Below are what I believe to be some of the most relevant excerpts from "Fault Lines". If you don't have time to read them all, I have bolded about sixty of them that I believe are the most important:

From the Jacket Cover:

"…it's tempting to blame what happened on just a few greedy bankers who took irrational risks and left the rest of us footing the bill. In Fault Lines, Rajan argues that serious flaws in the economy are also to blame, and warns that a potentially more devastating crisis awaits us if they aren't fixed."

"Rajan shows how the individual choices that collectively brought about the economic meltdown….made by bankers, government officials, and ordinary homeowners….were rational responses to a flawed global financial order in which the incentives to take on risk are incredibly out of step with the dangers those risks pose. He traces the deepening fault lines in a world overly dependent on the indebted American consumer to power global economic growth and stave off global downturns. He exposes a system where America's growing inequality and thin social safety net create tremendous political pressure to encourage easy credit and keep job creation robust, no matter what the consequences to the economy's long-term health; and where the U.S. financial sector, with its skewed incentives, is the critical but unstable link between an overstimulated America and an underconsuming world."

From the Introduction:

"Although I worried about banker incentives in my talk and regulatory motives in its aftermath, and although many more commentators and regulators have since come around to my point of view, I have come to believe that these issues are just the tip of the iceberg. The true sources of the crisis we have experienced are not only more widespread but also more hidden. We should resist the temptation to round up the most proximate suspects and pin the blame only on them. Greedy bankers can be regulated; lax government officials can be replaced. This is a convenient focus, because the villains are easily identified and measures can be taken against malfeasance and neglect. What's more, it absolves the rest of us our responsibility for precipitating this crisis."

"Although I believe that the basic ideas of the free-enterprise system are sound, the fault lines that precipitated this crisis are indeed systemic. They stem from more than just specific personalities or institutions. A much wider cast of characters are responsible for the crisis: it includes domestic politicians, foreign governments, economists like me, and people like you……Somewhat frighteningly, each one of us did what was sensible given the incentives we faced. Despite mounting evidence that things were going wrong, all of us clung to the hope that things would work out fine, for our interests lay in that outcome. Collectively, however, our actions took the world's economy to the brink of disaster, and they could do so again unless we recognize what went wrong and take the steps needed to correct it."

"There are deep fault lines in the global economy, fault lines that have developed because in an integrated economy and in an integrated world, what is best for the individual actor or institution is not always best for the system. Responsibility for some of the more serious fault lines lies not in economics but in politics. Unfortunately, we did not know where all these fault lines ran until the crisis exposed them."

“As the U.S. economy slowed (in early 2000 as a result of the dotcom bust), the Federal Reserve went into overdrive, cutting interest rates sharply. By doing so, it sought to energize activity in sectors of the economy that are interest rate sensitive. Typically, such a move boosts corporate investment, but corporations had invested too much already during the dot-com and had little incentive to do more. Instead, the low interest rates prompted U.S. consumers to buy houses, which in turn raised house prices and led to a surge in housing investment. A significant portion of the additional demand came from segments of the population with low credit ratings or impaired credit histories….the so-called subprime and Alt-A segments…who now obtained access to credit that had hitherto been denied to them. Morever, rising house prices gave subprime borrowers the ability to keep refinancing into low interest rate mortgages (thus avoiding default) even as they withdrew the home equity they had built up to buy more cars and TV sets. For many, the need to repay loans seemed remote and distant.”

“The flood of money lapping at the doors of borrowers originated, in part, from investors far away who had earned it by exporting to the United States and feeding the national consumption habit. But how did a dentist in Stuttgart, Germany make mortgage loans to subprime borrowers in Las Vegas, Nevada? The German dentist would not be able to lend directly, because she would incur extremely high costs investigating the Vegas’ borrower’s credit worthiness, making the loan conform to all local legal requirements, collecting payments, and intervening in case of default. Morever, any individual subprime homebuyer would have a high propensity to default, certainly higher than the level of risk with which a conservative private investor would be comfortable. This is where the sophisiticated U.S. financial sector stepped in. Securitization dealt with many of these concerns. If the mortgage was packaged together with mortgages from other areas, diversification would reduce risk. Furthermore, the riskiest claims against the package could be sold to those who had the capacity to evaluate them and had the appetite for the risk, while the safest, AAA-rated portions could be sold directly to the dentist or her bank. The U.S. financial sector thus bridged the gap between an overconsuming and overstimulated United States and an underconsuming, understimulated rest of the world. But this entire edifice rested on the housing market. New housing construction and existing housing sales provided jobs in construction, real estate brokerage, and finance, while rising house prices provided the home equity to refinance old loans and finance new consumption. Foreign countries could emerge from their slump by exporting to the seemingly insatiable U.S. consumer, while also lending the United States the money to pay for these imports. The world was in a sweet but unsustainable spot. The gravy train eventually came to a halt after the Federal Reserve raised interest rates and halted the house price rise that had underpinned the frenzied lending. Subprime mortgage-backed securities turned out to be backed by much riskier mortgages than previously advertised, and their value plummeted. The seemingly smart bankers turned out to have substantial portions of these highly rated but low-quality securities on their balance sheets, even though they must have know what they contained. And they financed these holdings with enormous amounts of short-term debt. The result was that short-term creditors panicked and refused to refinance the banks when their debts came due. Some of the banks failed; others were bailed out even as the whole system tottered on the brink of collapse. Economies across the world went into a deep slump from which they are recovering slowly. This narrative leaves many unanswered questions.”

“Why was the flood of money that came from outside the United States used for financing subprime credit?”
“Why was the United States, unlike other economies like Germany and Japan, unable to export its way out of the 2001 recession?”
“Why are poorer developing countries like China financing the unsustainable consumption of rich countries like the United States?”
“Why did the Federal Reserve keep rates so low for so long?”

“Why did financial firms make loans to people who had no income, no jobs, and no assets….a practice so ubiquitous that it attracted its own acronym, NINJA loans?”
“Why did the banks….the sausage makers, so to speak….hold so many of the sausages for their own consumption when they knew what went into them?”

“Let me start by saying that I do not have a single explanation for this crisis, and so no single silver bullet to prevent a future one. Any single explanation would be too simplistic.”

