

FINANCIAL TIMES

The future of Capitalism

The big debate

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Francesco Guerrera – Paul Kennedy – Nigel
Lawson – Kishore Mahbubani – Kevin Murphy –
Edmund Phelps – Amartya Sen – Robert Schiller –
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Seeds of its own destruction

By Martin Wolf

Another ideological god has failed. The assumptions that ruled policy and politics over three decades suddenly look as outdated as revolutionary socialism.

“The nine most terrifying words in the English language are: ‘I’m from the government and I’m here to help.’” Thus quipped Ronald Reagan, hero of US conservatism. The remark seems ancient history now that governments are pouring trillions of dollars, euros and pounds into financial systems.

“Governments bad; deregulated markets good”: how can this faith escape unscathed after Alan Greenspan, pupil of Ayn Rand and predominant central banker of the era, described himself, in congressional testimony last October, as being “in a state of shocked disbelief” over the failure of the “self-interest of lending institutions to protect shareholders’ equity”?

In the west, the pro-market ideology of the past three decades was a reaction to the perceived failure of the mixed-economy, Keynesian model of the 1950s, 1960s and 1970s. The move to the market was associated with the election of Reagan as US president in 1980 and the ascent to the British prime ministership of Margaret Thatcher the year before. Little less important was the role of Paul Volcker, then chairman of the Federal Reserve, in crushing inflation.

Yet bigger events shaped this epoch: the shift of China from the plan to the market under Deng Xiaoping, the collapse of Soviet communism between 1989 and 1991 and the end of India’s inward-looking economic policies after 1991. The death of central planning, the end of the cold war and, above all, the entry of billions of new participants into the rapidly globalising world economy were the high points of this era.

Today, with a huge global financial crisis and a synchronised slump in economic activity, the world is changing again. The financial system is the brain of the market economy. If it needs so expensive a rescue, what is left of Reagan’s dismissal of governments? If the financial system has failed, what remains of confidence in markets?

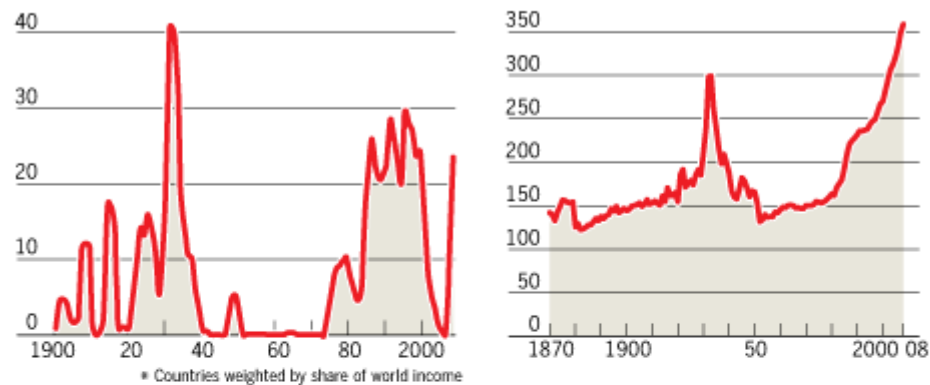
It is impossible at such a turning point to know where we are going. In the chaotic 1970s, few guessed that the next epoch would see the taming of inflation, the unleashing of capitalism and the death of communism. What will happen now depends on choices unmade and shocks unknown. Yet the combination of a financial collapse with a huge recession, if not something worse, will surely change the world. The legitimacy of the market will weaken. The credibility of the US will be damaged. The authority of China will rise. Globalisation itself may founder. This is a time of upheaval.

How did the world arrive here? A big part of the answer is that the era of liberalisation contained seeds of its own downfall: this was also a period of massive growth in the scale and profitability of the financial sector, of frenetic financial innovation, of growing global macroeconomic imbalances, of huge household borrowing and of bubbles in asset prices.

In the US, core of the global market economy and centre of the current storm, the aggregate debt of the financial sector jumped from 22 per cent of gross domestic product in 1981 to 117 per cent by the third quarter of 2008. In the UK, with its heavy reliance on financial activity, gross debt of the financial sector reached almost 250 per cent of GDP (see charts).

The era of liberalisation contained the seeds of its own downfall - financial crises and an explosion in debt have given way to a deep global recession

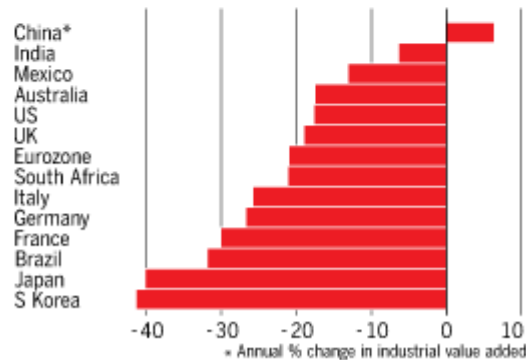
Proportion of countries with banking crises* Total US debt as % of GDP
% of countries (1900-2008)



Global GDP growth
Annual % change in real GDP



Manufacturing output
Annualised quarterly % change in volume, Q4 2008



Sources: Reinhart & Rogoff 'Banking Crises; an Equal Opportunity Menace' (AEA 2008); Hoisington Investment Management; IMF; Thomson Datastream

Carmen Reinhart of the University of Maryland and Kenneth Rogoff of Harvard argue that the era of liberalisation was also a time of exceptionally frequent financial crises, surpassed, since 1900, only by the 1930s. It was also an era of massive asset price bubbles. By intervening to keep their exchange rates down and accumulating foreign currency reserves, governments of emerging economies generated huge current account surpluses, which they recycled, together with inflows of private capital, into official capital outflows: between the end of the 1990s and the peak in July 2008, their currency reserves alone rose by \$5,300bn.

These huge flows of capital, on top of the traditional surpluses of a number of high-income countries and the burgeoning surpluses of oil exporters, largely ended up in a small number of high-income countries and particularly in the US. At the peak, America absorbed about 70 per cent of the rest of the world's surplus savings.

Meanwhile, inside the US the ratio of household debt to GDP rose from 66 per cent in 1997 to 100 per cent a decade later. Even bigger jumps in household indebtedness occurred in the UK. These surges in household debt were supported, in turn, by highly elastic and innovative financial systems and, in the US, by government programmes.

Throughout, the financial sector innovated ceaselessly. Warren Buffett, the legendary investor, described derivatives as “financial weapons of mass destruction”. He was proved at least partly right. In the 2000s, the “shadow banking system” emerged and traditional banking was largely replaced by the originate-and-distribute model of securitisation via constructions such as collateralised debt obligations. This model blew up in 2007.

We are witnessing the deepest, broadest and most dangerous financial crisis since the 1930s. As Profs Reinhart and Rogoff argue in another paper, “banking crises are associated with profound declines in output and employment”. This is partly because of overstretched balance sheets: in the US, overall debt reached an all-time peak of just under 350 per cent of GDP – 85 per cent of it private. This was up from just over 160 per cent in 1980.

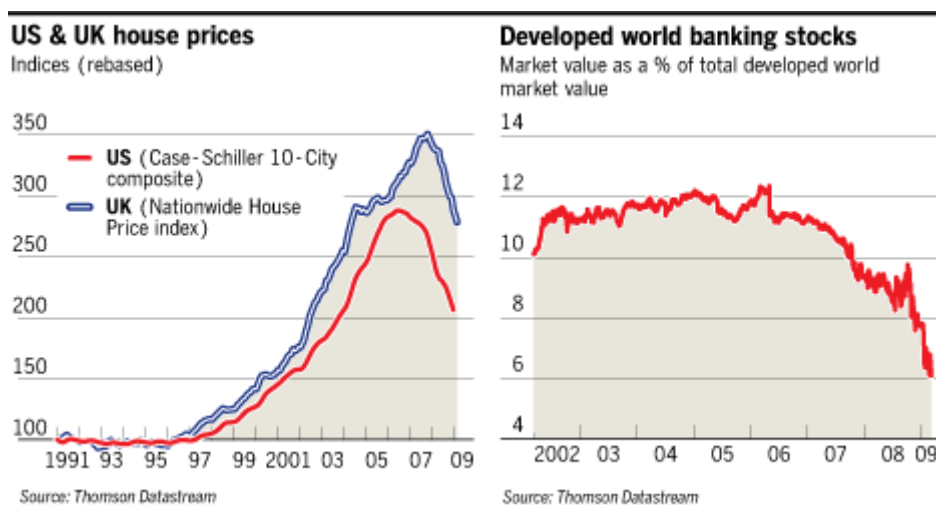
Among the possible outcomes of this shock are: massive and prolonged fiscal deficits in countries with large external deficits, as they try to sustain demand; a prolonged world recession; a brutal adjustment of the global balance of payments; a collapse of the dollar; soaring inflation; and a resort to protectionism. The transformation will surely go deepest in the financial sector itself. The proposition that sophisticated modern finance was able to transfer risk to those best able to manage it has failed. The paradigm is, instead, that risk has been transferred to those least able to understand it. As Mr Volcker remarked during a speech last April: “Simply stated, the bright new financial system – for all its talented participants, for all its rich rewards – has failed the test of the marketplace.”

In a recent paper Andrew Haldane, the Bank of England’s executive director for financial stability, shows how little banks understood of the risks they were supposed to manage. He ascribes these failures to “disaster myopia” (the tendency to underestimate risks), a lack of awareness of “network externalities” (spillovers from one institution to the others) and “misaligned incentives” (the upside to employees and the downside to shareholders and taxpayers).

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After the crisis, we will surely “see finance less proud”, as Winston Churchill desired back in 1925. Markets will impose a brutal, if temporary, discipline. Regulation will also tighten.

Less clear is whether policymakers will contemplate structural remedies: a separation of utility commercial banking from investment banking; or the forced reduction in the size and complexity of institutions deemed too big or interconnected to fail. One could also imagine a return of much banking activity to the home market, as governments increasingly call the tune. If so, this would be “de-globalisation”.



Churchill called also for industry to be “more content”. In the short run, however, the collapse of the financial system is achieving the opposite: a worldwide industrial slump. It is also spreading to every significant sector of the real economy, much of which is clamouring for assistance.

Yet if the financial system has proved dysfunctional, how far can we rely on the maximisation of shareholder value as the way to guide business? The bulk of shareholdings is, after all, controlled by financial institutions. Events of the past 18 months must confirm the folly of this idea. It is better, many will conclude, to let managers determine the direction of their companies than let financial players or markets override them.

A likely result will be an increased willingness by governments to protect companies from active shareholders – hedge funds, private equity and other investors. As a defective financial sector loses its credibility, the legitimacy of the market process itself is damaged. This is particularly true of the free-wheeling “Anglo-Saxon” approach.

No less likely are big changes in monetary policy. The macroeconomic consensus had been in favour of a separation of responsibility for monetary and fiscal policy, the placing of fiscal policy on autopilot, independence of central banks and the orientation of monetary decisions towards targeting inflation. But with interest rates close to zero, the distinction between monetary and fiscal policy vanishes. More fundamental is the challenge to the decision to ignore asset prices in the setting of monetary policy.

Many argue that Mr Greenspan, who succeeded Mr Volcker, created the conditions for both bubbles and subsequent collapse. He used to argue that it would be easier to clean up after the bursting of a bubble than identify such a bubble in real time and then prick it. In a reassessment of the doctrine last November, Donald Kohn, Fed vice-chairman, restated the orthodox position, but with a degree of discomfort.

Mr Kohn now states that “in light of the demonstrated importance to the real economy of speculative booms and busts (which can take years to play out), central banks probably should always try to look out over a long horizon when evaluating the economic outlook and deliberating about the appropriate accompanying path of the policy rate”. Central banks will have to go further, via either monetary policy or regulatory instruments.

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Yet a huge financial crisis, together with a deep global recession, if not something far worse, is going to have much wider effects than just these.

Remember what happened in the Great Depression of the 1930s. Unemployment rose to one-quarter of the labour force in important countries, including the US. This transformed capitalism and the role of government for half a century, even in the liberal democracies. It led to the collapse of liberal trade, fortified the credibility of socialism and communism and shifted many policymakers towards import substitution as a development strategy.

The Depression led also to xenophobia and authoritarianism. Frightened people become tribal: dividing lines open within and between societies. In 1930, the Nazis won 18 per cent of the German vote; in 1932, at the height of the Depression, their share had risen to 37 per cent.

One transformation that can already be seen is in attitudes to pay. Even the US and UK are exerting direct control over pay levels and structures in assisted institutions. From the inconceivable to the habitual has taken a year. Equally obvious is a wider shift in attitudes towards inequality: vast rewards were acceptable in return for exceptional competence; as compensation for costly incompetence, they are intolerable. Marginal tax rates on the wealthier are on the way back up.

Yet another impact will be on the sense of insecurity. The credibility of moving pension savings from government-run pay-as-you-go systems to market-based systems will be far smaller than before, even

though, ironically, the opportunity for profitable long-term investment has risen. Politics, like markets, overshoot.

