Saving the Global Financial System: International Financial Reforms and United States Financial Reform, Will They Do the Job? – Part I –

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I. INTRODUCTION

Financial reform in the United States is now law. On July 21, 2010, President Barak Obama signed the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010,⁽¹⁾ stating that "[financial] reform will rein in the abuses and excesses that nearly brought down our financial system." ⁽²⁾

Regulatory reform in the United States is necessary but not sufficient to put the crisis behind us. This article will analyze this important new law and will also paint a broader picture of the Global Financial Crisis, and through recounting the unprecedented events of the past three years, will provide an understanding of the Crisis, its causes and effects, and the unprecedented international effort still underway to restore global financial stability. The Global Financial Crisis has demonstrated how closely connected all nations and peoples are to each other. A remarkable fact about the Crisis is the international cooperation and reforms it has evoked. This international cooperation is the single biggest reason why the world has escaped economic collapse. Continued international cooperation will be essential to put the Crisis behind us.

The Global Economic Crisis that first became manifest in the summer of 2007 is an event without parallel in modern economic history. The world has experienced financial crises before, but not so broad and deep as to implicate the entire world economy. We have had many economic recessions – downturns in the business cycle – but never before a Great Recession triggered not by the business cycle but by near-collapse of the global financial system. The present Crisis is also unusual in having its origin in the United States, which in the post-World War period has been a source of world economic stability. The Crisis also

⁽¹⁾ Public Law No. 111-203, Stat. (2010).

⁽²⁾ www.whitehouse.gov/press-office/remarks-president-signing-dodd-frank-wall-street-reform-and-consumer-protection-act, visited July 21, 2010.

exposed the weaknesses of global economic and financial institutions, which were by and large powerless to remedy the Crisis. Deep depression was avoided only by coordinated action by national governments taking unprecedented reactive steps that rewarded, in many cases, the very people and companies that were responsible for the Crisis.

Now that the United States has enacted comprehensive reforms, it is appropriate to take stock, to examine the Crisis, to determine what happened and why and to analyze financial regulatory reform and further necessary steps to put the Crisis behind us.

II. WHAT HAPPENED: THE COURSE OF THE CRISIS

To understand the Global Economic Crisis we must transcend the daily headlines and news stories and consider the events of the last three years as an interconnected whole. The Crisis has unfolded in seven distinct (but overlapping) phases: (1) the bursting of the housing bubble and the sub-prime loan crisis; (2) the derivatives and investment banking crisis; (3) the commercial banking crisis; (4) the stock and commodities market crisis; (5) deep recession and unemployment: the crisis hits the "real" economy; (6) global economic contraction; and (7) the sovereign debt crisis. We are still in the throes of all these crises to some extent, especially the last, and it may be many years before the present economic woes are behind us. Let us briefly summarize each of these seven crises.

1. Phase One: The Bursting of the Housing Bubble and the Subprime Loan Crisis

In the spring and summer of 2007, housing prices in the United States and in many developed nations leveled off or began to decline after many years of increases that many thought would never end. We now realize that the spectacular run-up of housing values was in fact a "bubble," an artificial inflation. The bursting of this bubble was accompanied by an increased number of defaults by people who had taken out mortgage loans during the boom years,

especially people classed as "subprime borrowers." (3) Many such people had taken out non-recourse loans to buy houses that in truth they could not afford. In many cases loans were extended to borrowers with inadequate income and with no money down with the idea that rising house prices would soon provide a large equity cushion. The borrower could then either "flip" the property, pocketing a large profit, or could take out a second mortgage to tide him over until his earnings prospects improved. But when housing prices stopped going up, these rosy scenarios became impossible. Mortgage defaults suddenly spiked upward in the summer of 2007.

What is surprising about this situation is the fact that what turned into a global crisis began with what appeared at the time to be a rather minor economic problem. In 2007 sub-prime loans represented only about 12% of outstanding mortgage loans in the United States. (4) Of this 12% only about 20% went into default. (5) Yet this small "trigger" began a cascade of events that produced the major economic crisis of our time.

2. Phase Two: Derivatives and the Investment Banking Crisis

Could a relatively minor economic difficulty such as the sub-prime loan crisis trigger the collapse of seemingly solid financial companies? In the summer of 2007 Bear Stearns, at the time the fifth largest investment bank in the US

⁽³⁾ There is no standard definition of "sub-prime borrower." Sub-prime loans are high risk consumer loans made to people who have imperfect credit as evidenced by a low FICO score, most commonly below 640. Sub-prime loans were first made by financial institutions in 1993 after Congress enacted the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, Public Law No. 102-550, 12 USC secs. 4501 et seq. This law mandated the US Department of Housing and Urban Development (HUD) to require Fannie Mae and Freddie Mac to devote a percentage of their loan guarantees to support low income and "affordable" housing. By 2005 sub-prime loans constituted approximately 20% of all housing loans.

⁽⁴⁾ A study by the Center for Public Integrity released in May 2009 named 25 mortgage companies that were responsible for about 72% of the industry-reported subprime loans. "Who Is behind the Financial Meltdown?" available at www.publicintegrity.org, visited May 8, 2009.

⁽⁵⁾ Robert J. Samuelson, "Crisis Highlights Our Ignorance," The Japan Times, December 31, 2008, 14.

with over 14,000 employees, experienced heavy losses due to the collapse in value of its two principal hedge funds. Bear Stearns never recovered, and in March, 2008, US regulatory officials, Ben Bernanke, the chairman of the US Federal Reserve and Hank Paulson, the Secretary of the Treasury, quietly arranged a shotgun sale of Bear Stearns to J.P. Morgan Chase at the bargain – basement price of \$10 per share. The deal was designed to rescue Bear Stearns bondholders: the US Treasury and the Federal Reserve guaranteed \$29 billion in potential Bear Stearns losses. The US guarantee also rescued J.P. Morgan Chase, which accepted the deal only because it had a 40% share in the risk of Bear Stearn's derivatives holdings.

Although many at the time believed that the Bear Stearns rescue would calm the financial markets, in fact it had the opposite effect. During the summer of 2008 rumors were rife that one or more additional big banks would fail. In September 2008 the worst fears came to pass: in quick succession (1) Fannie Mae and Freddie Mac were placed into US government "conservatorship"; (2) Lehman Brothers, a venerable investment bank with over 25,000 employees, declared bankruptcy and this time the US government did not intervene; and (3) AIG, the world's largest insurer, became insolvent (6) only to be rescued by the US Federal Reserve, which pumped in billions in "bailout" money in return for preferred (non-voting) stock.

These spectacular events shook the financial, economic and political worlds. It soon became apparent that the entire financial structure of the United States was in great jeopardy. The administration of George W. Bush responded by calling on the Congress to pass legislation authorizing further government "bailouts" to save the system from total collapse. On the second try, the Congress responded by passing the Emergency Economic Stabilization Act of 2008, (7) commonly known as TARP, the troubled assets relief program, which

⁽⁶⁾ AIG got into trouble primarily because of the performance of one division, AIGFP, which issued a reported \$441 billion of CDSs on subprime mortgage bonds, asset-backed securities and corporate bonds.

⁽⁷⁾ Pubic Law No. 110-343 (2008).

authorized the administration to employ \$700 billion to purchase "troubled assets," defined as residential and commercial mortgages and their derivatives and (B) any other security whose purchase is necessary to promote financial stability. Basically the TARP authorized the US government to distribute money to private companies as it saw fit.

How could such an unprecedented series of events occur? Why was this crisis not foreseen by the smartest minds in the US government as well as economists in international institutions such as the International Monetary Fund (IMF) and in the private sector? How could a small number of deadbeat mortgage borrowers possibly trigger the possible collapse of the vaunted US financial system?

To understand how and why these events occurred we need to understand the role played by derivatives and securitizations in American and global financial markets.

A derivative is a financial instrument which is "derived" from an underlying financial asset, which can be any valuable property or financial interest. The value of a derivative thus depends upon the value of a separate asset or assets. As is readily apparent from this definition, the possible types of derivatives are virtually unlimited. For purposes of this essay, however, four especially important types of derivatives are relevant: (1) asset-backed securities (ABS), which are financial instruments derived from real estate, car loans and other consumer loans; (2) mortgage-backed securities (MBS), which are financial instruments based upon the values of a defined number of mortgage loans; (3) credit default swaps (CDS), which are contracts in which the issuer guarantees to pay the purchaser upon any default in the payment of a named financial interest, such as a bond; and (4) collateral debt obligations (CDO), which are derivatives whose value depends upon bundles (called "tranches") of other defined financial instruments, most commonly MBSs, ABSs and CDSs.