“I describe the fault lines that have emerged in the global economy and explain how these fault lines affected the financial sector. One set of fault lines stems from domestic political stresses, especially in the United States. Almost every financial crisis has political roots, which no doubt differ in each case but are political nevertheless, for strong political forces are needed to overcome the checks and balances that most industrial countries have established to contain financial exuberance. The second set of fault lines emanates from trade imbalances between countries stemming from prior patterns of growth. The final set of fault lines develops when different types of financial systems come into contact to finance the trade imbalances: specifically, when the transparent, contractually based, arm’s-length financial systems in countries like the United States and United Kingdom finance, or are financed by, less transparent financial systems in much of the rest of the world. Because different financial systems work on different principles and involve different forms of government intervention, they tend to distort each other’s functioning whenever they come in close contact. All these fault lines affect financial-sector behavior and are central to our understanding of the recent crisis.”

Rising Inequality and the Push for Housing Credit

“The most important example of the first kind of fault line, which is the theme of Chapter 1, is rising income inequality in the United States and the political pressure it has created for easy credit.”

“…the education system has been unable to provide enough labor force with the necessary education. The problems are rooted in indifferent nutrition, socialization, and learning in early childhood, and in dysfunctional primary and secondary schools that leave to many Americans unprepared for college.”

“The everyday consequence for the middle class is a stagnant paycheck as well as growing job insecurity.”

“Politicians feel their constituent’s pain, but it is very hard to improve the quality of education…….moreover, any change will require years to take effect and therefore will not address the current anxiety of the electorate……thus politicians have looked, or been steered into looking, for other, quicker ways to mollify their constituents. We have long understood that it is not income that matters but consumption. Stripped of its essentials, the argument is that if somehow the consumption of middle-class householders keeps up, if they can afford a new care every few years and the occasional exotic, holiday, perhaps they will pay less attention to their stagnant monthly paychecks. Therefore the political response to rising inequality….whether carefully planned or an unpremeditated reaction to constituent demands…..was to expand lending to households, especially low-income ones.”

“Cynical as it may seem, easy credit has been used as a palliative throughout history by governments that are unable to address the deeper anxieties of the middle class directly.”

"In the United States, the expansion of home ownership….a key element of the American dream…..to low-and middle-income households was the defensible linchpin for the broader aims of expanding credit and consumption. But when easy money pushed by a deep-pocketed government comes into contact with the profit motive of a sophisticated, competitive, and amoral financial sector, a deep fault line develops."

"The deregulation and rapid expansion of banking in the United States in the early years of the twentieth century was in many ways a response to the Populist movement, back by small and medium-sized farmers who found themselves falling behind the growing number of industrial workers and demanded easier credit. Excessive rural credit was one of the important causes of bank failure during the Great Depression."

Export-Led Growth and Dependency

"There are usually limits to debt-fueled consumption, especially in a large country like the United States. The strong demand for consumer goods and services tends to push up prices and inflation. A worried central bank then raises interest rates, curbing both households' ability to borrow and their desire to consume. Through the late 1990's and the 2000s, though, a significant portion of the increase in the U.S. household demand was met from abroad, from countries such as Germany, Japan, and increasingly, China, which have traditionally relied on exports for growth and had plenty of spare capacity to make more……the ability of these countries to supply the goods reflects a serious weakness in the growth path they have followed….excessive dependence on the foreign consumer. This dependence is the source of the second fault line."

"Because the exporters have excess goods to supply, countries like Spain, the United Kingdom, and the United States….which ignore growing household indebtedness and even actively encourage it…..and countries like Greece…..which lack the political will to control government populism and union demands….tend to get a long rope. Eventually, high household or government indebtedness in these countries limits further demand expansion and leads to a wrenching adjustment all around. But so long as large countries like Germany and Japan are structurally inclined……indeed required…..to export, global supply washes around the world looking for countries which have the weakest policies or the least discipline, tempting them to spend until they simply cannot afford it and succumb to crisis. Why are so many economies dependent on consumption elsewhere?....Therefore, these countries have become dependent on foreign demand to pull them out of economic troughs."

"And China, which is likely to be the world's largest economy in the not too distant future, is following a dangerously similar path. It has to make substantial policy changes if it is not to join this group as an encumbrance on, rather, than an engine of, world economic growth."

The Clash of Systems

"In the past, fast-growing developing countries were typically not net exporters, even though their factories focused on producing to meet demand elsewhere…..But developing countries experienced a series of financial crises in the 1990s that made them realize that borrowing large amounts from industrial countries to fund investment was a recipe for trouble……..these economies moved from helping to absorb global excess supply to becoming net exporters themselves and contributing to the problem: essentially, their own financial systems were based on fundamentally different principles from

those of their financiers, and the incompatibility between the two, the source of the fault line, made it extremely risky for them to borrow from abroad to support investment and growth."

"Rather than borrow from abroad to finance their investment, their governments and corporations decided to abandon grand investment projects and debt-fueled expansion. Morever, a number decided to boost exports by maintaining an undervalued currency. In buying foreign currency to keep their exchange rate down, they also built large foreign-exchange reserves, which could serve as a rainy-day fund if foreign lenders panicked again. Thus, in the late 1990s, developing countries cut back on investment and turned from being net importers to becoming net exporters of both goods and capital, adding to the global supply glut."

"Investment by industrial-country corporations also collapsed soon after, in the dot-com bust, and the world fell into recession in the early years of the new millennium. With countries like Germany and Japan unable to pull their weight because of their export orientation, the burden of stimulating growth fell on the United States."

Jobless Recoveries and the Pressure to Stimulate

"As I argue above, the United States was politically predisposed toward stimulating consumption."

"…..as it delivered the necessary stimulus for the world to emerge from the 2001 recession, it discovered, much as in the 1991 recovery, that jobs were not being created."

"Given the short duration of unemployment benefits in the United States, this created enormous additional political pressure to continue injecting stimulus into the economy."

"Jobless recoveries are particularly detrimental because the prolonged stimulus aimed at forcing an unwilling private sector to create jobs tends to warp incentives, especially in the financial sector."

"This constitutes yet another fault line stemming from the interaction between politics and the financial sector, this time one that varies over the business cycle."

"Unfortunately, the United States is singularly unprepared for jobless recoveries. Typically, unemployment benefits last only six months. Morever, because health care benefits have historically been tied to jobs, an unemployed worker also risks losing access to affordable health care."

"In politics, economic recovery is all about jobs, not output, and politicians are willing to add stimulus, both fiscal (government spending and lower taxes) and monetary (lower short-term interest rates), to the economy until the jobs start reappearing."

"But there are consequences: one problem is that a variety of other markets, including those abroad, react to easy policy. For instance, prices of commodities such as oil and metals are likely to rise. And the prices of assets, such as houses and stocks and bonds, are also likely to inflate as investors escape low short-term interest rates to invest in anything that offers a decent return."

"More problematic still, the financial sector is also prone to take greater risks at such times. In the period 2003-2006, low interest rates added to the incentives already provided by government support

to low-income housing and fueled and extraordinary housing boom as well as increasing indebtedness."

