

Economics in Crisis

The world economy is in crisis. Unemployment in Western Europe rises towards the 20 million mark. America faces the deep-seated problem of the twin deficits, the federal budget and the balance of trade. Vast tracts of the former Soviet empire are on the brink of economic collapse. Japanese companies, faced by the deepest recession since the war, are on the verge of breaking the long-standing and deep-rooted social convention of lifetime employment.

The orthodoxy of economics, trapped in an idealised, mechanistic view of the world, is powerless to assist.

In Western Europe, the economics profession eulogised the Exchange Rate Mechanism and monetary union, despite frequent bouts of massive currency speculation and the inexorable rise of unemployment throughout Europe during its years of existence. Teams of economists descend on the former Soviet Union, proclaiming not just the virtues but the absolute necessity of moving to a free-market system as rapidly as possible. Such prescriptions involve the establishment of market economies of greater purity than those contemplated by Ronald Reagan and Margaret Thatcher. But despite governments in the former Soviet bloc doing everything they are told, their economic situation worsens.

From the pensioned security of their vast bureaucracies, economists from the International Monetary Fund and the World Bank preach salvation through the market to the Third World. Austerity and discipline are the hallmarks of the favoured policies of the IMF throughout the world, yet its own salary bill has risen by 38 per cent in the last two years, and is budgeted to rise by a further 22 per cent in 1994.

On a more mundane level, economic forecasts are the subject of open derision. Throughout the Western world, their accuracy is appalling. Within the past twelve months alone, as this book is being written, forecasters have failed to predict the Japanese recession, the strength of the American recovery, the depth of the collapse in the German economy, and the turmoil in the European ERM.

Yet to the true believers, within the profession itself, the ability of economics to understand the world has never been greater. Indeed, in

terms of influence in the world the standing of the profession appears high. Economics dominates political debate, to the extent that it is scarcely possible to have a serious political career in many Western countries without being able to repeat more or less accurately its current fashionable orthodoxies. Television seeks out the views of economists on Wall Street and in the City of London, anxious that the viewing public should be informed of the impact of the latest monthly statistic on the entire economy over the coming years. The numbers of students seeking to read economics grew dramatically during the 1980s.

Academically, the discipline seems to have developed enormously, particularly over the past decade, the mathematical sophistication especially having increased in terms both of theoretical work and of the approved methodologies of applied economics.

Of course, disputes still exist, such as the well publicised arguments between monetarists and Keynesians as to how the economy as a whole operates. For example, the former argue that increases in government expenditure will ultimately have no impact on the overall level of economic activity and employment. Both sides agree that such increases can have a positive effect on a time horizon of two or three years. Keynesians believe that some of this impact persists. But such tiffs merely conceal the large body of shared belief which characterises present-day economics. The old joke that twelve economists in a room could be guaranteed to hold twelve different opinions, and thirteen if one of them were Keynes, is becoming less and less true. An intellectual orthodoxy has emerged.

Increasingly, the subject is taught not as a way of learning to think about how the world *might* operate, but as a set of discovered truths as to how the world *does* operate. The content of degree courses is becoming increasingly standardised. Substantial and impressive textbooks exist, both in micro- and in macro-economics, consisting in the main of the mathematical technique of differential calculus applied to linear systems.

It cannot be stated too often that very little of the content of such textbooks is known to be true, in the sense that many of the statements in textbooks on, say, engineering, are known to be true: formulae for building bridges exist, and when these formulae are applied in practice, bridges in general remain upright. The same does not apply in economics and yet the confidence of the true believers in economics has grow'd and grow'd like Topsy. As they themselves would doubtless prefer to say, to give the description an authentic mathematical air, it has grown exponentially.

Sociologists and psychologists have documented many case studies

concerning the reactions of groups when views which they hold about the world are shown to be false. In such situations, far from recognising the problem, a common reaction of individuals is to intensify the fervour of their belief.

A classic study of this kind, *When Prophecy Fails*, published in 1956, was carried out by American psychologists. It describes the experiences of researchers who joined a group which was making specific predictions of imminent catastrophic floods. When the floods failed to appear, the group, far from disbanding, intensified enormously its efforts to convert others to its beliefs. Another example is provided by James Patrick, a young sociologist who infiltrated a gang of Glasgow youths in the late 1960s.* These gangs, while being almost model citizens by the standards of the American inner city, were notorious for perpetrating acts of violence, mainly on each other but occasionally on the public at large, which were thought extreme in Northern Europe. The gang believed as a point of honour that no member would betray another to the police. Yet, as the author noted:

One prominent member of the gang was arrested and within twenty-four hours all other members had been questioned by the police. The inference was obvious to everyone except the gang. Yet their misplaced belief in gang loyalty was not discarded or even diminished, but became all the more extreme and passionate.