Most derivatives are created by a process known as "securitization," in which an asset holder, lender or anyone entitled to received a stream of

monetary payments transfers that right or asset to an entity, such as a trustee, who then issues securities to investors backed by the underlying asset or right to income.⁽⁸⁾

Derivatives play a useful and important role in the financial markets: they are used to "hedge"; to minimize or to spread risk; and to exchange different types of risk among financial participants. During the crisis, however, derivative creation and trading were abused to the point that their social utility vanished, and virtually all derivatives suddenly became "toxic" assets. How did this happen? First, beginning in the 1980s, the issuance of derivatives grew exponentially: According to the Bank of International Settlements, the notional value ⁽⁹⁾ of derivatives outstanding at the end of 2008 was \$645 trillion. (10) Between 2001 and 2007 it is estimated that \$27 trillion in securitizations (about twice the annual US GDP) were sold to investors. (11) Second, derivatives of questionable social utility, such as credit default swaps⁽¹²⁾ and collateral debt

Insurance law distinguishes between enforceable insurance contracts and gambling contracts by the "insurable interest" requirement. Gambling arrangements are not enforceable. Unlike insurance law, securities law does not have any legal standard to distinguish between a wager and a security. See Thomas Lee Hazen, "Disparate Regulatory Schemes for Parallel Activities: Securities Regulation, Derivatives Regulation, Gambling, and Insurance," *Annual Review of Banking and Financial Law* 24 (2005): 403-04.

⁽⁸⁾ Securitizations have a long history. In the 1920s bonds backed by a commercial building whose construction was being financed were created and sold to investors as collateral trust certificates. This spurred a real estate construction boom that fizzled, causing investors to lose their money in many cases. Floyd Norris, "An Old Tale in Real Estate Securities," *International Herald Tribune*, January 29, 2010, 20.

⁽⁹⁾ Notional value means nominal or face value.

⁽¹⁰⁾ www.risk.net/risk-magazine/news/163526/bank-international-settlements-notional-market-increase-otc-derivatives, visited July 30, 2010.

⁽¹¹⁾ www.isda.org/statistics, visited March 7, 2008.

⁽¹²⁾ A credit default swap is in reality not a swap but rather a contract of insurance. By calling this contract a swap, however, CDSs can be sold to investors who do not have any "insurable interest" in the underlying property or monetary interest being insured. This crosses the line making a CDS essentially a wager rather than a true investment. The widespread trading of such "naked" CDSs turns the securities markets into gambling casinos. See Floyd Norris, "The Naked Truth On Default Swaps," New York Times, May 20, 2010, A15.

obligations, (13) were invented and sold by trillions of dollars. (14) Third, since derivatives are purchased and sold only over-the-counter, their prices are not publicly available, so the true value of most derivatives is very difficult or impossible to determine. Fourth, until 2010 derivatives were exempt from government regulation, and purchases and sales of derivatives (among supposedly "sophisticated" investors) were not subject to ordinary securities disclosure rules. As a result, in many cases neither the sellers, the purchasers, nor anyone else had adequate understanding of the value of the underlying assets that the derivative was designed to represent. (15)

Moreover, perverse incentives made securitization and the sale of derivatives replete with moral hazard. The easy availability of securitization meant that a financial institution could make a risky loan without having to bear the consequences of default. Through securitization the risky loan could be sold to investors as part of a package of mortgage loans underlying a mortgage backed security. A second perverse incentive was the Community Reinvestment Act, (16) which was originally passed with the laudable idea of eliminating "red lining," the practice once widespread whereby banks and financial institutions

⁽¹³⁾ The CDO was trotted out by Goldman Sachs in 2004 as a derivative of derivatives. As Michael Lewis points out: "Goldman Sachs created a security so opaque and complex that it would remain forever misunderstood by investors and rating agencies: the synthetic subprime mortgage bond-backed CDO or collateralized debt obligation. Like the credit default swap, the CDO had been invented to redistribute the risk of corporate and government bond defaults and was now being rejiggered to disguise the risk of subprime mortgage loans." See Michael Lewis, *The Big Short: Inside the Doomsday Machine* (New York: W.W. Norton & Company, 2010), 72-73.

⁽¹⁴⁾ The social function of the capital markets is to raise capital and to allocate it efficiently, not to provide a gambling casino for market participants.

⁽¹⁵⁾ For example, two Federal Home Loan Banks in Seattle and San Francisco, have made studies of about 525,000 mortgage loans in 156 loan pools that were sold to investors as mortgage backed securities during the period 2005 to 2007. Using a valuation model to verify the accuracy of property appraisals, they concluded that about one-third of the loans had been for amounts that were 105% or more of the underlying property's value. Thus, the disclosure documents for the securities did not accurately describe the collateral. Gretchen Morgenstern, "Proving the Mortgage Security Case," *International Herald Tribune*, June 21, 2010, 18.

^{(16) 12} USC secs. 2901 et seq.

would identify certain neighborhoods — usually inner city, minority and economically depressed areas — as off-limits for loans. This discriminatory practice was rightly prohibited by various federal housing laws beginning in the 1960s, and the Community Reinvestment Act required financial institutions to meet the needs of low-and moderate-income people and neighborhoods. During the Clinton Administration the law was amended to require banking regulators — the Federal Reserve, the Federal Deposit Insurance Administration, the office of the Comptroller of the Currency and the Office of Thrift Supervision — to lean on banks to comply with the law. Although there are no penalties for noncompliance, the law requires banking agencies to make a written evaluation(17) of the banks under their jurisdiction and to make an annual report to Congress. (18) Compliance with the law must be taken into consideration with respect to bank applications for mergers and to open interstate branches. (19) Although many government officials have defended the Community Reinvestment Act, (20) respected economists consider it bad policy to "lean on" banks to make certain types of loans.(21)

This is not the place for a definitive evaluation of this controversy, but it appears clear that the Community Reinvestment Act was a necessary if not sufficient cause of the subprime loan crisis in combination with other causes and conditions. Not only were financial institutions subjected to government pressure

^{(17) 12} USC sec. 2906.

^{(18) 12} USC sec. 2905.

^{(19) 12} USC sec. 2904.

⁽²⁰⁾ E.g., see Aaron Pressman, "Community Reinvestment Act Had Nothing to Do with the Subprime Crisis," *Bloomberg Businessweek*, available at www.businessweek.com/investing/ insights/blog/archives/2008/09/community_reinvestment_act_had_nothing_to_do_with_subpr ime crisis.html.

⁽²¹⁾ E.g., Statement of Lawrence J. White before the Financial Services Committee of the US House of Representatives, Feb. 13, 2008, available at http://financialservices.house.gov/hearing110, visited July 12, 2010. For a symposium on the Community Reinvestment Act, see *Western New England Law Review* 29(1) (2006). See also, Lawrence J. White, "The Community Reinvestment Act: Good Intentions Headed in the Wrong Direction," *Fordham Urban Law Journal* 20, Winter (1993): 281-282.

to make loans to risky borrowers, but the possibility of securitization to package immediately the risky loans and sell them to investors proved an irresistible if very toxic temptation. Securitization — by breaking the financial link between lender and borrower — meant that those institutions that extended risky loans did not have to bear the risk of default.

The over-the-counter creation and trading of derivatives also produced abundant opportunities for sharp practices and outright fraud. The litigation fallout from the Crisis will take years to clear the courts so a judgment on role of fraudulent conduct as a cause of the Crisis must await future commentators. One of the most interesting and typical cases is the complaint brought by the Securities Exchange Commission against Goldman Sachs in which the latter allegedly allowed a client, a hedge fund manager named John Paulson, to handpick certain subprime MBSs for securitization by Goldman into a derivative known as Abacus 2007-AC1. Goldman then marketed the Abacus derivative to investors knowing all the while (but not disclosing) that Mr. Paulson had picked the underlying MBSs to bet against it, and he and his hedge fund made billions when it failed.⁽²²⁾

Most investment banks and hedge funds were, however, not as smart (or fortunate) as Mr. Paulson and Goldman Sachs. Ironically the Crisis was first felt among sophisticated investors, hedge funds, ⁽²³⁾ investment banks, ⁽²⁴⁾ and wealthy institutions and individuals who had taken positions in the casino that was the multi-billion dollar derivatives and securitization markets. When the subprime

⁽²²⁾ See "SEC takes off the gloves on Goldman," Financial Times, April 17, 2010, 1.

