



THE BOSTON CONSULTING GROUP

Collateral Damage

Part 5: Confronting the New Realities of a World in Crisis

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Collateral Damage

Part 5: Confronting the New Realities of a World in Crisis

This is the fifth paper in our Collateral Damage series.¹ We have consistently taken a somewhat pessimistic view of the impact of the financial crisis on the real economy. Unfortunately for all of us, this view has become a broad consensus. It is now widely accepted that the past two decades of debt-fueled economic growth have come to an end. The recession is deep, and almost no one expects it to be “V-shaped” (with a fast recovery). The debate is about whether there will be a “U-shaped” (long) recession or an “L-shaped” recession (a period of sustained poor economic performance of the kind experienced by Japan during its “lost decade” in the 1990s).

The speed and scale of the downturn are apparent across all industries and regions. Companies are now acting fast to protect their financial fundamentals and to prepare for a longer period of economic stress. Senior-management agendas have been redirected toward stopping investments, freeing up cash from operations, and reducing costs. We now see that management teams are acting more aggressively than they were in December 2008—when we wrote our fourth paper in the Collateral Damage series—as they realize the true magnitude of the crisis.

But besides dealing with the immediate challenges, business leaders are beginning to ask us what to expect next. How will the world look when we climb out of the recession? Which changes are secular and which merely cyclical? In the first section of this paper, we attempt to define some of the new realities that may shape the world. As companies strive to respond to the current crisis and define their longer-term strategies, what assumptions should they be incorporating into their plans? We have not prepared an exhaustive list, nor can we be definitive about which changes are merely cyclical and which are more permanent. Moreover, while we were writing this paper, some of what we thought might prove fanciful was in fact beginning to happen.

In the second section, we explore how the world might limit the damage being inflicted by the wave of deleveraging and avoid sinking into even bigger economic trouble. In a search for more radical solutions, we have tried to think the unthinkable—and so propose some alternative solutions to this economic crisis.

1. No Return to the Good Old Days

Commentators have frequently used the word “unprecedented” to describe this crisis. And for today’s executives, the combination of financial and economic upheaval is without equal in their working lives. Today’s managers have enjoyed a long-lasting boom—at least in most developed economies—in which growth, increasing profitability, and decreasing government intervention have been predominant. We believe that there will be major changes to the established global economic order, increased government activism, and significant changes to both the mindsets and behaviors of individuals and companies.

A. The Global Economic Order: Major Change, Major Challenge

During the boom times, governments all around the world pushed back the boundaries of the state. Deregulation, privatization, and free-trade policies were the order of the day in a world where virtually every country appeared to be prospering. For some time now, many developed countries have seemed content to export jobs to lower-wage countries in the name of globalization and lower costs because jobs, typically in the service sector, were still being created at home.

1. See *Collateral Damage, Part 1: What the Crisis in the Credit Markets Means for Everyone Else*, BCG White Paper, October 2008; *Collateral Damage, Part 2: Taking Robust Action in the Face of the Growing Crisis*, BCG White Paper, October 2008; *Collateral Damage, Part 3: Asia, Advantage, and Action*, BCG White Paper, November 2008; and *Collateral Damage, Part 4: Preparing for a Tough Year Ahead: The Outlook, the Crisis in Perspective, and Lessons from the Early Movers*, BCG White Paper, December 2008.

But times have changed. Over the next few years, we expect to see lower growth rates; an increase in trade and financial protectionism, along with some reversal of the broad acceptance of economic migration; and an attempt by some economies to reindustrialize.

Lower Growth Rates. We have enjoyed unusually high growth for some time, with consumption fueled by big increases in debt, particularly (but not only) in the United States. So it appears reasonable to expect that when recovery comes, there will be a period of slower organic growth with much less of the turbo-charging that comes with debt. Moreover, given the huge and, we would argue, unsustainable levels of debt today, it is reasonable to assume that the deleveraging process will take several years. This will also act as a drag on global economic growth. Consumers in emerging markets may well increase their spending, but, as we described in previous papers in the *Collateral Damage* series, it is unrealistic to assume that higher consumption in China and elsewhere can close the gap left by consumers in the United States and Western Europe. So companies will, on average, need to budget for lower growth. This will, in turn, create a much tougher competitive environment in which the losers will be those companies struggling with strategic disadvantages or inefficient business models.

A Rebalancing of International Trade. Over the past decade, many countries ran significant trade deficits. Deficit countries include the United States (−4.6 percent of GDP in 2008), Spain (−10.1 percent), the United Kingdom (−3.6 percent), Australia (−4.9 percent), and Greece (−14 percent). Other countries enjoyed significant trade surpluses—most notably the oil-exporting countries, China (9.5 percent of GDP), Germany (7.3 percent), and Japan (4 percent). It is not realistic to assume that this pattern can continue. The deficit countries cannot maintain their consumption patterns, because they need to rebalance their finances; nor will they find it politically acceptable that their efforts to support domestic demand end up benefiting workers in other countries.

Ideally, there would be a coordinated international approach. Deficit countries would endeavor to soften the impact of the downturn at home—and thereby, by default, support the export-oriented countries for some time. And the export-oriented countries would boost domestic demand to compensate for the fall in the demand for their exports—and thereby support the necessary rebalancing of trade flows. Noncooperation would lead to protectionism.

This rebalancing could mean that some fundamentals of the economic and business models in developing economies may need to change, with a greater focus on producing for domestic, rather than overseas, consumption. Multinationals may see globalization taking on a partly new meaning, with an increase in serving the domestic markets of what were previously seen more as low-cost manufacturing locations.

Increased Economic Protectionism. Protectionism may well be the big threat as the crisis deepens. Traditional protectionism applying to the flow of goods is already being joined by new forms of financial protectionism and other moves to limit economic migration. Publicly, leaders may be trying to distance themselves from protectionist words, but this is not fully reflected in their actions.

Trade Protectionism. Global trade has grown from less than 10 percent of global GDP during the 1950s to around 25 percent today. This trade has slowed down considerably. Although some of the solution may lie in stimulating consumer demand, it seems quite likely that protectionism will rear its ugly head. Trade protectionism will not typically take the crudely old-fashioned form of increased tariffs (although Russia and India have introduced such financial penalties on foreign cars and steel, respectively). The reason for this is that World Trade Organization and European Union rules help militate against it—in spite of the sharp increase in the number of antidumping cases.

Instead, the trade protectionism that we are already seeing (and of which we can expect to see more) includes some of the following subtle (and not-so-subtle) forms:

- ◇ In France, the government has introduced a €6 billion support package for the domestic auto manufacturers. It includes the condition that carmakers buy domestic components and not transfer jobs outside

France. The government has also created a sovereign wealth fund, essentially to protect French companies from foreign takeovers.

