, *Services: la productivité en question*, Paris, Desclée de Brouwer, 1996.
- 3 ‘What’s New About The New Economy?’ by Evan Koenig, July–August 1998.
- 4 Baumol, Batey-Blackman and Wolff, *Productivity and American Leadership*, Boston, MIT Press, 1989.
- 5 *The Computer Revolution: An Economic Perspective*, Washington, DC, Brookings Institution Press, 1977, and *Business Economics*, April 1999.
- 6 Investment in ICTs is not limited to the stock of computers. Conversely, however, it would be incorrect to take the view, as all those studies that seek to ‘inflate’ the

figures for the new economy do, that telecommunications *in their entirety* belong to the ICT sector. The telephone and telephone networks are old technologies, a part of which (and an increasingly large part, particularly with the boom in mobile telephony) is being used in a new mode. It is this part that should be included in the evaluations.

- 7 Martin Wolf, 'Not So New Economy', *Financial Times*, 4 August 1999.
- 8 Quoted by M. Wolf, *op. cit.*
- 9 'Comment mesurer le travail dans la société de l'information?' in J. Gadrey (ed.), *Regards croisés sur le travail et l'emploi*, Paris, L'Harmattan, 2000.
- 10 Interview in *Libération*, 12 November 1999.
- 11 See also the Green Paper entitled 'Living and working in the information society: people first', 1996: <http://www.ispo.cec.be/infosoc/legreg/docs/peopl1st.html>
- 12 *Human Development Report*, United Nations Development Program, Geneva, 1999.
- 13 Interview in *Libération*, 5 July 1999.
- 14 M. Castells, *The Rise of the Network Society*, Oxford, Blackwell, 2000, pp. 266–7 (my emphasis).
- 15 *Ibid.* p. 402.
- 16 *Ibid.*
- 17 *Ibid.* p. 402 and 405.
- 18 *Ibid.* p. 398.
- 19 *Ibid.*
- 20 *Human Development Report*, 1999, *op. cit.* p. 59.
- 21 *Ibid.* p. 62.
- 22 *Ibid.*
- 23 *Ibid.* p. 59.
- 24 *Ibid.*
- 25 Quoted in *Le Monde*, 30 January 2000.
- 26 *Human Development Report*, *op. cit.* p. 63.
- 27 *Ibid.* p. 57.

4 The new employment: services and flexibility

- 1 'Toward a High-Wage, High-Productivity Service Sector', Washington, DC, Economic Policy Institute, 1989.
- 2 *Manufacturing Matters*, New York, Basic Books, 1987.
- 3 *Statistical Abstract of the US*, 1998, and *Employment and Earnings*, January 1999.
- 4 *Statistical Abstract of the US*, 1998, p. 420.
- 5 In *Le Monde diplomatique*, July 1998. See also, by the same author, 'L'ascension de l'Etat pénal en Amérique', *Actes de la recherche en sciences sociales*, 1998, 124, pp. 7–26.
- 6 In *Le Monde diplomatique*, July 1998.
- 7 *Ibid.*
- 8 *The American Prospect*, 3 January 2000.
- 9 'The Unemployment Iceberg: What is Beneath, Behind, and Above?' *International Journal of Health Services*, 29 (3), 1999.
- 10 This is the income level below which 50 per cent of the population are located. With such distributions, the median is always lower than the average, particularly since there are very high incomes that drag the average upwards.

