

CHAPTER 9

The Crash of 2008

INTRODUCTION

In the previous edition of this book, I put forward a conceptual framework for understanding the financial crisis then beginning to unfold. I recognized that the crisis was more severe than many were willing to accept, but even I never expected the financial system to actually break down and the global economy to collapse. In the past, whenever we came to the brink of a breakdown the financial authorities came to the rescue. That is what I expected for 2008, but that is not what happened. On September 15, 2008, Lehman Brothers was allowed to go into bankruptcy without proper preparation. Within days the entire financial system suffered what amounted to cardiac arrest and had to be put on artificial life support. The effect on the global economy was the equivalent of the collapse of the banking system during the Great Depression. The current breakdown is a relatively recent event whose full impact has not yet been felt, and it contradicts my explicitly stated expectations for 2008. In

sum, I significantly underestimated the severity of the financial crisis. I was correct, however, in identifying that we were dealing with something much bigger than a subprime mortgage crisis or a housing bubble and that we had reached the reversal point in a process of credit expansion that had been at work ever since World War II and turned into a super-bubble in the 1980s.

Recognizing this point is essential for understanding where we are now and what policies we should follow, and for evaluating the conceptual framework I have put forward. In the following pages, I shall assess the present state of affairs first and the conceptual framework afterwards. I shall use my own investment performance to set the stage for reviewing the salient events of 2008 and then turn to the policy prescriptions.

PERFORMANCE EVALUATION

On rereading chapter 7, “My Outlook for 2008,” it is clear that by and large I foresaw what was coming and positioned myself reasonably well in anticipation. But I got one thing wrong and it cost me dearly: There was no decoupling between the developed and developing worlds. The Indian and Chinese stock markets were hit even harder than those in the United States and Europe. Since we did not reduce our exposure, we lost even more money in India than we made the year before. Our Chinese manager did better than the market through his stock selection; we were also helped by the appreciation of the Chinese currency. I

had to push very hard in my macro-account to offset these losses and the losses incurred by our external managers. This had its own drawback: I overtraded. The positions I took were too large for the increasingly volatile markets, and in order to manage my risk I could not afford to go against the trend in a major way. I had to try and catch minor market moves, and this made it difficult to maintain short positions.

The risk-reward relationship in selling stocks short is the exact opposite of being long. If you are long and the market goes against you, your risk exposure goes down. If you are short it goes up. As a result, short sellers cannot tolerate losses the way investors can. Because the short side was crowded, there were some vicious short-squeezes. Although I am an experienced short seller, I got caught several times, and in the end I largely missed the biggest downdraft, which came in October and November.

The increased volatility was an expression of the increased uncertainty. That was a point I made in the conclusion to last year's book, where I spoke of a period of heightened uncertainty but failed to draw the right conclusion for my trading tactics. Had I kept my risk exposure lower, I could have stuck to my strategic positions, and I might have ended up making more money.

I say "might have" rather than "would have" because although I was heavily weighted on the short side, the few strategic long positions I took on cost me an enormous amount. I was impressed by the potential in the newly discovered deep-water oil field in Brazil in light of the rapid depletion of existing major oil fields and bought a large, strategic position in Petrobras only to see it decline by 75

percent at one point in time. We also got caught in the newly developing petrochemical industry in the Gulf States.

Another instance where I failed to properly exploit a correct insight was in regard to the commodity bubble. I did recognize that the flight from currencies was turning a long-term uptrend in commodities into a bubble, and I so testified before Congress (see appendix). We did get out of our strategic long position in CVRD, the Brazilian iron ore producer, in time and shorted other major iron ore producers, but we missed a major opportunity in the commodities themselves—partly because I knew from past experience how difficult it is to trade them.

I was also slow to recognize the trend reversal in the dollar and gave back a large portion of our profits. Under the direction of my new Chief Investment Officer, we did make money in the United Kingdom, where we bet that short-term interest rates would decline and shorted sterling versus the euro. We also made good money by going long the credit markets in the United States after their collapse.

Eventually I understood that the strength of the dollar was due not to people choosing to hold dollars but to their inability to maintain or roll over their dollar obligations. In a very real sense, the strength of the dollar, like the fever associated with sickness, was a measure of the disruption of the financial system. This insight helped me to anticipate the downturn of the dollar at the end of 2008. As a result, we ended the year modestly higher, almost meeting my target of 10 percent annual minimum return, after spending most of the year in the red. I consider this quite an accomplishment in a period of almost universal wealth destruction.