"In an attempt to advance corporate investment and hiring, the Fed added fuel to the fire by trying to reassure the economy that interest rates would stay low for a sustained period. Such assurances only pushed asset prices even higher and increased financial-sector risk taking. Finally, in the regulatory coup de grace, the Fed Chairman, Alan Greenspan, effectively told the markets in 2002 that the Fed would not intervene to burst asset-price bubbles but would intervene to ease the way to a new expansion if the markets imploded. If ever financial markets needed a license to go overboard, this was it."

"By focusing only on jobs and inflation….and, in effect, only on the former…the Fed behaved myopically, indeed politically."

"….in particular, low interest rates and the liquidity infused by the Fed have widespread effects on financial-sector behavior. As with the push for low-income housing, the fault line that emerges when politically motivated stimulus comes into contact with a financial sector looking for any edge is an immense source of danger."

The Consequences to the U.S. Financial Sector

"How did tremors on all the fault lines come together in the U.S. financial sector to nearly destroy it? I focus on two important ways this happened."

"First, an enormous quantity of money flowed into low-income housing in the United States, both from abroad and from government-sponsored mortgage agencies such as Fannie Mae and Freddie Mac. This led to both unsustainable house price increases and steady deterioration in the quality of mortgage loans made."

"Second, both commercial and investment banks took on an enormous quantity of risk, including buying large quantities of the low-quality securities issue to finance subprime housing mortgages, even while borrowing extremely short term to finance these purchases."

"In the early 2000s, the saving generated by the export-dependent developing countries were drawn into financing the United States, where fiscal and monetary stimulus created enormous additional demand for goods and services, especially in home construction. Foreign investors looked for safety. Their money flowed into securities issued by government-sponsored mortgage agencies like Fannie Mae and Freddie Mac, thus furthering the U.S. government's low-income housing goals."

"The investors, many from developing countries, implicitly assumed that the U.S. government would back these agencies (in a crisis)……..Even though Fannie and Freddie were taking enormous risks, they were no longer subject to the discipline of the market."

"Other funds, from the foreign private sector, flowed into highly rated subprime mortgage-backed securities. Here, the unsuspecting foreign investors relied a little too naively on the institutions of the arm's-length system. They believed in the ratings and the market prices produced by the system, not realizing that the huge quantity of money flowing into subprime lending, both from the agencies and from other foreign investors, had corrupted the institutions. For one of the weaknesses of the arm's-

length system, as I explain in Chapter 6, is that it relies on prices being accurate: but when a flood of money from unquestioning investors has to be absorbed, prices can be significantly distorted. Here again, the contact between two different financial system created fragilities."

"However, the central cause for the financial panic was not so much that the banks packaged and distributed low-quality subprime mortgage-backed securities but that they held on to substantial quantities themselves, either on or off their balance sheets, financing these holdings with short-term debt….Why did so many banks in the United States hold on to so much of the risk?"

"The problem, as I described in Chapter 7, has to do with the special character of these risks. The substantial amount of money pouring in from unquestioning investors to finance subprime lending, as well as significant government involvement in housing, suggested that matter could go on for some time without homeowners defaulting. Similarly, the Fed's willingness to maintain easy conditions for a sustained period, given the persistent high level of unemployment, made the risk of a funding squeeze seem remote. Under such circumstances, the modern financial system tends to overdose on these risks."

"From society's perspective, these risks should not be taken because of the enormous costs if they materialize. Unfortunately, the nature of the reward structure in the financial system, whether implicit or explicit, emphasizes short-term advantages and may predispose bankers to take these risks."

"Particularly detrimental, the actual or prospective intervention of the government or the central bank in certain markets to further political objectives, or to avoid political pain, creates an enormous force coordinating the numerous entities in the financial sector into taking the same risks. As they do, they make the realization of losses much more likely."

"The financial sector is clearly centrally responsible for the risks it takes. Among its failings in the recent crisis include distorted incentives, hubris, envy, misplaced faith, and herd behavior. But the government helped make those risks look more attractive than they should have been and kept the market from exercising discipline, perhaps even making it applaud such behavior. Government interventions in the aftermath of the crisis have, unfortunately, fulfilled the beliefs of the financial sector."

"Put differently, the central problem of free-enterprise capitalism in a modern democracy has always been how to balance the role of the government and that of the market….it is the interaction between the two that is a central source of fragility."

"In a democracy, the government (or central bank) simply cannot allow ordinary people to suffer collateral damage as the harsh logic of the market is allowed to play out. A modern, sophisticated financial system understands this and therefore seeks ways to exploit government dependency, whether it is the government's concern about inequality, unemployment, or the stability of the country's banks. The problem stems from the fundamental incompatibility between the goals of capitalism and those of a democracy. And yet the two go together, because each of these systems softens the deficiencies of the other."

"I do not seek to be an apologist for bankers…..But outrage does not drive good policy. Though it was by no means an innocent victim, the financial sector was at the center of a number of fault lines that affected its behavior. Each of the actors…..bankers, politicians, the poor, foreign investors,

economists, and central bankers…..did what they thought was right. Indeed, a very real possibility is that key actors like politicians and bankers were guided unintentionally, by voting patterns and market approval respectively, into the behavior that led inexorably toward the crisis. Yet the absence of villains, and the fact that each of these actors failed to bridge the fault lines makes finding solutions more, rather than less, difficult."

The Challenges That Face Us

"If such a devastating crisis results from actors' undertaking reasonable actions, at least from their own perspective, we have considerable work to do."

"Much of the work lies outside the financial sector; how do we give the people falling behind in the United States a real chance to succeed? Should we create a stronger safety net to protect households during recessions in the United States, or can we find other ways to make workers more resilient? How can large countries around the world wean themselves off their dependence on exports? How can they develop their financial sectors so they can allocate resources and risks efficiently? And of course, how can the United States reform its financial system so that it does not devastate the world economy once again?"

"In structuring reforms, we have to recognize that the only truly safe financial system is a system that does not take risks, that does not finance innovation or growth, that does not help draw people out of poverty, and that gives consumer little choice. It is a system that reinforces the incremental and thus the status quo. In the long run…..settling for the status quo may be the greatest risk of all, for it will make us unable to adapt to meet the coming challenges. We do not want to return to the bad old days and just make banking boring again: it is easy to forget that under a rigidly regulated system, consumer and firms had little choice. We want innovative, dynamic finance, but without excessive risk and the outrageous behavior. That will be hard to achieve, but it will be really worthwhile."

