The Financial Crisis: Connecting the Dots

In 2008, you didn't have to understand the complexities of the financial system to be concerned about its health.

America held its collective breath as a general sense of unease took hold, fed by nonstop news of financial turmoil, falling home prices, a stock market in free fall and a widening global slowdown. Month after month, consumer confidence slid to record lows.

For many Americans, the situation was wrenchingly personal—foreclosed homes, lost jobs, shrinking college funds, evaporating retirement savings. The National Bureau of Economic Research's early-December announcement that the U.S. had been in recession for a year only confirmed what they had long known.

Texas, which constitutes the largest piece of the Eleventh District, escaped the downturn for much of 2008 and continued to expand. But in the second half, conditions deteriorated rapidly, the result of the deepening global crisis and sharp drops in energy prices, high-tech activity and exports. While the state's losses were relatively moderate, rising unemployment and a weakening housing market proved Texas was not immune to the financial crisis. Falling oil and gas prices adversely impacted Louisiana and New Mexico, parts of which fall in the district.

Richard Fisher, president and CEO of the Federal Reserve Bank of Dallas, spoke and wrote extensively on the financial crisis in 2008, connecting the dots for his audiences. He discussed the factors that contributed to the crisis and the credit crunch. He explained the Federal Reserve's response to the situation and the need for regulatory reform. He also reminded his audiences of Americans' inherent resilience.

Some Causes of the Crisis

Speculation on Housing

The roots of the current crisis [are] like those of earlier bubbles. They originated in the seductive power of price escalation . . . and the egocentricity of the present, which led some to believe we had entered a new era. We either didn't notice this elaborate conceit or failed to deal with it.

But it was there. Many coastal areas of the U.S. were beginning to see 20 to 30 percent year-over-year increases in house prices, some even as high as 30 to 40 percent. Subprime mortgage borrowing, or lending to less credit-worthy individuals by lenders who were eager to finance a "sure thing," exploded.

April 9 speech

To a great extent, the bubble in housing was a classic case of the bigger-fool theory and efficient-market theory run amok.

April 9 speech

Market Inefficiency

Judgment and experience, including our own vivid experience here in Texas in the 1980s, teach us that in booms and bubbles, prices overshoot and during busts, they overcorrect.

April 9 speech

The markets in commodities, like those of stocks and bonds, are manic-depressive mechanisms and overshoot on the upside as well as on the downside. One could reasonably deduce from recent price reversals in oil and food prices that they overshot on the upside and that their price run-up was a one-off development. If you subscribe to this argument, you envision a process not unlike that of a python digesting dinner: It visibly moves through the system, creating some moments of discomfort—in this case, a temporary inflationary bulge—but is processed in reasonable time and done with.

August 19 speech

America held its collective breath as a general sense of unease took hold, fed by nonstop news of financial turmoil, falling home prices, a stock market in free fall and a widening global slowdown.

I am firm in my view that financial markets remain prone to risk overshooting, and we see an elevated level of risk aversion when the inevitable correction comes. That is what happened in the summer of 2007, when willingness to take on risk seemed to dry up overnight, leading to significant liquidity squeezes and funding pressures at banks and other creditors.

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Rapid Innovation: Too Far Too Fast

We saw a wave of innovative mortgage products during the housing boom. Indeed, there would have been no other way for many borrowers to have procured financing without these new mortgage products.

These innovations in financing took two forms. First, credit-scoring models enabled lenders to better sort and price mortgages made to nonprime borrowers. The second set of innovations allowed these loans to be funded and sold to a new class of investors.

While traditional mortgages had long been securitized and sold through government-sponsored enterprises such as Fannie Mae and Freddie Mac, the securitization market ushered in new players from the private sector that would hold nonprime mortgages that could not meet the standards of Fannie and Freddie and that banks would generally not hold in portfolio.

. . . New and complex securities sliced and diced risk into different tranches. It was thought that the collateralized debt obligations and collateralized loan obligations could be hedged with credit default swaps to make them seem almost risk free.

April 9 speech

With the aid of technology and computational power that can assess probabilities at lightning speeds, the menu of risk instruments expanded dramatically. Financial intermediaries began offering exotic products to satisfy almost any risk taker's needs anywhere in the world, at any time.

April 9 speech

Most everyone agrees that risk appetites—fed by innovations in ways to measure, calibrate, repackage and sell risk—became excessive during the boom years. These innovations—otherwise known as securitization and the originate-to-distribute model of banking—are by no means new, but they certainly took on some new and uncharted dimensions in this decade.