⁽²³⁾ As of 2007 there were over 10,000 hedge funds holding over \$2 trillion in assets. The vast majority experienced heavy losses in 2008.

⁽²⁴⁾ Investment banks underwent a fundamental shift in their business model over the last 25 years. Traditionally investment banks made money by underwriting the issuance of stocks and other securities issued by industrial and commercial companies. Investment banks thus played a vital role in raising capital and made their profit underwriting fees and the spread between what they paid their company clients for an issue of stock and the price they could charge investors. But over the last 25 years investment companies made increasing profits by creating new derivative products and buying and selling them for their own account.

loan crisis hit and the housing bubble began to burst, investors suddenly figuratively "ran for the exits." Due to the opacity of the derivative interests, no one had a clear idea what they were worth, and almost overnight there were no buyers, only sellers, and the derivatives markets crashed. This explains why Bear Stearns, Lehman Brothers, and AIG⁽²⁵⁾ and later Merrill Lynch and other investment banks⁽²⁶⁾ experienced either failure or severe financial distress. The most sophisticated traders on Wall Street experienced a meltdown not seen since the 1930s.

3. Phase Three: The Crisis Hits the Commercial Banks

Close on the heels of the financial difficulty of the investment banks, commercial banks, such as Citibank, Bank of America, and Wachovia, experienced severe financial trouble. Soon the crisis enveloped commercial banks all over the United States and around the world. Commercial banks became implicated for several reasons. First, until 1999 the Glass-Steagall Act, which was passed during the Great Depression, mandated a separation between commercial banks and investment banks. The purpose of this separation was to insulate the commercial banking system from the risks of the securities markets. After 1999 the largest US commercial banks, which had long sought Glass-Steagall repeal, either established or acquired investment banks which they then operated as integral parts of their businesses. When the Crisis hit the investment banks in 2007-08, commercial banks became burdened by the financial woes of their investment affiliates. (28) Second, the commercial banks were highly

⁽²⁵⁾ AIG had issued over 2.7 trillion in CDSs now faced the prospect of massive potential liabilities.

⁽²⁶⁾ Investment banks and hedge funds that held hundreds of billions of dollars in derivatives now had to write them down to reflect their actual values. Since they were all highly leveraged, this alone threatened them with bankruptcy.

⁽²⁷⁾ The Banking Act of 1933, formerly codified at 12 U.S.C. secs. 227 et seq.

⁽²⁸⁾ Many warned against repeal of Glass-Steagall for this precise reason. See, e.g., Thomas J. Schoenbaum, "Bank Securities Activities and the Need to Separate Trust Departments from Commercial Banks," *The University of Michigan Journal of Law Reform* 10(1) (1977).

leveraged and overly dependent on securitizations for cash to conduct business and to extend further loans. (29) When the derivatives crisis hit, suddenly securitizations of MBSs, the lifeblood of many banks, became impossible. Third, many banks ran hedge funds and traded derivatives for their own accounts; when the Crisis hit, they suddenly experienced losses. Fourth, when doubts arose about the commercial banks' financial condition, the 10 trillion "repo" market (30) — short term loans that require the borrower to pledge collateral in return for cash — dried up. This "repo" market is essential to commercial and investment banks that depend on short term loans to balance their books and to meet capital requirements. For all these reasons, commercial banks experienced a shortage of cash and financial difficulty. Most commercial banks severely curtailed their lending and short term capital also became unavailable even for creditworthy businesses. The Crisis now engulfed the entire commercial banking systems of the United States and much of the world.

4. Phase Four: The Stock and Commodities Markets Crisis

The near-collapse of US investment banks and the commercial banking system was accompanied by severe declines in the major stock and commodities indexes as all categories of stocks and commodities tumbled in value. With financial firms leading the way, stock values collapsed as investors pulled back in reaction to the crisis. Stock indexes such as the Dow Jones and Standard and Poor indexes, which had reached all-time highs in October 2007, fell by more than 50 percent within a few months. Commodities values also fell precipitously: a case in point was the price of oil (light, sweet crude), which reached a high of \$149 per barrel in 2007 only to fall to less than \$50 six months later. Another

⁽²⁹⁾ The widespread availability and use of securitization sparked a fundamental change in the way commercial banks do business. Whereas traditionally banks took in deposits from customers and used the money to extend loans and their profits depended on repayment of the loans at a higher interest rate than they paid depositors, with securitization banks immediately package their loans into MBSs for sale to investors so that their profits as well as their source of money for new loans comes primarily from securitization.

^{(30) &}quot;Repo" is short for repurchase agreements.

indicator of commodities prices is the Baltic Dry Index, a daily average of prices for shipping raw materials, such as iron, coal, grains, cement, sand, fertilizer, and copper, published by the London-based Baltic Exchange. On May 20, 2008, this Index reached an all-time high of 11, 793 only to fall to 663 in December 2008, the lowest value since 1986. Now the Crisis affected the financial well-being of industrial and commercial companies and ordinary investors who had put savings into mutual funds, retirement funds and other financial vehicles.

5. Phase Five: The Crisis Hits the Real Economy — Layoffs and the "Great" Recession

By the end of 2007 the Crisis had spread from Wall Street to Main Street. There was a crisis of confidence among businesses and ordinary people who had experienced huge declines in the values of their owned assets and near-collapse of their banks and financial institutions. The banks stopped lending even to credit-worthy customers as they scrambled to retain whatever cash they could call in. There was a "credit crunch" as everyone tried to deleverage at once (31); there were bankruptcies and financial chaos ensued. Consumers and businesses cut back severely on spending.

The result was what is now called the Great Recession, economic contraction that was the most severe of the eleven recessions in the United States since the Second World War. The US economy officially entered recession in second quarter of 2008, which was only the second year since 1945 that US gross national product declined year-to-year. (32) The contraction was severe: GDP

⁽³¹⁾ The credit crunch was the direct result of the "new finance" represented by securitizations and derivatives. When demand for the high-flying new financial products collapsed, the credit crunch began: (1) what had become the standard mode of financing was no longer possible; (2) the financial institutions holding these suddenly worthless securities saw their assets fall in value, not only edging them toward insolvency but also increasing their leverage; and (3) the increased use of already-extended lines of credit caused the ability to make new loans to decrease.

⁽³²⁾ The only other such decline was a small contraction in 1970-71. The decline in US GDP in 2008 was the most severe since the 1930s.

declined 5.4% in the last quarter of 2008 and 6.4% in the first quarter of 2009, before resuming slight growth in the third quarter of 2009, which continues at a snail's pace as of this writing in July 2010.

For most Americans the Great Recession turned up in two areas: job losses and declines in the values of assets. Unemployment was and is the real hallmark of this Great Recession. Net job losses began to be manifest in January of 2008, and for the next two years job losses continued unabated. At this writing (July 2010) the number of people working in the United States is 7.9 million less than in December 2007, and the unemployment rate stands at 9.5%. The job market has not recovered: for the first six months of 2010 monthly job growth in the US averaged only 99,000, a net growth of only 593,000 for the year so far. Labor force participation in the US stands at only 64.7% as many people have dropped out of the labor market altogether. Moreover, a quarter of people still working in the US have experienced cuts in pay, including nearly one-fifth of those with family incomes over \$75,000 per year. People out of work can no longer afford to make payments on the homes they own: lenders have repossessed more than 2.3 million homes since the Great Recession began in December of 2007.

American families, businesses and institutions were also hit hard by declines in the values of the assets they own. Many Americans lost up to 50% of their wealth because of declines in the stock markets and the values of housing and property. This decline has affected especially higher-income people, who have correspondingly cut back on spending and consumption.

Although the US economy has returned to growth, the tiny quarterly increases in GDP are insufficient to generate jobs, and US consumers remain deeply in debt. As of June 30, 2010, total US consumer debt

⁽³³⁾ In mid-2010 in the United States 1.4 million workers have been unemployed for over 99 weeks; 14.6 million have been unemployed for at least 6 months.

⁽³⁴⁾ Robert J. Samuelson, "The Great Stranglehold," The Washington Post, July 12, 2010, A15.