The intensity of faith shown by most professional economists is well illustrated by two passages from *Liar's Poker*† by Michael Lewis, who began his career as a successful trader on world capital markets. His descriptions of how such markets operate are in many ways far removed from the received wisdom of orthodox economics. The first passage deals with the aspect of the growth of economics as a discipline. Writing about the major US universities in the mid-1980s, Lewis states:

[An effect] which struck me as tragic at the time was a strange surge in the study of economics. At Harvard, the enrolment had tripled in ten years. At Princeton, in my senior year, for the first time in the history of the school, economics became the single most popular area of concentration. And the more people studied economics, the more an economics degree became a requirement for a job on Wall Street. There was a good reason for this. Economics satisfied the two most basic needs of investment bankers. First, bankers wanted practical people, willing to

*L. Feininger, H. Ricken, S. Schuster, *When Prophecy Fails*, University of Minnesota Press, 1956, and James Patrick, *A Glasgow Gang Observed*, Eyre Methuen, London, 1973.

†Michael Lewis, *Liar's Poker*, Coronet Books, 1990.

subordinate their education to their careers. Economics seemed designed as a sifting device. Economics was practical. It got people jobs. And it did this because it demonstrated that they were among the most fervent believers in the primacy of economic life.

Economics allowed investment bankers directly to compare the academic records of the recruits. The only inexplicable part of the process was that economic theory (which is what, after all, economics students were supposed to know) *served almost no function in an investment bank.*

In other words, at the very centre of world financial markets, where the principles of the free market should be at their clearest, economics as an intellectual discipline served almost no practical function.

The second example from Lewis's book provides even more food for thought, both as an intellectual challenge for economics and as an illustration of how the study of the subject can affect a person's mind. A fundamental belief in economics for many years has been that the price of a commodity – whether it is bananas or people – is determined by the relative levels of demand and supply. The higher the demand relative to supply, the higher the price.

At an early stage in Lewis's career on Wall Street, during his training programme, a group of his colleagues was asked why they were so well paid. 'A person who had just taken an MBA from the University of Chicago explained: "It's supply and demand. My sister teaches kids with learning disabilities, and earns much less than I do. If nobody else wanted to teach, she'd make more money."' In fact, as all the trainees were acutely aware, there had been intense competition to secure places on their programme. Over 6000 people, most of them from economics programmes at the major American universities, had applied for just 127 places on the Salomon Brothers' training programme. Yet as Lewis drily remarks: 'Paycheques at Salomon Brothers spiralled higher in spite of the willingness of others who would do the same job for less.'

In other words, an apparently intelligent graduate from one of the major economics courses in the United States was able to assert, thanks to his understanding of the principles of economics, and in particular the law of supply and demand, that the reason he as an investment banker was paid a salary many times higher than that of his sister who taught children with learning disabilities was that fewer people were available to do his job, relative to demand, than was the case with his sister's. And this was despite overwhelming evidence on a daily basis that the empirical foundation for such an assertion was worthless.

Indeed, orthodox economics is quite unable to answer a simple question such as this, other than by resorting to definitions of supply, demand and price which degenerate into tautology. Transparently, many more people relative to the level of demand are willing to supply their labour to the financial markets than are willing to become teachers, yet the price of the former product (the salary) is many times that of the latter. Of course, the interchange of supply and demand can affect prices, but not always to the exclusion of other factors operating on price.

Of course, it may be unfair to castigate economics on the remarks of a single MBA graduate from Chicago. Yet the question he was asked, and answered so well in terms of economic orthodoxy, remains: Why are people operating in, say, financial markets paid far more than, say, schoolteachers or academic economists? There are answers to this question, but none of them involves the 'fundamental' principle of supply and demand.

James Tobin, the American Nobel Prize winner in economics, has questioned very seriously whether it makes sense from the point of view of American society as a whole to divert so much of its young talent from the top universities into financial markets. This debate is not new. John Maynard Keynes considered the same question in the 1930s, and expressed the view that on the whole the rewards of those in the financial sector were justified. Many individuals attracted to these markets, Keynes argued, are of a domineering and even psychopathic nature. If their energies could not find an outlet in money making, they might turn instead to careers involving open and wanton cruelty. Far better to have them absorbed on Wall Street or in the City of London than in organised crime.