Structured credit products became all the rage and gave us an alphabet soup of new acronyms like ABS, CDS, CLO and CMO. These new instruments allowed financiers to slice and dice the risk associated with mortgages and other credits, presumably reducing risk by spreading it around to those most willing to hold it. In retrospect, they compounded risk to the financial system.

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Overreliance on Models

The excesses in subprime lending in the United States were fed by an excessive amount of faith in technically sophisticated approaches to risk management and a misguided belief that mathematical models could price securitized assets, including securities based on mortgages, accurately. These valuation methodologies were so technical and mathematically sophisticated that their utter complexity lulled many people into a false sense of security.

In the end, complexity proved hopelessly inadequate as an all-encompassing measure of risk, despite its frequent advertisement as such. The risk models employed turned out to be merely formulaic descriptions of the past and created an illusion of precision. Such approaches could not and cannot replace the forward-looking judgment of a seasoned professional.
April 9 speech

New and sophisticated statistical models, made possible in part by advances in computer technology, assured us that all this new risk was being properly and accurately measured. And the ratings agencies further comforted us by giving many of the new securities their seal of approval—often, their highest, triple-A seal.
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The most striking and truly new part of the recent financial cycle was the mistake of replacing sound judgment with the mathematization of risk. An immense array of statistical gadgetry wielded by a new generation of quantitative minds . . . managed to squelch the wisdom of longtime bankers and seasoned financiers. Our problems are not new. But they have been magnified by a certain type of hubris that viewed statistical modeling as infallible.
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Market Interconnectedness

One of the issues at the heart of this particular episode is the interconnected nature of financial market participants. Unfortunately, while everyone knows that interconnectedness is important, it is difficult to tell exactly how and to what extent things are woven together—sort of like the "butterfly effect." A butterfly's wings disturb the air around it, setting off a chain of events that ends with a major storm in some remote part of the world. A small catalyst results in large—and sometimes catastrophic—consequences.

The crisis spreading through the global financial system can be thought of as a butterfly effect. Take credit default swaps, for example. These instruments and the institutions they connect are quite complex. In principle, though, these swaps provide a fairly simple service: Properly utilized, they are a form of insurance against the risk of the default of an underlying asset.

While that might sound appealing, the value of the insurance is only as good as the person providing the guarantee. When that individual's viability is called into question—when heightened uncertainty enters the mix—the whole network will suffer the consequences. It all comes down to what we say all the time, what is really common sense but is nevertheless often ignored: Know your counterparty.

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What began as isolated pockets of trouble in the U.S. housing market soon spread to global markets in mortgage-backed securities, where many of the exotic home mortgage products were gobbled up.

Monetary Policy

Hunger for the new risk products was stimulated by a lengthy period of abnormally low interest rates and the normal human instinct to look for ever-higher yields when the returns on orthodox financial instruments, like U.S. Treasuries, municipal bonds or bank CDs, become ho-hum.

April 9 speech

Despite all the advances in economic theory and risk management techniques, when the economy and financial markets get too headstrong and frisky, they are hard to rein in.

Economists like to say that one of the purposes of a central bank like the Federal Reserve is to tame the animal spirits of the economy, employing monetary policy to keep the nation on the path to sustainable, noninflationary growth. One of the greatest of Federal Reserve chairmen, William McChesney Martin, once said that the job of the Fed is to "take away the punch bowl just as the party gets going." As I speak to you today, we are in the midst of experiencing the consequences of the failure to take away the punch bowl and of allowing the exuberant animal spirits of our economy to get out of hand. We must never allow this to happen again.

November 4 speech

Insufficient Constraints

Some financial institutions attempted to reduce required capital and shield activity from regulators' view. Poor judgment compounded by capital arbitrage and accounting gimmickry has been the cause of innumerable financial crises throughout history.

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There are plenty of armchair quarterbacks who now claim to have seen all this coming. Indeed, we must acknowledge that many in the financial community, including at the Federal Reserve, failed to either detect or act upon the telltale signs of financial system excess.

December 18 speech

The Credit Crunch

What began as isolated pockets of trouble in the U.S. housing market soon spread to global markets in mortgage-backed securities, where many of the exotic home mortgage products were gobbled up. Soon it became obvious that financial market participants were gagging on the many types of structured credit products—not just those backed by mortgages—they were being served.