- 11 These adjectives allude to the theories of so-called labour market segmentation, the foundations of which were laid by P. Doeringer and M. Piore in *Internal Labor Markets and Manpower Analysis*, Lexington, DC Heath, 1971.
- 12 Most of these risks and uncertainties are strategically constructed and not inevitabilities: just-in-time manufacturing systems produce random tensions, but they are the product of deliberate choices. We have to ask, therefore, how desirable such systems actually are.
- 13 Put simply, this adjective denotes a mode of work organisation that derives from Taylorism: (1) a fairly high degree of specialisation in the work process, albeit with restricted and prescribed forms of functional flexibility that mark a tentative break with classic Taylorism; and (2) a high degree of individual control of tasks and productivity. In addition, workers are frequently subject to variable and unpredictable demands to make themselves available for work as and when required, which unknown in classic Taylorism.
- 14 M. Castells, *The Rise of the Network Society*, Oxford, Blackwell, 2000, pp. 295–6.
- 15 9 February 2000.
- 16 *The Corrosion of Character: The Personal Consequences of Work in the New Capitalism*, New York, Norton, 1998.
- 17 May–June 1999.
- 18 R. Farnetti and I. Warde, *Le modèle anglo-saxon en question*, Paris, Economica, 1997.
- 19 See Denis Clerc, *Condamnés au chômage?*, Paris, Syros, 1999. Clerc draws on OECD statistics and a report produced for the French economic planning agency, the Commissariat General du Plan, by R. Castel, J.P. Fitoussi, J. Freyssinet and H. Guaino: *Chômage: le cas français*, La documentation française, 1997.
- 20 *The Loyalty Effect*, Cambridge, Mass., Harvard Business School Press, 1996. Other examples are described by Robert Kuttner, *Everything for Sale*, New York, Knopf, 1997, Chapter 3.
- 21 For more details, see Robert Kuttner, op. cit., pp. 108–9.
- 22 *Au-delà de l'emploi. Transformations du travail et devenir du droit du travail en Europe*, Paris, Flammarion, 1999.

5 Market diversity and regulation

- 1 In *The Great Transformation*, Chapter 5.
- 2 This was Polanyi's view of the 'self-regulating market' (which equates precisely to the neo-classical market based on perfect competition): it was a 'utopian principle'.
- 3 *Actes de la Recherche en Sciences Sociales*, 65, 1986, pp. 2–13.
- 4 *Getting a Job*, Cambridge, MA, Harvard University Press, 1974.
- 5 An allusion, of course, to Peter Doeringer and Michael Piore, already cited above.
- 6 'L'économie de la qualité', *Revue française de la sociologie*, XXX, 1989 and 'Dispositifs de confiance et engagements crédibles', *Sociologie du travail*, 4, 1996.
- 7 Robert Frank and Philip Cooke, *The Winner-Take-All-Society*, New York, The Free Press, 1995.
- 8 The ten best paid actors in Hollywood earn between 10 and 20 million dollars per film. This is not unrelated to the fact that America's largest export industry 'is neither the aircraft industry nor the computer industry but the entertainment industry: films and TV programmes . . . In 1997, Hollywood films grossed more than 30 billion dollars globally' (UNDP, *Human Development Report*, 1999).

- 9 R. Farnetti and I. Warde, *Le modèle anglo-saxon en question*, Paris, p. 92.
- 10 *Everything for Sale*, Knopf, 1997, pp. 86–7.
- 11 See the distinction proposed by Michel Albert (*Capitalisme contre capitalisme*, Paris, Le Seuil, 1991) between the Anglo-Saxon and Rhenish models, particularly in the field of insurance.
- 12 Cited by A. Etzioni, in *The Moral Dimension*, New York, The Free Press, 1988, p. 209.
- 13 ‘The Economics of Moral Hazard: Further Comment’, 1968, republished in *The Collected Papers*, Basil Blackwell, 1984, vol. IV, p. 103.
- 14 Op. cit., chapter 12.