The search for security will strengthen political control over markets. A shift towards politics entails a shift towards the national, away from the global. This is already evident in finance. It is shown too in the determination to rescue national producers. But protectionist intervention is likely to extend well beyond the cases seen so far: these are still early days.

The impact of the crisis will be particularly hard on emerging countries: the number of people in extreme poverty will rise, the size of the new middle class will fall and governments of some indebted emerging countries will surely default. Confidence in local and global elites, in the market and even in the possibility of material progress will weaken, with potentially devastating social and political consequences. Helping emerging economies through a crisis for which most have no responsibility whatsoever is a necessity.

The ability of the west in general and the US in particular to influence the course of events will also be damaged. The collapse of the western financial system, while China's flourishes, marks a humiliating end to the "uni-polar moment". As western policymakers struggle, their credibility lies broken. Who still trusts the teachers?

These changes will endanger the ability of the world not just to manage the global economy but also to cope with strategic challenges: fragile states, terrorism, climate change and the rise of new great powers. At the extreme, the integration of the global economy on which almost everybody now depends might be reversed. Globalisation is a choice. The integrated economy of the decades before the first world war collapsed. It could do so again.

On June 19 2007, I concluded an article on the "new capitalism" with the observation that it remained "untested". The test has come: it failed. The era of financial liberalisation has ended. Yet, unlike in the 1930s, no credible alternative to the market economy exists and the habits of international co-operation are deep.

"I've a feeling we're not in Kansas any more," said Dorothy after a tornado dropped her, her house and dog in the land of Oz. The world of the past three decades has gone. Where we end up, after this financial tornado, is for us to seek to determine.

Adam Smith's market never stood alone

By Amartya Sen

Exactly 90 years ago, in March 1919, faced with another economic crisis, Vladimir Lenin discussed the dire straits of contemporary capitalism. He was, however, unwilling to write an epitaph: "To believe that there is no way out of the present crisis for capitalism is an error." That particular expectation of Lenin's, unlike some he held, proved to be correct enough. Even though American and European markets got into further problems in the 1920s, followed by the Great Depression of the 1930s, in the long haul after the end of the second world war, the market economy has been exceptionally dynamic, generating unprecedented expansion of the global economy over the past 60 years. Not any more, at least not right now. The global economic crisis began suddenly in the American autumn and is gathering speed at a frightening rate, and government attempts to stop it have had very little success despite unprecedented commitments of public funds.

The question that arises most forcefully now is not so much about the end of capitalism as about the nature of capitalism and the need for change. The invoking of old and new capitalism played an energising part in the animated discussions that took place in the symposium on "New World, New Capitalism" led by Nicolas Sarkozy, the French president, Tony Blair, the former British prime minister, and Angela Merkel, the German chancellor, in January in Paris.

The crisis, no matter how unbeatable it looks today, will eventually pass, but questions about future economic systems will remain. Do we really need a "new capitalism", carrying, in some significant way, the capitalist banner, rather than a non-monolithic economic system that draws on a variety of institutions chosen pragmatically and values that we can defend with reason? Should we search for a new capitalism or for a "new world" – to use the other term on offer at the Paris meeting – that need not take a specialised capitalist form? This is not only the question we face today, but I would argue it is also the question that the founder of modern economics, Adam Smith, in effect asked in the 18th century, even as he presented his pioneering analysis of the working of the market economy.

Smith never used the term capitalism (at least, so far as I have been able to trace), and it would also be hard to carve out from his works any theory of the sufficiency of the market economy, or of the need to accept the dominance of capital. He talked about the important role of broader values for the choice of behaviour, as well as the importance of institutions, in *The Wealth of Nations*; but it was in his first book, *The Theory of Moral Sentiments*, published exactly 250 years ago, that he extensively investigated the powerful role of non-profit values. While stating that "prudence" was "of all virtues that which is most helpful to the individual", Smith went on to argue that "humanity, justice, generosity, and public spirit, are the qualities most useful to others".*

What exactly is capitalism? The standard definition seems to take reliance on markets for economic transactions as a necessary qualification for an economy to be seen as capitalist. In a similar way, dependence on the profit motive, and on individual entitlements based on private ownership, are seen as archetypal features of capitalism. However, if these are necessary requirements, are the economic systems we currently have, for example, in Europe and America, genuinely capitalist? All the affluent countries in the world – those in Europe, as well as the US, Canada, Japan, Singapore, South Korea, Taiwan, Australia and others – have depended for some time on transactions that occur largely outside the markets, such as unemployment benefits, public pensions and other features of social security, and the public provision of school education and healthcare. The creditable performance of the allegedly capitalist systems in the days when there were real achievements drew on a combination of institutions that went much beyond relying only on a profit-maximising market economy.

It is often overlooked that Smith did not take the pure market mechanism to be a free-standing performer of excellence, nor did he take the profit motive to be all that is needed. Perhaps the biggest mistake lies in interpreting Smith's limited discussion of why people seek trade as an exhaustive analysis of all the

behavioural norms and institutions that he thought necessary for a market economy to work well. People seek trade because of self-interest – nothing more is needed, as Smith discussed in a statement that has been quoted again and again explaining why bakers, brewers, butchers and consumers seek trade. However an economy needs other values and commitments such as mutual trust and confidence to work efficiently. For example, Smith argued: “When the people of any particular country has such confidence in the fortune, probity, and prudence of a particular banker, as to believe he is always ready to pay upon demand such of his promissory notes as are likely to be at any time presented to him; those notes come to have the same currency as gold and silver money, from the confidence that such money can at any time be had for them.”

Smith explained why this kind of trust does not always exist. Even though the champions of the baker-brewer-butcher reading of Smith enshrined in many economics books may be at a loss to understand the present crisis (people still have very good reason to seek more trade, only less opportunity), the far-reaching consequences of mistrust and lack of confidence in others, which have contributed to generating this crisis and are making a recovery so very difficult, would not have puzzled him.

There were, in fact, very good reasons for mistrust and the breakdown of assurance that contributed to the crisis today. The obligations and responsibilities associated with transactions have in recent years become much harder to trace thanks to the rapid development of secondary markets involving derivatives and other financial instruments. This occurred at a time when the plentiful availability of credit, partly driven by the huge trading surpluses of some economies, most prominently China, magnified the scale of brash operations. A subprime lender who misled a borrower into taking unwise risks could pass off the financial instruments to other parties remote from the original transaction. The need for supervision and regulation has become much stronger over recent years. And yet the supervisory role of the government in the US in particular has been, over the same period, sharply curtailed, fed by an increasing belief in the self-regulatory nature of the market economy. Precisely as the need for state surveillance has grown, the provision of the needed supervision has shrunk.

This institutional vulnerability has implications not only for sharp practices, but also for a tendency towards over-speculation that, as Smith argued, tends to grip many human beings in their breathless search for profits. Smith called these promoters of excessive risk in search of profits “prodigals and projectors” – which, by the way, is quite a good description of the entrepreneurs of subprime mortgages over the recent past. The implicit faith in the wisdom of the stand-alone market economy, which is largely responsible for the removal of the established regulations in the US, tended to assume away the activities of prodigals and projectors in a way that would have shocked the pioneering exponent of the rationale of the market economy.

Despite all Smith did to explain and defend the constructive role of the market, he was deeply concerned about the incidence of poverty, illiteracy and relative deprivation that might remain despite a well-functioning market economy. He wanted institutional diversity and motivational variety, not monolithic markets and singular dominance of the profit motive. Smith was not only a defender of the role of the state in doing things that the market might fail to do, such as universal education and poverty relief (he also wanted greater freedom for the state-supported indigent than the Poor Laws of his day provided); he argued, in general, for institutional choices to fit the problems that arise rather than anchoring institutions to some fixed formula, such as leaving things to the market.

The economic difficulties of today do not, I would argue, call for some “new capitalism”, but they do demand an open-minded understanding of older ideas about the reach and limits of the market economy. What is needed above all is a clear-headed appreciation of how different institutions work, along with an understanding of how a variety of organisations – from the market to the institutions of state – can together contribute to producing a more decent economic world.

**An anniversary edition of ‘The Theory of Moral Sentiments’ will be published by Penguin Books this year, with a new introduction in which I discuss the contemporary relevance of Smith’s ideas*

The writer, who received the 1998 Nobel Prize in economics, teaches economics and philosophy at Harvard University. A longer essay by him on this topic appears in the current edition of The New York Review of Books

Lessons learnt for capitalism's future

Some crises spread hysteria; some clear the mind and focus attention. This one has done both. Lehman Brothers' fall panicked financial markets into paralysis. Wrong-footed policymakers scrambled for responses – to the point of then US Treasury secretary Hank Paulson's three-page proposal for a law to give him \$700bn, no strings attached.

Since then, everyone has had time to think. In the past two months, the Financial Times has published a Comment and Analysis series on the future of capitalism. Now is a good time to take stock of the lessons of that debate.

The crisis is unprecedented in the truly global reach of both its origins and its effects. Surpluses in emerging countries powered western bubbles. When they burst, the crisis struck the core of the global system, leaving no country sheltered from its consequences. We have learnt at great cost the need to manage the global economy better – global financial markets in particular.

We have rediscovered some old truths. People are not always rational; they make mistakes and are carried away by euphoria. Speculating with borrowed money is inherently risky – and riskier the more complex and interconnected are the assets. When external rules and internal ethics are both weak, self-interested actors push costs and risks on to others. Therefore markets are not always self-correcting. Unregulated markets may reduce, not improve, social efficiency.

These are indictments of capitalists, not of capitalism. Capitalism comes in many varieties and the cavalier thesis that less regulation is always better has been exposed as false; but the main features of the liberal market economy – private property rights, smart but even-handed and arms-length regulation, and democratic politics – are uncontested. Capitalism's worst crisis in 70 years has not prompted a serious alternative vision of society.

It has, however, laid bare that our current national framework for financial regulation is incapable of governing a global financial system.

Within individual countries, it is governments' obligation to save the financial sector from collapse. In return they must demand the right to constrain institutions' behaviour and align their risks with society's interests. Companies that gamble and lose must be disposed of through bankruptcies that do not drag others down with them.

Bankruptcy is capitalism: it makes you bear the costs of the risks you choose to take on. But the incapacity of national governments to manage international markets has sheltered the largest financial institutions from this capitalism.

As finance grew global, national rules could not prevent some companies from becoming too large for bankruptcy. We have discovered that to close down financial giants we must bail out their creditors or risk a global recession. At the same time, those too large to fail may also be too large for national governments to save, for fiscal and political reasons. Few countries can even afford to rescue truly global institutions. Taxpayers may in any case refuse to meet failed institutions' liabilities to foreigners.

The biggest question raised by the crisis is how to resolve this contradiction. The current mismatch of globalised finance and national governance is unsustainable. Either governance becomes more globalised or finance less globalised.

There are pressures in both directions. Banks are already becoming more beholden to national governments as the latter extend their economic lifelines. Predictably but disappointingly, many politicians are using their increased power to impose protectionist policies.

There is no way around national governments taking more control of banks. But this is a dangerous path, and not only for the integrity of the global economy. A state too deeply involved in its banking sector risks both politicising it and being captured by it. State control must focus narrowly on restoring banks' health and end as soon as possible.

Other signs point to more globalised governance. Policymakers are talking to each other: this month's G20 summit was welcome if insufficiently productive. US, UK and European Union authorities express similar ideas about regulatory reform. But keeping financial markets global while making them safe requires much tighter co-operation between countries – including emerging countries such as China – not only on financial regulation, but also on global macroeconomics and monetary policy.

That would be the most desirable resolution of the crisis. A retreat from globalisation is economically damaging; in the current political climate it will also sow distrust and strengthen antagonism between nations. The world's leaders must fend off the worst consequences of a crisis they failed to prevent.

A failure to control the animal spirits

By Robert Shiller

Lydia Lopokova, wife of the economist John Maynard Keynes, was a famous ballerina. She was also a Russian émigré. Thus Keynes knew from the experience of his in-laws the horrors of living in the worst of socialist economies. But he also knew first-hand the great difficulties that come from unregulated, unfettered capitalism. He lived through the British depression of the 1920s and 1930s. Thus Keynes was inspired to find a middle way for modern economies.

We are seeing, in this financial crisis, a rebirth of Keynesian economics. We are talking again of his 1936 book *The General Theory of Employment, Interest and Money*, which was written during the Great Depression. This era, like the present, saw many calls to end capitalism as we know it. The 1930s have been called the heyday of communism in western countries. Keynes's middle way would avoid the unemployment and the panics and manias of capitalism. But it would also avoid the economic and political controls of communism. The General Theory became the most important economics book of the 20th century because of its sensible balanced message.

In times of high unemployment, creditworthy governments should expand demand by deficit spending. Then, in times of low unemployment, governments should pay down the resultant debt. With that seemingly minor change in procedures, a capitalist system can be stable. There is no need for radical surgery on capitalism.

Adherents to Keynes's message were so eager to get this simple policy implemented, on both sides of the Atlantic, that they failed to notice – or perhaps they intentionally disregarded – that the General Theory also had a deeper, more fundamental message about how capitalism worked, if only briefly spelled out. It explained why capitalist economies, left to their own devices, without the balancing of governments, were essentially unstable. And it explained why, for capitalist economies to work well, the government should serve as a counterbalance.

