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The Great Credit Squeeze: How It Happened, How to Prevent Another

Executive Summary

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Executive Summary

The current financial crisis in the United States poses two separate challenges for economic policy: one, to resolve the immediate problems; the other, to reduce the likelihood that these problems recur. In this report, we examine the origins of the current crisis and recommend specific policy responses to address both the immediate and long-term challenges.

The U.S. financial system remains in a perilous state. We share the view of some observers that the worst of the credit crisis is probably behind us. But that is by no means certain, and, even if it turns out to be right, the return to normal financial conditions will be a slow and uneven process. Estimates suggest that billions of dollars of mortgage-related losses have yet to be declared by U.S. financial institutions, and risk spreads remain elevated. Moreover, an absence of dramatic events does not imply that financial intermediation is back to normal. The weakened state of banks' balance sheets will make them less willing to lend to households and businesses for some time to come. Many banks have raised additional capital to bolster their balance sheets, but much more needs to be raised.

The turmoil in the financial system is important primarily because of its impact on the overall economy. The latest data on spending, employment, and production suggest that the economy may well be in recession. In addition, the ongoing drop in housing construction, further expected declines in house prices, tighter lending standards and terms, and this year's further rise in oil prices are all exerting further downward pressure on economic activity. To be sure, not all of the economic news is bad. Data for the first quarter of the year were more favorable than many had feared, and the decline in the value of the dollar is buoying net exports. Moreover, powerful economic stimulus has been set in motion through the actions of the Federal Reserve and the tax-cut legislation passed by Congress in February. Therefore, we agree with the consensus among economic forecasters that a mild recession is the most likely outcome. But a more serious economic downturn is entirely possible.

The experience of the U.S. financial system and economy during the past year vividly demonstrate the need for reform of our financial regulation and supervision. Financial markets will always experience swings between confidence and fear; between optimism and pessimism. However, effective regulation and supervision can reduce the frequency, the magnitude, and the broader consequences of these swings. Our diagnosis of what caused this crisis leads directly to our prescriptions for policy changes. We view our proposals as a measured response—more than a fine-tuning of the regulatory and supervisory system, but less than a complete overhaul.

The Origins of the Crisis

Residential housing prices have rarely fallen, and from the mid-1990s until 2006, prices rose strongly. Americans decided that owning a home, or even more than one home, was a very good investment. Many became convinced that rising home prices were almost inevitable.

Strong demand for homes was driven by falling interest rates, the increased availability of mortgages and rising household incomes. As prices rose, this added to demand for some years as it generated the expectation of continuing capital gains. Strong housing demand pushed up prices, especially in locations where there was a limited supply of land (California, the East Coast) and where there was strong economic growth and a population influx (Las Vegas). Residential construction boomed.

From 2001 to 2003, mortgage originations hugely expanded, with much of the growth from prime conformable loans. After that, the total volume of originations dropped and the share of originations in subprime and Alt-A mortgages increased. There appears to have been an erosion of mortgage-lending standards as mortgages were extended to households that did not have good credit records. Many borrowers were not required to document their income and assets. Also, many conventional borrowers increased the loan-to-value ratio in their mortgage to take cash out and ended up as subprime. Some borrowers were buying properties in hopes of a quick re-sale for profit (flipping condos in Miami, for example).

The “originate to distribute” model suffers from incentive problems because the mortgage originators often sold the mortgage quickly to another bank. The originators lacked an incentive to ensure the loan would be serviced. The banks buying the mortgages failed to check what they were buying.

The securitization of mortgages expanded greatly, channeling funds into the market, including foreign capital. Structured securities, called CDOs, were developed of increasing complexity, many of which received high credit ratings from the ratings agencies despite the shaky mortgages underlying them. Institutions buying the securities relied on the ratings and did not realize how much risk they were taking on. At all levels, the belief in rising home prices resulted in an underestimate of risk. Some financial institutions added to their risks by very high leverage and by borrowing very short term to purchase mortgage-backed assets. Some of the risky securities carried default insurance, but only a fraction of them. Moreover, the mono-line companies providing the insurance lacked the capital necessary to deal with a broad decline in the housing market.