6 The limits of the market

- 1 ‘Is Science a Public Good?’ *Science, Technology and Human Value*, 19, 1994.
- 2 According to the 1999 UNDP report: ‘. . . in the 1990s, with many governments facing a squeeze on budgets, the proportion of public funding for research and development in science and technology has fallen around the world . . . This trend has been particularly strong in agriculture and biotechnology . . . in the United States . . . the portion of public sector patents in biotechnology sold under exclusive licence to the private sector rose from just 6% in 1981 to more than 40% by 1990.’
- 3 The more users there are of a particular standard, the more it becomes economically rational for new users to adopt it (even if others seem to be, and indeed are, of better quality) and the more expensive it is (including learning costs) to replace it with another standard, particularly if that standard is used in networked form.
- 4 The mere fact that a standard is adopted by many users means that it eventually becomes almost impossible to ignore, even if there are technically better standards, particularly if users operate in networks.
- 5 ‘Clio and the Economics of QWERTY’, AEA Papers and Proceedings, *American Economic Review*, May 1985.
- 6 ‘Competing Technologies: an Overview’, in: G. Dosi *et al.*, *Technical Change and Economic Theory*, London, Pinter, 1988.
- 7 ‘Too much market kills the market’ (M. Callon, op. cit.).
- 8 François Horn, ‘La diversité de l’ économie du logiciel’, *Revue d’ Economie Industrielle*, 95(2), 37–60, 2001.
- 9 In *The Collected Papers*, 1984, Basil Blackwell.
- 10 UNDP, *Human Development Report*, 1999, p. 68.
- 11 *Ibid.*, p. 68.
- 12 *Ibid.*, pp. 79–80.
- 13 R. Farnetti and I. Warde, *Le modèle anglo-saxon en question*, Paris, Economica, 1997, p. 92.
- 14 *The Moral Dimension*, The Free Press, 1988.
- 15 See Michel Callon’s introduction to *The Laws of the Markets*, Blackwell, 1998.
- 16 Edgard Morin, *Introduction à la pensée complexe*, ESF éditeur, 1990, p. 94.
- 17 Op. cit., p. 49.
- 18 Op. cit., p. 16.
- 19 E. Freidson, *Professional Powers*, Chicago, University of Chicago Press 1986.
- 20 Economists speak of ‘economies of scope’, as distinct from ‘economies of scale’. The latter term denotes the fact that, when standardised goods are manufactured

- on a large scale, unit costs fall as the scale of production (i.e. the volume of goods produced) increases. The former term denotes situations that were inconceivable with the rigid technologies of Fordism, in which flexible automation and computerisation have made it possible to produce goods and services of increasing variety at declining unit costs, particularly when design and marketing costs, for example, are shared.
- 21 A good indicator of the disappearance or marginalisation of creativity in this case is the fact that this form of cooking makes it very easy to dispense with 'chefs' or even cooks, who can be replaced by 'functionally flexible employees', and this indeed is what happens more often than in traditional independent restaurants, even in France.
 - 22 Thus on the basis of many observations made in all areas of its activities, we have estimated that in the case of the French Post Office at least 10 per cent of employees' working time is devoted to assisting people in difficulty, over and above the 'normal' time technically required for the operations in question.
 - 23 In M.L. Beaufls, Y. Janvier and J. Landrieu, *Aménager la ville demain: une action collective*, Paris, Editions de l'aube, 1999.
 - 24 *Ibid.* pp. 39–40.
 - 25 *Ibid.* p. 40.
 - 26 This does not mean that this is all they are but that a part of their behaviour, which varies depending on the market institutions in question but is usually the most decisive part, is determined by economic calculations.
 - 27 Callon, *The Laws of the Markets*, p. 42.
 - 28 R. Farnetti and I. Warde, *Le modèle anglo-saxon en question*, Paris, Economica, pp. 71–2.
 - 29 *L'expansion*, 24 June 1999.
 - 30 *Contre-feux*, Paris, Liber, 1998, p. 45.

7 New modes of governance for firms and financial markets

- 1 *The New Industrial State*, Boston, Houghton Mifflin, 1967 [Pelican Books, 1969]. Well before Galbraith, in 1932, A. Berle and G. Means had studied the early manifestations of this dichotomy between owners and managers.
- 2 *Ibid.*, p. 77.
- 3 'With low earnings or losses (the technostructure) becomes vulnerable to outside influences and loses its autonomy. But above a certain level more earnings add little or nothing to its security therein' (*ibid.*, p. 174).
- 4 A sort of monopoly shared among a small number of producers.
- 5 'There are few corporations in which it would be suggested that executive salaries are at a maximum' (*ibid.*, p. 123).
- 6 *Ibid.*, p. 183.
- 7 T. Coutrot, *Critique de l'organisation du travail*, Paris, La découverte, 1999, p. 58.
- 8 These words also formed the title of a chapter in the 1985 'Economic Report of the President'. The president in question was, of course, Ronald Reagan.
- 9 See Chapter 5 of Robert Kuttner's book, *Everything for Sale*, New York, Knopf, 1996.
- 10 *Ibid.*, p. 172.
- 11 T. Coutrot, *op. cit.*, p. 45.