"We also have to recognize that good economics cannot be divorced from good politics: this is perhaps a reason why the field of economics was known as political economy. The mistake economists made was to believe that once countries developed a steel frame of institutions, political influences would be tempered…"

"I hope my proposals are less simplistic and more constructive than call to tar and feather bankers or their regulators. If implemented, they will transform the world we live in quite fundamentally and move it away from the path of deepening crises to one of greater economic and political stability as well as cooperation."

"They will involved significant short-term pain in return for more diffuse but enormous long-term gain. Such reforms are always difficult to sell to the public and hence have little appeal to politicians. But the cost of doing nothing is perhaps worse turmoil than what we have experienced recently, for, unchecked, the fault lines only deepen."

"Much can be gained if we can draw the right lessons from the crisis and stabilize the world economy. Equally, much could be lost if we draw the wrong lessons. Let me now lay out the fault lines and the hard choices that confront us, with the hope that collectively we will make the right difference. For our own sakes, we must."

From Bubble to Bubble:

"In February 2004, in a speech to the Eastern Economic Association, Bernanke, then a governor of the Federal Reserve Board, spoke of the 'Great Moderation', the observation that the fluctuations of output and inflation in industrial countries had come down steadily since the mid-1980s. Because the Holy Grail of economic management is strong, steady growth, without booms, busts, or high inflation. This trend suggested that something was working."

"Bernanke considered three explanations: first, we might have just been lucky…..second, the economics had changed, for example as corporations developed systems to acquire sales information more quickly and to translate it more continuously into production and inventory decisions. Such improvements could explain how economies had been better able to avoid dramatic inventory buildups and productions cutbacks that had characterized previous recessions. Third, as a result of advances in our economic understanding, central bankers, many of them former academic economists, understood better how monetary policy affected economic output."

"Because he is a careful economist, in addition to being a very good one, Bernanke suggested that there was merit in all three explanations. However, he stressed the view that monetary policy had become much better……today's central bankers, he felt, understood far better how the economy works……the overall tone of his speech was triumphant: the policy levers for managing a modern economy were well understood, which was why we already had milder recessions. The implication, perhaps unintended, was that with steady progress, we could do away with recessions altogether."

"By September 2008, however, Bernanke, now chairman of the Federal Reserve Board, having realized the limits of monetary policy, was pleading for help from Congress, arguing that 'despite the efforts of the Federal Reserve, the Treasury, and other agencies, global financial markets remain under extraordinary stress. Action by Congress is urgently required to stabilize the situation and avert what otherwise could be very serious consequences for our financial market and for our economy.' In short, monetary policy was not working, and only a bailout of the financial system by Congress could stabilize the economy and avert a depression. Where had the Fed gone wrong?"

"With the benefit of hindsight, it appears that the Federal Reserve made two mistakes. First, the jobless recovery from the recession of 2001 induced the Fed to keep interest rates low for a sustained period. A lot of excesses were building up, in the rest of the world as well as in the United States, but theory and politics conveniently came together to keep the Fed on hold. Second, the Fed actively encouraged the financial markets to believe it would follow an asymmetric policy: it would not lean against a potential unsustainable rise in asset prices, but it would remain ready to pick up the pieces if a bubble burst. Both of these implied promises did considerable damage, because in attempting to stimulate sluggish job creation, they set off an orgy of financial risk taking."

"Unfortunately, because the Fed's actions were consistent with both its mandate and with the prevailing academic orthodoxy, it has not been forced to rethink its policies. Moreover, in an environment of high and persistent unemployment, the political pressure on it to persist with such policies will make change very difficult."

"The Federal Reserve has a mandate from Congress to promote a healthy economy. This means maintaining maximum sustainable employment and stable prices. Also, it had been entrusted since its

founding in 1913 (in the wake of the Banker's Panic of 1907) with helping ensure the stability of the financial system."

"According to the new orthodoxy, by keeping inflation low and thus eliminating all uncertainty and distortions associated with high and variable inflation, central bankers, would give the economy its best chance of achieving its potential growth rate and thus maximum sustainable employment……So the ideal central-bank policy is to keep the economy perpetually at its potential growth rate. Unfortunately, no one really knows what that potential growth rate is, though they have reasonable guesses….The best indicator for a central banker is inflation. A rise in the inflation rate indicates that the economy is exceeding the speed limit: if the inflation rate is falling, the economy can benefit from more stimulus."

"In the years before the crisis, central bankers and academia thus converged on variants of targeting inflation as their primary objective. Of course, they also had to consider the objective of financial stability. According to conventional wisdom, central bankers had only one instrument with which to carry out monetary policy….the short-term interest rate….and they could not target more than one objective with it. Concerns about financial stability would complicate and make less intellectually rigorous the process of setting monetary policy. Financial stability was left to be tackled through 'prudential' measures like capital requirements and relegated to the less glamorous supervisory and regulatory arms of central banks."

"The Fed conducts monetary policy largely through the short-term interest rate (overnight federal funds rate)…..Through this rate, the Fed hopes to influence the long-term interest rate. According to the most commonly held economic view, investors in the market see the long-term interest rate (say the ten-year Treasury bond rate) as being a function of the sequence of the short-term interest rates that are expected to prevail over time."

"By holding down the short-term rate, especially if the market believes it will be held low for a sustained period, the Fed can influence expectations of the future short-term rate and hence long-term rates."

"Long-term interest rates are extremely important in the economy. A lower long-term interest increases the value of long-term assets such as equity, bonds, and houses because dividends, interest payments and the services provided by the house are discounted at a lower rate. It thus increases household wealth and consequently spending. A low long-term interest rate also makes it less attractive for households to save and more attractive to consume, this again contributing to demand. Finally, long-term interest rates determine the profitability of real investment: lower long-term interest rates make today's value of future profits higher, giving corporations more incentive to invest as well as greater ability to borrow."

"The short-term interest rate may also have direct effects on economic activity. Many borrowing rates are tied to short-term interest rates: for example, the interest payment on an adjustable-rate mortgage falls if the Fed cuts interest rates, leaving more money for households to spend."

"Through a low policy rate, the Fed may also signal to the market that it intends to keep liquidity conditions….that is, the ability to borrow….easy over the foreseeable future. Banks and finance companies then have the incentive to make illiquid term loans, confident that they can refinance from the market."

"After the crash in the NASDAQ index in 2000-2001 and the recession that followed, the Federal Reserve tried to offset the collapse in investment by cutting short-term interest rates steadily. From a level of 6 ½ percent in January 2001, interest rates were brought down to 1 percent by June 2003. Such a low level, unprecedented in the post-1971 era of floating exchange rates, sent a strong signal to the economy. House purchases picked up as more people found they could afford the lower mortgage payments. Increased housing demand encouraged more home construction, which was already being given a boost by the low interest rates at which developers could borrow."