Some observers blame the Federal Reserve for keeping interest rates “too low” or blame foreign investors for flooding the U.S. market with liquidity seeking high returns. These factors did play a role in sustaining the U.S. housing boom, but do not, in our judgment, carry blame for what happened.

Financial institutions are regulated and supervised by a bewildering array of federal and state authorities. None of them acted forcefully to stop or mitigate the erosion of lending standards or to warn of serious problems brewing in the mortgage market. This was despite the fact that there were warnings being given to them as early as 2005. Then Federal Reserve Governor Edward Gramlich specifically warned of an impending crisis. Despite the limited authority of any specific regulators, more should have been done to prevent the crisis.

Like all asset bubbles, price increases eventually began to slow. Homeowners who had expected to refinance after a couple of years to pay off credit cards and/or get a more favorable interest rate were unable to do so. Delinquencies began to rise as early as 2004. As delinquencies rose, this burned through the cushion built into the structured securities and some defaulted. Problems in the financial markets emerged in early 2007 when HSBC announced subprime losses. Some hedge funds declared bankruptcy and the crisis spread. Initially, market participants viewed the problems as specific to the institutions that failed, but by late July/early August risk premiums were rising and there was a chill on borrowing worldwide between financial institutions. Central banks acted promptly to provide liquidity to ease the crisis and the Fed started lowering rates.

The boom in residential housing turned into a severe slump as new single family starts fell in half over the next few months. The drop in construction, together with soaring oil prices and the tightening of lending standards, has pushed the U.S. economy into a recession or at least a period of very weak growth. Although we believe the U.S. economy will weather this storm and resume at least slow growth, a deeper recession is possible.

Assessments made in the spring of 2008 indicate that risk management practices in financial institutions had failed. In part this is because the models that were used to assess risk had not factored in the possibility of a broad downturn in the housing market. Further, several institutions reported that they had not followed their own internal rules for risk management. Departments within these companies that were making huge profits developing and trading the new securities were allowed to take large risks without adequate internal monitoring.

Lessons From the Origins of the Crisis

Some factors that contributed to the crisis are ones that are not amenable to change, except at unacceptable cost. For example, a much more aggressive tightening of monetary policy earlier in the cycle might have constrained the housing boom, but at the price of substantially slower growth. There are better ways to avoid crisis. Similarly, the housing boom would surely not have continued as it did if funds had not been available on a large scale from foreign lenders. But closing off the U.S. borders to foreign capital is not acceptable. The price would be too high and, given the integration of U.S. companies with the rest of the world, it would be infeasible.

The erosion of mortgage-lending standards stands out as something that could and should have been stopped. The challenge going forward is either to create an appropriate incentive structure within the “originate to distribute” model, or to provide a better and more integrated force of regulators to compensate for the misaligned incentives.

A second factor that is ready for change is the process of developing derivatives of mortgage-backed securities that are not transparent to the point of absurdity. We know from economic theory that markets with information asymmetries are trouble, and the compounding layers of securitization greatly exacerbated this problem. We do not know what was in the minds of those creating these assets. At the least they did not realize how severe the problems were that they were creating; at worst they designed their financial products deliberately to be obscure as a way of making profits. At the least the credit agencies mistakenly failed to stop this process; at worst they abetted the actions for a share of the rewards.

A third remediable problem is that financial institutions did not follow their own best practices for risk management. In the short run, they will surely make internal changes, but experience suggests that some years from now there will be another problem. Developing solutions is not straightforward. Sarbanes-Oxley is already creating competitiveness problems for U.S. financial markets, and it did not work to forestall this crisis. The Basel II rules for capital did not stop the problems from developing either. However, we think there are ways to improve capital requirements and risk management.

Policymakers did not provide warning of the emerging dangers in the mortgage market. We cannot expect policymakers to second-guess markets or to know when assets are overvalued. But we can expect them to warn of the growing risk of certain assets that might generate large rewards but could also lead to large losses. Households should have been warned that continuing large increases in house prices were not a sure thing.