Keynes, it should be said, saw the world through the eyes of the gentleman scholar of the pre-war period, through the double negative, the subjunctive, and through irony. But he could when he chose be ruthlessly direct in his criticism. In fact, he likened the financial markets not merely to a casino, but to the childhood games of Snap, Old Maid or Musical Chairs – 'a pastime in which he is victor who says Snap neither too soon nor too late, who passes the Old Maid to his neighbour before the game is over, who secures a chair for himself when the music stops'.

Fervency of belief in the 'theorems' of economics is by no means confined to MBA students. An exchange at a seminar held in March 1993 at the prestigious Ecole des Hautes Etudes Commerciales in France is illuminating. The 500 students were addressed on successive days by distinguished French economists. The proceedings opened with

Maurice Allais, Nobel Prize winner in economics and now in his eighties, presenting what *Le Monde* described as '*le choc Allais*'. It is an article of faith in orthodox economics that free trade between nations is wholly desirable. But to the horror of the audience, Allais attacked the proposition that free trade was in general beneficial. Indeed, he argued that it could be of benefit only in certain very special circumstances. Denouncing the Maastricht Treaty, Allais pronounced that free trade would have favourable effects only when carried out between regions which were at comparable levels of economic development. He condemned roundly 'the free-trade policies of the European Commission'.

Two days later, Jacques Attali took the platform. At the time president of the European Bank for Reconstruction and Development, and the man of whom President Mitterrand of France reportedly said, 'I . . . am a page of history and you are merely a footnote', Attali lost no time in restoring orthodoxy. Quick to point out that Allais had once been his professor, but even quicker to denounce anti-free-trade views as unequivocally '*stupides*', he asserted that 'every obstacle to free trade is a factor which leads to recession'.

It may, of course, be mere coincidence that at a time when barriers to trade within the European Community are lower than ever before – indeed, the much publicised 1992 programme removing many trade restrictions has now come into force – Europe is entering not a boom, but a sharp recession!

To the detached observer, noting the contrast between the actual behaviour of the world and the confidence of orthodox economists to understand it, a number of analogies spring to mind. But the one which is uppermost, and which lingers persistently, is the story of 'The Emperor's New Clothes'. Or, as people during my childhood in the north of England used to say, more bluntly, 'There's none so blind as them as can't see.'

It was not always so. The great classical economists, writing in the late eighteenth and early nineteenth centuries, struggled to understand the dramatic impact on the economy and on society of the Industrial Revolution. But, as we shall see, they did so with an analysis very firmly rooted in reality, addressing questions of great practical import.

In fact, encouraging signs within economics have started to appear again in recent years.

At one level, the tremendous growth in students reading economics which took place during the 1980s seems to have peaked. At Harvard

University, government has recently overtaken economics as the most popular first-degree subject. And, outside academia, membership of America's National Association of Business Economists is falling, although there are still 100,000 people who describe themselves as economists in America. More important, not all economists lack doubts, and an increasing minority are prepared to articulate them, at the risk of incurring professional odium, and to investigate different approaches and different methodologies. The fundamental postulates of the discipline are being called into question as some of the most imaginative economists seek to restore the link with reality which characterised the work of the classical economists.

Some of their most innovative work, often carried out in conjunction with scholars from other disciplines such as the behavioural sciences, artificial intelligence and biology, and using new techniques and new approaches, both exposes the incurable weaknesses of orthodox economics and offers real hope of progress.

We shall see, in the course of this book, how and why economics was hijacked in the nineteenth century by an approach which still today forms the basis of the subject. The new method of analysis was based on a desire to raise the mathematical precision of economics, so that it could enjoy the status and prestige of the physical sciences in the Victorian era. Ironically, as the fervour of belief of conventional economists intensifies, the mechanistic view of the world embraced by economics is seen as less and less relevant by the biologists, chemists and physicists of the 1990s.

The concept that free trade is unequivocally beneficial goes back to the very beginnings of the study of economics as a serious and separate discipline, to the late eighteenth and early nineteenth centuries. During the eighteenth century, a dramatic transformation of the world had begun. Slowly at first, and initially confined to Britain and parts of North-West Europe, the Industrial Revolution launched the world on to a path of sustained growth and economic expansion, with unprecedented levels of trade between nations.

In the late twentieth century we have become accustomed to the process of growth. Annual rates of growth of 2 per cent a year, for example, whether in America or Europe, are regarded as being insufficient to meet the growing demands of society. But for much of human history, a sustained expansion of the economy by 2 per cent required not just a year but decades to achieve.