THE CRASH OF 2008

The bankruptcy of Lehman Brothers on Monday, September 15, 2008, was a game-changing event. As I have noted, until then, whenever the financial system came close to a breakdown, the authorities intervened. This time they did not. The consequences were disastrous. CDSs (credit default swaps) went through the roof, and American International Group (AIG), which carried a large short position in CDSs, was facing imminent default. By the next day, Tuesday, Treasury Secretary Henry Paulson had to reverse himself and come to the rescue of AIG, albeit on extremely punitive terms. But worse was to come. Lehman was one of the main market-makers in commercial paper and a major issuer. An independent money market fund held Lehman paper, and, since it had no deep pocket to turn to, it had to “break the buck”—stop redeeming its shares at par. This caused panic among depositors, and by Thursday a run on money market funds was in full swing. The panic spread to the stock market. The Federal Reserve had to extend a guarantee to all money market funds, short selling of financial stocks was suspended, and the Treasury announced a \$700 billion rescue package for the banking system. This provided some temporary relief to the stock market.

Paulson’s \$700 billion rescue package was ill conceived; more exactly, it was not conceived at all. Strange as it is, the Treasury Secretary was simply not prepared for the consequences of his action when he allowed Lehman Brothers to fail. When the financial system collapsed, he had to rush to Congress without any clear idea of how he was going to use

the money he was asking for, and only a rudimentary concept of setting up something like the Resolution Trust Corporation, which acquired and eventually disposed of the assets of failing savings and loan institutions in the savings and loan crisis of the 1980s. So he asked for total discretion, including immunity from legal challenge. Unsurprisingly, Congress did not give it to him. Several voices, my own included, argued convincingly that the money would be better spent injecting equity into banks rather than taking toxic assets off their hands. Eventually Secretary Paulson came around to the idea but did not execute it properly. I outlined how it should have been done in two articles, which are included in the appendix.

Conditions in the financial system continued to deteriorate. The commercial paper market ground to a halt, LIBOR rose, swap spreads widened, CDSs blew out, and investment banks and other financial institutions without direct access to the Federal Reserve could not get access to overnight or short-term credit. The Fed had to extend one lifeline after another. It was in this atmosphere that the International Monetary Fund (IMF) held its annual meeting in Washington, starting on October 11, 2008. The European leaders left early and met in Paris on Sunday, October 12. At that meeting they decided to guarantee, in effect, that no major European financial institution would be allowed to fail. They could not agree, however, to do it on an inclusive Europe-wide basis, so each country set up its own arrangements. The United States followed suit in short order.

These arrangements had an unintended adverse side effect: They brought additional pressure to bear on the countries that could not extend similarly credible guarantees to their financial institutions. Iceland was already in a state of

collapse. The largest bank in Hungary was now subjected to a bear raid, and the currencies and government bond markets of Hungary and the other Eastern European countries fell precipitously. The same happened to Brazil, Mexico, the Asian tigers, and to a lesser extent Turkey, South Africa, China, India, Australia, and New Zealand. The euro tanked and the yen soared. The dollar strengthened on a trade-weighted basis. Trade credit in the periphery countries dried up. The precipitous currency moves claimed some victims. Leading exporters in Brazil had gotten into the habit of selling options against their appreciating currency and now became insolvent, precipitating a local mini-crash.

All these dislocations taken together had a tremendous impact on the behavior and attitudes of consumers, businesses, and financial institutions throughout the world. The financial system had been in crisis since August 2007, but the general public hardly noticed it and, with some exceptions, business carried on as usual. All this changed in the weeks following September 15, 2008. The global economy fell off a cliff, and this became evident as the statistics for October and November began to appear. The wealth effect was enormous. Pension funds, university endowments, and charitable institutions lost anywhere between 20 and 40 percent of their assets within a couple of months—and that was before the \$50 billion Bernard Madoff scandal was exposed. The self-reinforcing recognition that we are facing a deep and long recession, possibly amounting to a depression, has become widespread.

The Federal Reserve responded forcefully, slashing the Fed fund rate to practically zero on December 16, 2008, and embarking on quantitative easing. The Obama administration

is preparing a two-year fiscal stimulus package in the \$850 billion range and other radical measures.

