REMARKS BEFORE BEACON HILL VILLAGE
Boston MA May 11, 2009

The Financial Crisis: Causes and Consequences

I. Introduction

I think that all of you will agree that this was The Big One. That is the phrase, of course, that Californians use to describe the much dreaded but virtually inevitable 10-points-on-the-Richter-Scale earthquake that will push everything west of the San Andreas Fault into the Pacific. For the financial system and the global economy, this crisis has been some combination of the San Francisco earthquake, Katrina and 9/11—that latter especially because it was aimed at the heart of American capitalism. No, there was no criminal intent, as far as we know, but the recklessness was breathtaking. To summon another natural disaster metaphor, this has been a 100-year flood, but the real problem is that we have been having, say, 50-year floods more like every 10 or 20 years for some time.

Still, this one dwarfs the rest and clearly is the worst financial crisis since the 1930s. Indeed, it is instructive that a year ago I gave a talk to a group in Boston that focused on what I called (as did most people at the time) the "credit crunch." It was not long until the crunch morphed into a full-blown crisis, whose effects are still being felt and will for years to come.

II. Causes

A. Debt

There can be no doubt that the prime cause of the crisis was the great rise in total debt in this country and abroad over a period of decades—the debt that financed consumption or leveraged investment returns. The crisis was triggered, of course, by a relatively obscure form of debt—subprime residential mortgages—especially in the form securitized obligations. Yet it was the sheer wall of debt that had been accumulated that led to the scale and rapidity of the crisis that broke in September of 2008.

The debt build-up would not have happened, almost assuredly, but for some very positive developments over the last 30 or more years. One was globalization, which completed the demise of the relatively rigid post-WWII system that governed international trade and capital flows called Bretton Woods, the name of the resort in New Hampshire where that system and its attendant institutions like the IMF were hammered out in 1944. Out of its ashes arose a de facto system of much freer trade and more freely fluctuating currencies. Another welcome development was the collapse of the Soviet Union and the rise of a market-based China and the other Asian Tigers.

The result for the U.S. was a growing and eventually massive current account deficit (not to mention a federal deficit of Brobdingnagian proportions even before the crisis) that eventually exceeded 6% of GDP, vastly more than anyone would ever have thought possible not many years ago. Both deficits were largely financed by oil-exporting countries and China, both of whom had good reason not simply to dump their dollar earnings but to invest

them in dollar-denominated securities, especially Treasury obligations and corporate debt. In the case of China and some other emerging markets, the implicit bargain was that hundreds of millions of peasants were integrated into the world economy, and we got cheap stuff at Walmart and Costco.

Now-Fed Chairman Bernanke some years ago identified what he called the "global savings glut," meaning the vast amount of foreign reserves accumulated by our trading partners. The Chinese, for example, now have about $2 trillion in foreign reserves, of which perhaps $1.5 trillion is invested in dollar-denominated securities. This kind of massive demand obviously has tended to keep intermediate and long-term interest rates relatively low and the dollar relatively high.

In the meantime, under Easy Al Greenspan, short-term rates were often reduced at the sign of any looming financial storm, causing Wall Street wags to coin the term "the Greenspan put," as these prophylactic pushes on the gas peddle tended to magically whisk away risk takers' exposure. Perhaps the worst of these episodes occurred after the tech bubble burst, and the Fed kept short rates in negative territory in real terms for some 34 months between 2003 and 2005, just at the time—no doubt hardly a coincidence—when the housing bubble was beginning to really inflate. It was, in my judgment, a spectacular example of "moral hazard."

The upshot of all this beneficence was what some have called a "debt supercycle." I won't belabor you with a lot of statistics, but here is one that pretty much captures it all: in the 25 years before the bubble popped last year, total debt in the U.S. rose from 1.25 times GDP to 3.1 times. There is simply no rational explanation for this phenomenon in terms of productivity growth or demographic changes or the like. Also, the rise was concentrated in two sectors: the consumer and financial services. Where do these two most prominently connect? Well, residential real estate would certainly be a prime candidate.