The key to this insight was the role Keynes gave to people's psychological motivations. These are usually ignored by macroeconomists. Keynes called them animal spirits, and he thought they were especially important in determining people's willingness to take risks. Businessmen's calculations, he said, were precarious: "Our basis of knowledge for estimating the yield 10 years hence of a railway, a copper mine, a textile factory, the goodwill of a patent medicine, an Atlantic liner, a building in the City of London amounts to little and sometimes to nothing." Despite this, people somehow make decisions and act. This "can only be taken as a result of animal spirits". There is "a spontaneous urge to action".

There are times when people are especially adventuresome – indeed, too much so. Their adventures are supported in these times by a blithe faith in the future, and trust in economic institutions. These are the upswing of the business cycle. But then the animal spirits also veer in the other direction, and then people are too wary.

George Akerlof and I, in our book *Animal Spirits* (Princeton 2009), expand on Keynes's concept and tie it in to modern literature on behavioural economics and psychology. Much more clarity about the psychological underpinnings of animal spirits is possible today.

For example, social psychologists, notably Roger Schank and Robert Abelson, have shown how much stories and storytelling, especially human-interest stories, motivate much of human behaviour. These stories can count for much more than abstract calculation. People's economic moods are largely based on the stories that people tell themselves and tell each other that are related to the economy.

We have seen these stories come and go in rapid succession in recent years. We first had the dotcom bubble and the envy-producing stories of young millionaires. It burst in 2000, but was soon replaced with another bubble, involving smart “flippers” of properties.

This mania was the product not only of a story about people but also a story about how the economy worked. It was part of a story that all investments in securitised mortgages were safe because those smart people were buying them. Those enviable people who are buying these assets must be checking on them, therefore we do not need to. We need only run alongside them.

What allowed this mania and these stories to persist as long as they did? To a remarkable extent we have got into the current economic and financial crisis because of a wrong economic theory – an economic theory that itself denied the role of the animal spirits in getting us into manias and panics.

According to the standard “classical” theory, which goes back to Adam Smith with his *Wealth of Nations* in 1776, the economy is essentially stable. If people rationally pursue their own economic interests in free markets they will exhaust all mutually beneficial opportunities to produce goods and exchange with one another. Such exhaustion of opportunities for mutually beneficial trade results in full employment. By this theory it could not be otherwise.

Of course, some workers will be unemployed. But they will be unable to find work only because they are in a temporary search for a job or because they insist on pay that is unreasonably high. Such unemployment is viewed as voluntary, and evokes no sympathy.

Classical theory also tells us that financial markets will also be stable. People will only make trades that they consider to benefit themselves. When entering financial markets – buying stocks or bonds or taking out a mortgage or even very complex securities – they will do due diligence in seeing that what they are buying is worth what they are paying, or what they are selling.

What this theory neglects is that there are times when people are too trusting. And it also fails to take into account that if it can do so profitably, capitalism will produce not only what people really want, but also what they think they want. It can produce the medicine people want to cure their ills. That is what people really want. But if it can do so profitably, it will also produce what people mistakenly want.

It will produce snake oil. Not only that: it may also produce the want for the snake oil itself. That is a downside to capitalism. Standard economic theory failed to take into account that buyers and sellers of assets might not be taking due diligence, and the marketplace was not selling them insurance against risk in the complex securities that they were buying, but was, instead, selling them the financial equivalent of snake oil.

There is a broader moral to all this – about the nature of capitalism. On the one hand, we want to take advantage of the wisdom of Adam Smith. For the most part, the products produced by capitalism are what we really want, produced at a price that we are willing and able to pay. On the other hand, when confidence is high, and since financial assets are hard to evaluate by those who are buying them, people will and do buy snake oil. And when that is discovered, as it invariably must be, the confidence disappears and the economy goes sour.

It is the role of the government at two levels to see that these events do not occur. First, it has a duty to regulate asset markets so that people are not falsely lured into buying snake-oil assets. Such standards for our financial assets make as much common sense as the standards for the food we eat, or the purchase medicine we get from the pharmacy. But we do not want to throw out the good parts of capitalism with the bad. To take advantage of the good parts of capitalism, when fluctuations occur it is the role of the government to see that those who can and want to produce what others want to buy can do so. It is the role of the government, through its counterbalancing fiscal and monetary policy, to maintain full employment.

The principles behind such an economy are not the principles behind a socialist economy. The government insofar as possible is only creating the macroeconomic conditions that will allow the economy to function well.

That is the role of government. Its role is to ensure a “wise *laissez faire*”. This is not the free-for-all capitalism that has been recommended by the current economic theory, and seems to have been accepted as gospel by economic planners, and also many economists, since the Thatcher and Reagan governments. But it also is a significant middle way between those who see the economic disasters and unemployment of unfettered capitalism, on the one hand, and those who believe that the government should play no role at all.

The idea that unfettered, unregulated capitalism would invariably produce the good outcomes was a wrong economic theory regarding how capitalist societies behave and what causes their crises. That wrong economic theory fails to take account of how the animal spirits affect economic behaviour. It fails to take into account the roles of confidence, stories and snake oil in economic fluctuation.

The writer is the Arthur M. Okun professor of economics at Yale University and co-founder and chief economist of MacroMarkets.

Read the big four to know capital's fate

By Paul Kennedy

US presidents, in confronting crises, have often let it be known that they are serious students of history and biography. George W. Bush, an unusually voracious late-night reader, devours books on the lives of Great Men, including his hero Winston Churchill, (who in turn liked to read about his illustrious ancestor, Marlborough). Barack Obama looks to biographies of Abraham Lincoln for inspiration.

Given the enormity of the banking, credit and trade crisis, might it be worth suggesting to Mr Obama and his fellow leaders that they study the writings of the greatest of the world's political economists, instead? After all, we may be in such a grim economic condition that the clever direction of budgets is a greater attribute of leadership than the stout direction of battleships.

Since today's leaders cannot possibly read all the major works of political economy, let us help them by selecting four of the greatest names from Robert Heilbroner's classic collection *The Worldly Philosophers: The Lives, Times, and Ideas of the Great Economic Thinkers*: Adam Smith, the virtual founder of the discipline and early apostle of free trade; Karl Marx, that penetrating critic of the foibles of capitalism, and less reliable predictor of its "inevit-able" collapse; Joseph Schumpeter, the brilliant and unorthodox Austrian who was certainly no foe of the capitalist system but warned of its inherent volatilities (its "perennial gale of creative destruction"); and that great brain, John Maynard Keynes, who spent the second half of his astonishing career seeking to find policies to rescue the same temperamental free-market order from crashing to the ground.

Perhaps the supremely gifted playwright Tom Stoppard could put those four savants on stage and offer an imaginary weekend-long quadrilateral discourse among them about the future of capitalism. Failing such a creative work, what might we imagine the four great political economists would say about our present economic crisis?

Smith, one imagines, would claim that he had never advocated total laissez faire, was appalled at how sub-prime loans to fiscally insecure people contradicted his devotion to moral economy, and was concerned at the deficit spending proposed by many governments. Marx would still be badly bruised by learning of Lenin and Stalin's perversion of his communistic theories, and by the post-1989 withering-away of most of the world's socialist economies; yet he might still feel pleasure at modern financial capitalism foundering on its contradictions. The austere Schumpeter, by contrast, might be lecturing us to swallow another decade of serious depression before a newer, leaner form of capitalism emerged again, though with lots of evidence of severe gale-damage (the end of the US car industry, the decline of the City of London, perhaps) in its wake.

And Keynes? My own guess is that he would not be very happy at today's state of affairs. He might (only might) regard it as fine that he was quoted or misquoted millions of times in today's media, but one suspects that he would be uneasy at parts of Mr Obama's deficit-spending scheme: at the US Treasury's proposal to allocate more money to buying bad debts and rescuing bad banks than investing in job creation; at a Washington spending spree that seems unco-ordinated with those of Britain, Japan, China and the rest; and, most unsettling of all, at the fact that no one is asking who will purchase the \$1,750bn of US Treasuries to be offered to the market this year – will it be the east Asian quartet, China, Japan, Taiwan and South Korea (all with their own catastrophic collapses in production), the uneasy Arab states (yes, but to perhaps one-tenth of what is needed), or the near-bankrupt European and South American states? Good luck! If that colossal amount of paper is bought this year, who will have ready funds to purchase the Treasury flotations of 2010, then 2011, as the US plunges into levels of indebtedness that could make Philip II of Spain's record seem austere by comparison?

In the larger sense, of course, all four of our philosophers would be correct. Capitalism – our ability to buy and sell, move money around as we wish, and to turn a profit by doing so – is in deep trouble. No doubt

Smith, as he watches the collapse of Iceland and the Irish travails, is reconsidering his aphorism that little else is needed to create a prosperous state than “peace, easy taxes and tolerable administration of justice” – that did not work this time. By contrast, rumbles of satisfaction might be heard coming from Marx’s grave in Highgate cemetery, causing excitement for the still-considerable numbers of Chinese visitors. Meanwhile, Schumpeter will have due cause to mutter: “This is not a surprise, really.” As for Keynes, we might imagine him sipping tea with Wittgenstein at Grantchester meadows, pursing his lips at the incapacity of merely normal human beings to get things right: at our tendency to excessive optimism, our blindness to the signs of economic over-heating, our proneness to panic – and our need, every so often, to turn to clever men like himself to put the shattered Humpty-Dumpty of international capitalism back together again.

All these political economists instinctively recognised that the triumph of free-market forces – with the consequent elimination of older social contracts, the downgrading of the state over the individual, the end of restraints upon usury – would not only bring greater wealth to many but could also produce significant, possibly unintended consequences that would ripple through entire societies. *Laissez faire, laissez aller* was not only a call to those chafing under medieval, hierarchical constraints; it was also a call to unbind Prometheus. Logically, it both freed you from the chains of a pre-market age, and freed you to the risks of financial and social disaster. In the place of Augustinian rules came Bernie Madoff opportunities.

By the same instinctive reasoning, most sensible governments since Smith’s time have taken precautions against citizens’ totally unrestricted pursuit of private advantage. States have invoked the needs of national security (therefore you must protect certain industries, even if that is uneconomic), the desire for social stability (therefore do not allow 1 per cent of the population to own 99 per cent of its wealth and thus provoke civil riot), and the common sense of spending upon public goods (therefore invest in highways, schools and fire-brigades). In fact, with the exception of the few absurdly communist states such as North Korea, all of today’s many political economies lie along a recognisable spectrum of more-free-market versus less-free-market arrangements.

But what has happened over the past decade or more is that many governments let down their guard and allowed nimble, profit-seeking individuals, banks, insurance companies and hedge funds much greater scope to create new investment schemes, leverage more and more capital on the basis of increasingly thin real resources and widen dramatically the pool of gullible victims (silly, under-earning individuals, hopeful not-for-profits, Jewish charities, friends of a friend of an investment manager, the list is long), thereby creating our own era’s spectacular equivalent of the South Sea Bubble. As in all such gigantic credit “busts”, many millions more people – the innocent as well as the foolish – will be hurt than the snake-oil salesmen and loan managers who perpetrated these so-called “wealth creation” schemes.

What, then, is capitalism’s future? Our current, damaged system is not, despite Marx’s hopes, to be replaced by a totally egalitarian, communist society (such arrangements might be there in life after death). Our future political economy will probably not be one in which Smith or his present-day disciples could find much comfort: there will be a higher-than-welcome degree of government interference in “the market”, somewhat larger taxes and heavy public disapprobation of the profit principle in general. Schumpeter and Keynes, one suspects, will feel rather more at home with our new post-excess neocapitalist political economy. It will be a system where the animal spirits of the market will be closely watched (and tamed) by a variety of national and international zookeepers – a taming of which the great bulk of the spectators will heartily approve – but there will be no ritual murder of the free-enterprise principle, even if we have to plunge further into depression for the next years. *Homo Economicus* will take a horrible beating. But capitalism, in modified form, will not disappear. Like democracy, it has serious flaws – but, just as one finds faults with democracy, the critics of capitalism will discover that all other systems are worse. Political economy tells us so.

The writer is professor of history and director of International Security Studies at Yale University, is the author/editor of 19 books, including The Rise and Fall of the Great Powers (Vintage). He is writing an operational history of the second world war.

Capitalism needs a revived Glass-Steagall

By Nigel Lawson

That capitalism has been shown, in practice, to be endemically flawed should come as no surprise. That is the nature of mankind. What is more important is that history, notably the history of the world after the second world war, has demonstrated beyond dispute that every other system of economic organisation is far worse. So capitalism both deserves to survive, and will survive, just as it did after the even greater economic disaster of the 1930s.

But there is another lesson of the 1930s. It is that although capitalism survives it is capable of retreating behind a protectionist shell, at great cost to global prosperity. This is a real danger today. The “Buy American” provisions in President Barack Obama’s fiscal boost are an ominous sign. The impulse to resort to protection when economic hardship suddenly strikes is, of course, always present. But there is today a dangerous new factor which magnifies the threat. The leaders of some of America’s largest corporations have already joined up with organised labour (the AFL-CIO) to urge Congress to impose tariffs against imports from countries (such as China, for example) which are understandably unwilling to bear the heavy costs of an obligation to curb their carbon dioxide emissions. There is considerable support in Europe, notably within the European Commission and in France, for a similar approach.