Historically, although there were long-term fluctuations in economies, these were for the most part dependent upon shifts in weather patterns which determined the productivity of the harvest. Individual economies could also expand by military conquest and by plunder, which was essentially the basis of the prosperity even of the Roman empire. The conquests of Attila the Hun, who has entered popular mythology as the embodiment of terror and destruction (although Verdi's opera presents a more balanced view of this complex character), are a good example of this form of expansion. Sustained internal economic expansion, however, through the accumulation of capital and through technological progress, was very slow.

One recent study, by Angus Maddison,* estimates that in what are now the Western economies, during the 1000 years between AD500 and 1500, GDP grew on average by only 0.1 per cent a year. Using straightforward compound arithmetic, this growth rate implies that in 1500 the volume of economic activity in the West was between 2.5 and 3 times as great as it had been in 500. To put this in perspective, the Western economies grew as much in percentage terms between 1950 and 1970 as they did between 500 and 1500. And given the much higher base at the start of the 1950s, the absolute increase in the volume of goods and services produced was enormously greater.

Growth began to accelerate around 1500, and between then and 1700 Maddison estimates that total economic output in the West almost doubled. But an even sharper rise in growth then took place, to over 0.5 per cent a year during the eighteenth century. In the more advanced economies, such as Britain, growth was of the order of a full 1 per cent a year.

Such growth was dramatic. It was sufficient to ensure marked changes could be observed during the lifetime of an individual. It was also sufficient to exceed the surge in population which was taking place, and so ensure an expansion of average living standards. The sheer magnitude of the growth was without precedent in human history. It is almost impossible today to capture the wonder and excitement which was felt at the scale of the changes taking place in the economy and in society.

The process of growth fascinated the great early thinkers on economics, such as Adam Smith, Thomas Malthus, David Ricardo and Karl Marx. The central theme of their various works was an attempt to understand and explain both why it was happening and whether and

how it might continue, if indeed it could, for Malthus in particular was pessimistic.

Since it was in Britain that the transformation wrought by the Industrial Revolution was initially the greatest, it was primarily there that the early classical economists analysed the process of economic growth. But as industrialisation spread, so too did the new discipline of economics, and gradually through the nineteenth century citizens of other countries – such as the Austrian Böhm-Bawerk, the Swede Knut Wicksell, Léon Walras in Switzerland and Irving Fisher in America – began to make major contributions to the subject, challenging Britain's pre-eminence in the field.

In fact, the early economists concerned themselves with a wide range of highly practical questions. Moreover, scholars from a range of disciplines felt able to contribute to the discussions within political economy. Jeremy Bentham and the Mills, better known as philosophers and political theorists, and the historian Carlyle, for example, were all involved in these debates. Economics was not seen to be an exclusive preserve of professional economists.

To understand the world better, the early thinkers introduced the important concept of theoretical models, abstract versions of the economy which extracted the essentials of the problem under consideration, but which at the same time, by simplification from reality, made analysis easier. By this method of systematic and logical analysis, great steps forward were made in establishing the basis of modern economics. But despite this theoretical analysis, economics remained firmly based in reality. By no means everything they wrote has stood the test of time. But the overriding concern of these men was to understand the world which they could see about them.

Born in 1766 to wealthy parents, Thomas Robert Malthus was educated at Cambridge where, according to an early editor of his collected works, 'he was generally distinguished for gentlemanlike deportment'. Taking holy orders in the Church of England, this gentleman-scholar corresponded actively with Ricardo and achieved distinction on a European scale, being elected to the French Institute in Paris and the Royal Academy in Berlin before his death at the age of seventy. Writing at the end of the eighteenth century, he observed the explosion in population which was taking place, and drew his own gloomy conclusions.

For Malthus, slow growth in productivity in agriculture meant that any expansion of the population which took place, for whatever reason, was

*Angus Maddison, *Phases of Capitalist Development*, Oxford University Press, 1982.

unsustainable. The spectre of death through war and disease permeates his writings, but lurking in reserve, as a final arbiter of growth, is famine.

The Malthusian model has a great deal of validity for much of human history, but as we can now see, with the benefit of hindsight, Malthus did not appreciate the potential for massive technological advance in agriculture, which enables the Western world to be fed with a mere handful of its population engaged in agricultural production. Criticisms can also be made of his empirical data, his main concern being the huge expansion of population in what he regarded as the American colonies, much of which was due in fact to immigration rather than to Malthus's worry about the fecundity of the population. But in an important sense, the fact that we now believe him to have been wrong does not matter. He was trying to understand, by analytical means and using empirical evidence, a phenomenon of great import to society.