The international response has been more muted. The IMF has approved a new facility that allows periphery countries in sound financial condition to borrow up to five times their quota without conditionality, but the amounts are puny and the possibility of a stigma continues to linger. As a result, the facility remains unused. The Fed opened swap lines with Mexico, Brazil, Korea, and Singapore. But European Central Bank President Jean-Claude Trichet inveighed against fiscal irresponsibility, and Germany remains adamantly opposed to excessive money creation that may lay the groundwork for inflationary pressures in the future. These divergent attitudes render concerted international action extremely difficult to achieve. They may also cause wide swings in exchange rates.

In retrospect, the bankruptcy of Lehman Brothers is comparable to the bank failures that occurred in the 1930s. How could it have been allowed to occur? The responsibility lies squarely with the financial authorities, notably the Treasury and the Federal Reserve. They claim that they lacked the necessary legal powers, but that is a lame excuse. In an emergency they could and should have done whatever was necessary to prevent the system from collapsing. That is what they have done on other occasions. The fact is, they allowed it to happen. Why?

I would draw a distinction between Treasury Secretary Henry Paulson and Federal Reserve Chairman Ben Bernanke. Paulson was in charge because Lehman Brothers, as an investment bank, was not under the aegis of the Federal

Reserve. In my view, Paulson was reluctant to resort to the use of “taxpayers’ money” because he knew that it would entail increased government control. He was a true market fundamentalist. He believed that the same methods and instruments that got the markets into trouble could be used to get them out of it. This led to his abortive plan to create a super-SIV (Special Investment Vehicle) to take over failing SIVs. He subscribed to the doctrine that markets have greater powers to adjust than any individual participant. Coming six months after the Bear Stearns crisis, he must have thought that markets had had enough notice to prepare for the failure of Lehman Brothers. That is why he had no Plan B when the markets broke down.

Ben Bernanke was less of an ideologue. But coming from an academic background, the bursting of the super-bubble found him unprepared. He asserted that the housing bubble was an isolated phenomenon that could cause losses up to \$100 billion, which could be easily absorbed. He did not realize that equilibrium theory was fundamentally flawed; as a consequence, he could not anticipate that the various methods and instruments based on the false assumption that prices deviate from a theoretical equilibrium in a random manner would fail one after another in short order. But he was a fast learner. When he saw it happening he responded by drastically lowering interest rates, first in January 2008 and again in December. Unfortunately, his learning process started too late and always lagged behind the actual course of events. That is how the situation spun out of control.

On a deeper level, the demise of Lehman Brothers conclusively falsifies the efficient market hypothesis. My

argument is bound to be controversial, but it raises some very interesting questions. Each of its three steps will take the reader to unfamiliar grounds.

The first step is to acknowledge that there is an asymmetry between being long or short in the stock market. (Being long means owning a stock; being short means selling a stock one does not own). As discussed earlier, going long has unlimited potential on the upside, but limited exposure on the downside. Being short is the reverse. The asymmetry manifests itself in the following way: Losing on a long position reduces one's risk exposure while losing on a short position increases it. As a result, one can be more patient being long and wrong than being short and wrong. The asymmetry serves to discourage the short-selling of stocks.

The second step is to understand CDSs and to recognize that the CDS market offers a convenient way of shorting bonds. In that market the risk-reward asymmetry works in the opposite way to stocks. Going short bonds by buying a CDS contract carries limited risk but unlimited profit potential; by contrast, selling CDSs offers limited profits but practically unlimited risks. The asymmetry encourages speculating on the short side, which in turn exerts a downward pressure on the underlying bonds. When an adverse development is expected, the negative effect can become overwhelming because CDSs tend to be priced as warrants, not as options: People buy them not because they expect an eventual default but because they expect the CDS to appreciate in case of adverse developments. No arbitrage can correct the mispricing. That can be clearly seen in the case of U.S. and U.K. government bonds: The actual price of the bonds is much higher than the price implied by CDSs.

These asymmetries are difficult to reconcile with the efficient market hypothesis.