It is essential, both in the US and in Europe, that this is resolutely rejected. The first and most important requirement for the future of capitalism is the preservation of globalisation, and the massive benefits it confers on mankind, in particular in the developing world. There are, inevitably, costs of globalisation; but they are hugely outweighed by the benefits. So resistance to protection, whatever arguments may be used in its favour, must be rigorously maintained. Nor is this an exclusively economic argument. It is a moral imperative, as well. Moreover, a trade war with China could well have unpredictable, and potentially highly damaging, political consequences.

But will capitalism need to change in the future? Again, the lesson of history is that the answer is “not really”. The economic cycle is endemic and inescapable, and everyone (with the exception of prime minister Gordon Brown) has always known this. What the current crisis does underline, however, is that a cyclical downturn associated with a collapse of the banking system is by an order of magnitude worse than a normal cyclical downturn.

So there does need to be a change to the banking system. In a nutshell, we need to return, in all major financial centres, to the separation of commercial banking from investment banking that was enforced in the US under the 1933 Glass-Steagall Act, until it was repealed by President Bill Clinton in the 1990s. This is all the more important since we now live in an age in which the acquisition of wealth appears to count for more than reputation.

Achieving this will not be easy or popular in banking circles, but it can be done. We have time to get it right: this is not firefighting, but fireproofing.

The overriding reason why this separation is essential is straightforward. It is only a commercial banking crisis that poses a systemic risk and can lead to the sort of mess we face today. It is folly to allow core banks to be in a position where they can be brought down by exciting but highly risky investment banking activities. But the idea that this can be prevented by judicious regulation of investment banking activities is a chimaera. In the real world, that is not possible: either the investment bankers will outsmart the regulators, or the regulators will respond with damaging overkill.

Thus investment banks should be left to their own creative devices, and subject essentially only to the discipline of the marketplace. This leaves a much more limited, and practicable, but still absolutely essential,

role for bank supervision and regulation: namely, to ensure that the core commercial banking system is thoroughly sound and adequately capitalised at all times.

It is worth adding that it is the capital adequacy regime, and not primarily interest rate policy, which needs to be responsive to asset-price bubbles.

What else (other than the maintenance of what passes for world peace) is needed to ensure that capitalism survives (as it will) and prospers (as it should)?

There is a danger in many parts of the world, and certainly in the UK, to imagine that since this is a global problem it requires a global solution, so the overriding need is for a global agreement. This may sound statesmanlike, but it is in fact a dangerous delusion. The overriding need is for the authorities in each country to put their own house in order.

The threat from terrorism is an instructive parallel. Terrorism is indeed a global problem, and international co-operation is clearly desirable. But that in no way diminishes the overriding duty of national governments to do what is necessary to protect their own people.

The same applies to financial regulation. As the Basel II bank capital rules clearly showed, international agreement is slow in arriving and, when it does arrive, it is likely to prove inadequate. As far as the UK is concerned, Mr Brown's decision, as chancellor, to scrap the strengthened system of bank supervision I put in place in 1987 and replace it with a system that has proved largely dysfunctional was not very clever. Without waiting for global agreement, however desirable that may be, we need to, and can, do a great deal better.

The writer was the UK's chancellor of the exchequer from 1983 to 1989

Fifty who will frame a way forward

by *Lionel Barber*

The world financial crisis will go down in history as the first stress test of globalisation, writes *Lionel Barber*, FT editor.

In 2001 the September 11 terrorist attacks highlighted the threat of non-state actors waging asymmetric warfare against the most powerful nation on earth, but the economic consequences proved manageable. By contrast, the international credit squeeze marks an existential challenge to the free movement of goods, people and capital, the post-1989 model for global prosperity.

Tackling the crisis and planning for the post-crisis order requires political leadership. Even more important, it demands international co-operation. In this respect, networks matter as much as individuals. What are the patterns of co-operation that have so far emerged; who are the most influential movers and shakers; and how can they restore the confidence necessary to turn the tide?

The FT's guide to people who will shape debate on the future of capitalism is by no means exhaustive. President Barack Obama stands at the top not merely because his country is at the centre of the storm but also because US leadership remains the necessary, though insufficient, antidote to the crisis.

The new global pecking order requires the inclusion of Chinese figures including Wen Jiabao, prime minister, and Wang Qishan, the recently appointed vice-premier and former mayor of Beijing. From Europe, Gordon Brown, Nicolas Sarkozy and Angela Merkel all figure – but the trio has yet to meld into a collective voice.

Despite criticism of their pre-crisis record, regulators feature prominently. Lord Turner, the forceful head of the Financial Services Authority, has already made his mark in London. So has Mario Draghi, the quietly assertive governor of the Bank of Italy, who chairs the Financial Stability Forum of central bankers and treasury civil servants.

Ben Bernanke, Federal Reserve chairman, is a must, along with Robert Zoellick of the World Bank and Dominique Strauss-Kahn at the International Monetary Fund. But are national governments ready to give the IMF and World Bank the extra money and authority to play a central role?

Much-abused bankers make the cut, but fewer than might have appeared on a similar list five years ago. Jamie Dimon of JPMorgan Chase is King of the Street, for now; but do not count out the resourceful Lloyd Blankfein of Goldman Sachs or Michel Pébureau, cerebral head of BNP Paribas.

Sheikh Hamad bin Jassem, Qatari prime minister and head of the QIA sovereign wealth fund, reflects the new reality: those with the capital call the shots. But no one can ignore the power of the web. Hence the inclusion of Eric Schmidt of Google and the insurgent Arianna Huffington of The Huffington Post. Let the debate begin.

POLITICIANS

1: Barack Obama, 47
US president

On his economic rescue plans so far, reviews are mixed but much detail is still awaited. In the meantime, the president is pressing ahead with a radical domestic reform agenda encompassing healthcare, the environment and education. As promised, it has a strong whiff both of audacity and of hope.

2: Wen Jiabao, 66
Chinese prime minister

The man in charge of China's economy has a strong reputation overseas but is under fire at home from critics who say he put the brakes on too fast last year. A former geologist who rose through loyalty and attention to detail, he has demonstrated a populist touch – many know him as “Grandpa Wen”.

3: Angela Merkel, 54
Chancellor of Germany

Among advocates of a regulatory and systemic rather than purely macroeconomic or reactive response, she has called for a “new global constitution” for financial markets. The Christian Democrat will run for a second term on September 27.

4: Nicolas Sarkozy, 54
President of France

Regards himself as de facto leader of Europe given Gordon Brown's domestic political and economic woes and Angela Merkel's cumbersome coalition. During France's European Union presidency he forged a semblance of co-ordination and unity, which has since dissipated. He champions state intervention over Anglo-Saxon capitalism.

5: Gordon Brown, 58
UK prime minister

Hailed as a potential global saviour by economist Paul Krugman after recapitalising Britain's banks, the Labour former chancellor of the exchequer believes he is ideally equipped to tackle the crisis. Mr Brown hosts the Group of 20 summit of industrial and developing nations in London on April 2.

6: Vladimir Putin, 56
Prime minister of Russia

After enjoying a booming economy as president, he has seen the world change since he stepped down to the premiership last year. He will have to hold together a government budget that is suffering from an oil price slide.

7: Tim Geithner, 47
US Treasury secretary

Chairman of the New York Federal Reserve when the meltdown hit last September, he now spearheads the rescue of America's financial system. His February announcement of rescue guidelines was perceived as miscued.

8: Lawrence Summers, 54
Director, National Economic Council

As Bill Clinton's last Treasury secretary and Barack Obama's top economic adviser, Larry Summers is arguably the most influential person in the administration. The former president of Harvard is less abrasive than before. But that is still a work in progress.

9: Hamad bin Jasssem al-Thani, 50
Prime minister of Qatar; head of Qatar Investment Authority

Savvy, outspoken and a power broker in a gas-rich country that intends to spend its way out of the crisis and will probably succeed. The QIA, a sovereign wealth fund, will be bargain hunting as prices go down. Sheikh Hamad made waves by backing the creation of al-Jazeera, the popular Arabic channel.

10: Wang Qishan, 60
Vice-premier, China

Appointed last year, he has emerged as point man in the leadership on international financial issues. With a curriculum vitae that includes stints as mayor of Beijing and head of China Construction Bank, he is one of the few Chinese leaders at home in the diplomacy of the G20 summit. Famed for a blunt style.

11: Barney Frank, 68
Chairman, House of Representatives financial services committee

The congressman who will be one of the main architects helping to redesign US financial regulation wants to create a “systemic risk regulator”, saying the Fed should take on that task. Mr Frank is also pushing to overhaul mortgage financing and prevent lender abuses.

12: Steven Chu, 61
US energy secretary

With only one advanced degree to his name, he jokes he was the “academic black sheep” in his family of Chinese-American scholars. Yet Mr Chu had enough brainpower to win the Nobel Prize for physics in 1997. He will head efforts to promote green energy.

13: Olivier Besancenot, 34
French party leader

The Trotskyist postman who heads the New Anticapitalist party, France’s biggest extreme-left group, dreams of using unrest triggered by the recession to overturn the social and political order. Rated in polls as France’s most effective opposition politician, he has fought two presidential elections, winning well over 1m votes in each.

CENTRAL BANKERS

14: Ben Bernanke, 55
Chairman, US Federal Reserve

A scholar of the Great Depression and the measures that central banks can use at times of great crisis, he has had ample opportunity to put his theories into effect, using an expanding range of tools to try to arrest the slide.

15: Jean-Claude Trichet, 66
President, European Central Bank

The French bureaucrat, who has been tackling economic crises for more than two decades, believes politicians and central bankers must do their utmost to shore up economic confidence. He has helped rally governments behind rescue plans and regulatory reform.

16: Zhou Xiaochuan, 61
Governor, People’s Bank of China

China's central bank governor since 2002 is considered a principal supporter of faster market reforms. Fluent in English, he can hold his own among economists. He is in charge of nearly \$2,000bn in foreign exchange reserves.

17: Mervyn King, 60
Governor, Bank of England

Mr King's policymaking at the UK central bank has come under fire for emphasising economics over financial stability. But beyond doubt are his intellectual prowess and grasp of global economic links.

18: Masaaki Shirakawa, 59
Governor, Bank of Japan

Although monetary steward of the world's second largest economy, his cautious style and modest policy ambitions make clear he will not be a force for dramatic change. A BoJ veteran who calls central banking his hobby as well as his profession.

19: Mario Draghi, 61
Chairman, Financial Stability Forum and governor, Bank of Italy

US-educated economist, former Goldman Sachs executive and respected transatlanticist. He is a proponent of greater regulation, oversight and transparency at the FSF, an offshoot of the Group of Seven industrial countries that is expected to take on a greater role after the G20 summit.

20: Mark Carney, 43
Governor, Bank of Canada

The youthful Mr Carney continues the tradition of impressive Canadian governors. With a doctorate in economics, 13 years at Goldman and six as an official attending international meetings, he is well placed to understand the pressures of both banking and regulating.

21: Miguel Ordóñez, 63
Governor, Bank of Spain

As top Spanish central banker, Miguel Angel Fernández Ordóñez maintained a "contra-cyclical" provisioning system for banks, now seen as a model for the world. The Bank of Spain also rejected the off-balance-sheet units that helped to wreck banks' profits elsewhere.

22: William Dudley, 56
President, Federal Reserve Bank of New York

After a career that combined central banking with practical experience, Mr Dudley was named in January to head the arm of the US central banking system that is closest to the markets. Trained as an economist, he began his career at the Fed but spent most of his professional life at Goldman Sachs.

23: Jacques de Larosière, 79
Honorary governor, Banque de France

Managing director of the IMF from 1978 to 1987, when he oversaw policy on the Latin American debt crisis and the Plaza accord on the dollar. He was then governor of the Banque de France and president of the European Bank for Reconstruction and Development. A Commission group he chaired called last month for powerful EU regulators in banking, securities and insurance.

REGULATORS

24: Adair Turner, 53
Chairman, Financial Services Authority

Lord Turner of Ecchinswell started at the UK regulator the week after the collapse of Lehman Brothers. But in his first speech in January, the former McKinsey consultant offered one of the most comprehensive assessments of the origins of the crisis. This approach is familiar from his work in tackling problems from pensions to climate change. This month he is to present a report that will form the basis for reforms of UK financial regulation.

25: Sheila Bair, 54
Chairman, Federal Deposit Insurance Corporation

Oversees an agency that has seen its powers vastly expanded under plans to stand behind the banking system. As the list of “problem” banks grows further failures will put pressure on the FDIC’s deposit insurance fund.

26: Mary Schapiro, 53
Chairman, Securities and Exchange Commission

Having worked in regulation for more than 20 years, she has both a consummate résumé and a tough skin. But the SEC is under fire over the crisis and Bernard Madoff’s alleged \$50bn fraud. She has vowed to help restore investor confidence and toughen enforcement.