- ◇ U.S. Democrats, along with a number of interest groups, pushed for a strong “Buy American” provision in President Barack Obama’s stimulus program. Moreover, President Obama, in his weekly address on February 28, 2009, reinforced his intention to “end the tax breaks for corporations that ship our jobs overseas.”
- ◇ Spain’s Ministry of Industry, Tourism and Trade has urged Spaniards to buy more local products.
- ◇ In China, the systematically low value of the national currency against the U.S. dollar is acting as a very real form of protectionism, making exports cheap (and, of course, imports relatively more expensive).

In a very negative scenario, protectionism could even lead to severe tensions within trading blocks such as the European Union. The risk premiums of government bonds of some countries today (notably Greece, Italy, Ireland, and Portugal) have risen to unprecedented levels compared with German bonds. This reflects the very different economic positions of member states. The inability of states with weaker economies to pull their own economic levers (mainly monetary and currency policies) is leading to tension within the European Union. In addition, some European leaders have adopted a distinctly protectionist rhetoric even within the confines of the European Union. Nicolas Sarkozy, the French president, talking in the context of the provision of aid to the French auto industry, said, “It is justifiable if a factory of Renault is built in India so that Renault cars may be sold to the Indians. But it is not justifiable if a factory ... is built in the Czech Republic and its cars are sold in France.”

New Financial Protectionism. The globalization of financial markets has brought a new form of protectionism: financial protectionism. According to the Bank for International Settlement, cross-border loans now represent nearly 50 percent of all loans (up from just over 20 percent in 1995). With so many banks under pressure and requiring government support, it is not surprising that governments (and public opinion) are starting to put pressure on banks to stop lending outside their home market. In Greece, for example, the government insisted that the €28 billion support package for Greek banks should not be used to support their Balkan subsidiaries. Elsewhere in Europe, companies are complaining about the significant pullback of U.K. banks from international lending, while in the United Kingdom, companies are seeing similar behavior from foreign banks.

Given the scale of cross-border lending, this systematic retrenchment will have a profound, long-term effect. In Central and Eastern Europe, with so many banks in foreign ownership, the fallout is already visible. The contraction in lending capacity amplifies the deep problems there (especially given the high share of foreign currency–denominated debt), potentially triggering a crisis across the region that could be bigger than the Asian crisis at the end of the 1990s. Responding to this developing problem at the end of February 2009, the European Bank for Reconstruction and Development, the EIB Group, and the World Bank announced a €24.5 billion package to support the banking sector and to fund lending to businesses. In other countries, reduced access to funds will exacerbate the credit crunch, deepen the recession, and be a drag on long-term growth.

Labor Protectionism: Restrictions on Economic Migration. Another facet of globalization has been the enormous increase in foreign nationals living outside their homeland—more than 200 million around the world. Take three examples: according to the OECD, between 1996 and 2006, the percentage of foreign nationals living in Italy rose from 2 percent to 4.6 percent; in Spain, from 1.4 percent to 6.2 percent; and in the United Kingdom, from 3.4 percent to 5.2 percent. Not all of this growth represents economic migration, but a lot of it does; and with economies in crisis across the developed world, the pressure is on to reverse this trend. There is a precedent for shutting the door on foreign workers. In 1973, Germany, France, Switzerland, the Netherlands, and Belgium all ended guest worker programs in anticipation of a recession. Indeed, the stirring of labor protectionism is happening already. In the United Kingdom, there has just been a strike by oil workers protesting the offering of jobs to foreign workers (albeit EU nationals) by a U.S.

contractor to the U.K. operations of a French oil company. The strikers called for “British jobs for British workers.” The workers won concessions. We expect that the pressure on companies to “act sensitively” will be repeated all over the world.

So whether it is the application of conditions to state aid, the pressure of public opinion, industrial action, favoritism, the widening of the definitions of “sensitive” industries, or any of the many other forms of job protectionism, we will see more of it. And it will have an impact on countries that traditionally export their labor force. Many of these countries rely on the remittances of their nationals working overseas. Moreover, many have a surplus of young workers unable to find jobs at home—and if these people cannot migrate in search of work, then the risk of social unrest will increase.

Reindustrialization and Self-Sufficiency. Over the past decade, millions of jobs were exported from the United States and the European Union to rapidly developing economies such as China and India. There are already protectionist calls to repatriate jobs. More significant, several Western economies seem to be deciding that it is insufficient to base their economic growth on the service sector—and that they need to start a program of reindustrialization. In the United States, the United Kingdom, and France (three countries where there is much talk of reindustrialization), the manufacturing sector represents around 13 percent of value added—compared with around 22 percent in Germany and Japan. Indeed, in the United Kingdom, Lord Mandelson (the secretary of state for Business, Enterprise & Regulatory Reform) has called for “less financial engineering and more real engineering.” So over the next few years, we would expect to see significant government interest in stimulating the growth of manufacturing through the provision of investment-related tax breaks and training programs designed to develop skills, reinforced by the subtle protectionism that is already emerging.

The adjustment to wages driven by the recession will support this trend toward reindustrialization, as lower wages in Western economies make labor more affordable. Companies are already taking advantage of affordable local labor. According to *The Economist*, IBM has just decided to set up outsourcing centers in low-cost states of the United States instead of doing more in India.

But it is far from clear how feasible reindustrialization is as a policy. Given living standards and wage levels in most developed economies, the focus will have to be on industries that require a high level of skills and expertise. But not every country can reindustrialize around pharmaceuticals, defense, aerospace, IT, and other high-tech industries.

The Return of Inflation. The unprecedented scale of deleveraging and the level of overcapacity built up during the boom make it difficult to raise prices; indeed, even a general fall in prices (“deflation”) cannot be ruled out over the next few years. Deflation, if it happens, will make the recession even worse: consumers would postpone making purchases in the hope of seeing still lower prices; and debtors would struggle to service their debt—a situation that would potentially lead to a damaging spiral of debt deflation.² For this reason, governments and central banks will continue to fight this deflationary risk with all the means at their disposal—even if it means that central banks have to fund government spending directly.

In a world with too much debt, debtors and the authorities alike will have a vested interest in creating high inflation. Given the deleveraging trend, inflation may be hard to achieve in the short term. In the middle to long term, however, inflation needs to be part of the solution in order to reduce the debt burden (even if it damages savers). But there is danger here: it is quite possible that the actions of the authorities could lead to much higher inflation than is actually needed to resolve the problem of debt overhang. This would come about because the authorities, having pumped money into the economy through a series of stimulus packages, would be too slow in taking “neutralizing” action: reducing the amount of money circulating in the economy again.

2. See *Collateral Damage, Part 4: Preparing for a Tough Year Ahead: The Outlook, the Crisis in Perspective, and Lessons from the Early Movers*, BCG White Paper, December 2008.

There is even some risk that we could overshoot desired inflation targets by disturbing levels. We know of some management teams that have included in their scenario planning the possibility of hyperinflation.