⁽³⁵⁾ www.realtytrac.com/trendcenter, visited August 22, 2010.

stood at \$11.7 trillion, down only 6.5% from its peak in 2008. 11.4% of consumer debt was delinquent, a worrying total of \$1.3 trillion. Thus, US consumers, which commonly generate about 70% of US GDP, are troubled by high debt and high unemployment; the values of their assets have fallen drastically; and they are unable to generate income from savings because of rock-bottom interest rates. This state of affairs does not bode well for economic recovery.

6. Phase Six: The Crisis Goes Global — World-Wide Economic Contraction

In 2008 began a deep recession that affected every part of the world. The downturn was felt first and most severely in the United States, Europe and Japan, but soon spread to emerging market countries and the developing world as well. Even high-flying economies like China were affected: Chinese economic growth fell from 11% in 2007 to 6% in 2008. World steel production declined by 12%; global manufacturing declined 8% during this same period. World GDP declined for the first time since the 1940s; world trade declined 10% in 2009, the first yearly drop since 1980 and by far the steepest decline since the revival of trade in the 1940s. Bankruptcies and unemployment have increased in virtually every nation in the world. (37) In 2008 began a Global Economic Crisis unlike any since the 1930s.

Many factors contributed to this global contraction: First was the financial crisis which had begun in the United States. Not only American financial institutions were infected by the derivatives mess; investment and commercial banks especially in Europe were especially affected. Financial

⁽³⁶⁾ Federal Reserve Bank of New York, *Quarterly Report on Household Debt and Credit*, August 17, 2010, available at www.newyorkfed.org/newsevents, visited August 23, 2010.

⁽³⁷⁾ According to the International Labour Organization, at the end of 2009, about 81 million people out of about 620 million economically active people between 15 and 24 years old were unemployed, the highest in two decades of record-keeping by the organization. International Labour Organization, *Global Employment Trends for Youth*, August 2010.

institutions and individual and company investors around the world had stakes in the US financial markets. Financial markets crashed around the world. Interbank lending suddenly froze: the London LIBOR rate — the rate banks charge each other for international lending — doubled almost overnight to a record 6.8% by late 2008. Second, the precipitous declines in consumer demand in the US adversely affected the exports of US trading partners. Countries like Japan saw trade surpluses turn into deficits; China experienced a severe decline in sales to the United States, Europe and Japan. Developing countries' exports also declined. World trade volumes declined not only because of lack of sufficient consumer demand but also because trade financing become virtually impossible for many businesses as financial entities refused credit and short-term financial markets disappeared. Third, international investors stopped investing and withdrew large amounts of capital particularly from developing and emerging market countries. Private investment in emerging market countries plunged from \$928 billion in 2007 to just \$466 billion in 2008 and \$165 billion in 2009. Thus virtually all countries — even those not directly dependent on the US economy experienced serious economic troubles.

The Global Financial Crisis also produced wild swings in the exchange values of major currencies and exacerbated controversies over current account imbalances, especially between China and its major trading partners. An irony of the Global Financial Crisis is the fact that the US dollar has grown stronger, not due to inherent factors, but rather by default, because budgetary difficulties in several euro-zone member countries and economic weakness in the United Kingdom caused the euro and the pound to decline in value. As one wag put it, "The dollar is the best looking horse in the glue derby." (38) The Japanese yen also rose in value, though not based on the strength of the Japanese economy but largely because of increased purchases by governments and the decline in

⁽³⁸⁾ Jan Randolph, director of sovereign risk at HIS Global Insight, quoted in James Saft, "The Dollar Is Top Choice by Default," *The International Herald Tribune*, May 7, 2010, 16.

the yen carry-trade. (39)

By far the biggest currency controversy has involved the valuation of the Chinese yuan (renminbi). In the years leading up to the financial Crisis, the Bank of China maintained a strict peg between the value of the yuan and the value of the US dollar. This monetary policy and China's economic and political policies have achieved great success. For most of the last two decades China's economic growth has averaged about 10% so that now China has the second largest economy in the world, surpassing Japan. During that time, especially after China became a member of the World Trade Organization in 2001, China's trade surplus has soared in value. As their trade and current account deficits rose, key nations, especially the United States, maintained that the yuan was undervalued and that the Chinese Central Bank should loosen the dollar peg and should allow the yuan to appreciate in value. The Global Financial Crisis exacerbated this controversy: in 2008 US Secretary of the Treasury Tim Geithner charged China with currency manipulation, (40) stating that the low value of the yuan contributed to the Crisis. China not only rejected this charge, but on March 13, 2009, Chinese Prime Minister Wen Jiabao

⁽³⁹⁾ Carry-trading is selling currencies with low-interest rates in order to buy and invest currencies carrying higher rates. The size of the yen carry-trade when the Crisis hit was about \$1 trillion per year. See Mike Dolan, "Regulators Take Aim at Carry-Trades", *The International Herald Tribune*, February 11, 2010, 11. After the Crisis, it was no longer as profitable for Japanese companies to sell yen and to buy dollars or euros or pound sterling. Thus the yen rose in value. The yen also rose in value because Japanese banks and companies had relatively little exposure to the derivatives fiasco since Japanese banks were still recovering from the collapse of Japan's "bubble" economy in 1990.

⁽⁴⁰⁾ Currency manipulation is a serious charge because Article IV:1(iii) of the Articles of Agreement of the International Monetary Fund prohibits manipulating currency exchange rates "in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members." A 2007 IMF Decision on Bilateral Surveillance clarifies this by stating that this can mean either causing the exchange rate to move or preventing it from moving "for the purpose of securing fundamental exchange rate misalignment in the form of an undervalued exchange rate in order to increase net exports. Senator Charles Schumer (D-NY) has also introduced legislation in the US Senate designed to put pressure on China to allow the appreciation of the yuan.

expressed "concern" over the continued value of China's vast holdings of US debt securities (41)

In fact the Bank of China and the Chinese government, while maintaining that the yuan exchange rate policy is a purely domestic issue, have substantially altered the exchange value of the yuan since 2005, and China has adopted a correct monetary course that will contribute to international stability and will continue the difficult process of integrating China as a new and rising economic giant into the world economy. Between 2005 and July 2008, China permitted the yuan to appreciate against the US dollar by about 21%. After holding the yuan steady at about 6.83 to the dollar during the upheaval of the Global Financial Crisis from July 2008 to June 2010, the Bank of China on June 20, 2010 announced that China would end the link between the yuan and the dollar and that China would "improve foreign exchange management and keep the renminbi exchange rate at a reasonable and balanced level of basic stability, and safeguard macroeconomic and financial market stability." (42) At this writing, two months after the Chinese announcement, the yuan has appreciated only modestly (0.7%) against the dollar, but on a trade-weighted basis the yuan has gained 7% since the beginning of 2010.

In 2010 China participated in the IMF's Article IV Consultation, an annual analysis of the exchange rates and monetary policies of member countries. In July 2010 the IMF Executive Board softened its criticism of China's exchange rate policy, characterizing the yuan as "undervalued," a change from past use of the term, "substantially undervalued." (43)

Although some economists and US politicians maintain that the yuan is still greatly undervalued and call for an immediate large jump in the value

⁽⁴¹⁾ China's foreign exchange reserves, which formerly were mainly US dollar reserves, reached \$1.066 trillion at the end of 2006, up from \$212.2 billion at the end of 2001. As of this writing in August of 2010, China's reserves are \$2.45 trillion.

⁽⁴²⁾ Quoted in "Beijing Vows Slow Pace for Rise of Its Currency", *The International Herald Tribune*, June 21, 2010, 1.