Short-Term Policies to Resolve the Credit Squeeze

Policy actions that have been taken to address the immediate financial and economic problems have garnered criticism both from those who prefer less government intrusion in the economy and from those looking for more aggressive government action. In our view, policymakers have struck the balance about right—attempting to forestall the worst spillover effects and cushion the greatest harms while not trying to put a safety net under all financial investments or risks. Our discussion of short-term policies is divided into four categories: fiscal and monetary policy; the problems facing commercial and investment banks; policies regarding Fannie Mae and Freddie Mac, and policy regarding mortgage foreclosures.

Congress and President Bush agreed in February on a significant package of tax cuts to stimulate (primarily) household spending. When discussions of fiscal stimulus began, we were among the economists who worried that it would be poorly designed and end up doing more damage to the federal budget than good for the economy. However, the stimulus package that was adopted largely met the criteria enunciated by many economists of being timely, targeted, and temporary. Therefore, the package will likely provide a considerable boost to economic activity this year. Given subsequent financial and economic developments, this fiscal stimulus looks even more desirable in retrospect.

The Federal Reserve has slashed the federal funds rate by 3¼ percentage points since September. This has been an appropriate response in our view to the dramatic widening of risk spreads and the risk of a financial meltdown and abrupt drop in economic activity.

Both commercial and investment banks have been under pressure in this crisis. The Fed has vigorously filled its role as "lender of last resort" by providing large amounts of liquidity to financial institutions through a series of creative new lending arrangements and by organizing the sale of Bear Stearns to JPMorgan. Although these actions increase the moral hazard that financial-market participants will take larger risks knowing that a safety net is in place, we think they were the right choice under the circumstances. However, this additional moral hazard makes it even more critical that we implement long-term reforms to enhance regulation of risk-taking by financial institutions.

Fannie Mae and Freddie Mac, the government-sponsored enterprises that play critical roles in the mortgage market, have recorded billions of dollars in losses during the past year. Given the possibility of future losses and the thin capital cushions that Fannie and Freddie hold, policymakers should be making contingency plans for the institutions' futures. If either institution becomes insolvent, the options include:

- Forbearance, either by temporarily suspending mark-to-market accounting or by relaxing their capital standards.

- Government equity investment.

- Outright nationalization.

Several million households will likely default on their mortgages in the next few years, and we support further government efforts to reduce this number. Skeptics have argued that many families who will lose their homes knowingly took the risk of putting little money down or withdrawing a large amount of existing equity; as a result, these families are not especially deserving of government help, and a "bail out" would encourage unduly risky borrowing in the future. Despite these legitimate concerns, we think the government has an important role to play. Foreclosures have negative consequences beyond the families that lose their homes, especially when concentrated geographically as they are likely to be; these consequences include reducing the property values of nearby houses and jeopardizing the stability of surrounding communities. In addition, the dispersion of mortgage ownership through securities and derivatives complicates the modification process and means that fewer loans will be modified than is optimal even from the perspective of lenders. Beyond the actions already taken, therefore, we recommend:

- Clarifying servicers' fiduciary responsibilities.

- Reforming bankruptcy law to allow judges, in limited circumstances, to reduce mortgage amounts to the value of the houses that serve as collateral.

- Expanding eligibility for FHA-guaranteed loans used for refinancing.

Long-Term Reforms to Improve the Financial System

Financial innovation has been a very positive force in our economy, but it also creates problems. New products, new markets, and new institutions are usually more complex and less transparent than their predecessors; they tend to boost leverage and risk-taking; and they tend to skirt existing regulations and supervisory attention. In recent years, regulation and supervision of financial institutions did not fully recognize the problems that were building and did not adapt enough to put effective limits on these problems. We think that targeted policies aimed at improving transparency, reducing leverage, and enhancing prudential supervision can significantly reduce the extent of these problems. Thus, our proposed long-term reforms fall into these three broad categories.

Most of the changes we propose do not require legislation but can be implemented by the appropriate agencies. However, some of the changes would need to be implemented by law.