The third step is to take into account reflexivity and recognize that the mispricing of financial instruments can affect the fundamentals that market prices are supposed to reflect. Nowhere is this phenomenon more pronounced than in the case of financial institutions whose ability to do business is so dependent on confidence and trust. A decline in their share and bond prices can increase their financing costs. That means that bear raids on financial institutions can be self-validating, which is in direct contradiction of the efficient market hypothesis.

Putting these three considerations together leads to the conclusion that Lehman Brothers, AIG, and other financial institutions were destroyed by bear raids in which the shorting of stocks and buying of CDSs mutually amplified and reinforced each other. The unlimited shorting of stocks was made possible by the abolition of the uptick rule (which would have hindered bear raids by allowing short selling only when prices were rising). The unlimited shorting of bonds was facilitated by the CDS market. The two together made a lethal combination. That is what AIG, one of the most successful insurance companies in the world, failed to understand. Its business was selling insurance, and when it saw a seriously mispriced risk it went to town insuring it in the belief that diversifying risk reduces it. It expected to make a fortune in the long run, but it was destroyed in the short run because it did not realize that it was selling not insurance but warrants for shorting bonds.

My argument lends itself to empirical research. The evidence shows that the CDS market is much larger than all the

bond markets put together—having peaked at an amazing \$62 trillion nominal amount outstanding. There is only anecdotal evidence that there was some collusion between the people who shorted stocks and bought CDSs, but the matter could be further investigated. The *prima facie* evidence favors the conclusion.

This raises some interesting questions. What would have happened if the uptick rule had been kept in effect and speculating in CDSs had been outlawed? The bankruptcy of Lehman Brothers might have been avoided, but what would have happened to the super-bubble? One can only conjecture. My guess is that the super-bubble would have been deflated more slowly, with less catastrophic results, but the aftereffects would have lingered longer. It would have resembled the Japanese experience more than what is happening now.

What is the proper role of short selling? Undoubtedly it gives markets greater depth and continuity, making them more resilient, but it is not without dangers. Bear raids can be self-validating and ought to be kept under control. If the efficient market hypothesis were valid, there would be an *a priori* reason for imposing no constraints. As it is, both the uptick rule and allowing short selling only when it is covered by actually borrowed stock are useful pragmatic measures that seem to work well without any clear-cut theoretical justification.

What about credit default swaps? Here I take a more radical view than most people. The prevailing view is that they ought to be traded on regulated exchanges. I believe they are toxic and should be used only by prescription. They could be allowed to be used to insure actual bonds but—in light of

their asymmetric character—not to speculate against countries or companies.* CDSs are not the only synthetic financial instruments that have proven toxic. The same applies to the slicing and dicing of CDOs (collateralized debt obligations) and to the portfolio insurance contracts that caused the stock market crash of 1987, to mention only two that have actually done a lot of damage. The issuance of stock is closely regulated by the SEC; why not the issuance of derivatives and other synthetic instruments? The role of reflexivity and the asymmetries I have identified ought to prompt a rejection of the efficient market hypothesis and a thorough reconsideration of the regulatory regime.

Now that the bankruptcy of Lehman Brothers has had the same shock effect on the behavior of consumers and businesses as the bank failures of the 1930s, the problems facing the Obama administration are at least twice as great as those that confronted President Roosevelt. This can be seen from a simple calculation. Total credit outstanding was 160 percent of GDP in 1929, and it rose to 260 percent in 1932 due to the accumulation of debt and the decline of GDP. We entered into the Crash of 2008 at 365 percent, which is bound to rise to 500 percent or more by the time the full effect is felt. And this calculation does not take into account the pervasive use of derivatives, which was absent in the 1930s but immensely complicates the current situation.

*Early in 2009, trading in CDSs is creating trouble for the euro. Several countries within the Euroblock are getting over-indebted and facing the prospect of being downgraded by the rating agencies. The buying of CDS contracts puts additional pressure on their borrowing costs and diminishes the benefit of being members of the euroblock. This casts doubts on the durability of the euro. There is an independently existing underlying weakness in the euro, which is exacerbated by the CDS market in a self-reinforcing fashion.

The nominal amount of CDS contracts outstanding is more than four times the GDP. On the positive side, we have the experience of the 1930s and the prescriptions of John Maynard Keynes to draw on. His *The General Theory of Employment, Interest, and Money* was published only in 1936; we have it at our disposal from the outset. Drawing on it, let me first outline the policies that the Obama administration ought to pursue, and then assess how the future may play out.