Some twenty years before Malthus was writing, a quiet Scottish academic published a book whose profound influence is still with us today. Adam Smith is now seen as the intellectual inspiration of the New Right in Western politics. The drive to privatise nationalised industries and functions carried out by state bureaucracies, and the insistence on the primacy of free-market forces, which has dominated Western politics in the past decade, are carried out with fervent invocations of Smith's name. His major economic work, *The Wealth of Nations* (1776), is indeed intended to demonstrate how the pursuit of enlightened self-interest by individuals and companies can benefit society as a whole. The book is a tremendous analytical achievement, setting up a model of how the economy is thought to operate and develop, and supporting the theory with an enormous sweep of contemporary and world historical evidence.

Smith's work was not a piece of abstract theorising, but was firmly rooted in reality. Indeed, the whole purpose of *The Wealth of Nations* was to understand how economies worked, and why some countries were so much wealthier than others. The full title of the book shows quite clearly Smith's intention. Almost invariably abbreviated now, it was published as *An Inquiry Into the Nature and Causes of the Wealth of Nations*.

In the best scientific tradition, Smith observed the world, and then sought to explain it. Observation came first, theory second.

Contrary to the general perception, *The Wealth of Nations* is by no means a pure eulogy of and apology for free-market forces. Margaret Thatcher famously declared, 'There is no such thing as society.' But such a sentiment would have been completely alien to Adam Smith, who

attached great importance to the concept of society. Indeed, before *The Wealth of Nations* appeared, he was already famous for his previous great work, *The Theory of Moral Sentiments*.

A central theme of *Moral Sentiments* was precisely to show how there are propensities in human nature which incline us towards society, such as fellow feeling and the desire both to obtain the approval of others and to be worthy of that approval. For Smith, these sentiments exercised a crucial influence on the self-control and restraint of individuals in their behaviour towards others.

Indeed, he believed that many behavioural problems would be eliminated if only people could see themselves more clearly 'in the light in which others see us'. Importantly, the tendency for individuals to control their behaviour because of the opinions of others was not seen as a utilitarian act, but one which arose quite naturally.

In other words, self-restraint could arise in a system in which people followed purely their own self-interest, simply because of the practical value of such restraint. Life would be intolerable if everyone pursued a career of fraud, pillage and murder. But for Smith, self-control was not dependent upon such self-seeking calculations, but was a natural, integral part of human nature.

The moral climate in which the economy and society function is also an important theme in *The Wealth of Nations*. The enlightened pursuit of self-interest is seen as the driving force of a successful economy, but in the context of a shared view of what constitutes reasonable behaviour. For Smith, an important role of the state was to assume powers which could be used if necessary to support the moral framework. This did not simply extend to the system of justice, or even to legal provisions for the state to deal with monopoly powers. Smith was particularly concerned, for example, with the quality of life of the labouring poor. He defined living standards in terms not only material, but also moral, arguing that the principles of industrial organisation on which material prosperity was based required workers to become increasingly specialised and narrowly focused in their working lives. This process – the principle of the division of labour, in Smith's famous phrase – brought enormous benefits in material terms. But at the same time, it rendered many individuals 'not only incapable of relishing or bearing a part in any rational conversation, but of conceiving any generous, noble or tender sentiment, and consequently of forming any just judgment concerning many even of the ordinary duties of private life. Of the great

and extensive interests of his country he is altogether incapable of judging.'

Smith argued that the state had the very important duty to tackle this problem, by providing a level of education sufficient to render every citizen capable of exercising an appropriate level of intellectual and social 'virtue'. The state should even extend its range of activities into the cultural sphere, in order to raise the overall intellectual level of the population, to the benefit of all.

The importance to Smith of the overall set of values in which the economy operates is generally ignored by his followers in the late twentieth century. His economics, based upon individual self-interest, is remembered, but his moral framework is not. Yet societal values are an important theme, and one which will be revisited in the second part of this book, in the context of understanding post-war economic performance. Differences both across countries and within a particular country over time in value systems and the degree of social cohesion are important in understanding, for example, the behaviour of unemployment since the war.

In sharp contrast, modern economics views the economy as something which can be analysed in isolation. There are few greater insults in an orthodox economist's vocabulary than to describe someone as a sociologist. The institutional setting, the historical experience and the overall framework of behaviour are ruthlessly excluded from contemporary economic theory.