As we approached the summer of 2007, this gag reflex reached a pinnacle. The larger banks found it difficult, if not impossible, to sell to others many types of loans, and the interbank lending market experienced intense liquidity pressures as banks became fearful of lending to each other for longer than overnight.

April 9 speech

If you were a yachtsman, you would say that we sailed the economy along in a following sea for a long time; now we are navigating force 10 seas. Everyone is battening down the hatches and reefing in their sails. Worldwide, creditors are tightening their standards and consumers and businesses are correcting their courses.

August 19 speech

Since the beginning of the year, I have been worried about the efficacy of reducing the fed funds rate, given the problems of liquidity and capital constraints afflicting the financial system. As I see it, the seizures and convulsions we have experienced in the debt and equity markets have been the consequences of a sustained orgy of excess and reckless behavior, not a too-tight monetary policy.

There is no nice way to say this, so I will be blunt: Our credit markets had contracted a hideous STD—a securitization transmitted disease—for which lowering the funds rate to negative real levels seemed to me to be not only an ineffective treatment but a palliative and maybe even a stimulus that would only encourage further mischief.

September 25 speech

The problem that has been ailing capital markets and, by extension, the economy has not been the fed funds rate. It has been and remains risk aversion and uncertainty about counterparty risk and capital adequacy.

September 25 speech

With uncertainty in full fever, cash is hoarded, counterparties are viewed with suspicion, and no business appears worthy of financing. The economy, starved of the lifeblood of capital, staggers and begins to weaken.

> It is the Fed's duty as lender of last resort to lead the way to restoring the efficacy of the financial system.

Just as irrational exuberance causes economies to overshoot on the upside, behavioral adaptations driven by uncertainty and fear and credit constriction exacerbate the downside.
November 4 speech

Bankers and other creditors, having noted that the horse long ago bolted from the confines of prudence, are now shutting the proverbial barn doors. The credit intermediation process has become dysfunctional. Once ubiquitous, credit has become quite expensive—if you can get it.
December 18 speech

Uncertainty is the ultimate enemy of decisionmaking, forcing an otherwise robust credit system into a defensive crouch. . . . With uncertainty in full fever, cash is hoarded, counterparties are viewed with suspicion, and no business appears worthy of financing. The economy, starved of the lifeblood of capital, staggers and begins to weaken.
December 18 speech

The Fed's Response

Now we are faced with the consequences of a process that lawyers would call the discovery phase: As big banks and other financial agents confess their acts of fiduciary omission and excesses of commission, credit markets have effectively deleveraged important segments of the economy, slowing growth suddenly and precipitously. Instead of taking the punch bowl away, the Federal Reserve is now faced with the task of replenishing the punch.
February 7 speech

Think of the fed funds rate as a monetary spigot, and the Fed's goal is keeping the lawn of the economy green and healthy. If we turn the spigot up too forcefully, we will flood and kill the grass with inflation. If we provide too little, the lawn turns brown, starved for money.

To get the money from the spigot to the lawn requires a working system of pipes and sprinkler heads. The "shadow banking system," however, looks like a Rube Goldberg device designed by a hydrologist on acid, with pipes and conduits that lead every which way and not always toward the goal of sustainable economic growth. Moreover, the system of pipes and outlets is clogged with the muck and residue of a prolonged and frenetic period of unrestrained growth and abuse.

Until the confusion and the debris are cleared away, financial intermediaries will be reluctant to book new loans or incur additional risk. This retards the impact of additional monetary accommodation.

Thus, even as we have been cutting the fed funds rate—even as we have been opening the monetary spigot—interest rates for private-sector borrowers have not fallen correspondingly, and rates for some borrowers have increased. The grass is turning brown.

To address this problem, we have created some new facilities that should provide a liquidity bridge over the currently dysfunctional system while the marketplace and regulators—ourselves included—go about restoring the system's plumbing.

April 9 speech

It is the Fed's duty as lender of last resort to lead the way to restoring the efficacy of the financial system.

April 9 speech

You can see the size and breadth of the Fed's efforts to counter the collapse of the credit mechanism in our balance sheet. At the beginning of this year, the assets on the books of the Fed totaled $926 billion. Today, our assets exceed $1.9 trillion. . . .

The composition of our holdings has shifted considerably. Previously, almost 100 percent of our holdings were in the form of core holdings of U.S. Treasuries; today, less than a third are. The remainder consists of claims deriving from our new facilities.