In our view, financial innovators and regulators are in a race, and the regulators will always lose that race. But it matters how much they lose by. If regulators do not try to keep up, or are completely outclassed in the race, then much of the benefit of financial innovation will be offset by the cost.

First, financial instruments and institutions should be more transparent.

One key problem with financial innovation in recent years is the high degree of complexity and low degree of transparency. Nontraditional mortgages—including interest-only mortgages, negative amortization mortgages, and mortgages with teaser rates—were apparently not well understood by many who borrowed this way or lent this way. Unconventional credit-market instruments—such as derivatives on asset-backed securities—were intrinsically complicated and unfamiliar even to sophisticated investors, and they had a very short track record that was exclusively from a period of rapidly rising house prices. Transparency was further reduced by arrangements that purported to insulate investors from risk, such as credit default swaps, bond insurance, and shifting liabilities off balance sheets.

As we know from many examples, self-interest is a powerful economic force. Good regulation harnesses that force. By increasing transparency, we can give investors better tools to monitor financial risk-taking themselves. We recommend:

- For mortgages, simpler disclosures, counseling in advance for subprime borrowers, and perhaps a default contract from which people could opt out.

- For mortgages, further restrictions on the design of mortgage contracts under the HOEPA rules and a broadening of HOEPA coverage, both along the lines proposed by the Federal Reserve.

- For mortgages, federal oversight of state regulation for all mortgage originators.

- For asset-backed securities, public reporting on characteristics of the underlying assets.

- For credit ratings agencies, greater clarity in presenting ratings across asset classes, reporting of the ratings agencies' track records, and disclosure of the limitations of ratings for newer instruments.

- For commercial banks, clearer accounting of off-balance-sheet activities.

- For derivatives, a shift toward trading on exchanges, which will encourage standardization of instruments.

Second, financial institutions should be less leveraged and more liquid.

Even if private investors had perfect information, they would tend to take greater financial risks than are optimal from society's perspective. The reason is that taking risks in a financial transaction can have negative consequences for people not directly involved in that transaction. These spillover effects arise in part because of the risk of contagion in the financial system, and they arise in part because of the government safety net including bank deposit insurance and the role of the Federal Reserve as lender of last resort. The parties to a transaction have no reason to take account of these externalities, as economists label them, and this provides the traditional rationale for government financial regulation and supervision.

In recent years, the lack of transparency and divergent incentives caused a run-up in financial risk-taking, both in the assets purchased and the degree of leverage used to finance those assets. These forces helped to fuel the housing bubble, and it greatly worsened the consequences when the bubble deflated.

To be sure, the financial system is already moving to reduce leverage and increase liquidity. Those institutions with larger capital cushions are weathering this crisis far better than their less-conservative competitors, and they now find themselves in position to purchase assets at favorable prices. Those institutions with greater amounts of liquid assets have been less subject to "runs" in which their investors scramble to get their money out first. These examples provide strong lessons for future institutional strategies.

Still, these private responses should be accompanied by regulatory changes. We recommend:

- For commercial banks, capital requirements for off-balance-sheet liabilities and required issuance of uninsured subordinated debt.

- For investment banks, regulation and supervision of capital, liquidity, and risk management.

- For bond insurers, higher capital requirements.

Third, financial institutions should be supervised more effectively.

Government oversight of risk-taking by financial institutions does not take the form solely of laws and regulations. Prudential supervision is another crucial component of public policy. In recent years, supervision did not adequately monitor or constrain mistakes being made by financial institutions, and we must improve supervision going forward.

Note that our focus in this report is primarily on *what* should be regulated rather than *who* should do the regulating. We think the highest priority in regulatory reform is not to change boxes on the organization chart but to change what happens inside each box. That said, we are hardly enthusiastic about the existing hodgepodge of regulation. Restructuring of responsibilities among regulatory agencies would contribute to better oversight of the financial system.

We recommend:

- For commercial banks, closer supervision of risk-management practices.

- For commercial banks, consolidation of federal regulation and supervision.

- For bond insurers, closer supervision of underwriting standards for new products.