⁽⁴³⁾ *IMF Annual Review of Exchange Rate and Monetary Policy*, July 28, 2010, available at www.imf.org/external/np/sec/pn.

of the yuan, such a policy would be disastrous both for China and the world economy. For two major reasons, China's policy appears to be exactly right. First, those that believe a rapid rise in the value of the yuan would cause trade deficits with China to disappear and would create employment in America and Europe are mistaken. The relationship between current account imbalances and currency exchange rates is complex; it cannot be assumed that revaluation of the yuan even by 40% would result in balanced trade between China, the US and Europe. (44) Although the exchange rate between currencies is an important factor in the balance of payments between countries, because cheaper currency makes exporting easier, other factors are also important, such as the rates of savings and investment in different countries. For example, China's savings rate in 2010 is 37.9% while the US savings rate is 4.29%. This means that the United States has a greater propensity to consume than the United States, and China has a greater propensity to save and invest. Since a portion of such consumption and investment will be international, there is a direct relationship between current account surpluses and deficits and a country's rates of savings and consumption. Empirical proof of this relationship comes from the experience of the US and Japan following the Plaza Accord of 1985, (45) after which the Japanese yen appreciated against the US dollar by 85%, moving from 240 to 120 in less than two years. Yet the US trade deficit with Japan remained high through the period of rapid appreciation. Moreover, if Chinese exports become more expensive because of the higher value of the yuan, the most likely scenario is not that Americans will stop importing but rather that a certain value of imports will simply shift from China to lower cost producers, probably also in Asia. Thus it

⁽⁴⁴⁾ Multicountry economic models indicate that the impact of an appreciation of the yuan would be quite modest. Ray C. Fair, "Estimated Macroeconomic Effects of a Chinese Yuan Appreciation," February 2010, available at www.cowles.econ.yale.edu/P/cd/d17b/d1755/pdf, visited July 21, 2010.

⁽⁴⁵⁾ The Plaza Accord was an agreement on September 22, 1985 between the Finance Ministers and Central Bank Governors of France, Germany, Japan, the United Kingdom and the United States to devalue the US dollar against key European currencies and the Japanese yen in order to correct international economic imbalances and to reduce the US trade deficit.

is a mistake to believe that exchange rate adjustment by China is a magic bullet that will create jobs in the United States.

In addition, China correctly draws upon the experience of Japan after the Plaza Accord of 1985 to reject international pressure to allow large and immediate appreciation of the yuan. Japan made serious economic mistakes that led to the growth of an asset bubble in the 1980s, the bursting of the bubble in 1990-91 and the "lost decade" of the 1990s, when Japan's economic growth stagnated and Japan entered a deflationary period from 1998 to 2003. Japan's troubles were the result of a series of economic blunders: First, the Bank of Japan allowed the yen exchange rate to remain too low for too long during the economic boom years of the 1970s and early 1980s. This was done primarily to achieve economic growth through increased exports. A second mistake was the Plaza Accord itself that caused the Japanese yen to appreciate too rapidly in too short a period. (46) This contributed to a spending spree both domestically and internationally as Japanese companies shifted production abroad, borrowed excessively and invested foolishly both domestically and internationally. The huge appreciation of the yen and the ease of borrowing created an asset "bubble" in Japan. Then the Bank of Japan made a third economic mistake by suddenly raising rates from 3.25% to 6.0% in mid-1989 in an attempt to kill the bubble. This move was overkill and was badly timed as well. The result was the bursting of the bubble in 1990-91 with the destruction of 1,500 trillion yen of the wealth of the Japanese people. The recovery from the bubble in Japan was delayed by a further series of mistakes by the Japanese government and the Bank of Japan: the Japanese government significantly raised taxes in 1997, a move which likely caused the five years of Japan's deflation 1998-2003. The Bank of Japan was far too cautious in using monetary policy to stimulate the economy — only in 1999 did Japan adopt a zero interest rate policy, too little too late to avoid economic

⁽⁴⁶⁾ See Yoichi Funabashi, Managing the Dollar: From the Plaza to the Louvre (Washington DC: Institute of International Economics, 1988).

stagnation.⁽⁴⁷⁾ And the Bank of Japan flatly rejected the use of unorthodox monetary policy tools, such as quantitative easing.

China, seeking to avoid what happened to Japan, wisely rejects a sudden, one-off rise in the value of the yuan. Rather, China is using Germany⁽⁴⁸⁾ as a model in allowing the yuan to rise gradually in response to economic conditions. Accordingly the yuan will rise in value, but China will restrict the yuan's movement to a rise or fall of no more than 0.5% against the dollar in a single day. Thus China is taking steps to stimulate domestic demand⁽⁴⁹⁾ and trying to avoid a bubble by gradually lifting the value of the yuan. This benefits not only China but the rest of the world, which needs stable and sustained growth in China to exit the present Crisis. There has been a distinct if gradual change in China: while maintaining a rate of economic growth expected to exceed 10% in 2010, China has reduced its current account surplus to 5.8% of GDP from a high of 10.6% in 2007.⁽⁵⁰⁾

In the second quarter of 2010, China surpassed Japan as the world's second largest economy; many predict that between 2027 and 2030 China will replace the United States as the world's largest economy. China clearly has and will continue to have a major impact on the global economy. (51)

⁽⁴⁷⁾ See Takahiro Miyao, Lessons from Japan's "Lost Decade" for the World Economy Today (2010), www.obserwatorfinansowy.pl, visited July 15, 2010. Japan's economic crisis had some similarities but was actually much different than the current Global Financial Crisis. Richard Katz and Robert Madson, "Comparing Crises," Foreign Affairs, May/June (2009): 159-166.

⁽⁴⁸⁾ Germany, in contrast to Japan, allowed the mark to appreciate gradually in the 1970s against the dollar so that its rise after the Plaza Accord was only about 15%. Germany did not experience the bubble and subsequent deflation experienced by Japan.

⁽⁴⁹⁾ China is stimulating domestic demand by government stimulus spending domestically and by expanding social welfare programs. China is also using its foreign reserves to buy significant stakes in major European and US companies. See "Buying Spree Nets China Stakes in Top US Firms," New York Times, February 9, 2010, A4.

⁽⁵⁰⁾ China experienced a monthly trade deficit in March 2010. However, in July of 2010 China recorded a trade surplus of \$28.7 billion.

⁽⁵¹⁾ Piers Brandon, "For China, will money bring power?" *International Herald Tribune*, August 23, 2010, 8.

There is little doubt that by 2020 the renminbi will become a major world reserve currency and will be an alternative to the dollar and the euro for central banks' financial holdings.

7. Phase Seven: The Sovereign Debt Crisis

In response to the Global Financial Crisis governments around the world have taken extraordinary and unprecedented fiscal and monetary steps to avoid worldwide depression and financial collapse. These steps were coordinated by a series of meetings of the G-20,⁽⁵²⁾ the leaders of the world's economically important nations. However, these extraordinary expenditures in country-after-country produced an unprecedented surge in the amount of sovereign debt, especially in developed countries. In the US for example, whereas in early 2001 Clinton and Bush administration officials agreed on plans to reduce the total US national debt to zero by 2010, in actuality the US national debt in 2010 stands at \$13.2 trillion⁽⁵³⁾ and is increasing at the unprecedented rate of \$1.4 trillion per year.⁽⁵⁴⁾ At this rate the US deficit will top 100% of GDP by 2012 with no end in sight. Other nations are in similar fiscal trouble: Japan's national debt is 190% of GDP,⁽⁵⁵⁾ the UK's debt is 80% of GDP. The International Monetary Fund's Global Financial Stability

⁽⁵²⁾ The G-20 was established in 1999 in the wake of the Asian economic crisis and is composed of the Finance Ministers and Central Bank Governors of the most important industrialized and developing countries of the world.

⁽⁵³⁾ This figure is the total US debt, including Government Account securities that the US government owes to various trust funds, such as Social Security. The public debt of the US federal government, the treasury bills, notes and bonds outstanding, is projected to exceed \$8.75 trillion at the end of fiscal 2010, 62% of GDP. The only time in history before now that the US public debt has exceeded 50% of GDP was at the end of World War II, in 1945.

⁽⁵⁴⁾ On July 23, 2010, the Obama Administration raised its forecast for the fiscal 2011 deficit to 1.4 trillion or 9.2% of GDP. www.whitehouse.gov/news, visited July 24, 2010. See Jonathan Weisman, "Forecast for 2011 deficit is raised to \$1.4 trillion," *Wall Street Journal*, July 24, 2010. A3.

⁽⁵⁵⁾ Japan's debt, unlike the debt of the US and most other developed nations, is owed 95% to Japanese savers not to foreign banks or governments.

Report⁽⁵⁶⁾ on April 10, 2010 cited spiraling sovereign debt in the US, Europe and Japan as the top future threat to the world economy.