HEADS OF INSTITUTIONS

27: Jaime Caruana, 56
General manager, Bank for International Settlements

Spain’s former central bank governor takes over the hot seat at the central bankers’ bank next month. Having chaired the Basel II negotiations on bank capital, he is charged with helping find an alternative less prone to amplifying the economic cycle.

28: Dominique Strauss-Kahn, 59
Managing director, International Monetary Fund

A wily politician as well as a PhD economist. Like his counterpart at the World Bank, he has concentrated on trying to scale the institution up in size to address the crisis. He has also tried to finesse controversy over China’s currency policy by keeping the issue out of the bank’s executive board.

29: Robert Zoellick, 55
President, World Bank

After a career in public service with the odd stint in the private sector, he has sought to expand the bank’s capacity to lend in the face of the crisis.

30: Pascal Lamy, 61
Director-general, World Trade Organisation

Long-distance running has prepared Mr Lamy well for presiding over the marathon Doha round of trade talks. But the former EU commissioner has little executive power: he can consult, cajole and exhort rather than impose a deal.

INVESTORS

31: Lou Jiwei, 58
Chairman, China Investment Corp

The head of China's fledgling sovereign wealth fund is regarded as a crucial member of the "market economy clique" of officials that includes Zhou Xiaochuan, central bank governor. CIC's disastrous investments in Blackstone and Morgan Stanley have made him the target of criticism.

32: George Soros, 78
Founder of Soros Fund Management and Open Society Foundation

For the hedge fund manager and philanthropist, 2008 was a banner year – his fund defied a sinking market to post a return of nearly 10 per cent. The first Wall Street heavyweight to support Barack Obama, he has long predicted a crisis of global capitalism and finds himself in tune with the zeitgeist.

33: Warren Buffett, 78
Chairman, Berkshire Hathaway

The world's most famous investor; still probably its richest man. A proponent of value investing, he believes in selling when others are greedy and buying when they are fearful. But after a call to buy stocks in late 2008, it turned out the sell-off had further to go.

34: Laurence Fink, 56
Chief executive, BlackRock

BlackRock has probably done more to clean up the mess than any other firm – for example, advising the Fed as it unwinds AIG's credit default swaps. A mortgage-backed securities pioneer, Larry Fink is seen as one of few Wall Street leaders not to be discredited.

ECONOMISTS

35: Robert Shiller, 62
Professor of economics, Yale University

At the forefront of behavioural economics – a field that challenges the assumption that people, and particularly financial markets, are generally driven by rational behaviour. He wants ordinary people to have more rather than less exposure to derivatives, but as insurance against the nasty things in life.

36: Montek Singh Ahluwalia, 65
Deputy chairman, Indian Planning Commission

Described by some as the finest finance minister India never had, Mr Ahluwalia is associated with the reforms that helped make the country a promising emerging market. Over the past months, he has crafted India's gradual stimulus response to the crisis.

37: Paul Volcker, 81
Chairman, Economic Recovery Advisory Board

Fed chairman in 1979-87, he is remembered mostly for monetary medicine to bring inflation under control, A Democrat, he warned early and powerfully about subprime mortgages.

38: Paul Krugman, 56
Professor, Princeton University; columnist, The New York Times

Almost certainly the world's most famous economist, he parlayed a stellar academic background into a career as columnist, blogger and eviscerator of ideologically bound conservatism. He has carved out a niche as the Democrats' liberal conscience.

39: Nouriel Roubini, 49
Chairman, RGE Monitor

Known as Dr Doom for being persistently the most gloomy, and most accurate, predictor of the financial crisis and its link to the wider economy, Prof Roubini is now predicting a "near-Depression" unless radical action is taken. An adviser to Tim Geithner in the Treasury of the 1990s.

40: Leszek Balcerowicz, 62
Professor of economics, Warsaw School of Economics

Architect of Poland's economic transition, twice deputy prime minister and finance minister, then central bank governor. A believer in free markets, he is better known for the exposition of his ideas than building consensus.

BANKERS

41: Lloyd Blankfein, 54
Chief executive, Goldman Sachs

Steered his investment bank away from much of the 2008 destruction visited on Wall Street: Goldman was profitable for the year. In the harsh new environment, his task will be to find new growth areas without straying far from the firm's traditional roots.

42: Jamie Dimon, 52
Chairman, JPMorgan Chase

From Citigroup reject to acclaimed "King of Wall Street", Mr Dimon, who turns 53 on Friday, has been through the Street's ups and downs but so far the crisis has been kind. JPMorgan was able to buy rivals Bear Stearns and Washington Mutual on the cheap.

43: Stephen Green, 60
Chairman, HSBC

At HSBC since 1982, he has voiced strong views about the need for reform of banking. A lay preacher and author of a book about reconciling religion with free markets, he has criticised the industry's excesses during the boom.

44: Michel Pébereau, 67
Chairman, BNP Paribas

The long-serving chairman of France's largest lender has worked behind the scenes as an adviser to Christine Lagarde, finance minister. Heading BNP since shortly before it was privatised in 1993 gives him an insight into the role the state should play.

INDUSTRIALISTS

45: Carlos Ghosn, 55
Chief executive, Nissan and Renault

Long seen as an exemplar of cross-border co-operation in the car business and now a chief spokesman, holding the presidency of the European Automobile Manufacturers' Association.

46: Indra Nooyi, 53
Chief executive, PepsiCo

An advocate of globalisation who argues that it needs to be underpinned by cultural and political sensitivity and ethical values. She warned at Davos this year that "capitalism leads to greed" and needs effective regulation.

47: Eric Schmidt, 53
Chief executive, Google

The veteran computer scientist is a key link in the Obama administration's ties with Silicon Valley. His technocratic style mirrors the technological bent of the administration. He acted as an adviser to the Obama transition team.

MEDIA/ACADEMIA

48: Arianna Huffington, 58
Editor-in-chief, The Huffington Post

The former biographer has recreated the art of the Washington salon hostess for the digital age. HuffingtonPost.com, unlike many competitors, has managed to hold its audience since the election.

49: Rush Limbaugh, 58
Host, the Rush Limbaugh Show

"You can't just listen to Rush Limbaugh and get things done," Barack Obama told Republicans during negotiations on the stimulus. More than 20m radio listeners appear to disagree, as they lap up the talk show host's rhetoric against liberalism.

50: Kishore Mahbubani, 60
Dean, Lee Kuan Yew School of Public Policy

Though no outright proponent of superior "Asian values", he says the west needs to cede ground in institutions such as the World Bank and IMF for Asia to play a more constructive role.

A need to reconnect

By Francesco Guerrera

In different times, the offer from the check-in attendant would have been accepted with alacrity. But in the midst of the worst economic downturn since the Great Depression, with an angry public, populist politicians and an aggressive press baying for a crackdown on Wall Street's "excesses", the senior banker paused for thought when he heard those usually welcome airline words: "Sir, you have been upgraded to first class. Please follow me."

Finally replying, "I am fine in coach, thank you", he gave up the better seat and opened another chink in the armour of beliefs and practices that corporate America had built and spread around the world over decades.

Once hailed as examples of an American dream that rewarded success with large pay cheques, lavish perks and popular admiration, executives and their companies have been caught in the grip of a storm that will revolutionise business. The deep freeze of capital markets, the implosion of financial groups and the resulting rise in governments' sway over the private sector have called into question some of the foundations of Anglo-Saxon capitalism.

Long-held tenets of corporate faith – the pursuit of shareholder value, the use of stock options to motivate employees and a light regulatory touch allied with board oversight of management – are being blamed for the turmoil and look likely to be overhauled. "We are in uncharted waters," says Jack Welch, the former **General Electric** boss who embodied an era when the untrammelled interplay of market forces, domineering chief executives and the laser-like focus on quarterly earnings rises reigned supreme.

If, as it has become painfully apparent, the value system and operating principles that informed the corporate psyche since at least the end of the cold war were found wanting, what should replace them?

Business leaders are by instinct glass-half-full type of people but, this time, few believe their companies' future lies in their own hands. The financial sector's role in causing the shocks that have jolted the world economy has had a big side-effect: the debate on the future of corporate governance is no longer confined to the boardroom. Stakeholders ranging from trade unions to activist investors and government itself are claiming the right to draw the boundaries of a new corporate order. In the words of one union leader: "The time for corporate dictatorships is over. This is our time."

Such pressure, combined with an internal reassessment of companies' priorities precipitated by the crisis, is starting to crumble one of the cornerstones of the previous corporate edifice: the cult of shareholder value.

Since Mr Welch made the concept famous in a speech at New York's Pierre Hotel in 1981, the short-term goal of rewarding shareholders by increasing profits and dividends every quarter has become a mantra for companies around the world. With the share price of GE and other shareholder-focused companies soaring, executives from all over the world took up the credo Alfred Rappaport spelt out in his 1986 book, *Creating Shareholder Value*: "The ultimate test of corporate strategy, the only reliable measure, is whether it creates economic value for shareholders."

Fund managers encouraged this attitude, as pressure from their own quarterly reviews addicted them to the periodic improvements in earnings and stock prices promised by the prophets of shareholder value.

Today, that focus on the here and now is seen as a root cause of the world's economic predicament. "Immediate shareholder value maximisation, by itself, was always too short-term in nature," says Jeffrey Sonnenfeld at Yale School of Management. "It created a fleeting illusion of value creation by emphasising immediate goals over long-term strategies." Even Mr Welch argues that focusing solely on quarterly profit

increases was “the dumbest idea in the world”. “Shareholder value is a result, not a strategy,” he says. “Your main constituencies are your employees, your customers and your products.”

Like many other business figures, Mr Welch wants the task of charting a new course away from short-termism to fall to directors and executives. But unions, regulators and government authorities argue that a drive for change led by the same corporate elite that helped bring about the turmoil would not remove the contradictions that undermined the previous regime. “We don’t feel companies should be run in the interest of short-term investors and executives who are hell-bent on making a killing regardless of the risks and leave taxpayers and real long-term holders to pick up the pieces,” says Damon Silvers at the AFL-CIO, the US union federation.

Unions and “socially responsible” investors argue that the focus on short-term profits should be replaced not just by long-term strategic thinking but also by attention to issues such as the environment and the needs of customers and suppliers. The corporate social responsibility movement, on the rise before the crisis, is likely to receive fresh impetus from an investor recognition that companies’ narrow search for profits was not always the best strategy.

Many business leaders object to what they regard as the growing encroachment by the state and other interest groups on their ability to run the company. “If there is a danger in the current situation, it is that we don’t know how to exit from this little adventure in socialism so that the private sector can do what it does best – which is to innovate, grow and create job,” says John Castellani, president of the Business Roundtable, the lobby group for some of America’s largest companies.

But the arrival of President Barack Obama at the White House on the heels of a Democratic majority in Congress has, coupled with increased public antipathy towards plutocrats, already resulted in big wins for unions and other campaigners. Reforms that activist investors had demanded for years without much success, such as an (albeit non-binding) annual vote on executive pay, have already been approved by Congress. Others such as “proxy access” – the right for shareholders to nominate candidates to the board and vote down underperforming directors – are on the way, while the bonus caps imposed on the banks that took government funds have sent chills down many an executive spine.

These moves give campaigners new ammunition in the first big battle to reshape the rules of the business game: executive compensation. The failure of Wall Street’s high-risk, high-reward model is set to bring about change on two main fronts: top management’s pay and the use of stock options.

After years of soaring pay, business chieftains in America can expect to reap relatively meagre rewards in the coming years. As the downturn moved from Wall Street to Main Street, even companies that have not received federal aid, such as GE, FedEx and Motorola, have joined those on government life support in slashing top executives’ compensation.

Many are also re-examining the gap in pay between executives and other employees. In America, the discrepancy between the compensation of those at the top of the corporate tree and those further down the trunk has grown steadily for decades, reaching an estimated 275 times the average in 2007 and contributing to rising wealth inequality in the country.

A significant portion of the blame for rocketing executive remuneration and managers’ obsession with short-term goals is being pinned on stock options and other forms of incentive pay. Hitherto praised as a tool to align executive compensation with shareholders’ gains, options have been increasingly discredited for rewarding executives for stock market rises that have nothing to do with them. In banking, end-of-year awards of options and stock had the added drawback of remunerating staff well before the company or its shareholders could find out whether their bets had paid off.

Several banks have announced plans to claw back future bonuses from employees whose deals sour in later years. But the fallout from what one executive calls “an era of rewarding ourselves with other people’s money” will be felt beyond the financial sector. Regulators and investors look certain to strengthen the link

between pay and long-term performance by introducing measures such as a ban on the sale of shares and options until after retirement, or even a straight pay cap.

Fred Smith, the founder and chief executive of FedEx, spoke for many corporate leaders in December when he predicted: "Some of the fantastic outsized gains that were offensive to people will be increasingly less likely. At board level ... things will not be looked at as costless to the shareholders."

Boards themselves will be in the line of fire. The losses suffered by financial groups have exposed the belief that directors were the knowledgeable guardians of shareholders' interests as a fallacy – one that will not be lost on angry investors and fee-hungry lawyers. As a result, the composition of boards is likely to change dramatically.