B. Governments: New Activism

Governments will, as we have described, pursue policies of economic protectionism. But we also expect them to be active in other ways—reregulating businesses (particularly in the financial sector), experimenting with fiscal and monetary policy, and intervening in and taking ownership of private enterprises.

Reregulation. As much as the crisis has altered the chemistry of the banking industry, more changes are in store as regulators begin drafting and implementing rules designed to prevent a similar meltdown. As we write this paper, major European leaders have called for massive and concerted action.

The mandate for a new regulatory regime is overwhelming. Since the crisis began, governments have provided guarantees and direct injections of capital to support weakened banks and reassure investors and consumers. Now, more than ever, they have an unusual amount of leverage to impose new rules and regulations. Moreover, the crisis has proved that a serious crisis in one corner of the world can have catastrophic consequences for the global financial system.

Global rules are difficult to define and harder to enforce. So even if a global regime is not put in place, we think that the financial sectors in different markets around the world will be affected by a variety of similar efforts aimed at strengthening regulations. These should clearly bring within the regulatory framework alternative investors such as hedge funds, as well as the previously unpoliced over-the-counter derivatives markets, whose potential to affect the financial system is not matched with a commensurate level of oversight. Nevertheless, noises from U.K. and U.S. authorities suggest that achieving global consistency around hedge funds may prove challenging.

Capital requirements will be increased and supervision tightened: regulators will want to make up for their failures in the past. Some governments will push to end the practice of short selling, to limit the role of leverage in investments (with a knock-on effect on the private-equity industry), and even to take advantage of the broad public dissatisfaction with the financial sector in order to address the use of tax shelters for individuals and companies. In this reregulated environment, the regulators themselves will require greater levels of risk competence and supervision at senior-management levels.

The financial sector will see reregulation, but it will not be the only industry to experience more government intervention. As politicians regain the power and influence they lost during the boom years of private enterprise, they will intervene much more prominently in a range of industries in order to protect domestic companies, limit competition, and regulate earnings. Obvious candidates for more intense regulation include the energy and health care sectors.

Expansionary Fiscal and Monetary Policy. The crisis is far from over. Governments and central banks are likely to pursue an expansionary policy for some years to come. This is just what Japan did following the bursting of its real-estate and stock-market bubbles in 1990: the central bank kept interest rates at very low levels, while public debt increased from 64 percent of GDP in 1990 to 173 percent in 2008.

A recent study by Carmen Reinhart and Kenneth Rogoff found that the aftermath of financial crises is associated with significant output declines and unemployment and also with a substantial deterioration in government finances. On average, across the sample, government debt increased by more than 86 percent in the three years following the crisis.³

3. Carmen M. Reinhart and Kenneth S. Rogoff, *The Aftermath of Financial Crises*, NBER Working Paper No. 14656, January 2009, <http://www.nber.org/papers/w14656>.

Given the scale of the current downturn and the unique debt problems in major economies, this time things are likely to be even worse. In a recent study for the Brookings Institution, Alan Auerbach and William Gale said they expect the U.S. government to run deficits of \$1 trillion per year for the next ten years.⁴ This sum alone would equal more than two-thirds of the current U.S. GDP. Because the savings rates in most countries are much lower than in Japan at the beginning of its crisis, this huge demand for government funding will have the following effects:

- ◇ It will crowd out private investments as companies will have difficulties competing for funds
- ◇ It will increase the demand for foreign funds (like China's buying U.S. Treasury bonds)
- ◇ It will require increased funding by the central banks

We expect to see governments attempting to rebalance their budgets at the first signs of a recovery. This will also follow pressure from the public and from foreign investors. China, for example, might revisit its investment strategy. But we fear that, as with the efforts by President Franklin D. Roosevelt in 1937, this would push the economy back into recession. Government spending will be significant for years to come, leading to higher future tax burdens and additional motivation to seek significant inflation.

More Ownership of Private Enterprises. As part of the efforts to stabilize the domestic economy, governments will become active shareholders in many industries, not only financial institutions. This will be done in an attempt to secure jobs, facilitate necessary restructuring, and protect businesses from foreign ownership. We doubt that politicians will achieve their goals, because governments—at least in the past—have not demonstrated superior skills in running companies. Even so, given the increased pressure of public opinion and the eagerness of some fast-moving governments to become the saviors of last resort, it will be quite common. And it is unlikely that governments will quickly dispose of their equity positions once the crisis is over: experience from the past shows that the denationalization process can take years, if not decades—even in countries that embrace free-trade principles.

C. Industry Structures: Fundamental Changes

Recessions typically see an acceleration in the reshaping of industries. This time will be no different: ineffective business models will not survive the tougher climate; mature industries will face increasing pressure to consolidate; cross-border M&A will become tougher to pull off; and different companies will emerge as leaders of their industries—partly driven by the increase in innovation that is a feature of recessionary times.

- ◇ *New Business Models.* The downturn will accelerate industry restructuring. Poorly grounded business models will face significant pressure and either adjust or be forced to exit the market—witness the stress being placed on the auto industry today. Tough economic times tend to reinforce structural weaknesses. The newspaper industry, for example, has been struggling for years as the Internet has transformed the way people use the media. It is now, in addition, facing a decline in advertising, which is forecast to recover only slowly.
- ◇ *Increased Consolidation.* The pressure for consolidation will be intensified in those aging industries that dominated the last Kondratiev cycle. (For more on Kondratiev cycles, see the sidebar “The Theory of the Long Wave of Economic Development.”) Overcapacity will force some of these companies to either merge or exit some businesses. Lower growth rates, together with the emergence of new technologies and industries, will also increase the challenges of companies in mature industries. Efforts by governments to protect mature domestic industries will increase the pressure to consolidate.
- ◇ *Reduced Cross-Border M&A Activity.* Although M&A will return to the corporate agenda—especially in industries under pressure to accelerate consolidation—it will face higher hurdles in the wake of pro-

4. Alan J. Auerbach and William G. Gale, *The Economic Crisis and the Fiscal Crisis: 2009 and Beyond*, February 19, 2009, www.brookings.edu.

tectionist tendencies. The establishment of state funds to protect domestic companies in countries like France is already signaling the localization of consolidation efforts.

- ◇ *New Industry Leadership.* Empirically, past recessions have had a lasting impact on the pecking order of industries. In all industries (except utilities), changes in leadership occur significantly more frequently in times of recession. During the last downturn, eight out of ten industries experienced heavy shakeups: one-third of the top ten companies dropped off the top ten list during the crisis, while less than half that number lost their top-ten positioning over the period of the ensuing upturn. This time, the changes will be even deeper and more fundamental.
- ◇ *Increased Innovation.* Recessions are a good time for innovation and creativity. During past recessions, the level of innovation and new-product development has gone up. Several economists see revolutionary innovations—such as the railway, the automobile, and the computer—as the driving force behind the long waves of economic development first identified by Kondratiev. It is possible to view the current crisis as signaling the end of one such wave, with many of the industries that drove the development of the last decade now maturing. New industries will shape the next economic expansion: biotechnology, nanotechnology, and new energy technologies—to name just three—will lay the foundation for future growth and prosperity. Companies will need to understand which innovations will drive the next wave of economic development. And such an understanding will help politicians identify where to direct their fiscal stimulus.