In the years following Adam Smith's great book, the pace of economic development quickened even further. In the first two decades of the nineteenth century, the remarkable David Ricardo applied himself to an analysis of contemporary economic questions, of which economic growth remained the most important.

Ironically, it is the shy and retiring academic, Adam Smith, who is today by far the better known of these two outstanding minds. Indeed, it is even possible to obtain a respectable degree in economics with only the haziest notion of Ricardo's existence. Yet to his contemporaries in the emerging world power of Britain, Ricardo was a truly outstanding figure, whose premature death at the age of only fifty-one in 1823 was a major loss to society. He made an enormous amount of money on the Stock Exchange, and even more as a loan contractor during the Napoleonic Wars. He retired from money making in 1815. One outlet for his energies became politics, and in 1819 he entered the House of

Commons, taking advantage of the then prevailing attitude in British politics by purchasing a constituency in Ireland, which he never visited, for the sum of around £1 million at today's prices. Despite this rather unusual, to modern eyes, method of gaining a seat, Ricardo established himself very quickly as an important authority on questions of economics in Parliament.

Like Smith, Ricardo's intellectual interests ranged widely across social and economic problems, or, as he perceived them to be, questions of political economy. These were not to be studied loftily, above the hurly burly of political debate. The whole purpose of the subject was to improve human welfare through a better understanding of how the economy operated. His major work, entitled *Principles of Political Economy and Taxation*, appeared in 1817.

In the early years of the nineteenth century, Britain was engaged in a military struggle with Napoleon, on a scale which is dwarfed only by the global conflicts of our own century. This had a huge impact on British public finances, as military expenditure rose dramatically and the government was obliged to borrow on an unprecedented scale. Ricardo addressed a number of pressing practical issues, such as the stability of the currency at a time when the government was printing money to finance its deficit, and the question as to whether a deficit in the public finances was better dealt with by borrowing or by taxation.

On the question of trade, he extended the analysis made by Adam Smith. Given the great practical importance of this issue in the early nineteenth century, it is worth spending some time on the subject.

One question which intrigued the early, classical economists was why trade between nations should take place at all. This was not merely an abstract area of intellectual speculation. Powerful bodies of opinion believed strongly in the regulation and protection from foreign competition of both industry and agriculture, policies which deterred rather than promoted trade. In thinking and writing about trade, Smith and Ricardo were addressing a contemporary problem of major political and economic importance.

The Corn Laws in Britain were the prime example of such an issue. They gave a high degree of protection to British agriculture, and were an absolutely central political question in the first half of the nineteenth century.

During the Napoleonic Wars, the supply of corn to Britain from the rest of Europe had been cut off and the price of wheat tripled. The poor,

whether urban or rural, suffered terribly as a result. But landlords and farmers benefited enormously. With the defeat of Napoleon, imported corn once again became available, and prices fell. The Corn Laws were hurriedly passed to restrict imports, and to enable prices to stay high. The urban population, of all classes, was violently opposed to the laws, often literally so, and a number of major riots took place. In contrast, landowners both great and small were very strongly in favour. The ultimate abolition of the Laws, a quarter of a century after Ricardo's death, was an issue of such importance that the Conservative Party split on the question, and as a result was out of power for a generation.

In *The Wealth of Nations*, Adam Smith demonstrated that it was in general advantageous for a country to specialise in the production of those products in which it held an absolute advantage over other countries. In other words, its areas of production were those in which it could produce more efficiently than others. If two countries could each produce a different product more efficiently than the other, then it would be to the advantage of both for each to specialise in producing the efficient product, and for trade to take place between them. In general, Smith argued, this would be better for both countries than if each tried to produce both products.

Ricardo went much further. The thirty to forty years between the successive editions of *The Wealth of Nations* and the appearance of *The Principles of Political Economy* had seen a further dramatic acceleration in economic development, particularly in Britain. As industrialisation proceeded, it was entirely possible that for a time Britain held an absolute advantage in the production not just of manufactured goods but also, thanks to mechanisation and technological improvements, in agriculture as well. In other words, Britain could produce a wide range of goods more efficiently than anyone else. Yet trade still took place.

Ricardo explained this by the theory of comparative advantage, which is still the basis of international trade theory in economics today. Imagine that a country, such as Britain in the early nineteenth century, had such a lead in technological development that it could produce any given product more efficiently than any other country.

The theory says that even in these circumstances everyone could benefit from trade. The most efficient country should concentrate its resources on producing those goods where the gap between its efficiency and those of competing nations was the greatest. The less efficient countries should produce those products where the gap was smallest. In

this way, more resources could be concentrated on those goods which could be produced the most efficiently of all.