The sovereign debt crisis is most severe in the eurozone, where 16 nations use the same currency, the euro, and monetary policy is set by one central bank, the European Central Bank (ECB) in Frankfurt, but fiscal policy is still under the control of each separate national government. The European Monetary Union has no practicable way to enforce fiscal discipline among members. The EU's Growth and Stability Pact "requires" all members to keep annual budget deficits below 3% and total debt below 60% of GDP, but not one member is totally in compliance. In contrast, several members — Portugal, Ireland, Italy, Greece, and Spain — are struggling with budget deficits that exceed 100% of GDP. To forestall a collapse of the euro, European leaders in May 2010 put together an emergency 750 billion euro European Financial Stability Facility, (57) a special purpose fund with the ability to guarantee the debts of weaker eurozone members so that their borrowing costs would not spiral out of control. (58) This is at best a stop-gap measure and it is evident that the EU will have to adopt enforceable sanctions against members of the common currency that breach fiscal rules. This will be politically difficult but is necessary if the euro is to survive in its present

The ECB is also buying up European government bonds to hold down interest rates.

⁽⁵⁶⁾ www.telegraph.co.uk/finance/economics, visited July 15, 2010.

⁽⁵⁷⁾ See the official site, www.efsf.europa.eu. The EFSF appears to be working. On July 20, 2010, Spain, Ireland and Greece successfully tapped bond markets and although they had to pay premium interest rates, demand was very strong. Howard Schneider, "EU Countries Find Relief in Bond Market," Washington Post, July 21, 2010, A15.

⁽⁵⁸⁾ Another purpose of the European fund is to save European banks that hold the debt securities of the eurozone members that are in financial trouble. As of the middle of 2010, European banks are reluctant to lend to one another because they are unsure which banks may be in trouble holding too much indebtedness of weaker eurozone members. The EU in 2010 conducted a "stress test" of 91 large European banks with the result that 7 must immediately increase reserves. Critics say, however, that the stress test was not strict enough because European banks are still reluctant to lend. Anthony Faiola, "Europe's Big Banks Pass Stress Tests," Washington Post, July 23, 2010, A8.

form.(59)

The sovereign debt crisis will not be solved quickly or easily. This aspect of the Global Financial Crisis also presents policy-makers with a dilemma: how soon and to what extent should governments raise taxes and reduce spending to restore fiscal stability? Some nations, such as the UK, have adopted severe austerity plans designed to balance the cyclicly adjusted current budget (excluding net investment) within 5 years. (60) Other nations, such as the United States, take a more cautious approach to immediate deficit reduction, fearing that belt-tightening too soon will damage the very fragile economic recovery. (61) At the Toronto G-20 meeting, however, international solidarity was maintained, and leaders pledged to halve their budget deficits by 2013 and to stabilize their ratio of public debt to gross domestic product by 2016. (62) This pronouncement, of course, does not solve the problem, and the dilemma remains: "all governments face the tricky balance of appeasing the [credit] markets without damaging growth." (63)

⁽⁵⁹⁾ According to the International Monetary Fund, the eurozone is expected to grow at a less than 2% rate through 2012. The eurozone is held back economically by the necessity to get its sovereign debt problems under control. Luc Everaert, assistant director of the IMF's European department stated that, "the crisis management measures are expected to keep the sovereign crisis in check. Yet weakened confidence and the drag from fiscal adjustment" will limit potential growth. Ian Talley and Bob Davis, "IMF Sees Euro-Zone Debt Hobbling Growth," Wall Street Journal, July 22, 2010, 3. In the summer of 2010 unemployment in the euro-zone averages 10.2%.

⁽⁶⁰⁾ See "Britain's Emergency Budget," The Economist, June 26, 2010, 39.

⁽⁶¹⁾ See "Obama Calls for Nations to 'Act in Concert' on Economy," *The New York Times*, June 26, 2010, A1.

⁽⁶²⁾ The G-20 Toronto Summit Declaration, June 26-27, 2010. www.g20.org/pub communiques.

^{(63) &}quot;Is There Life after Debt?" *The Economist*, June 26, 2010, 13. Another difficulty with austerity is to explain politically why government must reduce pensions and government workers' salaries after the largesse of the past few years handing out billions to bankers and financial institutions.

III. WHAT WENT WRONG: CAUSES OF THE GLOBAL FINANCIAL CRISIS

Like the Great Depression of the 1930s, the Global Financial Crisis has complex and multiple causes. The precise mix of causes and how they functioned will be debated by economists and historians for decades to come. I attempt only a preliminary and cursory assessment. I believe no one cause can be held responsible, but the Crisis was caused by many interacting policies and events. The seeds of the Crisis were sown as long ago as the early 1980s. The principal causes are as follows:

(1) The diminished authority of the US Securities Exchange Commission

(SEC). The SEC, created in the 1930s in the aftermath of the Great Depression, has long had primary responsibility for policing the securities markets and its professional participants. Beginning in the 1980s, however, the once-feared SEC became largely toothless due to rule-revisions, exemptions, and leaders that discouraged fraud investigations and enforcement actions. One of the most egregious examples of SEC failure occurred on April 28, 2004, when the SEC voted to exempt investment companies from the SEC's net capital rule, ⁽⁶⁴⁾ which requires securities market participants to maintain adequate capital reserves (indebtedness cannot be more than 1500% of net capital or more than 800% of net capital for 12 months). At this meeting, Harvey Goldschmid, one of the Commissioners, remarked, "If anything goes wrong, it's going to be an awfully big mess." ⁽⁶⁵⁾

A climate of "deregulation" has prevailed at the SEC under both Republican and Democratic administrations so that a "hands off" attitude toward financial market participants prevailed. Regulators were appointed who believed that the intelligent and sophisticated people involved in the financial markets were intrinsically honest and capable of policing themselves without government

^{(64) 17} C.F.R. sec. 15c3-1.

⁽⁶⁵⁾ http://securities.stanford.edu/news/archive/2004, visited July 15, 2010.

interference. As a result, the SEC proved incapable of detecting even blatantly obvious fraud, such as the Bernie Madoff pyramid scheme that ran for years and eluded SEC investigators. (66)

- **(2) Financial institutions took on too much leverage.** A key cause of the Crisis was the fact that key financial institutions, especially the investment banks, took on far too much leverage, risking vast quantities of borrowed capital so that they were unable to withstand a downturn in asset prices. Particularly after the SEC exempted investment banks from the "net capital" rule in April 2004, leverage increased dramatically to levels in excess of 40: 1.⁽⁶⁷⁾
- (3) Failure to regulate the derivatives markets. The Commodities Futures Modernization Act of 2000 (68) specifically exempted derivatives and swaps from supervisory oversight by the Commodity Futures Trading Commission (CFTC). Brooksley E. Born, then the Chairman of the CFTC and formerly the head of derivatives practice at the law firm of Arnold and Porter, had warned against this course, testifying that unregulated derivatives could "threaten our regulated markets or, indeed, our economy without any Federal agency knowing about it." (69) After extensive study, Born recommended regulating derivatives by requiring high capital requirements and full disclosure of trades. However, her advice was overruled by "wiser" heads, such as Fed chief Alan Greenspan and

⁽⁶⁶⁾ Christopher Cox, former head of the SEC has testified to Congress that the SEC first investigated Bernie Madoff's empire in 1992 and in numerous audits since that time failed to find anything wrong. "SEC Admits to Failures in Madoff Case," *Financial Times*, December 17, 2008, A1.

⁽⁶⁷⁾ Stephan Labaton, "Agency's '04 Rule Lets Banks Pile Up New Debt," *New York Times*, October 8, 2008, A1.

⁽⁶⁸⁾ Public Law No. 106-554, __Stat.___. For a summary of this law, see Dean Kloner, *The Commodities Futures Modernization Act of 2000* (2000), available at www.strook.com/sitefiles/Publ34/pdf, visited July 21, 2010.

⁽⁶⁹⁾ Quoted in Barry Ritholtz, *Bailout Nation: How Greed and Easy Money Corrupted Wall Street and Shock the World Economy* (Hoboken, N.J.: Wiley, 2009), 237.

former Secretary of the Treasury Robert Rubin. (70)

- (4) Lax regulation of banks. The Federal Reserve and the Comptroller of the Currency are the principal agencies charged with oversight of the US banking industry. The persons in charge of bank regulation were totally oblivious to the dangers of the extensive use of derivatives such MBSs. For example, Fed Chairman, Alan Greenspan in his 2007 book, "The Age of Turbulence," offered an all-too rosy view of MBSs: "Being able to profit from the loan transaction but transfer credit risk is a boon to banks and other financial intermediaries which, in order to make an adequate return on equity, have to heavily leverage their balance sheets by accepting deposit obligations and/or incurring debt." Studies of MBSs issued before the Crisis show an average loan to equity value ratio of 105% (the loan was 5% more than the value of the underlying collateral). Banks were granted very low capital requirements so that, when the crunch came, big banks had billions in outstanding loans but little actual money.
- (5) The US Federal Reserve's botched monetary policy. After the bursting of the high-tech bubble in 2001, the Greenspan-led Federal Reserve lowered interest rates to levels not seen in a generation. These low rates persisted too long (in early 2005 the key federal funds rate was only 2.25), contributing to the asset bubble that sparked the Crisis. Then, too late, the Fed rapidly raised rates, making up for lost time to kill the asset bubble. Both policies were badly mistaken.