- 12 Ibid., p. 45.
- 13 In what follows, we draw on R. Kuttner, op. cit., p. 180.
- 14 Ibid., Chapter 5, p. 179.
- 15 Ibid., Chapter 5.
- 16 R. Farnetti and I. Warde, *Le modèle anglo-saxon en question*, Paris, Economica, 1997, pp. 76–7. See also, along the same lines, André Orléan, *Le pouvoir de la finance*, Paris, Odile Jacob, 1999.
- 17 J.L. Gréau, *Le capitalisme malade de sa finance*, p. 208.
- 18 Ibid., p. 209.
- 19 T. Coutrot, op. cit., p. 48.
- 20 J.L. Gréau, op. cit., p. 209.
- 21 Op. cit., pp. 46–7.
- 22 Ibid., p. 47.
- 23 Ibid., p. 210.
- 24 Juliet Schor, *The Overworked American: The Unexpected Decline of Leisure*, New York, Basic Books, 1992.
- 25 R. Farnetti and I. Warde, op. cit., p. 89.
- 26 D. Plihon, *Alternatives Economiques*, Hors-série no. 20, 1994. See also A. Orléan, *Le pouvoir de la finance*, Paris, Odile Jacob.
- 27 *Alternatives Economiques*, October 1998.
- 28 Ibid.
- 29 An independent association that analyses economic policy issues. One of its members was James Tobin.
- 30 R. Kuttner, op. cit., p. 186.
- 31 Paris, Gallimard, 1998.
- 32 *The Rise of the Network Society*, Oxford, Blackwell, p. 505.
- 33 M. Aglietta and A. Orléans (eds), *La monnaie souveraine* Paris, Odile Jacob, 1998, p. 157.
- 34 *Le Monde*, 4 October 1994.
- 35 Robert Kuttner, op. cit., Chapter 5, and Will Hutton, *The State We're In*, London, Jonathan Cape, 1995.
- 36 Michel Aglietta, postface in the new edition of *Régulation et crises du capitalisme*, Paris, Odile Jacob, 1997.
- 37 OECD, *Social Enterprises*, Paris, 1999.

Conclusion

- 1 *The Great Transformation*, Boston, Beacon Press.
- 2 'If we continue to believe that the goals of the industrial system – the expansion of output, the companion increase in consumption, technological advance, the public images that sustain it – are coordinate with life, then all of our lives will be in the service of these goals . . . education will be adapted to industrial need; the disciplines required by the industrial system will be the conventional morality of the community. All other goals will be made to seem precious, unimportant or anti-social' (J.K. Galbraith, *The New Industrial State* Boston, Houghton Mifflin, 1967, p. 401). It is almost sufficient simply to replace 'industrial system' with 'commercial and financial system' to update this analysis. Durkheim expressed similar concerns in his 'Leçons de sociologie'.

- 3 *Souffrance en France*, Paris, Editions du Seuil, 1998.
- 4 For a detailed description of the perverse effects of the transformation of medicine in America into a profit-making industry, leading to a two-speed health care system that is also very extravagant and wasteful, see R. Kuttner, *Everything for Sale*, New York, Knopf, Chapter 4.
- 5 *Le Monde*, 11 December 1999.
- 6 In 1995, an expert group (Advisory Commission to Study the Consumer Price Index), chaired by Michael Boskin, was appointed to report to the Senate Finance Committee on a possible overstatement of inflation in the USA. The Commission's objective was to analyse the faults in the current methods, to evaluate the bias and to propose improved or alternative methods for the future. The final report was submitted in December 1996.
- 7 'La prochaine utopie', *Le Monde*, 6 January 1999.
- 8 Addendum to *The New Industrial State*, op. cit.
- 9 P. Bourdieu, *Contre-feux*, Paris, Liber, 1998.

Postface: what is left of the 'new economy'?

- 1 Robert J. Gordon, 2000, 'Does the "New Economy" Measure Up to the Great Inventions of the Past?', draft (May), available on the author's web site, final version published in the *Journal of Economic Perspectives*, 2000.
- 2 Paris, Dunod, 1998.
- 3 Gallup Institute, quoted in *Libération*, 16 September 1998.
- 4 G. Duval and H. Jacot (eds), *Le travail dans la société de l'information*, Paris, Editions Liaisons, 2000.

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