"With inflation low and unemployment high, the Fed's healthy-economy mandate suggested it should keep interest rates low. Indeed, given the level of unemployment and the consequent slack in the economy, Fed officials, including Ben Bernanke, openly worried about the possibility of deflation, even in mid-2003, when quarterly GDP growth was around 3 percent. The Federal Reserve seemed to be influenced by the recent experience of Japan, which had faced prolonged price deflation and slow growth in the 1990s as a result of the collapse of its real estate bubble. But this concern was misplaced: unlike Japan, the United States in 2001 had not experienced a debt crisis, only a meltdown of the overvalued tech stocks. A debt crisis could have caused a downward spiral of bankruptcies, job losses, and fire sales that might have triggered deflation. But the effects of a stock meltdown were, and historically have been, much milder. Consumer price inflations in the United States never fell below 1 percent over this period…….and more important, future expectations of inflation were firmly above 1 percent and nearer 2 percent, the Fed's unofficial target……By mid-2003, almost every measure of economic activity other than inflation and unemployment was picking up strongly."

"The Fed was now effectively adding stimulus to a world economy that was growing strongly, with jobs being created elsewhere but not in the United States. Commodity prices around the world started a steady rise, suggesting that world-wide economic slack was decreasing. If the Federal Reserve, the world's central banker in all but name, had been focused on sustainable world growth, it should have been tightening monetary policy by raising interest rates. But its mandates covered only the United States."

"John Taylor of Stanford University has pointed out that even measured against what is known as the Taylor rule…..the Fed should have started raising interest rates by early 2002. But it continued to reduce rates until as late as June 2003. In a speech in 2010 at the American Economic Association's annual meetings, Ben Bernanke defended Fed policy, saying that if inflation was properly measured, the Fed had not departed from the Taylor rule during this period. In truth, the problem was that output growth had not resulted in job growth. And the Fed was focused not on output, as the Taylor rule would suggest, but jobs."

"When the Fed finally started to raise rates in June 2004, it was extremely fearful of killing the nascent job recovery. So it took pains to accompany its rate hikes with announcements that interest rates would be low for 'a considerable period' and would rise slowly at a 'measured pace'……This strategy clearly helped keep long-term interest rates low, but not because of the expectations of future short-term rates came down, as the expectations hypothesis would suggest. Instead, the risk premium on long-term government bonds…..the additional spread that the market demands to take the risk of bond prices fluctuating…..fell even as the Fed raised short-term interest rates, with the result that long-term interest rates fell and bond prices rose. Indeed, a generally low premium for risk ensured that the prices of all risky or long-term assets, including housing, rose, even as the Fed raised rates slowly. The Fed's policy seemed to be working because it made risk more tolerable!"

“The Fed did worry about the deteriorating quality of lending and made some supervisory noises over time. But with its foot pressed firmly on the interest-rate accelerator, the supervisory measures were ineffective. Ultimately, it was probably also Fed actions that brought the party to an end. Higher short-term interest rates raised the payments on adjustable-rate mortgages as well as prospective payments on mortgage rates with rate resets.”

“With demand for housing falling off (and Fannie and Freddie eventually tempering their purchases of mortgage-backed securities), housing prices stopped rising. As a result, over-extended borrowers found it hard to refinance before the initially low ‘teaser’ rates on their mortgages expired, and households began to default on payments. Foreclosures caused house-price declines, and the whole momentum of the boom was reversed. The Fed, as we now know, intervened too late. The bubble had inflated enormously, and the ensuing bust has been extremely painful.”

“With the benefit of hindsight, it is easy to suggest that the Fed made mistakes even in the traditional conduct of monetary policy: for instance, it may well have overestimated the risk of deflation. In some ways, the threat of deflation seemed to be a low-probability red herring, put forth to explain why the Fed kept rates on hold. The true problem was unemployment, which made raising rates politically impossible. In the past, when economic growth and job recovery coincided, this was not an issue. With jobless recoveries though, growth and jobs became somewhat divorced. The Fed would have to be on hold for a long time if it wanted to see jobs reappear.”

“The prevailing orthodoxy suggested that Fed policy makers should worry only if inflation was getting out of hand. And it was not: inflation in prices of goods (like cars and milk) and services (like haircuts and laundry) was quiescent, and indeed, if anything, the Fed feared deflation. So the Fed was free to focus on the second part of its mandate, full employment. Yet even while the Fed attempted to convince unwilling corporations to invest through ultralow interest rates, the prices of financial assets and housing were skyrocketing. But the orthodoxy suggested asset prices could be ignored.”

“Rapidly rising asset prices should have sounded alarm bells. They were driven by a number of forces other than the traditional ones: increased risk taking, more foreign money looking for debt claims, and expanding credit.”

“Low short-term interest rates pushed investors to take more risk, for a number of reasons. Some institutions, like insurance companies and pension funds, had contracted long-term liabilities. At the low interest rates available for safe assets, they had no hope of meeting those liabilities. Rather than falling short for sure, they preferred to move into longer-term riskier bonds, such as mortgage-backed securities, that paid higher interest rates. In addition, as long-term interest rates fell and the value of stocks, bonds, and housing rose, households felt wealthier and may have felt the confidence to take more risks.”

“One effect of the search for yield was that money moved out of the United States into other countries, especially into the high-yielding bonds, stocks, and government securities in developing countries. But many of these countries were fearful of losing out in the race to supply goods to the U.S. market. Their central banks intervened to hold down the value of their currency by buying the U.S. dollars that were flowing into their countries from the domestic private entities that had acquired them and reinvesting these dollars in short-term U.S. government and agency bonds. Thus, even as the Fed pushed dollars out, central banks in developing countries pushed them back.”

“German banks and Japanese insurance companies bought seemingly safe U.S. mortgage-backed securities with the dollars their customers deposited. The money leaving the United States, looking for seemingly safe but higher-yielding debt-like securities. In some ways, Federal Reserve Policy was turning the United States into a gigantic hedge fund, investing in risky assets around the world and financed by debt issued to the world.”

“Credit also expanded. Rising asset prices themselves gave households and firms the collateral with which to borrow…..a channel that Chairman Bernanke himself had pointed out when he was a professor at Princeton University. Indeed, much of the financing of low-income borrowers was predicated on house prices rising and borrowers refinancing once their low teaser rates ran out. Thus a higher house price, rather than increased income, was the means through which borrowers would keep themselves current on paymemts.”