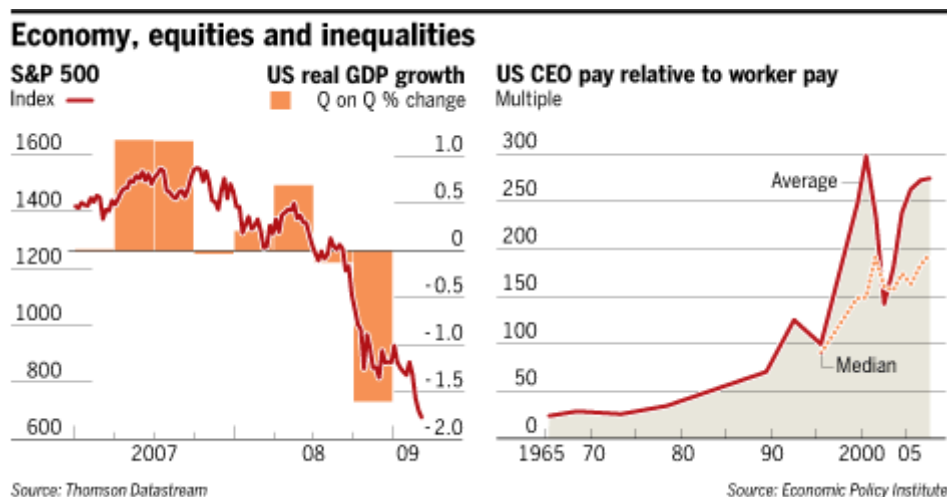
Russell Reynolds, the doyen of American headhunters, says directors will have to be both more knowledgeable and more selfless. "Gone are the days when directors played a good game of golf but did not understand the risk-reward ratio of the business," he says. "And yet the current environment calls for people who can devote time to the business for relatively little pay. It is almost a charitable act."

Investors such as Bob Pozen, who runs MFS Investment Management, believe that listed companies' boards should become more like their private equity-owned rivals: smaller, nimbler and more competent. "The directors on those boards have the expertise, the time and the incentive to fully understand the company's issues," he says.

Jeffrey Immelt, who has presided over a fall of about three-quarters in the price of GE's shares since succeeding Mr Welch in 2001 and this week saw the removal of its triple A credit rating by Standard & Poor's, recently lamented: "Anybody could run a business in the 1990s. A dog could have run a business."

Unfortunately for Mr Immelt and his contemporaries, these are not the 1990s and nor are they like the several years that followed. As business structures that were thought to be indestructible collapse in the meltdown, the corporate sector will have to give up a lot more than first-class seats.

Additional reporting by Justin Baer



Shareholder value re-evaluated

A palace revolution in the realm of business is toppling the dictatorship of shareholder value maximisation as the sole guiding principle for corporate action. As so often with regicide, many of the knives are in the hands of the old regime's own henchmen. Jack Welch, the former **General Electric** chief executive who ushered in the reign of shareholder value maximisation a quarter-century ago, told the Financial Times last week that "shareholder value is the dumbest idea in the world". But this revolution will not eat its own children – not Mr Welch, and more importantly not shareholders at large, who rather stand to benefit from being less fetishised.

In capitalism, private companies fulfil the social function of providing goods and services people want by competing for consumers' purchases. Companies that compete well – whose products consumers choose – are rewarded with profits. Since profits ultimately redound to the owners' advantage, holding managers accountable to shareholders best ensures that companies remain profitable and keep their products attractive to customers.

This basic model of economic organisation (supplemented with the government's requisite role as regulator and provider of public goods) is still sound; it fuelled unparalleled economic growth throughout the second half of the 20th century. Shareholder value maximisation as a principle of management, however, goes much further. It says that companies should take shareholder returns as their *operative* goal. Its most extreme version argues that executives should single-mindedly aim to increase the stock price even in the short run.

But the theory confuses cause and effect and conflates goals with metrics. Competent executives' dedication to improving products, to motivating employees, and to pleasing customers will usually be reflected in higher profits and stock prices. But such results are measures, not causes, of business success. As this crisis shows, efforts to boost stock prices far from guarantee stable or secure earnings.

Shareholder value maximisation presupposes efficient capital markets where companies' stock prices fully capture their future profitability and nothing else. The bubbles that ballooned and burst in the past decade show that in the short run, and over surprisingly long periods, capital markets can be remarkably inefficient. In a bubble, each individual investor maximises short-term return by following the herd – but the herd as a whole must lose money when the bubble bursts.

Clearly, strong total shareholder returns – capital gains from the share price plus a flow of dividends – are what ultimately matter to investors in a company. But there are reasons to think that shareholder value, like happiness and many of life's other good things, is best achieved by not aiming at it too directly.

Take compensation policy. It makes sense partly to align executives' or employees' remuneration with the stock price through share awards. But some such schemes, particularly involving share options, can create incentives to game the stock price rather than create sound and sustainable business practices. Their vesting period, typically three years, may have encouraged managers, especially in the banking industry, to take dangerous short-term business risks, the catastrophic results of which only became evident long after the options had been monetised.

Good business results often require long-term relationships based on trust between managers, employees, customers and suppliers. But long-term trust between two parties is impossible unless their respect for each others' interests is anchored in something deeper than the effect on the next quarterly profit numbers.

None of this undermines the model of capitalism that leaves to private market actors the power to decide how capital should be deployed. Instead it has implications for how market actors ought to use that power.

Managers must know – and they must communicate to shareholders – that if companies strive to make good products and generate trust with customers, suppliers and creditors, profits will follow for the well-run business. Investors must permit and encourage that focus and not obsess about short-term results. Directors – independent directors in particular – have a special responsibility to create this mutual understanding.

If they do, companies will enjoy more stable and sustainable profits, dividends and the prospects for the stock price improves. In the end this secures value for shareholders better than actively maximising the stock price is likely to do. Shareholder value maximisation is dead; long live shareholder value.

We need a better cushion against risk

By Alan Greenspan

The extraordinary risk-management discipline that developed out of the writings of the University of Chicago's Harry Markowitz in the 1950s produced insights that won several Nobel prizes in economics. It was widely embraced not only by academia but also by a large majority of financial professionals and global regulators.

But in August 2007, the risk-management structure cracked. All the sophisticated mathematics and computer wizardry essentially rested on one central premise: that the enlightened self-interest of owners and managers of financial institutions would lead them to maintain a sufficient buffer against insolvency by actively monitoring their firms' capital and risk positions. For generations, that premise appeared incontestable but, in the summer of 2007, it failed. It is clear that the levels of complexity to which market practitioners, at the height of their euphoria, carried risk-management techniques and risk-product design were too much for even the most sophisticated market players to handle prudently.

Even with the breakdown of self-regulation, the financial system would have held together had the second bulwark against crisis – our regulatory system – functioned effectively. But, under crisis pressure, it too failed. Only a year earlier, the Federal Deposit Insurance Corporation had noted that “more than 99 per cent of all insured institutions met or exceeded the requirements of the highest regulatory capital standards”. US banks are extensively regulated and, even though our largest 10 to 15 banking institutions have had permanently assigned on-site examiners to oversee daily operations, many of these banks still took on toxic assets that brought them to their knees. The UK's heavily praised Financial Services Authority was unable to anticipate and prevent the bank run that threatened Northern Rock. The Basel Committee, representing regulatory authorities from the world's major financial systems, promulgated a set of capital rules that failed to foresee the need that arose in August 2007 for large capital buffers.

The important lesson is that bank regulators cannot fully or accurately forecast whether, for example, subprime mortgages will turn toxic, or a particular tranche of a collateralised debt obligation will default, or even if the financial system will seize up. A large fraction of such difficult forecasts will invariably be proved wrong.

What, in my experience, supervision and examination can do is set and enforce capital and collateral requirements and other rules that are preventative and do not require anticipating an uncertain future. It can, and has, put limits or prohibitions on certain types of bank lending, for example, in commercial real estate. But it is incumbent on advocates of new regulations that they improve the ability of financial institutions to direct a nation's savings into the most productive capital investments – those that enhance living standards. Much regulation fails that test and is often costly and counterproductive. Regulation should enhance the effectiveness of competitive markets, not impede them. Competition, not protectionism, is the source of capitalism's great success over the generations.

New regulatory challenges arise because of the recently proven fact that some financial institutions have become too big to fail as their failure would raise systemic concerns. This status gives them a highly market-distorting special competitive advantage in pricing their debt and equities. The solution is to have graduated regulatory capital requirements to discourage them from becoming too big and to offset their competitive advantage. In any event, we need not rush to reform. Private markets are now imposing far greater restraint than would any of the current sets of regulatory proposals.

Free-market capitalism has emerged from the battle of ideas as the most effective means to maximise material wellbeing, but it has also been periodically derailed by asset-price bubbles and rare but devastating economic collapse that engenders widespread misery. Bubbles seem to require prolonged periods of

prosperity, damped inflation and low long-term interest rates. Euphoria-driven bubbles do not arise in inflation-racked or unsuccessful economies. I do not recall bubbles emerging in the former Soviet Union.

History also demonstrates that underpriced risk – the hallmark of bubbles – can persist for years. I feared “irrational exuberance” in 1996, but the dotcom bubble proceeded to inflate for another four years. Similarly, I opined in a federal open market committee meeting in 2002 that “it’s hard to escape the conclusion that ... our extraordinary housing boom ... financed by very large increases in mortgage debt, cannot continue indefinitely into the future”. The housing bubble did continue to inflate into 2006.

It has rarely been a problem of judging when risk is historically underpriced. Credit spreads are reliable guides. Anticipating the onset of crisis, however, appears out of our forecasting reach. Financial crises are defined by a sharp discontinuity of asset prices. But that requires that the crisis be largely unanticipated by market participants. For, were it otherwise, financial arbitrage would have diverted it. Earlier this decade, for example, it was widely expected that the next crisis would be triggered by the large and persistent US current-account deficit precipitating a collapse of the US dollar. The dollar accordingly came under heavy selling pressure. The rise in the euro-dollar exchange rate from, say, 1.10 in the spring of 2003 to 1.30 at the end of 2004 appears to have arbitrated away the presumed dollar trigger of the “next” crisis. Instead, arguably, it was the excess securitisation of US subprime mortgages that unexpectedly set off the current solvency crisis.

Once a bubble emerges out of an exceptionally positive economic environment, an inbred propensity of human nature fosters speculative fever that builds on itself, seeking new unexplored, leveraged areas of profit. Mortgage-backed securities were sliced into collateralised debt obligations and then into CDOs squared. Speculative fever creates new avenues of excess until the house of cards collapses. What causes it finally to fall? Reality.

An event shocks markets when it contradicts conventional wisdom of how the financial world is supposed to work. The uncertainty leads to a dramatic disengagement by the financial community that almost always requires sales and, hence, lower prices of goods and assets. We can model the euphoria and the fear stage of the business cycle. Their parameters are quite different. We have never successfully modelled the transition from euphoria to fear.

I do not question that central banks can defuse any bubble. But it has been my experience that unless monetary policy crushes economic activity and, for example, breaks the back of rising profits or rents, policy actions to abort bubbles will fail. I know of no instance where incremental monetary policy has defused a bubble.

I believe that recent risk spreads suggest that markets require perhaps 13 or 14 per cent capital (up from 10 per cent) before US banks are likely to lend freely again. Thus, before we probe too deeply into what type of new regulatory structure is appropriate, we have to find ways to restore our now-broken system of financial intermediation.

Restoring the US banking system is a key requirement of global rebalancing. The US Treasury’s purchase of \$250bn (€185bn, £173bn) of preferred stock of US commercial banks under the troubled asset relief programme (subsequent to the Lehman Brothers default) was measurably successful in reducing the risk of US bank insolvency. But, starting in mid-January 2009, without further investments from the US Treasury, the improvement has stalled. The restoration of normal bank lending by banks will require a very large capital infusion from private or public sources. Analysis of the US consolidated bank balance sheet suggests a potential loss of at least \$1,000bn out of the more than \$12,000bn of US commercial bank assets at original book value.

Through the end of 2008, approximately \$500bn had been written off, leaving an additional \$500bn yet to be recognised. But funding the latter \$500bn will not be enough to foster normal lending if investors in the liabilities of banks require, as I suspect, an additional 3-4 percentage points of cushion in their equity capital-to-asset ratios. The overall need appears to be north of \$850bn. Some is being replenished by increased bank cash flow. A turnaround of global equity prices could deliver a far larger part of those needs. Still, a deep

hole must be filled, probably with sovereign US Treasury credits. It is too soon to evaluate the US Treasury's most recent public-private initiatives. Hopefully, they will succeed in removing much of the heavy burden of illiquid bank assets.

The writer is the former chairman of the US Federal Reserve.

The consequence of bad economics

As a shell-shocked world tries to fathom how its economic collapse happened, commentators are busily outbidding each other with claims about the exceptional nature of this crisis. But the most astounding fact is how familiar its physiognomy and physiology look compared to past financial crashes.