⁽⁷⁰⁾ After repeatedly clashing with Greenspan, Brooksley Born resigned from the CFTC. www.nowpublic.com/tech-biz, visited July 12, 2010.

⁽⁷¹⁾ In testimony before Congress in October 2008, Greenspan admitted that the Fed had neglected its job in adequately regulating banks. "Greenspan Concedes Error on Regulation," New York Times, www.nytimes.com/2008/10/24/business/economy/24panel.htm, visited July 15, 2010.

⁽⁷²⁾ Gretchen Morgenson, "Proving the Mortgage Security Case," *The International Herald Tribune*, June 21, 2010, 18.

- **(6)** Low savings rates and high borrowing by American consumers. As of 2007 the US savings rate touched zero, which means that as a group Americans were spending every penny of income. Moreover, many Americans were deeply in debt, not only for home mortgages but on credit cards and other consumer loans.⁽⁷³⁾ The American economy was overheated and riding for a fall.
- (7) Irresponsible behavior and fraud by Wall Street professionals. In creating and profiting from new types of derivative securities, such as CDOs and CDSs, Wall Street professionals were taking full advantage of a permissive and inadequately policed system that encouraged sharp practices (74) and provided large rewards for excessive greed. Of course fraudulent activity also played a part: for example, Goldman Sachs, perhaps the most respected name on Wall Street, has accepted a civil fine of \$550 million (about two weeks worth of profits) to settle a fraud case brought by the SEC accusing the firm of selling derivative investments to customers that were secretly designed to fail. (75) In testimony before the Congress, however, Goldman chief executive Lloyd Blankfein had previously defended the actions of Goldman employees: "I heard nothing today that makes me think anything went wrong." (76) This statement prompted the comment: "In Blankfein's morally hazardous world, it would seem that there's nothing wrong with selling harebrained subprime mortgage schemes of the bank's own invention to Goldman clients, while disparaging the same deals in e-mails to colleagues as "crap" and other more vulgar terms for human waste. (77)

⁽⁷³⁾ In 2005 credit card delinquencies in the United States reached an all-time high. Lewis, *The Big Short*, 54.

⁽⁷⁴⁾ For example, testimony before the US Financial Crisis Inquiry Commission has revealed the sharp dealings and heavy pressures that drove AIG into insolvency. "How Goldman Sachs Drove AIG to the Brink," *New York Times*, July 2, 2010, A1.

⁽⁷⁵⁾ Zachary Goldfarb, "Goldman Sachs 550 Million Fine to SEC, Regrets to Clients," *New York Times*, July 16, 2010, 1.

⁽⁷⁶⁾ Jonathan Weil, "CEO Hedge Whets Appetite for Goldman's Whole Story," The Japan Times, May 8, 2010, 13.

⁽⁷⁷⁾ Ibid.

But before the SEC Goldman expressed "regret" to its clients and agreed to change its business practices by providing its employees with more training (presumably in ethics) and by giving company lawyers and managers more of an oversight role in marketing derivatives in the future.

(8) Government housing policy. The US government is far too involved in the private housing market. In a misguided effort to make every citizen a property owner, the US government has skewed the housing and mortgage markets as well as the prices for houses in the United States. There is simply too much government interference in housing. As detailed above, the US Community Reinvestment Act⁽⁷⁸⁾ places government financial regulators in the position of having to grade banks and other financial institutions on the basis of their extension of credit to certain types of borrowers, mainly low-income borrowers who want to become homebuyers. This is not the appropriate role for government, which should enforce antidiscrimination laws but should not pressure banks to make loans to certain groups of people.

Government interference in housing started at the top and was remarkably similar for the sixteen years from 2003 to 2009. President Clinton touted a "National Homeownership Strategy" that advocated specific home ownership rates.⁽⁷⁹⁾ President George W. Bush advocated an "ownership society" that sought to increase homeowner rates, specifically for low-income people.⁽⁸⁰⁾ This period of government interference in housing was well-intentioned but disastrous as it contributed to creating the housing bubble that went bust in 2007.

Politics and corruption have played leading roles in the demise of the two main mortgage guarantee companies, Fannie Mae (Federal National Mortgage

^{(78) 12} USC sec. 2901 et seq.

⁽⁷⁹⁾ See HUD Urban Policy Brief No. 2, October 1995, www.huduser.org/publication/txt/hdbrf2, visited July 21, 2010.

⁽⁸⁰⁾ Home ownership was a major Bush campaign theme in 2004. See Zachary Karabell, "The End of the Ownership Society," *Newsweek*, October 11, 2008, available at www.newsweek.com/2008/10/10/end-of-ownership-society.

Association) and Freddie Mac (Federal Home Loan Mortgage Corporation). In the years of the housing boom, both companies bought hundreds of billions of dollars investments known as private-label securities, MBSs and other mortgage derivatives often comprising subprime loans and other risky mortgages. Both Fannie Mae and Freddie Mac were placed in US government conservatorship on September 7, 2008, and in December 2009 both companies were granted an open line of credit from the US treasury. Both are now effectively nationalized, although both were intended to be operated a private companies with no access to government money. The fact that they are now US government run is testimony to their key role not only as mortgage guarantee agencies but also as purchasers of mortgages from banks so the banks have money to make more loans. Both Fannie and Freddie were subjected to great political pressure during the Clinton administration to relax their rules to purchase a greater ratio of inner-city and low-income mortgage loans. (81) For a brief time in the early Bush administration this was reversed, but in 2004 the US Department of Housing and Urban Development (HUD), both agencies' oversight body, reinstated the mandate to purchase low-income mortgages. (82)

Corruption and incompetence also played significant roles in the demise of these companies. In 2008 it was revealed that top executives of Fannie Mae had received below market loans from Countrywide Financial, a lender from whom Fannie Mae purchases significant number of mortgages. In addition, both companies were embroiled in accounting scandals involving funds that were misapplied or unaccounted.⁽⁸³⁾

Not only was the government heavily involved in the housing market before the Crisis, but after the Crisis broke, the US government pulled out all the stops to support house prices: a generous \$8000 tax credit was enacted for first-time homebuyers on top of the mortgage deduction tax allowance; interest rates were

⁽⁸¹⁾ Steven A. Holmes, "Fannie Mae Eases Credit to Aid Mortgage Lending," *New York Times*, September 30, 1999, A1.

⁽⁸²⁾ Carol D. Leonnig, "How HUD Mortgage Policy Failed," Washington Post, June 10, 2008, A4.

⁽⁸³⁾ Wall Street Journal, June 7, 2008, A7.

kept very low; the Fed made direct purchases of mortgage debt (in the amount of over \$1.25 trillion) to hold down mortgage rates; and Fannie and Freddie were kept in business. Yet despite this vast government support, the housing market has languished. Huge amounts of government time, money and energy have been expended to keep housing expensive rather than to allow prices to come down to the point where natural and reliable demand would revive the housing sector.

Officials in the Obama administration deserve praise for preparing to change almost two decades of government interference in housing that was well intentioned but disastrous. In connection with formulating options for reform of Fannie and Freddie, HUD and Treasury are looking for ways to gradually unwind the massive government support for home ownership and to restore the traditional role of the private sector. (84) The U.S. government is considering a break with the policy of emphasizing home ownership embraced by previous administrations. (85)

(9) Repeal of the Glass-Steagall Act. As explained above, the Glass-Steagall Act, which was enacted during the Great Depression, functioned to insulate commercial banks from the risks inherent in investment banking. This law was repealed by the Gramm-Leach-Bliley Financial Services Modernization Act of 1999⁽⁸⁶⁾, which permitted consolidation of commercial banking, investment banking, and insurance companies. At the time this law was hailed as a great advance. Then Secretary of the Treasury Lawrence Summers stated that, "today Congress voted to update the rules that have governed financial services since the Great Depression and replaced them with a system for the 21st century." (87) After this repeal, commercial banks and investment banks functioned as single entities, thus subjecting the US commercial banking system to the risks that

⁽⁸⁴⁾ Zachary A. Goldfarb, "Next Up for Reform: Housing Finance," Washington Post, July 21, 2010, A14. Since the onset of the Crisis, Fannie Mae, Freddie Mac and the Federal Housing Administration have been nearly the only sources of backing for new mortgage loans.