“In addition, the promise that liquidity would be plentiful over the foreseeable future meant that bankers were willing to make longer-term illiquid, and hence risky, loans. But with firms unwilling to invest, banks went looking for deals that would create demand for loans. One option was for private equity investors to acquire firms, relying on banks to finance the deals. Banks, in turn, packed the loans they made……creating collateralized loan obligations (CLOs)….and sold debt securities against them, thus obtaining the funds to make yet more loans. The result was that larger and larger leveraged acquisitions were proposed to satisfy the seemingly insatiable investor hunger for debt claims. As the rush to lend increased, lending standards declined rapidly: the classic signs of the frenzy were ‘covenant-lite’ loans, bereft of the traditional covenants banks put in to trigger repayment if the borrower’s condition deteriorated, and pay-in-kind bonds, schemes by which borrowers who could not pay interest simply issued more bonds. As I argued earlier, the recent crisis was not cause only by lending to the poor!”

“Rising asset prices would not be a problem if markets were well behaved and kept asset prices tied to fundamentals. In the case of housing, prices should be a function of interest rates, local demographics, household incomes, and local zoning regulations constraining the supply of housing. Unfortunately, asset price growth can be self-reinforcing. For instance, higher house prices give existing homeowners home equity that they can borrow against to make the down payment for better houses, leading to a rise in prices, for those houses as well.”

“In most markets, savvy investors can take contrarian positions when prices depart too much from fundamental value. In the housing market (as well as in the market to take firms private), few opportunities exist for investors to take a short position…..that is, sell houses they do not have so as to make a killing when prices fall. This typically means that the optimistic, who buy housing, tend to have undue influence. So house prices, and more generally asset prices, can rise excessively, and their reacquaintance with reality can be brutal indeed.”

“Central bankers argue that they really should not be in the business of figuring our when asset prices are too high: after all, do they really know that much more than market participants? This is not a silly argument. Many markets work well by themselves, and introducing the whims and fancies of the central bank governor into the way prices are determined could create more problems than it solves.”

“But history warns that markets such as housing, which are driven by bank lending, are different: not only are they very thin (relatively few house sales determine the value of housing for the whole country), but they also do not allow for investors to take short positions. Prices in these markets can

run away from fundamentals. And the adverse spirals associated with house-price busts can be very damaging indeed: as prices fall, lending vanishes, and people cannot repay their mortgages; thus foreclosures increase, and prices drop further."

"The key warning signal of unsustainable growth in asset prices is an accompanying growth in credit."

"Before the crash of 1929, the warning signal was the growth in margin loans against shares even as stock prices increased. Before the most recent recession, alarm bells should have sounded in every central bank meeting as a boom in real estate lending accompanied house price growth, and lending to private equity grew with ever-higher transaction prices. Indeed, credit growth has historically been one of the factors determining how central bankers set policy interest rates; but in recent years, academics have persuaded many of them that such behavior is archaic. To their credit (no pub intended), the European Central Bank and some developing-country banks, like the Reserve Bank of India, have continued to pay attention to credit growth in determining monetary policy."

"Rapid credit growth was deemed of importance in the past partly because it was thought to presage inflation and partly because it reflected possible deterioration in the quality of credit. Academics argued that links between credit growth and inflation were tenuous (here they were right) and that credit problems were a historic curiosity in industrial countries because of improvements in bank management and supervision (here they were obviously wrong)."

"A second argument that central bankers offer is that in the midst of a frenzy, when investors expect double-digit rates of price growth, raising rates by a fraction of a percent is ineffective. There are two difficulties with this argument. First, the key issue is expectations. If the central bank can convince investors that it is serious about fighting asset price inflation….in the same way it convinces them it will fight goods-price inflation….expectations about price growth can deflate fast, especially in early stages of a bubble. Put differently, small changes in the central bank interest rate can affect expectations about price growth considerably. Second, bubbles develop based on a kind of 'greater fool' theory….that even if an asset is already trading at an inflated price, someone will be willing to buy it at an even more inflated price. By signaling that it will tighten liquidity conditions, and thus constrain financing and trading, the central bank can signal to investors that there will be fewer fools out there with the capacity to buy, making it more difficult for the bubble to grow."

"Indeed, instead of discouraging the development of bubbles, the Fed encouraged it through and implicit commitment, which might have done far more damage than any other Fed action. This commitment, the so-called 'Greenspan-put', essentially said that the Fed could not really tell when asset prices were building up into a bubble, and so instead the Fed would ignore asset prices but stand ready to pick up the pieces when the bubble burst. To understand why this commitment was made, we need to go back to 1996."

"In late 1996, the Fed chairman, Alan Greenspan, an astute and experienced economist……In a famously brave speech at the American Enterprise Institute, he wondered whether the central bank should also worry when the prices of real estate, equities, and other earning assets were rising rapidly."

"…..he came as close as a central banker can to saying he thought stocks were overvalued: 'But how do we know when irrational exuberance has unduly escalated asset values, which then become subject to unexpected and prolonged contractions as they have in Japan over the past decade?.....We as central bankers need not be concerned if a collapsing financial asset bubble does not threaten to impair the real

economy, its production, jobs, and price stability……But we should not underestimate or become complacent about the complexity of the interactions of asset markets and the economy. Thus, evaluating shifts in balance sheets generally, and in asset prices particularly, must be an integral part of the development of monetary policy.'"

"In his autobiography, Greenspan admits wondering whether the market would understand what he was getting at. It did….and ignored him!....And it was right to ignore him, because the Fed did not follow up Greenspan's concern with and increase in interest rates, even though he hinted at such action in his speech. Greenspan never explained why he did not act…"

"Instead, the Fed watched while stock prices continued rising in the dot-come boom, as companies without earnings or even revenues sold shares at astronomical prices based on the number of 'eyeballs' they attracted to their websites. The Fed even cut rates following the Russian debt default in 1998 and the collapse of the hedge fund Long-Term Capital Management, and raised interest rates mildly only in 1999."

"When the stock market eventually crashed in 2000, the dramatic initial response by the Fed ensured that the recession was mild even if job growth was tepid. In a 2002 speech at Jackson Hole, Alan Greenspan now argued that although the Federal Reserve could not recognize or prevent an asset-price boom, it could 'mitigate fallout when it occurs and, hopefully, ease the transition to the next expansion'. This speech seemed to be post facto rationalization of why Greenspan had not acted more forcefully on his prescient 1996 intuition: he was now saying that the Fed should not intervene when it thought asset prices were too high but that it could recognize a bust when it happened and would pick up the pieces."