No one can read the chronicles of those earlier crashes without sensing – with a chill – that history is repeating itself. The story of the modern capitalist economy is a rhythmic repetition of cycles, syncopated by eerily similar crises. These crises, while their details differ, are but variations on the same theme. Easy money, geared up by leverage, floods the financial system through innovative products. This simultaneously pumps up asset prices and obscures their speculative nature, with euphoria usurping the place of analysis. Until, one day, something triggers a loss of confidence in the continued rise of prices, and the whole leveraged edifice crumbles.

Today's collapse has followed the same pattern – as outlined on Tuesday in the FT's series on the future of capitalism. Easy money came from global macroeconomic imbalances that generated enormous capital inflows into deficit countries. Those flows helped drive interest rates down and increase access to credit, fuelling a leveraged asset bubble. Many leaders in the affected countries – in particular the US – knew this: Alan Greenspan himself spoke of "irrational exuberance". And yet they did not understand how they had to act to prevent a replay of the past.

Today's disastrous outcome is testimony to those leaders' intellectual failure. Most fundamentally to blame is their unwillingness to see (or their wilful ignorance of) what markets need in order to produce good outcomes for society.

Every first-year economics student learns the conditions for an unregulated market, in theory, to function efficiently. The most important are full information, enforceable property rights and contracts, and the absence of "externalities" – effects of economic transactions on third parties. These conditions are never fulfilled, but many markets come close enough that participants' self-interested actions achieve good outcomes for all.

When these conditions are absent, markets malfunction; the way they do so is one of the great topics of economic theory. It tells those who care to listen that when a market is too opaque, or when the effects of market transactions are too inter-dependent, the pursuit of self-interest can make everyone worse off, or unfairly land some with the losses caused by others, or – *in extremis* – make markets disappear altogether. Nowhere are these problems greater than in financial markets.

Finance expands our economic possibilities by enabling us to shift funds between the present and the future, and between different outcomes of risky ventures. For that reason, confidence in future values is everything for a financial product: if confidence is lost, the market collapses. But in a non-transparent financial sector, unwarranted valuations will often occur, which, when they fail, can destroy confidence throughout the financial system. And the more implicated the economy is in the financial sector, the wider are the repercussions of such dysfunctions – to the point where financial failures can threaten the economic system as a whole.

Economic policymakers could have limited these dangers, but they did not do so. Instead, they allowed the bubble to inflate and let financial transactions become increasingly opaque and ever more leveraged. As in previous bubbles, value came to rely on the perception of value itself: growth pulling itself up by its own leveraged bootstraps. Many assets were not even priced through market trading but valued by complex formulas – akin to peddling tulips with equations.

People were not unaware of the risks, but both regulation and private risk management were based on the faulty premise that if each entity looks after its own risk, no one needs to worry about systemic risk. The

great mistake was to rely merely on self-interest in as imperfect and as important a market as the financial sector. The huge profits bankers reaped reinforced their collective blindness to the illusory value of the assets they traded.

Those who sound the death knell of market capitalism are therefore mistaken. This was not a failure of markets; it was a failure to create proper markets. What is to blame is a certain mindset, embodied not least by Mr Greenspan. It ignored a capitalist economy's inherent instabilities – and therefore relieved policymakers who could manage those instabilities of their responsibility to do so. This is not the bankruptcy of a social system, but the intellectual and moral failure of those who were in charge of it: a failure for which there is no excuse.

Do not let the ‘cure’ destroy capitalism

By Gary Becker and Kevin Murphy

Capitalism has been wounded by the global recession, which unfortunately will get worse before it gets better. As governments continue to determine how many restrictions to place on markets, especially financial markets, the destruction of wealth from the recession should be placed in the context of the enormous creation of wealth and improved well-being during the past three decades. Financial and other reforms must not risk destroying the source of these gains in prosperity.

Consider the following extraordinary statistics about the performance of the world economy since 1980. World real gross domestic product grew by about 145 per cent from 1980 to 2007, or by an average of roughly 3.4 per cent a year. The so-called capitalist greed that motivated business people and ambitious workers helped hundreds of millions to climb out of grinding poverty. The role of capitalism in creating wealth is seen in the sharp rise in Chinese and Indian incomes after they introduced market-based reforms (China in the late 1970s and India in 1991). Global health, as measured by life expectancy at different ages, has also risen rapidly, especially in lower-income countries.

Of course, the performance of capitalism must include this recession and other recessions along with the glory decades. Even if the recession is entirely blamed on capitalism, and it deserves a good share of the blame, the recession-induced losses pale in comparison with the great accomplishments of prior decades. Suppose, for example, that the recession turns into a depression, where world GDP falls in 2008-10 by 10 per cent, a pessimistic assumption. Then the net growth in world GDP from 1980 to 2010 would amount to 120 per cent, or about 2.7 per cent a year over this 30-year period. This allowed real per capita incomes to rise by almost 40 per cent even though world population grew by roughly 1.6 per cent a year over the same period.

Therefore, in devising reforms that aim to reduce the likelihood of future severe contractions, the accomplishments of capitalism should be appreciated. Governments should not so hamper markets that they are prevented from bringing rapid growth to the poor economies of Africa, Asia and elsewhere that have had limited participation in the global economy. New economic policies that try to speed up recovery should follow the first principle of medicine: do no harm. This runs counter to a common but mistaken view, even among many free-market proponents, that it is better to do something to try to help the economy than to do nothing. Most interventions, including random policies, by their very nature would hurt rather than help, in large part by adding to the uncertainty and risk that are already so prominent during this contraction.

Government reactions have demonstrated the danger that interventions designed to help can exacerbate the problem. Even though we had well-qualified policymakers, we have gone from error to error since August 2007.

The policies of the Bush and Obama administrations violate the “do no harm” principle. Interventions by the US Treasury in financial markets have added to the uncertainty and slowed market responses that would help stabilise and recapitalise the system. The government has overridden contracts and rewarded many of those whose poor decisions helped create the mess. It proposes to override even more contracts. As a result of the Treasury’s actions, we face further distorted decision-making as government ownership of big financial institutions threatens to substitute political agendas for business judgments in running these companies. While such dramatic measures may be expedient, they are likely to have serious adverse consequences.

These problems are symptomatic of three basic flaws in the current approach to the crisis. They are an overly broad diagnosis of the problem, a misconception that market failures are readily overcome by government solutions and a failure to focus on the long-run costs of current actions.

The rush to “solve” the problems of the crisis has opened the door to government actions on many fronts. Many of these have little or nothing to do with the crisis or its causes. For example, the Obama administration has proposed sweeping changes to labour market policies to foster unionisation and a more centralised setting of wages, even though the relative freedom of US labour markets in no way contributed to the crisis and would help to keep it short. Similarly, the backlash against capitalism and “greed” has been used to justify more antitrust scrutiny, greater regulation of a range of markets, and an expansion of price controls for healthcare and pharmaceuticals. The crisis has led to a bail-out of the US car industry and a government role in how it will be run. Even one of the most discredited ideas, protectionism, has gained support under the guise of stimulating the economy. Such policies would be a mistake. They make no more sense today than they did a few years ago and could take a long time to reverse.

The failure of financial innovations such as securities backed by subprime mortgages, problems caused by risk models that ignored the potential for steep falls in house prices and the overload of systemic risk represent clear market failures, although innovations in finance also contributed to the global boom over the past three decades.

The people who made mistakes lost, and many lost big. Institutions that made bad loans and investments had large declines in their wealth, while investors that funded these institutions without proper scrutiny have seen their wealth cut in half or much more. Households that overextended themselves have also been badly hurt.

Given the losses, actors in these markets have a strong incentive to correct their mistakes the next time. In this respect, many government actions have been counterproductive, shielding actors from the consequences of their actions and preventing private sector adjustments. The uncertainty from muddled Treasury policy on bank capital and ownership structure, the willingness of the government to change mortgage and debt contracts unilaterally and the uncertain nature of future regulation and subsidies help prevent greater private recapitalisation. Rather than solving problems, such policies tend to prolong them.

The US stimulus bill falls into the same category. This package is partly based on the belief that government spending is required to stimulate the economy because private spending would be insufficient. The focus on government solutions is particularly disappointing given its poor record in dealing with crises in the US and many other countries, such as the aftermath of hurricane Katrina and failure effectively to prosecute the war in Iraq.

The claim that the crisis was due to insufficient regulation is also unconvincing. For example, commercial banks have been more regulated than most other financial institutions, yet they performed no better, and in many ways worse. Regulators got caught up in the same bubble mentality as investors and failed to use the regulatory authority available to them.

Output, employment and earnings have all been hit by the crisis and will get worse before they get better. Nevertheless, even big downturns represent pauses in long-run progress if we keep the engines of long-term growth in place. This growth depends on investment in human and physical capital and the production of new knowledge. That requires a stable economic environment. Uncertainty about the scope of regulation is likely to have the unintended consequence of making those investments more risky.

The Great Depression induced a massive worldwide retreat from capitalism, and an embrace of socialism and communism that continued into the 1960s. It also fostered a belief that the future lay in government management of the economy, not in freer markets. The result was generally slow growth during those decades in most of the undeveloped world, including China, the Soviet bloc nations, India and Africa.

Partly owing to the collapse of the housing and stock markets, hostility to business people and capitalism has grown sharply again. Yet a world that is mainly capitalistic is the “only game in town” that can deliver further large increases in wealth and health to poor as well as rich nations. We hope our leaders do not deviate far from a market-oriented global economic system. To do so would risk damaging a system that has served us well for 30 years.

The writers are professors of economics and the University of Chicago and senior fellows at the Hoover Institution. Gary Becker was awarded the 1992 Nobel prize in economics and Kevin Murphy was awarded the Clark Medal in 1997.

The pendulum will swing back

By Sir Martin Sorrell

Every era of financial or irrational exuberance ends with the shutters coming down. Tulip mania, the South Sea bubble, the panic of 1825 and the first internet bust were all part of the same ebb and flow. We should not expect it to be different now, but that does not make it any easier to accept the cyclical nature of economies.

In good times, collective human psychology and self-reinforcing experience convince us that we are living in a new era, where the old oscillations of boom and bust have been banished. Then comes catastrophe and bankruptcy, and a fresh consensus emerges from the debris of the last great party. That new orthodoxy says that Anglo-Saxon liberal market economics is dead and globalisation discredited. Even capitalism itself, it seems, is on life support under the watchful eye of the prison hospital staff. The former giants of finance are pariahs. Right now it would probably be more acceptable to confess at a dinner party to having stolen Christmas presents, than admit you dabble in investment banking.

This too shall pass and things will change. There will be a recovery of sorts, not this year but perhaps next – just by dint of the scale of fiscal stimulus in the US, UK and elsewhere and even by the atmosphere surrounding Gordon Brown's seemingly triumphant Group of 20 nations summit.

Not that we should be complacent about our current pain. Some have said that, intellectually, recessions are exciting or fun. That is callous nonsense. Telling someone who has lost their job or business that their troubles are merely part of a cycle will provide little comfort. It remains essential that money is spent to cushion the worst effects of the recession – although it was the same spending and lending that got us here in the first place.

It must be said plainly that capitalism messed up – or, to be more precise, capitalists did. We – business, governments, consumers – submitted to excess; we got too greedy. Life was easy in the late 1990s and early 21st century. With a seemingly benign interest rate regime, and cheap goods from China keeping inflation at bay, all you had to do was go into the office – moderation was out.

Just as the crash was inevitable, so will be the pendulum swinging the other way. The teeth and claws of capitalism will be blunted, and we will see the return of forms of state corporatism familiar to those of us who lived and worked in the 1970s. We in business need to be philosophical: if taxpayers are required to bail out banks or other businesses, they should expect a say. The devolved Wales and Scotland were already operating on a Scandinavian model; we should expect more of the same. It is part of the hangover from the party, but probably not the cure for a punishing headache.

Just as business is poor at government, so government is feeble at running business. The Keynesian model espoused 40 years ago by Harold Wilson, and backed by the Hungarian economists Nicholas Kaldor and Thomas Balogh, all but wrecked Britain. This time, a swift exit from the UK's state banking investments is essential.

If that does not happen, I fear an exodus of talent from Britain. In a world of overcapacity, the one thing in short supply is human capital. Our best brains will not work for British banks if they are under the dead hand of the Treasury for too long – or if the tax system is skewed against them being rewarded for hard work and success. Moreover, widespread departures from failed banks make them harder to rebuild. Given modern technology, it is relatively easy for people and company headquarters to shift to more welcoming jurisdictions. Equally, high-flyers may change disciplines, join a boutique operation or a start-up.

At some point, the cycle will begin afresh. Henry Kravis of the private equity house KKR recently said that at least \$300bn–\$400bn of private equity money is waiting for deals. Eventually, low stock market valuations

will become irresistible, and the gears of mergers and acquisitions will again crunch into action – albeit with considerably less leverage than before. Then the pendulum will begin to swing back.

At the same time, another change is playing out. The geographic balance of power is reversing – returning to the east and south, from where it came two centuries ago. The new capitalism will have an Asian-Pacific, Latin American flavour – more orderly, more pragmatic and more flexible. Where **General Motors** cannot go, India's cut-price Nano and China's Geely will. Despite the rise of other regional economies, US innovation and ability to raise capital will be undiminished. The City can flourish again, too, if it is not hobbled by modern-day Keynesians and regulators – the same people who, in good times, were not voluble about capitalism's excesses. I am less optimistic about western Europe, where structural change seems difficult, if not impossible.