⁽⁸⁵⁾ Zachary A. Goldfarb, "Fannie, Freddie Overhaul Moving Ahead Gingerly," *Washington Post*, July 28, 2010, A12.

⁽⁸⁶⁾ Public Law No. 106-102, 113 Stat. 1338, codified in scattered sections of U.S.C. Title 12.

⁽⁸⁷⁾ Quoted in Ritholtz, Bailout Nation, 213.

infected investment banks in their dealings with derivatives and other exotic securities. The repeal of Glass-Steagall was a reason why the Crisis infected the whole US financial system, not just the investment banks.

(10) Global current account imbalances. During the period leading up to the Crisis, the United States experienced record trade and current account deficits. In 2006 the US current account deficit was \$811 billion; in 2007 it was \$738.6 billion. In 2008 the deficit declined slightly to \$706 billion, and because of recession a further decline was recorded in 2009 to \$419.87 billion. Some countries, such as China, have experienced record current account surpluses. During the boom years before the Crisis, record US trade deficits were equal to approximately two-thirds of the trade surpluses of the rest of the world. While trade and current account deficits are not inherently bad, when they become chronic and balloon out of proportion they are a sign of structural problems that should be corrected. In the case of the United States the current account deficit represents inadequate savings and over-consumption. In the case of China, the growing and chronic surpluses represent lack of adequate domestic demand and too much saving. These underlying structural problems should be corrected by programs to stimulate savings in the United States and programs to stimulate domestic demand in China. The imbalance between China and the US is unsustainable, for example, because China is increasingly reluctant to purchase US debt securities. (88) Debt in the US and some other nations was allowed to

⁽⁸⁸⁾ See Floyd Norris, "China Cuts Holdings of US Debt," Washington Post, January 23, 2010, A17. In May 2010, however, China boosted its US treasury debt holdings by 2%, reversing a six month trend decreasing holdings. "China Raises Stake in US Debt Assets," Washington Post, A14. After this short respite, China has again begun selling US debt, reducing its holdings to less than one-third of its \$2.45 trillion currency reserves. James Saft, "For China Risky Move Is Inevitable," International Herald Tribune, August 20, 2010, 17. The buyers of US debt now are mainly Americans rather than foreigners. This is a substantial change from years past when foreigners overwhelmingly were the majority purchasers. The Federal Reserve is now also a significant purchaser of US debt. Floyd Norris, "Who Buys US Debt? Americans," International Herald Tribune, August 21, 2010, 9.

swell dramatically, while dollar assets in China and some Asian nations grew enormously. This imbalance cannot continue without threatening the stability of the international monetary system.

(11) Mismanagement by bond and securities' ratings agencies. The bond rating agencies, such as Moody's, Fitch Ratings, and Standard & Poor's, bear some responsibility for the Global Financial Crisis. Hearings in the Congress and in the European Union have established sloppy and misleading ratings practices that caused most of the now "toxic" derivatives to be given triple A ratings. Only after the Crisis began did the ratings agencies downgrade these securities. The credit ratings agencies were among the enablers of the Crisis. In a 2003 Report to Congress the SEC identified many problems with the ratings agencies: faulty information flow; conflicts of interest; anticompetitive and unfair practices; failure of oversight; the use of faulty models and standards. (89) This culminated in the enactment of the Credit Rating Reform Act of 2006, (90) which provided the SEC with direct regulatory responsibility over credit rating agencies. But the Global Financial Crisis engulfed the industry before the SEC had a chance to complete its rulemaking and oversight function. (91) The herd mentality and faulty ratings standards of the credit rating agencies certainly contributed to the Crisis and these abuses are only beginning to be addressed. (92)

⁽⁸⁹⁾ US Securities Exchange Commission, Report on the Role and Function of Credit Rating Agencies in the Operation of the Securities Markets as required by section 702 (b) of the Sarbanes Oxley Act of 2002 (2003), available at www.sec.gov/news/studies/creditratingreport, visited July 12, 2010.

⁽⁹⁰⁾ Public Law No. 109-291(2006), codified at 15 USC sec. 78a note.

⁽⁹¹⁾ See Testimony Concerning Credit Rating Agencies, Christopher Cox, United States Securities Exchange Commission, before the US Senate Committee on Banking, Housing and Urban Affairs (September 26, 2007). The SEC is still struggling to develop rules for the credit rating agencies.

⁽⁹²⁾ See Year of Rating Agency Reform, Total ASF 2010 Summary, available at www.totalasf.com/ Article.

(12) Confused and inconsistent accounting standards. A centerpiece of the Sarbanes-Oxley law of 2002 (93) was the establishment of the Public Company Accounting Oversight Board, whose job is to regulate the accounting industry. Regretfully, this Board has been very slow to act, prevented from getting off the mark by alleged conflicts of interest and litigation begun with the intent to destroy it altogether, but ending only with a Supreme Court decision that the Board's members should be appointed by and be accountable to the President. (94) For whatever reason, the Board has not done its job and accounting miscues and inconsistencies contributed to the Global Financial Crisis. For example, Lehman Brothers was able to use accounting rules to move tens of billions of dollars from its balance sheet according to an examiner's report. (95) And the famous "mark-to-market" accounting standard that required mark downs of assets to what a buyer was willing to pay, was modified by the US Financial Accounting Standards Board on April 2, 2009, for the specific purpose of allowing many financial companies to report profits instead of losses. (96)

⁽⁹³⁾ Public Law No. 107-204, 116 Stat. 745 (2002).

⁽⁹⁴⁾ The plaintiff Free Enterprise Fund argued that the Board violated the separation of powers clause of the US Constitution because its members are appointed by the SEC rather than by the President. They argued that because the law has no "severability" clause, this flaw knocked out the entire law. The Supreme Court, however, stated that Sarbanes-Oxley remains fully operative, but that the President not the SEC must be given the power of removal of Board members for the law to pass constitutional muster. Free Enterprise Fund v. Public Accounting Oversight Board, S.Ct. (2010).

⁽⁹⁵⁾ David Hilzenrath, "Is Accounting Oversight Board a Good Cop or a Flop?" Washington Post, July 11, 2010, A8.

⁽⁹⁶⁾ *Washington Post*, August 5, 2009, A9. A total of 45 companies revised their earnings upward; the total benefit of the accounting change was over \$3 billion.

Saving the Global Financial System: International Financial Reforms and United States Financial Reform, Will They Do the Job?

<Summary>

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What is now called the Global Financial Crisis may be analyzed as a cascading series of seven distinct crises, the effects of which are with us still: (1) the subprime mortgage crisis; (2) investment banking crisis; (3) the commercial banking crisis; (4) the stock and commodities markets crisis; (5) the Great Recession; (6) global economic contraction; and (7) the sovereign debt crisis. The series of economic events of the past three years are unprecedented: the world is still dealing with the worst economic downturn in 75 years. No one cause is responsible for the Global Economic Crisis; rather, at least twelve causes acting synergistically can be identified. Unlike most past economic train-wrecks the Crisis had its epicenter in the United States. The Crisis called forth unprecedented international efforts to deal with its causes and to mitigate its effects. International cooperation and coordination, despite some minor problems, has been and continues to be remarkable, and is the most important reason why the world has not been plunged into more serious economic decline. The G-20 in particular has become the single most important international economic body and has dealt with the Crisis effectively. At the G-20's insistence reforms have been made to global economic institutions such as the International Monetary Fund and the World Bank. In the United States monetary policy has been more successful than fiscal policy in dealing with the Crisis. The United

States also has enacted an historic financial reform law, the Dodd-Frank Wall Street Reform and Consumer Protection Act, which attempts to deal with the principal causes of the Crisis in the U.S. economy. Dodd-Frank is a valiant effort to deal point-by-point with the principal causes of the Crisis. This Act makes revolutionary changes: an exponential increase in governmental regulation of the U.S. financial industry by a vast new bureaucracy of regulators. However, the process of reform initiated by the Act will take many years to accomplish and will depend on wise implementation to be successful.