"The logic was not only strangely asymmetrical….why is the bottom easier to recognize than the top?....but also positively dangerous. It fueled the flames of asset-price inflation by telling Wall Street and banks across the country that the Fed would not raise interest rates to curb asset prices, and that if matters went terribly wrong, it would step in to prop prices up. The commitment to put a floor under asset prices was dubbed the 'Greenspan put'. It told traders and bankers that if they gambled, the Fed would not limit their gains, but if their bets turned sour, the Fed would limit the consequences. All they had to ensure was that they bet on the same thing, for if the bet alone, they would not pose a systemic threat."

"Equally important, the willingness to flood the market with liquidity in the event of a severe downturn sent a clear message to bankers: 'Don't bother storing cash or marketable securities for a rainy day; we will be there to help you.' Not only did the Fed reduce the profitability of taking precautions, but it implicitly encouraged bankers to borrow short-term while making long-term loans, confident the Fed would be there if funding dried up. Leverage built up throughout the system."

"For a long time, central banks justified not focusing on asset prices by arguing that if Alan Greenspan had acted on his intuition in 1996 he would have snuffed out a boom that, despite the slump in 2000, took the stock market and U.S. household wealth to unprecedented heights. On March 2, 2009, though, the S&P 500 closed at 700, below its level of 744.38 on the day in 1996 when Alan Greenspan made his fateful speech. Of course it has regained substantial ground, but perhaps Greenspan could have averted thirteen years of lost returns if indeed he had back his word with actions on interest rates. Whether the political system would have allowed him to do so is, of course, another matter."

"The recent recession has started some rethinking on the objectives of monetary policy, though even as I write, the Fed is keeping interest rates at rock-bottom levels because unemployment is high, even while all manner of asset prices are rising. The saving grace today is that credit growth is still tepid, and it is unlikely that we will have another housing boom while memories of the last one are still fresh. But the financial sector is, if anything, innovative, even in the ways it gets into trouble!"

"But there does seem to be some incompatibility between the monetary policies that encourage real investment and growth….maintaining predictably low interest rates over a sustained period and expressing the willingness to flood the market with liquidity when it is tight….and the monetary policies that discourage the coordinated one-way bets by financial market participants that have proved so damaging…..pursuing unpredictable policies with no assurance of liquidity support."

"The argument that monetary policy has no role in leaning against asset-price bubbles is both timid and self-serving, and it takes the Fed out of a key role it can play in assuring financial stability…..To resign the role of party pooper, however, is to buy political acceptability at greater risk to the economy."

"More controversial is whether the Fed should cut policy interest rates to rock bottom in order to revive the economy. Although such an action seems costless, it impose an enormous cost on savers and offers an enormous windfall to debtors, especially banks. Because it is a relative hidden transfer, it elicits little comment or protest, especially as well-off savers tend to keep their heads down in times of crisis. But it is a transfer nevertheless, amounting to hundreds of billions of dollars a year. Moreover, it offers a one-way bet to bankers: plunge the system into trouble, and they will get a great deal on interest rates."

"More damaging still is the Fed's ongoing attempt to prop up housing prices, both indirectly through low interest rates and directly by lending into the housing market. Although such support is justified as a way to allow the bubble to deflate slowly, it contributes to prolonged delays in adjustment in the housing market……so long as there is a prospect for further adjustment, buyers, too, stay out of the market…..The Fed could be not only delaying the recovery of the housing market but also reinforcing the sense that it will not get in the way of prices increases but will prevent prices falls. The Greenspan put is quickly becoming the Bernanke put."

"In sum, the Fed's conduct of monetary policy between 2002 and 2005, while roundly criticized by all but central bankers and monetary economists (with notable exceptions), had two important limitations. First, it was fixated on the high and persistent unemployment rate and did its best to bring it down by trying to encourage investment. It signaled that it would keep rates low for a sustained period and offered the Greenspan put if firms were still not convinced….This policy, however may have had a greater effect on credit growth and asset prices than on job creation outside the real estate industry: corporations were still working away excesses of the dot-com boom. Second, the dominant academic orthodoxy indicated that so long as inflation was quiescent, central bankers had nothing to worry about. Indeed to worry was to destroy the purity of the theoretical system that had been built, for that would admit of multiple objectives and lead to market confusion. Instead, central bankers should keep their eyes fixed on inflation (or the lack thereof) and let bank supervisors worry about risk taking. Unfortunately, the supervisors had been muzzled, this time on the ideological grounds that they would do more harm than good by restraining the private sector."

"The bottom line is that the debate over monetary policy, which was once thought settled, will have to be reopened again……Asset-price inflation will have to enter the policy debate. Moreover, the Fed will have to consider whether it is setting policy only for the United States or, in reality, for a much larger global economy."

"This is as good a point as any to try to understand the failings of academic economists in the macroeconomic sphere."

"….they took for granted the plumbing underlying the industrial economy…..the financial claims, the transactions, the incentive structures, the firms, the banks, the markets, the regulations, and so on. So long as these mechanisms worked well, the models were a useful simplification. And during much of the 'Great Moderation' that Bernanke referred to, the plumbing worked well and served as a good basis for abstract reasoning. But as soon as the plumbing broke down, the models were an oversimplification."

"Indeed, the models themselves may have hastened the plumbing's breakdown: with the Fed focused on what interest rates would do to output rather than financial risk taking (few models had a financial sector embedded in them, let alone banks), financial risk taking went unchecked."

"The danger is that monetary economists will try to wish away links between monetary policy, risk taking, and asset-price bubbles. Bernanke came close to doing so in his 2010 speech to the American Economic Association, where he argued that it was not the Fed's defective monetary policy….which he considered entirely appropriate, given the Fed's views on inflation…..but its inadequate supervision that helped trigger the crisis. He concluded: 'Although the most rapid prices increases occurred when short-term interest rates were at their lowest levels, the magnitude of the house price gains seem too large to be readily explained by the stance of monetary policy alone. Moreover, cross-country evidence shows no significant relationship between monetary policy and the pace of house price increases.'"

"Of course, no one claims that the Fed alone was responsible for the housing debacle. Government policies favoring low-income housing, as well as private-sector mistakes, contributed significantly. But to suggest that it had no role is disingenuous. Indeed, a detailed study published in the Federal Reserve Bank of St. Louis Review in 2008 presents evidence that 'monetary policy has significant effects on housing investment and house prices and that easy monetary policy designed to stave off the perceived risks of deflation in 2002-2004 had contributed to a boom in the housing market in 2004 and 2005.'"