Finally, the moral tenor of the times is perhaps best displayed in the personal savings rate. It does tend to fluctuate over time, more or less inversely with the "wealth effect" as people save less when they feel wealthier. Still, over the long term it has tended to oscillate around 10%. Well, during this decade, up until the middle of last year, it consistently declined until it reached an all-time low of nearly -3%. Apologists explained that the 21st century way of saving was for workers to rely on appreciating 401k accounts and ever-rising house prices instead of the dreary business of regularly taking a chunk out of their paychecks and putting it in the bank instead of spending it. Note that at the peak the form of savings, so to speak, represented by house prices was more than 40% over trend in relation to both personal incomes and rental alternatives.

B. Ideology

By the end of the 1990s there had clearly been a complete triumph of Reaganite or Friedmanite market fundamentalism over the post-Depression consensus of top-down Keynesian management of the economy and regulation of the capital markets. Monetarism was triumphant although it grudgingly made its peace with the fact that the Fed continued to manage the money supply chiefly through its grip on the fed funds and discount rates. Deregulation was the spirit of the age.

Some, no doubt, was long overdue. For example, long after the railroads had lost their monopoly on freight and personal transportation, an obscure federal agency called the Interstate Commerce Commission was still setting railroad tariffs and deserved its oblivion. In the world of financial services, however, there lingered the problem, amidst a great deal of deregulation, that significant federal guarantees—explicit in the case of FDIC deposit insurance and implicit in the case of Freddie and Fannie—left the playing field less than level. In a broad sense, gain was privatized and, certainly once the crisis began, loss socialized[1].

Let me give you two of my favorite examples of deregulation run amok. The first (more a case of nonregulation) occurred in the 1990s as so-called financial derivatives became more and more important tools in finance. In the late 1990s, Brooksley Born, the head of the federal agency that regulates futures, the CFTC, asserted that financial derivatives, which were traded solely over the counter (or OTC) and without any federal or state regulation, should come under the CFTC's jurisdiction. At that point an unholy alliance across the political spectrum—from Phil Graham, a leading Senate Republican proponent of deregulation, to Larry Summers, Democratic Secretary of the Treasury—quashed her effort. Indeed, Congress thereafter, in 2000, passed and Clinton signed a bill that explicitly forbade any federal or state[2] regulation of financial derivatives.

It is no accident that at the peak in 2008, one crucial form of financial derivative, credit default swaps, had grown to over $60 TRILLION in aggregate (though in fairness, that amount is "notional" and does not account for offsetting positions or possible recoveries after defaults). CDSs are essentially a form of bond insurance but were not so named in order to assure that they did not fall under the purview of state[3] insurance regulators, who might have forced sellers to meet typical insurance reserve requirements. Moreover, since OTC CDSs are not settled on any exchange, terms were not standardized, no reserve requirements were imposed and only a modest amount of transparency was achieved through self-reporting to a trade association. In fact, CDSs became a major tool for banks that assembled packages of securitized obligations like collateralized debt obligations (CDOs) and then "insured" them with a CDS. Those CDSs bought from a AAA-rated AIG automatically earned a AAA rating. We all know what happened when that market froze in 2008 and thus "insured" CDOs had to be "marked to market" but that market simply stopped functioning.

---

[1] Of course, it turned out that large chunks of the financial system that no one had dreamed had any claim on the federal Treasury drank deeply at the trough on grounds of "systemic risk." Thus, AIG, an insurance company with no such explicit or implicit claim has so far consumed well over $100 billion in taxpayer dollars.

[2] The legislation "pre-empted" state laws that prohibited "side bets" or insurance where there was no "insurable interest." Side bets on securities were the stock-in-trade, so to speak, of old-fashioned bucket-shops, which had contributed heavily to financial panics of yore and therefore such state laws had ultimately had banned. The new federal legislation was necessary, claimed the Street and its apologists (i.e., lobbyists), because credit default swaps were often no more than side bets because the buyer did not own the security that the seller insured.