The Theory of the Long Wave of Economic Development

In the early 1920s, Nikolai Kondratiev, a young Russian economist and a policy advisor to the Ministries of Agriculture and Finance, became the founding director of the Business Research Institute in Moscow. His task was to monitor the economic situation in the Soviet Union and the major capitalist countries.

Using a broad range of indicators—for example, long-term movements in wholesale prices, wages, and interest rates—Kondratiev identified three waves of economic development between 1790 and 1920. In doing so, he accurately anticipated the Great Depression of the 1930s. His theory was later picked up by Joseph Schumpeter, the Austrian economist and Harvard professor, who named the waves “K-cycles” after the Russian economist. But Kondratiev did not live to see his theory win general support: he was executed in 1938 after the Soviet leadership objected to the way his findings appeared to champion capitalism rather than communism.

K-Cycles, Long Waves, and Their Characteristics

The classic K-cycle is a long wave of economic development, lasting 50 to 60 years, that features four distinct phases. Phase 1, or “spring,” lasts for about 25 years. It is a period of expansion driven by innovation and the implementation of new technology, and the end result is greater overall prosperity and, eventually, inflation. Phase 2, or

“summer,” lasts for a fleeting five years. In this phase, the period of expansion reaches its peak and then encounters some difficulties. In particular, excess production creates a shortage of resources, and the resulting effect—increased costs—leads to lower profits. As a result, economic growth slows down. Phase 3, or “autumn,” endures for around ten years. This phase is characterized by the first recession in the K-cycle, after which the economy enters a stable period of relatively flat growth. In this “plateau” period, lower inflation and a positive future outlook encourage the consumer and lead to more indebtedness. Phase 4, or “winter,” lasts for around 18 years. It begins with a protracted recessionary downturn—which lasts for about three years—after the indebtedness of the “autumn” phase destabilizes the economy. This is followed by a period of up to 15 years of slower growth rates until the next “spring” phase begins.

Innovation as the Main Engine of the K-Cycle

What are the driving factors behind the waves of economic development? Economists are divided on the answer. Some argue that the waves reflect changing patterns in capital accumulation or the availability of commodities and food; others contend that wars or social upheavals explain them. But the dominant theory—articulated by Schumpeter—is that technological innovation is the main engine of economic development.

The Theory of the Long Wave of Economic Development (continued)

Schumpeter argued that the driving force of change is the “perennial gale of creative destruction”—namely, the process that begins with innovative action, continues with imitative action, and ends with the destruction of the old economic structure.

If innovation drives an economic upswing (and imitation drives a downswing), what drives innovation? Schumpeter’s view was that innovation is driven by entrepreneurship: the heroic efforts of individuals to break the repetitive creation of existing products and processes.

Where Are We Now—and What Will Drive the Next K-Cycle?

K-cycle theorists have identified four—and possibly five—waves of economic development since the end of the eighteenth century, together with their innovating driving force. The first wave, the age of industrial revolution, was driven by the invention of the steam engine and the growth of the textile industry (1780s to 1840s). The second wave was triggered by the emergence of the railway and the growth of the steel industry (1840s to 1890s). The third wave was driven by the discovery of electricity and its development for general use (1890s to 1940s). The fourth wave, which started in the 1940s,

was driven by the development of petrochemicals and the expansion of the auto industry, as the motor car invented 50 years earlier became affordable for everyone. Some argue that the fourth wave is not yet finished and that the world is in its “winter” phase—the period of slower economic growth. Others insist that a short fifth phase began in 1980 to 1985, driven by new developments in information technology and telecommunications. According to this view, the world has entered an “autumn/winter” phase that could last until 2015 to 2025, although there is some basis for arguing that the increasing pace of technological change is shortening the cycles.

But whether the world is in its fourth or fifth wave of economic development, there is no disputing the fact that it is in a phase of decline. The question is: What will be the innovation that will trigger an upturn in economic fortunes? There is a growing consensus that the driving force of the next K-cycle will be some combination of renewable energy and other green technologies, nanotechnology, and biotechnology.

D. Companies: Lower Profit Levels, More Regulation

Companies have enjoyed many years of reporting rapidly improving quarterly earnings. This will change as underlying economic growth slows, leverage is reduced, companies shy away from risk in favor of financial prudence, and the emphasis is placed on organic growth.

Profit levels will not return to recent highs anytime soon. The current recession is clearly affecting the profit levels of corporations across all regions and industries. The combination of pressure on volumes and prices, asset write-downs (the estimate for goodwill write-offs in the S&P 400 alone amounts to \$200 billion, according to Goldman Sachs), and funding gaps on pension funds (approximately \$400 billion for S&P 1500 companies) will lead to lower profits over both the short and medium term.⁵ According to Merrill Lynch, overcapacity in the United States alone will amount to \$1 trillion (or 30 percent of the country’s theoretical industry capacity) in 2009. Given the projected lower economic-growth rates, we expect that overcapacity will be a feature of many industries for a sustained period, with a damaging effect on profit levels as companies face less room for maneuvering—for example, because of reduced opportunities to pull the pricing lever.

Looking at the longer term, we do not expect that the profit levels of the years from 2005 through 2007 will be repeated anytime soon. As research from BCG has shown, most industries earned record high profits over the past few years, leading to the buildup of cash positions, increased payouts and buybacks, as well as intensified M&A.⁶ In the United States, for example, corporate profits reached a record high share of 13 percent of GDP (compared with 7 percent in the early 1980s).

5. Mercer, February 12, 2009.

6. *Avoiding the Cash Trap: The Challenge of Value Creation When Profits Are High*. The 2007 Value Creators report, September 2007.

The rising share and profitability of the financial sector contributed to these profit levels. But so, too, did the very high global growth rates, the easy access to cheap pools of labor around the world (which lowered the pressure on wages), the deregulation of markets and industries, and lower tax rates. In today's environment, all these positive factors are likely to go into reverse: we will see lower economic growth, more protectionism, more regulation, and higher taxes.

In addition, any localization or repatriation of production (driven by government policy or pressure) is likely to lead to higher costs and less wage competition. Particularly in those countries with less flexible labor laws, politicians will reinforce the rights of workers, impose higher taxes, and be more directive. As a result, companies will be less able to cut costs and realize necessary efficiency improvements as demand drops. Even sectors not affected directly by the crisis, such as utilities and health care, may see increased pressure on margins owing to more regulation, taxation, and budget constraints.