"As developing countries cut back on demand following their crises in the 1990s, and as industrial-country corporations worked off their excess investment following the dot-com bust, the world's exporters searched once again for countries that would reliably spend more than they produced. The United States, which was already pushing to encourage household consumption to appease those left behind by growth, had added reasons to infuse substantial fiscal and monetary stimulus in response to the downturn: the jobless nature of the recovery and the weak U.S. safety net. In addition, to a substantial fiscal stimulus that pushed a government budget that was temporarily in surplus into large fiscal deficits, the Fed kept its foot pressed on the monetary accelerator, even while giving all sorts of assurances to the markets on its willingness to maintain easy monetary conditions and to step in to provide liquidity in case the financial markets had problems. These assurances had the desired effect of leading to an explosion of lending, which unfortunately continued expanding and deteriorating in

quality even after the Fed started tightening. For an unsustainable while, though, the United States provided the demand the rest of the world needed."

"The U.S. political system is acutely sensitive to job growth because of the economy's weak safety nets."

"Another problem with a weak safety net is that the United States tend to overreact, and other nations underreact, to downturns. Because every country knows that the politically vulnerable United States has to respond with expansionary policies and that some U.S. demand will spill over to the rest of the world, their incentive to change the structure of their economy, or their policies in downturns, is commensurately less."

"But perhaps the most important problem is that the ad hoc policies the United States is forced into do enormous damage to the long-term health of the economy, both directly and through their effects on the financial sector."

"And the public's anxiety gives them (Congress) the license to bring out all of their pet projects, all the favors to special interests, and all the schemes their ideological leanings and political connections predispose them to."

"Similarly, as we have seen, the Federal Reserve, though ostensibly independent, has a very difficult task. It is extremely hard to ensure rapid job growth in an integrated, innovative economy where firms use recessions to refocus on becoming more productive or strengthen their global supply chains, shifting jobs elsewhere. Moreover, the new technologies employed in hiring allow firms the luxury of waiting to fill positions. The sustained easy monetary policy that is maintained while jobs are still scarce has the effect of increasing risk-taking and inflating asset-price bubbles, which again weaken the fabric of the economy over the longer term. If the United States cannot tolerate longer bouts of unemployment, but those bouts are here to stay, we risk going from bubble to bubble as the Federal Reserve is pressured to do the impossible and create jobs where none are forthcoming."

<u>From the Epilogue:</u>

"Industrial countries have their own problems. Even as government debt mounts in the aftermath of this crisis, populations in many countries are aging rapidly and coming to the realization that their government's earlier promises of security and health care in old age are likely to be reneged on. As they tighten their belts to provide for the difficult present, the future if anything looks bleaker."

"These problems can and will be solved, provided we retain faith in human ingenuity and give it space to express itself. Economic reforms in China and India have unleashed the creative energies of more than a third of humanity."

"Collaboration between countries can help in other areas: health management practices in developing countries could show to making health care more affordable in developed countries."

"'Medical tourism', whereby patients from rich countries can undergo much-needed medical procedures at significantly lower costs in developing countries, or 'retirement migration', whereby the elderly migrate to retirement communities in salubrious but less expensive countries, helps bring incomes to developing countries while making treatment and old-age assistance affordable. Conversely, the

migration of young workers from developing to industrial countries can provide the tax base to help support aging industrial-country populations while also equalizing incomes globally…Two-way flows of people can, if properly managed, be an answer to some of the world's most pressing problems."

"Vibrant financial markets can provide the risk capital needed by the innovators across the world as well as the savings instruments needed by the aging and the currency-transfer facilities needed by migrants. But finance is in disrepute. Calls to shackle it are being heard from every quarter. More dangerous is the possibility that industrial countries, especially the United States, could lose faith in the financial system that has made them what they are. A misbegotten sense of the inadequacy of markets and competition is leading to ever more faith being placed in government. Although there are certain things government can (and must) do, leading dynamic change and innovation is not among them."

"Instead of embracing the growth of developing countries and keeping their domestic markets open, industrial countries could turn inward, to the detriment of all."

"Economic stagnation is the breeding ground for conflict. To prevent history from mimicking itself, we have to understand the causes of the recent crisis and act on that understanding. Financial markets and democratic government are not incompatible. The role of financial markets is to allocate resources to those most capable of using them, while spreading risks to those most capable of bearing them. The role of democratic government is to create a legal, regulatory, and supervisory framework within which financial markets can operate. However, democratic government has other roles, including limiting the most inequitable consequences of the market economy through taxes, subsidies, and safety nets. It is when democratic governments use these other tools inadequately, when it tries to use modern financial markets to fulfill political goals, when it becomes a participant in markets rather than a regulator, that we get the kind of disasters we just experienced."

"Some argue that it was laissez-faire ideology that led us to this pass: regulators became enamored of the ideal of the self-regulating market and stood on the sidelines as it self-destructed. They are only partly right. Although it ought to be the duty of regulators to lean against the prevailing winds of optimism (and sometimes pessimism), regulation in the United States was driven by the misplaced view that markets would take care of themselves, a view that time and time again makes the ideological Right play into the hands of the ideological Left. Yet the bulk of the damage was done as the sophisticated financial sector tried to seek an edge that the U.S. government, driven by political compulsions, was only too wiling to provide."

"Progressives in the United States blame the bankers, while conservatives blame the government and the Federal Reserve. The worrying reality is that both are to blame, but neither may have been fully cognizant of the fault lines guiding their actions……Unless we reestablish the proper role of the government and the financial sector, as well as fix the imbalances between nations, what happened may happen again."

"The financial sector needs to know that it will bear the full consequences of its actions, which means that it, and not the taxpayer, will have to bear the losses it generates. The U.S. government has to re-create the access and opportunity for all its people that has historically been the hallmark of its economy, which helping those who fall behind. This will reduce the pressure on the government to intervene in financial markets or to stimulate the economy excessively. Other countries will have to

implement reforms that help rebalance the world economy while reducing their own dependence on global growth."

"The world's great powers, both the established ones and the emerging ones, have to recognize that their policies do not add up to a coherent whole. They have been reluctant to create strong global institutions that might impose constraints on their policies. To counter this reluctance, we need to broaden the policy debate across the world, persuading civil society in each country to push its government to enact policies that further the global good."

"….the past three decades have brought immense improvements to countries around the world, as they have harnessed the power of global markets and finance while obtaining economic freedom. Unfortunately, we have allowed political imbalances to develop within countries and economic imbalances to grow between countries. In many rich countries, insecurity and despair have replaced hope. We should not let what has gone wrong obscure all that can go right, or reverse the progress we have made. But to preserve and rebuild trust in the market system, we have to make fundamental changes. Governments have to do more to help their citizens build capabilities that will allow them to be productive. But they also have to step back in other areas to allow the market to function effectively. This crisis has resulted from a confusion about the appropriate roles of the government and the market. We need to find the right balance again, and I am hopeful we will."