November 4 speech

You will note that the emphasis of our activities has been on expanding the asset side of our balance sheet—the left side, which registers the securities we hold, the loans we make, the value of our swap lines and the credit facilities we have created. We feel this is the correct side to emphasize. The right side of our balance sheet records our holdings of banks' balances; Federal Reserve notes, or cash (currently over $830 billion); and U.S. Treasury balances.

December 18 speech

In times of crisis, many feel that the best position to take is somewhere between cash and fetal. But it does the economy no good when creditors curl up in a ball and clutch their money. This only reinforces the widening of spreads between risk-free holdings and all-important private-sector yields, further braking commercial activity, whose lifeblood is access to affordable credit.

We believe that emphasizing the asset side of the balance sheet will do more to improve the functioning of credit markets and restore the flow of finance to the private sector. In the parlance of central banking finance, I consider this a more qualitative approach to quantitative easing.

December 18 speech

We must not forget that prudent risk taking is the lifeblood of capitalism, especially the American form of capitalism.

> We have been here before and we have overcome our problems. We are a nation of risk takers. Often we confront storms of our own making. We falter. We get blown off course. We lose some of our ships. But we never give up.

Revamping the Financial System

Need for New Regulatory Structure

Our country is the most advanced in the world. We have been at the forefront of innovation and structural advancement in biology and science and technology, in culture and management and commerce and countless other fields. We must continually strive to be at the forefront of figuring out how to corral the "little dogies" that are the financial markets' animal spirits in a way that encourages them to work their magic of underwriting prosperity and yet discourages their straying from the pasture. This is not an easy thing to do. But if we want to preserve our way of life, and do what is right for . . . future generations of Americans, we must get it done.

September 25 speech

In the near future, we will have to consider more fundamental reform of our financial infrastructure. In addition to the usual calls for greater transparency and accountability, policymakers would do well to establish and follow several main principles of reform.

For example, they should seek to avoid situations that privatize profits and socialize losses. Institutions and investors that are free to make money in the financial system should also be free to lose it. That is the only way to maintain some degree of market discipline in the system. In addition, policymakers should continue to stress the importance of capital adequacy at financial institutions. To be blunt, leverage got out of hand. It certainly is not an easy job, but supervision and regulation need to make capital levels reflect the risks taken by an institution.

November/December Southwest Economy

Steering Clear of Overregulation

We must not forget that prudent risk taking is the lifeblood of capitalism, especially the American form of capitalism, where we are constantly replacing the old with the new and the familiar with the new and the innovative. If we had not taken risks, we would never have created from scratch the $14 trillion U.S. economy.

April 9 speech

Regulations by themselves cannot replace good judgment by individual investors or bankers or financiers, and certainly by policymakers. Policymakers need to remain vigilant in seeking the right balance between prudent and indiscriminate risk taking. But the elimination of risk—and the consequences of incurring risk—can never be the goal of any policymaker in a capitalist system. In building the bridge to restore financial order and efficiency, my primary interest is to do the minimum necessary to get the job done. And no more. In so doing, my hope is that we restore the long-term faith of the millions of risk takers who make our economy so mighty.

April 9 speech

American Resilience

Even in the egocentric present, when gloomy analysts lament "unprecedented problems," we must never lose faith in the economic machine that has propelled the U.S. economy to unprecedented prosperity. You need look no further than to what is happening in our own state for proof of our nation's inherent resiliency. All I ask of you as San Antonians and as Texans is that you continue to serve as the exemplar of what can be accomplished by properly managing risk and turning "unprecedented problems" into unrivaled opportunities, as Americans have done time and time again.
April 9 speech

If financial markets are prone to overshooting and undershooting, we may find ourselves wondering what we have to be optimistic about. In the fearful and uncertain aftermath of bursting bubbles, we too soon forget the euphoric booms that fund our purchases, expand our businesses and generally afford us the rich opportunities we enjoy in this country.

We should always be mindful that this dynamic system—or, as the economist Joseph Schumpeter called it, this "creative gale of destruction"—has given us the highest standard of living in recorded history. Something must be right about it.
November/December Southwest Economy

We have been here before and we have overcome our problems. We are a nation of risk takers. Often we confront storms of our own making. We falter. We get blown off course. We lose some of our ships. But we never give up. We are a resilient people. We always come roaring back. . . . You don't have to be irrationally exuberant to know that is what makes America unique. And always will.
November 4 speech