Companies will aim for solid financing and reduced risk. Managers, like investors and consumers, will have to behave differently in the new climate. Well-run companies will be characterized by solid balance sheets, good cash positions, and strict risk management. This will lead to lower profit levels, reduced growth, and less M&A activity. Managers will have to consider the changing expectations of investors, lenders, and other stakeholders, who will be mindful of the consequences of high indebtedness: expecting lower (and mostly organic) growth, they will look for reasonable levels of debt and capital investment.

Risk management and risk discrimination will become more important. Externally and internally, companies will face pressure both to create transparency on risk positions in their operations as well as in their financials and to eliminate information asymmetries. Investors and creditors will more strongly discriminate risk positions and demand higher risk compensation than historically.

Success factors will shift. The influence of government will regain the importance it had in the 1970s as governments recoup much of the power given up during the past two decades—particularly in Europe. Being a “socially responsible” company—one that balances the interests not just of its owners but also of its staff, local community, and other stakeholders—will become more important. Meanwhile, investors will lose influence and power. This holds true in continental Europe and in Asia (where governments already wield great influence in business), but we think this may increasingly apply in the United Kingdom and even in the United States. The current discussion on “dividends versus jobs” and “dividends versus pensions” in Europe—and the vocal involvement of political leaders in this discussion—sheds light on how fundamental the changes might be in the future. Maintaining the “institution” of the company will again become a key goal for managers, supporting the need to take a longer-term view. It is no accident that some companies are looking at shorter working weeks and sabbaticals rather than cutting jobs: not only do they wish to preserve their skill base, but they also wish to be seen as acting responsibly.

E. Investors: Preferences and Appetite for Risk Will Change

Over the past few years, we have witnessed significant changes in investor behavior. Not content with market returns, investors sought enhanced returns, turning to private equity, hedge funds, leverage, and financial engineering. The financial crisis and significant losses on instruments mistakenly thought to be low risk will change investor preferences and their appetite for risk.

This crisis will have a lasting impact on investors. We have experienced massive market volatility and an increasing correlation within and among asset classes (which has led to losses in spite of diversification). This will have a lasting effect on investment strategies and risk preferences. If there is a deep and long recession, there is the risk of a sustained bear market, merely interrupted by some weak rallies.

Recent research by Ulrike Malmendier of the University of California at Berkeley and Stefan Nagel of Stanford University has demonstrated that the generation of “Depression babies,” who have experienced low stock-market returns, is less willing to invest in stocks and expresses more risk aversion. Like consumers who will be cautious about leveraging, investors will be cautious about risk. This will mean less speculation, longer time horizons, but also less entrepreneurship.

On February 23, 2009, Frank-Walter Steinmeier, Germany's vice chancellor and foreign minister, told the *Financial Times* that "the turbo-capitalism of the past few years is dead, irrevocably so." In doing so, he criticized all the shareholders who had become interested primarily in short-term success. With such views gaining ground across Europe, we can expect capital-gains tax changes that favor longer-term investments (and discourage shorter-term gains).

Stock yields may beat bond yields once again. In recent years, it was common for the dividend yield to be lower than the bond yield: investors were looking for returns from growth and capital gains. But, historically, there were longer periods when the dividend yield was higher than the bond yield, reflecting the higher risk of investing in stocks. In a world of lower growth and overcapacity, we might see this again. Perhaps investors will look back and realize that the past 25 years were the "unusual" years—rather than the periods either before or after.

The market will reward solidly financed companies. Over the past few years, leverage provided a positive boost to returns, leading to higher valuation multiples. For example, banks with high leverage enjoyed a premium in their market valuation; their price-to-earnings ratio was higher than that of more prudent peers. But, since the summer of 2007, the opposite has applied; and given the ramifications of the economic turbulence for corporate and individual investors, this trend will most probably continue. Companies with low leverage, solid cash positions, and limited risks will be valued higher than their peers.

Sovereign wealth funds will be repositioned. Sovereign wealth funds are likely to be refocused, not least because surplus countries are rapidly going to tire of bailing out the failing companies of the developed economies—or at least, tire of long-term low returns. With some of these export-oriented countries facing a reduced surplus as trade flows are rebalanced, several sovereign-wealth funds will be asked to invest more domestically and focus on their nation-building role. They may also be inhibited by new restrictions on investing abroad. In those countries where international investments are still possible, the sovereign wealth funds will form investment alliances with private-equity funds in order to benefit from their expertise.

F. Banking: An Industry Transformed

The losses suffered by the banking industry are astounding. Since its precrisis peak, the market capitalization of the global banking industry has fallen by \$5.5 trillion. This is equivalent to about 10 percent of global GDP. And these losses are only half the story. The financial crisis has redefined what financial institutions must do to compete and win. It will prove to be as transformative as it is destructive, precipitating changes that are more fundamental than actions driven solely by self-preservation—such as the scramble for funding and hurried efforts to cut costs. The situation today is extremely fluid and could change significantly. Governments around the world have become much more actively involved. Their interventions are as unprecedented—and potentially game changing—as the crisis itself. There is going to be a *new normal*—a more difficult, challenging environment for financial institutions, which will persist for a considerable time.⁷ Several new realities will change the face of the industry once the dust settles.

We expect the much-maligned universal-banking model to reestablish its primacy. The fundamentals of the model are sound. These banks are built on strong customer relationships and funded predominantly from their own deposit base. At the same time, large banks will tend to be multilocal institutions—repeating a simpler, more standardized business model across fewer countries. And banks will once again emphasize "old-fashioned" products and practices, where the bias is to lend only what is taken in as deposits. Business models will reflect a more cautious, more highly regulated, and less risk-oriented environment.

There is no room in the new order for the global banking titan as it existed before the crisis. Banks that sought to do just about everything everywhere have seen their market values plummet and are not likely to survive in the postcrisis landscape. Some titans confused their massive proportions with competitive

7. For further discussion, see *Living with New Realities: Creating Value in Banking 2009*, BCG report, February 2009.

advantage in individual businesses and countries. They were blind to the fact that their size was actually a disadvantage—it made them far too complex to manage.

Although increased M&A activity could lead to the reemergence of the *national champion* model—a strong bank that builds a seemingly unassailable national position—regulators may seek to limit the size of banks. As the crisis deepened, some governments took steps to rescue banks deemed “too big to fail.” The concern now is that a bank may become too big to save: a collapse would undermine a country’s entire banking industry.

One thing is certain: the financial sector’s share of total profits will come down. In the mid-1980s, the financial sector had about a 15 percent share of total profits in the United States. By 2007, its share of profits had reached nearly 50 percent. In the future, the share of profits will be closer to the levels of the 1980s, reflecting the supporting role that the financial sector should play in an economy. The days of 25 percent ROE targets may well be over for large universal banks.

G. Individuals: Shaped by the Economic Whirlwind

Consumers drove the boom. And they will determine—through their changing habits and behavior—many of the new realities. In the United States, consumer spending accounts for 70 percent of GDP. Given that the United States generates such a large share of global GDP, this means that approximately 16 percent of the world’s GDP is driven directly (and indirectly, from the multiplier effect, even more) by U.S. consumers. In the past, these consumers could spend their way out of a recession. But not now. We expect to see a number of developments.