Countries previously viewed as suitable only for charity will become the new powerhouses. Africa, long seen as the continent of war, poverty and disease, will become a continent of opportunity. Witness the 800,000 or so Chinese managing and working there.

Older technologies, however, may be permanently wounded by the recession. Mainstream print journalism is going through traumas in the US and will probably never fully recover. Free to air television also faces challenges.

So capitalism will escape from its deathbed but with a more human face. Corporate responsibility is key. Some suggest that in straitened times such touchy-feely, tree-hugging notions are expensive fripperies. I disagree. Any business that fails to engage with government, green activists, charities and the press imperils its future because consumers know it is important.

Conspicuous consumption will be frowned upon. Women will no longer buy a handbag as a mere badge of affluence. Men may be more self-conscious about extremely expensive cars. Luxury goods will still be with us but they will be judged by their authenticity and craftsmanship, not price tag.

Eventually, globalisation will cease to be a dirty word. It remains – within sensible social and environmental constraints – the most efficient way to enrich the most people around the world. Yet we have never successfully articulated globalisation's advantages. Nor has everyone felt the benefits. In that respect, the G20 protesters have a point, but aggressive slogans and shattered windows in Morningside are the wrong way to show discontent.

Democracies always have a propensity towards ugly protectionism in a recession. Any politician facing election will want to protect specialist skills and industries, as Labour did with Rover in 2005 and as a fiercely redistributive Barack Obama will do as he faces mid-term Congressional elections in 2010. But the nihilistic voices raised against the disgraced masters of the universe will eventually cease. It is possible to imagine that one day investment bankers may again be welcome at dinner parties. It might take a little rebranding, though.

Sir Martin Sorrell is chief executive of WPP.

Lessons for the west from Asian capitalism

By Kishore Mahbubani

Asian elites have always looked at the world differently from western elites. And after this crisis is over, the gap in perspectives will widen. Asians will naturally view with caution any western advice on economics, particularly because most Asians believe that the crisis has only vindicated the Asian approach to capitalism.

To be accurate, there is more than one Asian approach. China's economy is managed differently from India's. Yet neither China nor India has lost faith in capitalism, because both have elites who well remember living with the alternatives. The Chinese well remember the disasters that followed from the Maoist centrally planned economy. The Indians well remember the slow "Hindu rate of growth" under Nehruvian socialism.

The benefits of the free market to Asia have been enormous: increased labour productivity, efficient use and deployment of national resources, a tremendous increase in economic wealth and, most importantly, hundreds of millions have been lifted out of absolute poverty. Just look at Chinese history through Chinese eyes. From 1842 to 1979, the Chinese experienced foreign occupation, civil wars, a Japanese invasion, a cultural revolution. But after Deng Xiaoping gradually instituted free market reforms, the Chinese people experienced the fastest increase so far in their standard of living.

The desire for an orderly society is deeply ingrained in the psyche of all Asians, which helps explain why virtually all Asian states hesitated to copy America in deregulating their financial markets. Instinctively, they felt government supervision remained critical. This was equally true in India's democratic system and in China's Communist party system. It is telling that, while Y.V. Reddy, India's former central bank governor, was occasionally vilified by his country's media for holding back on deregulation, he has now become a national hero. His stance saved India from the worst effects of this crisis. China was equally wary of deregulation. Indeed the Chinese leaders may have understood earlier than most that America was building a house of cards with its reckless creation of derivatives. Gao Xiqing, an adviser to Zhu Rongji, then Chinese premier, said in 2000 that "if you look at every one of these [derivative] products, they make sense. But in aggregate, they are bullshit. They are crap. They serve to cheat people." Mr Gao said all this while Alan Greenspan, as chairman of the US Federal Reserve, was waxing eloquent about the economic value of derivatives.

Asian culture has been honed by centuries of hard experience, which explains why Asians save more. All Asian societies have memories of turbulent times. They know from experience the importance of preparing for the bad days that will follow the good. Most Asian friends of mine find it inconceivable that some Americans can live from pay cheque to pay cheque. "But what happens if you lose your job?" they ask.

The Asian financial crisis of 1997-98 may have been a blessing in disguise. The failure of the International Monetary Fund and western policies then confirmed in Asian minds that they had to create their own safety mechanisms for economic downturns. Thus began a decade-long exercise of accumulating foreign reserves. China's went up from nearly \$145bn at the end of 1998 to almost \$2,000bn (€1,520bn, £1,430bn) at the end of 2008. India's went up from \$27.83bn in early 1998 to \$315.6bn in June 2008. This enormous pool has helped to protect Asian societies as they hunker down for the storm.

And when this storm is over, we should not be surprised to discover that the greatest global believers in capitalism will be in Asia. But it will be an Asian mix of capitalism, not the western formula, that will become the dominant form of global capitalism, where the "invisible hand" of free markets will be balanced by the "visible hand" of good governance.

The Asian mix may have its own weaknesses. Asia is still underperforming in creativity and innovation. Corruption will remain a serious problem.

The Asian emphasis on the family unit may also be a mixed blessing. Many of Asia's most successful entrepreneurs are keen to retain family control of the business. This enables them to take a long-term view. But the downside is nepotism and the lack of a deep culture of meritocracy.

On balance, the strengths of Asian capitalism are greater than the weaknesses. Within a decade Asians will have some of the largest free trade areas, including those between China and the Association of South East Asian Nations, the Japan-Asean FTA, and the Indian-Asean FTA that is likely to be set up. Recent history has taught Asians a valuable lesson: more trade leads to greater prosperity. In the Asian way – two steps forward, one step back – trade barriers will gradually come down. By the middle of the 21st century, intra-Asian trade will far surpass that of any other region.

Despite this, there will be no ideological trumpeting of the virtues of Asian capitalism. After their experiences of the past 100 years, Asians are wary of ideology. They prefer the simple, commonsense approach of learning from experience and they will heed the advice of Adam Smith, who said that prudence is “of all virtues that which is most useful to the individual”. It may also be helpful to nations.

The writer, dean of the Lee Kuan Yew School of Public Policy, National University of Singapore, has just published The New Asian Hemisphere: the Irresistible Shift of Global Power to the East.

Uncertainty bedevils the best system

By Edmund Phelps

In countries operating a largely capitalist system, there does not appear to be a wide understanding among its actors and overseers of either its advantages or its hazards. Ignorance of what it can contribute has in the past led some countries to throw out the system or clip its wings. Ignorance of the hazards has made imprudence in markets and policy neglect all the more likely. Regaining a well-functioning capitalism will require re-education and deep reform.

Capitalism is not the “free market” or *laissez faire* – a system of zero government “plus the constable”. Capitalist systems function less well without state protection of investors, lenders and companies against monopoly, deception and fraud. These systems may lack the requisite political support and cause social stresses without subsidies to stimulate inclusion of the less advantaged in society’s formal business economy. Last, a huge social insurance system, with resulting high taxes, low take-home pay and low wealth, may not hurt capitalism.

In essence, capitalist systems are a mechanism by which economies may generate growth in knowledge – with much uncertainty in the process, owing to the incompleteness of knowledge. Growth in knowledge leads to income growth and job satisfaction; uncertainty makes the economy prone to sudden swings – all phenomena noted by Marx in 1848. Understanding was slow to come, though.

Well into the 20th century, scholars viewed economic advances as resulting from commercial innovations enabled by the discoveries of scientists – discoveries that come from outside the economy and out of the blue. Why then did capitalist economies benefit more than others? Joseph Schumpeter’s early theory proposed that a capitalist economy is quicker to seize sudden opportunities and thus has higher productivity, thanks to capitalist culture: the zeal of capable entrepreneurs and diligence of expert bankers. But the idea of all-knowing bankers and unerring entrepreneurs is laughable. Scholars now find that most growth in knowledge is not science-driven. Schumpeterian economics – Adam Smith plus sociology – captures very little.

Friedrich Hayek offered another view in the 1930s. Any modern economy, capitalist or state-run, is a great soup of private “know-how” dispersed among the specialised participants. No one, he said, not even a state agency, could amass all the knowledge that each participant “on the spot” inevitably acquires. The state would have no idea where to invest. Only capitalism solves this “knowledge problem”.

Later, Hayek fleshed out a theory of how capitalism makes “discoveries” on its own. He had no problem with the concept of an innovative idea, for he understood that, even among experts, knowledge is incomplete about most things not yet tried. So he felt free to suppose that, thanks to the specialised insights each acquires, a manager or employee may one day “imagine” (as Hayek’s hero, David Hume, would have put it) a commercial departure – one that could not be inferred or envisioned by people outside the individual’s line of work. Then he portrays a well-functioning capitalist system as a broad-based, bottom-up organism that gives diverse new ideas opportunities to compete for development and, with luck, adoption in the marketplace. That “discovery procedure” makes it far more innovative than the top-down systems of socialism or corporatism. The latter are too bureaucratic to learn about ideas from below and unlikely to obtain approval from all the social partners of the ideas that do get through.

Well-functioning capitalist economies, with their high propensity to innovate, could arise only when serviceable institutions were in place. The freedoms borne by England’s Glorious Revolution of 1688 and the “commercial society” of the Scots were not enough. There had to be financial institutions where there would be disinterested financiers, each trying to make the best investment, and – importantly – a plurality of views among them, so financiers funded a diversity of projects. There also had to be limited liability for companies and a market enabling their takeover. Such institutions had to wait for demand by wide numbers of business

people wanting to build a new product or new market or new business model. Rudimentary institutions began to emerge early in the 19th century, from company law and stock exchanges to joint-stock banks and “merchant” banks lending to industry.

Unprecedented rewards soon followed in Europe and America: new cities rising, unbroken productivity growth, steadily climbing wages and generally high employment. Lifetime prospects improved for all or nearly all participants. Less measurable but ultimately fundamental, growing numbers of people in capitalist economies had engaging careers and were energised by their challenges and explorations. Capitalism was a godsend for them.

From the outset, the biggest downside was that creative ventures caused uncertainty not only for the entrepreneurs themselves but also for everyone else in the global economy. Swings in venture activity created a fluctuating economic environment. Frank Knight, observing US capitalism in his 1921 book, said that a company, in all of its decisions aside from the handful of routine ones, faces what is now called “Knightian uncertainty”. In an innovative economy there are not enough precedents to be able to estimate the probability of this or that outcome. John Maynard Keynes in 1936 insisted on the “precariousness” of much of the “knowledge” used to value an investment – thus the “flimsiness” of investors’ beliefs. (Yet now he is seen as “Smith plus psychological swings”.)

No coherent moral justification was ever suggested for throwing out a system providing invaluable and irreplaceable novelty, problem-solving and exploration, thus personal growth. On the contrary, humanist philosophy has continued since ancient times to hold up such experience as the “good life”. Socialists and corporatists never offered an alternative good life. They simply claimed that the system they advocated could out-do capitalism: wider prosperity, or more jobs, or greater job satisfaction. Unfortunately, there is still no wide understanding among the public of the benefits that can fairly be credited to capitalism and why these benefits have costs. This intellectual failure has left capitalism vulnerable to opponents and to ignorance within the system.

Capitalism lost much of its standing in the interwar period, when many countries in western continental Europe shifted to corporatist systems. This was a low point in the public’s grasp of political economy. In the end, the promises of greater prosperity and lesser swings could not be delivered. The nations that kept capitalism while making reforms, some good and others maybe not, ultimately performed well again – until now. Those that broke from capitalism were less innovative. After the disturbances of the 1970s, they saw unemployment rise far more than the capitalist nations did. They were worse on economic inclusion too.

Now capitalism is in the midst of its second crisis. An explanation offered is that the bankers, whatever they knew about capitalism, knew that to keep their jobs and their bonuses they would have to borrow more and more to lend more and more, in order to meet profit targets and hold up share prices. The implication was that the crisis flowed from a failure of corporate governance to curb bonuses and of regulation to rein in leveraging of bank capital to levels that made the banks vulnerable to a break in housing prices.

But why did big shareholders not move to stop over-leveraging before it reached dangerous levels? Why did legislators not demand regulatory intervention? The answer, I believe, is that they had no sense of the existing Knightian uncertainty. So they had no sense of the possibility of a huge break in housing prices and no sense of the fundamental inapplicability of the risk management models used in the banks. “Risk” came to mean volatility over some recent past. The volatility of the price as it vibrates around some path was considered but not the uncertainty of the path itself: the risk that it would shift down. The banks’ chief executives, too, had little grasp of uncertainty. Some had the instinct to buy insurance but did not see the uncertainty of the insurer’s solvency.

Much is dysfunctional in the US and the UK: a financial sector that turned away from the business sector, then caused its self-destruction, and a business sector beset by short-termism. If we still have our humanist values we will try to restructure these sectors to make capitalism work well again – to guard better against reckless disregard of uncertainty in the financial sector while reviving innovativeness in business. We will not close the door on systems that gave growing numbers rewarding lives.

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