The practical application for Ricardo was clear. Britain could produce both corn and manufactures more efficiently than other countries. But Britain's comparative advantage was much greater in manufactures. In other words, the gap between the efficiency of Britain in producing manufactured goods and that of the rest of the world was greater than the gap between Britain and the rest of the world in the efficiency of their agricultural production. By concentrating on manufactures, Britain could obtain the necessary amount of corn to feed its population from abroad far more cheaply than if it were produced at home. For Ricardo, this constituted a devastating argument against the protectionism of the Corn Laws.

Ricardo was careful to point out that his theory was dependent upon the assumption that funds available to invest in industry ('capital', for short) did not flow freely from one country to another. While capital then moved reasonably easily between regions in any one country, the same did not apply between different countries, even within Western Europe. Ricardo wrote of the 'fancied or real insecurity of capital, together with the natural disinclination which every man has to quit the country of his birth, and intrust himself to a strange government and new laws'. He approved of these restrictions on capital mobility, and stated that he would 'be sorry to see them weakened'.

In contrast, at the end of the twentieth century, capital is for the most part highly mobile. There are still areas where the risk of losing one's investment through expropriation of assets by the state exists. And small and medium-sized companies may well be deterred from investing abroad by local customs. Southern Italy, for example, is not an area to which the foreign entrepreneur is naturally drawn. But for large corporations, to all intents and purposes, capital is mobile throughout the world. Investments can be carried out almost anywhere, and indeed governments vie with each other for the privilege of large companies investing in their country.

Despite the fact that an important assumption behind Ricardo's trade theory, to which he himself drew attention, no longer holds empirically, the orthodoxy of free trade and free markets still prevails in contemporary economics.

The question which undoubtedly most intrigued the great classical economists was that of economic growth. It was this that was making a

dramatic difference to both the economy in particular and society in general.

Writing in the early decades of the nineteenth century, Ricardo was by no means certain that growth on the scale he observed could continue. One reason for this was the influence of Malthus on his thoughts about the productivity of agriculture, which led him to suspect that ultimately the growth process might break down through the inability of the economy to support the growth in population.

But Ricardo thought hard about the conditions under which the remarkable transformation in the economy which he observed could continue. An important aspect of this for him was the distribution of national income between profits, wages and rent, or the income from land and property. For Ricardo, the possibility existed that profits would become too low to sustain growth.

Profits were seen as extremely important to economic development by the early economists. Without an adequate level of profit, for example, investment in new machinery and equipment and in new methods of transport such as canals and railways would not be enough to sustain growth. The role of profits in modern economics has faded over time, which is not to say that their true influence in the economy has changed in any way. On the contrary, the neglect of the impact of profits on the behaviour of the economy is a crucial weakness of modern economic analysis, whether Keynesian or monetarist, and it is a theme developed in the second half of this book.

The first economist to appreciate fully the profound qualitative change in the economic system which industrial capitalism brought about was Karl Marx. Marx drew not only on the experience of industrialisation in his native Germany, but also on events in Britain, where he spent the latter part of his life in political exile. The political aura which surrounds his name through its appropriation by the Soviet Communists makes it difficult for many people to approach his writings in the same way as they would those of, say, Adam Smith. But he was writing in the same intellectual, scientific tradition of setting up theoretical models, not in a purely abstract way, but as a means of trying to understand actual economic events.

Marx had the advantage of writing thirty or forty years later than Ricardo. Industrialisation and growth, far from faltering, had progressed by leaps and bounds. What appeared as a new phenomenon to Ricardo, which might at any time disappear, was seen by Marx to have become

a permanent feature of society. He concluded that the build up of investment in factories and rapid technological development, the features which distinguished industrial capitalism from all previous societies, would guarantee growth in the long run. And on this point, Marx was right.

Marx did have doubts about the ultimate sustainability of growth. If technical advances and the dissemination of new techniques slowed down, the only way to sustain expansion would be to invest in greater and greater amounts of machinery and buildings, the fixed capital of industry. And eventually, as the size of the stock of this capital grew, the rate of profit available on yet more new investment would inevitably fall. So the two engines of growth, technological advance and the expansion of the stock of fixed capital in machines, vehicles and so forth, would break down.

A vast and esoteric literature has developed over subsequent years on Marx's concept of the falling rate of profit. Whether the rate of profit has fallen or not, technological progress is as rapid as ever, and economic growth continues. Marx himself allowed this as a distinct possibility, and his model of economic growth by no means implied an inevitable breakdown of the economic system.