Consumers will become more conservative. The newspapers are full of articles about the differences between today’s “here and now” generation and an earlier generation whose behavior was shaped by the experience of the Second World War or the Great Depression—and how these differences are fading fast. We believe that the writers are not exaggerating. A whole generation will start to spend less because its members will tend to borrow less. It may have been a knee-jerk reaction to the crisis, but in December 2008, the U.S. savings rate leapt to 3.6 percent after several years of inexorably declining to zero. But the implication of this conservative behavior is profound: because consumers are such an important part of developed economies, any material slowdown in long-term consumption will lead to slower economic growth. This conservative behavior will be reinforced by consumers’ reduced faith in the certainty of stock market and property appreciation.

Consumers will become more value conscious. Consumer behavior is changing rapidly, with an emphasis on trading down. Symptomatic of this trend is the decline in sales of bottled water as consumers choose to drink tap water (even in restaurants). In the United States, retail food sales dropped 4 percent at the end of 2008 as consumers both consumed less and traded down; value retailers are gaining market share around the world (be they Aldi in Germany or Wal-Mart in the United States); supermarkets’ lower-cost private-label products are taking market share from premium brands; and within the supermarkets’ private-label products, the value end is performing best of all. At the other end of the market, many luxury brands have reported dismal sales figures as the credit crunch affects even the wealthy; ostentatious consumption is shunned even by those who can afford it; and fewer people have the enthusiasm or the confidence to trade up.

Consumers will extend their working lifetimes. Increased life expectancy and the inadequacy of pension provisions in many countries had already meant that people expected to work longer. Falling property values are unlikely to recover any time soon. Coupled with more conservative credit regimes, the option to use the home as a vehicle of stored value for old age is unlikely to be nearly as widely available. And for members of the generation nearing retirement today, the drop in stock market values has eaten into their already inadequate pension pots. From being 104 percent funded at the end of 2007, pensions of S&P 1500 companies are now only 75 percent funded. We expect extended working lives to become a reality for some time, even in countries that provide a social safety net.

The retired generation will get squeezed. Millions of people live on their savings and investments. And they have been among the big losers, as governments and central banks have tackled the credit crunch by lowering interest rates to record lows. Although their dividend income may recover over the next few years, as the markets recover, income they derive from deposits will not. Why is this important? First, these retired people will spend less; second, they will need to rely more on their families for support. There will be a group of cash-strapped consumers who need to support both their parents and their children. They will divert any spending toward the basics. Some look to China to stimulate consumer demand. But why, in a country where the savings rate is 30 percent of income, would the average person spend more when jobs are being lost and the country does not have a well-developed state safety net?

Traditional employers will be more attractive. In the last recession, we saw young graduates looking more to traditional employers and industries—for instance, industrial or consumer goods companies, the civil service, and professions such as medicine and engineering. Given the fundamental shift in the financial industry and in the political climate, it is quite reasonable to assume that less financially rewarding—but (possibly) more stable—employers will once again become more attractive to top talent. For at least the next couple of years, however, we expect the job markets to be tough, even for white-collar workers.

H. Society: Increased Political and Social Tensions

It is reasonable to assume that we will see a broad change in social mood. The period of economic expansion, easy credit, and reduced global tensions since the end of the Cold War created an atmosphere of optimism and confidence. The abrupt economic slowdown, along with the return of protectionism and other forms of economic nationalism, will have a clear impact on the political agenda.

- ◇ *Social Unrest.* There have already been signs of social unrest in countries such as Iceland, Bulgaria, Latvia, and Lithuania as local economies have slumped. China has summoned its police chiefs for a briefing on the potential for social unrest in light of that country's economic challenges. Other countries are likely to see similar developments. The deeper the economic slump, and the greater the additional destruction of wealth and savings, the more tensions will rise.
- ◇ *Political Instability.* Although government spending will prevent a repeat of the unemployment and poverty of the 1930s, the political stability of the past three decades is at some risk because of the magnitude of the crisis.
- ◇ *Fundamental Doubts About the Free-Market Economy.* We can already see that faith in the superiority of the free-market model has been eroded. This is true not only in traditionally less free-market societies like France and Germany but also in Anglo-Saxon countries like the United Kingdom. Even in the United States, respected economists are in favor of bank nationalization in order to prevent the collapse of the banking system. This will lead to more government intervention and regulation as well as higher taxes (as described above).
- ◇ *International Tensions.* As countries start protecting their own businesses and limiting cooperation, tensions may well rise.

I. Getting Prepared

Many of the “new realities” we describe do not yet represent the consensus view. Most probably—and hopefully—not all of our “predictions” will come true. But the likelihood that the end of the long boom will lead to more fundamental change than we all would like to see is very high. A world with easy credit and growth is a very comfortable prospect: contented consumers, prosperous businesses, and economic progress. A world that needs to deleverage is a much tougher place, one where life is more difficult for consumers and businesses and where retrenchment is the order of the day. It is better to be prepared—starting with an understanding of how these new realities would affect your business if they materialized in the way in which we have described.

There are several simple steps that management teams can take to build strategic flexibility.

- ◇ *Build Smart Scenarios.* Most companies are developing scenarios for 2009 and 2010 on the basis of the “expected case with a range.” They typically do this on the basis of a consensus view of the economy. But with so much uncertainty, companies should model the potential impact of these various new realities on their businesses. A *smart scenarios* approach enables organizations to identify and consider low-probability but high-impact events that could radically shift the playing field. Such an approach would much more finely de-average businesses by region, customer segment, key technologies, and the like—to show where the company is well positioned to cope with the new realities, where it is vulnerable, the most likely ways for competition to evolve, and which leading indicators to monitor.
- ◇ *Create a “Global Intelligence Monitoring” Function.* Companies must monitor a much broader range of economic indicators and trends than ever before, creating a dashboard of important indicators. While institutionalizing a monitoring function may seem like a perfectly logical and prudent approach, the reality is that too few companies spend sufficient resources on this type of capability. The leading indicators for the current crisis were signaling trouble long before most companies appeared to notice.
- ◇ *Invest in War-Gaming and Simulation.* Management should invest in “playing out” the consequences of their insights and choices—asking how their choices affect their competitors, customers, suppliers, and partners, and how best to shape the end games while minimizing risks. The persistence and degree of uncertainty in the business environment place a new premium on having management invest more time in gaming of all types. Simulation cannot provide a crystal ball. But it drives a higher level of preparedness.

2. Fighting the Deleveraging Fallout

The new realities are emerging as two decades of credit-based expansion come to an end. The hangover after the party—the debt load—must be cleaned up. Many executives and readers of our papers have asked, How can the cleanup be achieved while limiting the collateral damage to the economy?