[3] In a CDS, the only "swap" occurring is when the buyer and the seller exchange cash for a contingent promise to pay so the choice of nomenclature is Orwellian.

A second example occurred in 2004 when the SEC modified (or, in my view, eviscerated) what is known as the net capital rule, which regulates the amount of leverage that investment banks (or more broadly broker-dealers) can assume. For as long as I can remember (since my days nearly 40 years ago as a securities lawyer), that was a flat 12 times capital. Then, in 2004, in part because international rules regulating commercial banks' leverage had permitted some degree of self-regulation, the SEC decreed that henceforth the big investment banks (not the little ones, presumably because they could not be trusted) could self-regulate their leverage as long as they used an accepted risk management methodology and applied it consistently and professionally. The upshot was that risk levels rose on average to perhaps 20 to one and then, as disaster loomed, at the Bear Stearns and Lehmans on the Street, it shot to 30 to one and upwards of 40 to one. And keep in mind the assets they were financing were not exactly Treasury bonds.

Deregulation manifested itself in another important way in what became known as the rise in the "shadow banking system," which, by definition, lies outside conventional regulation or at least is lightly touched by it. These were chiefly the hedge funds and private equity funds, sellers of CDSs like AIG, "government-sponsored enterprises" like Fannie and Freddie, etc. In time they collectively became the source of some 80% of all credit extended in this country.

C. Technology

Over the last three or four decades (do you remember the "paper crunch"?), technology has brought wonders to the capital markets as it has to virtually all phases of American life. Most importantly, it has introduced efficiencies that materially lowered the cost of capital to businesses and to consumers.

In recent years technology was the genie that supposedly spread risk largely through securitization. Small, illiquid obligations (like residential mortgages) could be sliced and diced and then bundled so that they could then be sold as liquid, generally high-rated paper to institutional investors. We now know (and perhaps should have known then) that rather than dispersing risk, this process tended to diffuse responsibility and introduce opacity. No one knew where the heck risk wound up, especially after the malfeasance of the rating agencies and the auditors.

It should be noted that all of this fit a new business model that became overwhelmingly important to the big investment banks and commercial banks called "originate to distribute." Essentially, rather than serving as intermediaries between companies and the capital markets through underwriting and lending, they manufactured paper from inputs acquired from mortgage brokers and lenders and then sold it to both traders (e.g., hedge funds) and investors (e.g., pension funds). Some of them "sold" this soon-to-be-toxic stuff to their own off-balance sheet entities (special purpose vehicles or SPVs) that were even more highly leveraged so that they could book the profits (through various revenue streams from the SPVs) but not the assets and liabilities. This was astonishingly close to what brought Enron down nearly 10 years ago.

D. Agency Problem

Economists (and sociologists) say that it is often the case that the interests of agents (e.g., bonus-driven employees who are CDO orginators) may not only diverge from, but may seriously conflict with, those of their principals (e.g., shareholders of publicly-held banks). Well, as implied, in my view that became a very serious problem among the major banks, investment and commercial, during the height of the real estate-driven credit bubble. Though less important as a policy matter, it is also a problem in the world of hedge funds and private equity funds because of the conventional fee structure that pays the managers a typical 2% base fee but also a 20% incentive fee based on annual profits. The latter, however, is asymmetrical in that the managers never share in losses.

Among the big publicly-held banks—both investment banks and post-Glass Steagall commercial banks engaged in essentially investment banking activities—the agency problem was manifested in the fact that traditionally net operating profit was effectively divided 50/50 between shareholders (through dividends and retained earnings) and management (through bonuses). This is a crude but not inaccurate depiction. Clearly, this structure provides ample opportunity and incentive for gaming of all kinds.