A further important innovation by Marx was to analyse business cycles. We are now familiar with the way in which our economies move through periods of boom, followed by recession, and so on. Much of contemporary macro-economic policy has the intention of modifying and controlling these fluctuations – with, it has to be said, little success. But in the first half of the nineteenth century, such short-term cycles were an entirely new phenomenon. Marx again formulated an analytical model to try to account for them.

In the twentieth century, John Maynard Keynes has been the most important scholar working in the tradition of the classical political economists. This does not mean that he agreed with everything they wrote. But his interest, like theirs, was in the analysis of the great issues of his day, the greatest of which in the inter-war period was not growth but unemployment, a problem so acute at the time that in desperation the Germans turned to Hitler and to fascism. The very future of Western democracies was placed at risk. Keynes was concerned not just to understand unemployment intellectually, but to put forward practical suggestions as to how the problem could be solved. He believed fervently that, for all its faults, Western liberal democracy offered the best hope for

the world, and he saw himself working to save it.

Keynes, a Fellow of King's College, Cambridge, had enormous influence with governments around the world on a range of issues from the early 1920s until his death shortly after the Second World War. He fought an unremitting struggle against what he saw as the baleful and malign influences of orthodox economics, which taught that, even with rates of unemployment of more than 20 per cent in both America and Germany, governments should not intervene in the economy, to avoid interfering with the workings of the free-market mechanism.

Keynes, like Adam Smith, believed that market economies could be an enormous force for good in terms of their efficiency and the resulting prosperity which they could bring through economic growth. But he was contemptuous of orthodox economic theory, despite its ostensible concern to analyse the workings of markets, because he regarded such theory as offering a seriously misleading view of how the market economies of the West actually worked.

Like all great thinkers, Keynes's teachings have become distorted by many of his followers, and, as we will see in later chapters, there is an important distinction to be made between his own economics and much of what is now described as Keynesian economics. Indeed, the latter has been safely absorbed by, and neutered within the framework of the orthodox economics of today.

Not everyone can be a Malthus, or a Smith, a Ricardo, a Marx or a Keynes. But economists can aim to emulate the distinguishing feature of their works, namely the attempt to understand the world around them and the great practical questions of the day.

An internal culture has developed within academic economics which positively extols esoteric irrelevance. Despite a new emphasis in some of the very best work now being done, particularly in the United States, on confronting theory with empirical evidence, a relatively low status is given to applied work, involving the empirical testing of theories, in contrast to pure theoretical research.

Of course, this attitude is not unique to economics. Some of the greatest minds of world history have worked on theoretical physics, for example, and theory has a high standing in many disciplines. But in economics, pure theory is held to describe how the world actually operates. There is no perceived need to examine this empirically.

In other disciplines, the need to test theories is strong, and indeed some of the greatest theorists, Archimedes and Isaac Newton, for

example, seem to have had a fairly acute sense of empirical observation as well. Of course, it is possible to make advances by pure thought, without reference to observation. But such opportunities are distinguished by their rarity. The truly great thinkers allow mundane events such as lying in a bath or sitting under an apple tree to inform the development of their theories.

Usually, it is only by attempting to describe an observed phenomenon by setting up a theoretical model, and then checking its empirical relevance as thoroughly as possible, that scientific progress can be made. The more situations in which the model can be applied successfully, the greater the confidence in the theory, and the greater the respect in which it is held. Newton's theory of gravity is seen as so outstandingly brilliant precisely because it can explain such an enormously wide range of events.

In contrast, many theoretical economists today bring to mind Shadwell's 1676 Restoration comedy, *The Virtuoso*. The Virtuoso himself, an eminent theorist about almost anything which moves, is, for example, held to be the greatest swimmer in the world. But he never actually swims in water. He simply lies on a table and follows to perfection the movements of a frog which is dangled on a string in front of him. At least the Virtuoso, by observing the frog, has the merit of allowing empirical reality to impinge on him to a modest extent.

Contemporary orthodox economics is isolated. It is isolated from its roots in the late eighteenth and early nineteenth centuries, when economists were by no means afraid to theorise, but did so purely to illustrate and understand the great practical issues of the day. Its method of analysis is isolated from the wider context of society, in which the economy operates, and which Adam Smith believed to be of great importance. And its methodology, despite the pretensions of many of its practitioners, is isolated from that of the physical sciences, to whose status it none the less aspires.