We briefly summarize the problem and the basic options of deleveraging before describing a more provocative approach.

A. The Problem in a Nutshell

Consumers are now overindebted and banks, which themselves have overstretched their balance sheets, are refusing to lend. We begin by outlining these twin problems.

U.S. consumers cannot spend their way out of the problem. In 2007, the already-high debt burden of U.S. consumers reached 100 percent of GDP. This was mainly driven by a real estate boom that saw the average price of U.S. homes rise by 74 percent in the period since 2001. Many people bought houses they could not afford, betting on further price increases to pay back their loans and relying on seemingly cheap debt fueled by historically low interest rates. Others took out home equity loans—which allowed them to monetize the rising market value of their home—in order to fund consumption. The overall savings rate of U.S. private households dropped to -2.7 percent in August 2005, the lowest level since the Great Depression.

But the change of fortune has been sudden and precipitous—and the effect on consumer demand will be significant. Over the first three quarters of 2008, U.S. household wealth shrank by an estimated \$5.6 trillion, or 9 percent. Meanwhile, the savings rate rose to 3.6 percent in December 2008. If the savings rate were to return to its long-term average of 5 percent of GDP, there would be a reduction in consumer demand of \$500 billion per year. Another factor driving down consumption is that, spurred by job insecurity, consumers are starting to pay back their high debt overhang—which could amount to up to \$6 trillion when compared with the long-term averages. This could translate into reduced consumer demand of up to

\$1.5 trillion per year for several years to come. On top of all this, there is the impact of higher unemployment and the declining values of assets such as houses, stockholdings, and pensions—all of which are hard to quantify.

Banks have overstretched their balance sheets. Not only did banks underestimate the risks associated with the U.S. real-estate market, they also stretched their balance sheets as never before. U.S. broker-dealers extended their leverage by 56 percent (from 25:1 to 39:1), and European banks extended theirs by 34 percent (from 29:1 to 39:1). The write-downs that U.S. and European banks have been forced to make—around \$0.8 trillion since the beginning of 2007—would have been a severe challenge under normal circumstances; but given the high risk exposure both on and off the balance sheet—along with relatively low equity ratios—they have been nearly impossible to absorb. A number of banks are effectively insolvent.

B. The Basic Options to Reduce the Debt Load of Consumers

What options exist to reduce the real debt load of consumers? In principle, there are four.

- ◇ *Continuous Paydown of Debt.* Under this option, consumers reduce their consumption and save more in order to pay back loans. Such organic reversion to normalized debt levels is a time-consuming and painful process that would take many years, if not decades. This implies a long-term drag on growth in the real economy.
- ◇ *Selling Assets to Pay Back Debt.* A broad liquidation of assets—forced or unforced—not only would reduce debt levels (either by paying off or writing down debt) but also would further reduce the value of assets, leading to a chain of bankruptcies or insolvencies of private companies and households. The downward spiral in both the financial and nonfinancial sectors would be reinforced, leading to further asset value depreciation and increasing the need for further deleveraging.⁸
- ◇ *Replacing Private Debt with Public Debt.* Replacing incurred losses on private debt with public debt would relieve consumers of the burden of paying back debt and would recapitalize distressed banks, thereby placing the burden of the losses on the taxpayer. While this eliminates excess debt to some extent, it also creates a moral hazard for both financial institutions and individuals. The main question is how much debt governments can take on.
- ◇ *Pursuing an Inflationary Policy.* The return of inflation would lead to a decrease in debt levels in real terms, making it easier for companies and individuals to service their debt. While inflation may be unlikely in an economy driven by credit liquidation, it is not impossible to generate. This is why governments and central banks, particularly in the United States, are trying to trigger an inflationary cycle.

Currently, all of these options are being pursued in different ways. There is a clear risk of creating higher savings, a downward spiral of bankruptcies, and a drop in demand—all leading to unemployment and lower asset values. But it is not clear that any of the options are working. If the damaging deleveraging trend is to be stopped, it is time to consider more radical alternatives.

C. Think the Unthinkable: Some Radical Thoughts About What President Obama (and Possibly Some Other Government Leaders) Could Do Next

Given the scale of the crisis, policymakers have acted in an unprecedented way. Central banks have flooded the money markets, reduced interest rates to historically low levels, and used unconventional measures in an approach of so-called quantitative easing by purchasing government bonds as well as corporate bonds and commercial paper. Some governments have attempted to bail out banks through guarantees, with injections of fresh capital and the potential creation of “bad banks” where toxic assets can be isolated.

8. For more on this topic, see the sidebar on Irving Fisher in Part 4 of the *Collateral Damage* series.

Despite the aggressive intervention of policymakers, however, the crisis is deepening. The real economy is deteriorating with unprecedented speed and severity. This is because government actions—to stabilize the banks and encourage lending on the one hand and to spur demand by ever-bigger stimulus packages on the other hand—fail to address the core of the problem: first, a bank that has written down an asset will still try to recover as much of that loss as possible, thereby putting pressure on the debtors; second, over-indebted consumers will not be granted the loans they need to increase consumption; and third, lacking confidence and seeking to save more, even creditworthy customers may shy away from debt.

We believe that there may be a way for governments, central banks, regulators, and other policymakers to address the twin problems of overstretched banks and overindebted consumers.

Fixing the Banks and Other Financial Institutions. It is hard to argue that taxpayers should cover losses suffered by bank shareholders and bondholders given that the latter groups acted as investors. In search of higher returns, investors incur risks—and if these risks materialize, it is the investors who should cover them, not the taxpayers. Although this may seem harsh, investing cannot be risk free, and it is up to investors to hold to account the management of the companies in which they have invested. This is in contrast to regular deposits, which do not involve “investing” so much as “storing” money.

Given that the ultimate goal is to stabilize the economy and stop the downturn, policymakers could consider taking the following steps.

Step 1. The real estate bubble was financed by opaque pools of toxic mortgages that were bundled together and sold as safe securities in the form of collateralized debt obligations (CDOs). The problem was that none of the investors (nor, frankly, the banks) had any notion of how poisonous the underlying collateral was. One option, therefore, would be for bank regulators to set a significantly higher capital requirement for securitization transactions—one that requires a 100 percent deduction from regulatory capital for opaque and illiquid CDOs. In a January 2009 paper from the Basel Committee on Banking Supervision, banking supervisors have already considered this option.⁹ The Bank for International Settlements proposes a 100 percent deduction if banks cannot perform, on their own, a proper due diligence on CDOs and the underlying collateral pool (that is, if a bank relies solely on rating agencies for a risk assessment).

To facilitate an emergency implementation of this idea (and to avoid a lengthy review of a bank’s CDO operations and IT infrastructure), we would propose applying the “100 percent deduction rule” to all CDOs whose value dropped below a 50 percent threshold during the crisis. Broadly speaking, this would apply to all CDOs rated AA or lower. The same logic applies to nonsecuritized loan portfolios—here, too, banks need to increase loan loss provisions by applying similar assumptions to future losses. At the same time, governments should continue to guarantee deposits up to a certain threshold as well as short-term investments in banks.