It is also in great contrast to the traditional form of investment bank partnerships, which persisted until Salomon Brothers broke the mold and went public in the early 1980s. I happen to have a elderly friend who was once a partner in charge of corporate finance at the venerable white-shoe investment bank, First Boston, long since absorbed by Credit Suisse. At the time last summer when Bearn Stearns became the first publicly-held investment bank to go under, he said to me, "Your know, Jerry, at First Boston, every day my partners and I came to work and decided where to deploy OUR capital that day." In other words, it was not capital that theoretically belonged some lady in Dubuque.

Indeed, last June I gave a talk to another group in Boston in which I made bold to make the following statement: the business model of the publicly held investment bank is broken. Little did I know that within four months they would all be gone, either bankrupt, forcibly merged or voluntarily turned into less leveraged and more heavily regulated bank holding companies.

Finally, I cannot help but remark upon Greenspan's testimony before Congress last fall, which in effect was a mea culpa. He said—and I paraphrase—that he was in a state of shocked disbelief at what by then had happened because he had always been convinced that the "enlightened self-interest" of bankers would assure that they would protect the interests of shareholders first. Whew! On what planet had he been living?

E. Intellectual Error

Finally—if you will forgive a rather lofty pass at the problem—I would argue that a very fundamental intellectual error contributed mightily. In summary, more or less in parallel with the rise of market fundamentalism and deregulation, neoclassical economics and its progeny in the capital markets known as Portfolio Theory built large theoretical structures increasingly premised on the assumption that you and I are little Smithian automata, drained of "animal spirits" and irrationality. We are homo economicus.

This perhaps did no harm in the academy but when introduced into the financial system in the form of both risk management methodologies (most prominently so-called "Value at Risk") and structured financial products (like CDOs), upon both of which billions of dollars rested, vast dangers were courted and staggering losses consequently absorbed.

In particular, all this represented a huge misapplication of so-called Gaussian statistical analysis, which you will better recognize in the form of its graphic representation known as the bell curve or normal distribution. The problem, put simply, is that any field of human activity is highly unlikely to lend itself to a normal distribution, with its very "flat tails" on either side of the bell curve. As others have noted, those tails tend to be fat, not flat, in that "outliers" tend to be much more frequent. That is why, as I said at the outset, in the global financial system, 50-year floods appear to be occurring every 10 or 20 years, and we may even have had a 100-year flood.

Let me end this analysis by quoting the very distinguished economist and mathematician, Benoit Mandelbroit. He observed recently, "Even though economics is a very old subject, it has not come to grips with the main difficulty, which is the inordinate practical importance of a few extreme events."

III. Consequences

I will close with a very brief recitation of what all of this has wrought. Essentially, a theretofore obscure corner of the residential mortgage market (subprime and AltA) was juiced by all manner of miscreants, most now either bankrupt or imprudently purchased by banks before the collapse. Billions of dollars of dubious mortgages were originated and more billions extracted from apparent home equity as prices rose and interest rates fell or at least did not rise.

Then an invisible transmission belt—at least one that I and my colleagues did not see—carried this often putrescent paper (as a result of incredibly lax underwriting standards) to Wall Street, where, as described above, it was digested and regurgitated in immaculate (i.e., AAA rated) new form through the magic of securitization, bogus insurance and the pusillanimity of the rating agencies and then sold to many investors who never looked under the hood. It was all an eerie replay of what First National City Bank was accused of doing in the 1920s when it underwrote proverbial Chilean railroad bonds and then stuffed them into the trust accounts of widows and orphans.

The entire towering edifice was based on one fatally flawed statistical assumption built into all the securitizers' models, namely, that house prices nationwide (even if 40% above trend at the top) would never decline. Everyone danced, to recall Chuck Prince's (Citi's then CEO) unfortunate turn of phrase, until the music stopped. And stop it did. Let us hope, my friends, that an era of towering greed, self-indulgence and narcissism has come to an end.

Jerome W. Anderson