Step 2. Banks should review their equity position in light of the new regulatory requirements. If a bank does not have sufficient equity, it should endeavor to raise the necessary amount from private sources. If a bank is not able to raise the required equity in the capital markets, all bank bondholders (with the exception of those who signed bonds with government guarantees in the last 12 months) should be required to accept a debt-for-equity swap. This move would dilute the stake of shareholders and, in effect, transfer ownership of the bank to the bondholders.

Step 3. If, after step 2, the bank’s equity still falls short of the required level, the government should underwrite any further equity issuance to close the gap. Depending on the amount necessary to close the gap, the government may actually end up holding a stake of up to 100 percent of the bank. After the restructuring, the bank can be sold again.

9. For more details, see “Consultative Document—Proposed Enhancements to the Basel II Framework,” Basel Committee on Banking Supervision, January 2009.

The approach outlined above should also, all things being equal, be applied to other distressed financial institutions with systemic relevance for the financial system, such as insurance companies. But since risk has primarily been concentrated in bank balance sheets, most other financial institutions have less exposure to such equity shortfalls.

Not only is this approach better aligned with the principles of a free-market economy than the one adopted by governments around the world, it should also be more effective. Taxpayers should not have to protect shareholders and bondholders who profit from speculation and who invest in banks in order to make money. Taxes should be used only to protect deposits and short-term investments. By applying the rule outlined in step 1, the market can decide which bank is a good investment, since assets are already written down and now offer some upside—especially if our proposal for addressing consumer debt (described next) is implemented.

Fixing the Consumer. If banks need to be put on a sounder footing, so too do the finances of the U.S. consumer. The best way for this to be done is through a reengineering of the real estate market so that house prices do not decline too far, because a steep decline would damage consumer confidence and wealth in a way that would harm the long-term health of the economy. To achieve this, policymakers should consider taking the following steps.

Step 1. The government should guarantee a minimum price level for houses (write a “put option”) in relation to the purchase price of a house. As can be seen from the S&P/Case-Shiller U.S. National Home Price Index, indexed real-estate prices increased to a level of approximately 230 from a level of 100 in the period from 1997 through 2006 (1997 equals 100).¹⁰ Given the inflation-adjusted prices of U.S. homes over the previous 100 years and a long-term average ranging around the 1997 indexed value, it seems reasonable to assert that 100 is the “normal” price level. If we assume that inflation will be part of the solution, the U.S. government should set real estate prices at 140—a level actually passed in 2001/2002 but which should only have been reached in 2020 on the basis of a projection of the long-term trend. The government should define the minimum price level for houses (the “strike price” of the put option) as follows:

- ◇ For houses bought (or refinanced with home equity loans) before 2002, the guaranteed price should be the purchase price.
- ◇ For houses bought or refinanced in 2003, the price should be the purchase price multiplied by a factor of approximately 0.88 (140 divided by 159).
- ◇ For houses bought or refinanced in 2004, the multiplier should be approximately 0.78 (140 divided by 179), and so on through houses bought or refinanced in 2008, for which the price should be the purchase price multiplied by approximately 0.72 (140 divided by 194).

In this way, the government can define a kind of auctioneer’s reserve price, signal to the market that no house will fall below this value, and thereby reduce the downward pressure in the real estate market. The problem, of course, is that the government could end up owning several million houses across the United States. (Estimates of homeowners underwater are around 8 million to 12 million, with negative equity of approximately \$600 billion, or \$50,000 to \$75,000 per house on average.) If this happens, however, then the former owners should be able to rent the house from the government at favorable rates and receive an option to repurchase it at the set price at any time in the future.

By focusing on the fundamental debt problem and avoiding any overshooting on the downside, the government can address the core problem of the crisis and bail out the consumer instead of the banks. Without any doubt, these measures go beyond the current proposals of the Obama administration. The plan to support U.S. households with \$275 billion to facilitate refinancing and participation in lower mortgage rates goes in the right direction. But given the size of the problem, the plan is not sufficient, and its effects

10. The S&P/Case-Shiller U.S. National Home Price Index is available at www2.standardandpoors.com; for the inflation adjustment, see www.irrationalexuberance.com.

are still to be proven. With its focus on salvageable mortgages for homeowners “deserving” rescue (and “deserving” is hard to define with any clarity), the program will reduce the number of foreclosures of eligible homes. But it does not solve the problem of the high share of mortgage loans that are securitized—for which servicers are unable to renegotiate payment terms without the consent of third-party owners. With the housing bubble at the heart of the current crisis and continuing asset losses posing an ongoing threat to bank balance sheets, there seems to be no alternative: the downward spiral in real estate prices needs to come to a halt—even if this means setting a floor to prices that is above fair value, thereby sending a signal about the desired level of inflation.

Step 2. This pure bailout of consumers would of course imply a moral hazard, with people who overconsumed now rescued by those who saved and remained responsible during the boom years. In an economic environment of multiple self-reinforcing downward trends, however, home prices and foreclosures will be dependent on volatility in the overall market irrespective of the reasons for delinquency. Nonetheless, to avoid moral hazard, homeowners should be required to pay for their rescue through the imposition of sizable additional capital-gains taxes on houses.

In parallel with the implementation of these measures by the United States, governments and central banks in the other regions affected by the crisis—mainly the United Kingdom, Spain, and Ireland, which had bigger real-estate bubbles and accompanying expansions of credit—should consider following the same approach. The governments should push through a recapitalization of banks, and at the same time put in place measures to avoid an overshooting on the downside in real estate markets.

The cost of these measures in the United States could be as high as \$3 trillion, approximated on the basis of a currently estimated 8 million to 12 million homeowners with negative equity and a median house price of \$200,000, plus fees and transaction costs. We are optimistic that the actual amount will be much lower, as private demand will pick up, given the defined “floor” to real estate prices. Over time, of course, much of this could be recoverable as inflation and a reviving economy rescue the housing market.

The current approach adopted by the U.S. government—and other governments around the world—is likely to lead to much higher costs in the long run if, as seems likely, it fails to halt the deepening downturn in the real economy.

The financial crisis has inflicted widespread collateral damage on economies around the world. But at the same time, as we have described in this paper, it is giving rise to a new corporate environment shaped by a new global economic order. Its precise characteristics need to be understood, because senior managers must take the initiative rather than merely respond (late) to the crisis. No one should be under any illusion about the magnitude of the challenges: in our view, the world has changed. Most of the new realities of the world in crisis that we have identified here have long-term transformational implications for the shape and profitability of the corporation. Executives who explore the impact of these (and other) new realities on their businesses will be better prepared to deal with the twists and turns that lie ahead. It is not a case of being precisely right—rather, it is a question of being prepared.

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