The Credit Crunch and Future Role of the Fed

Summary of Proceedings and Preliminary Conclusions from "The Future Role of Central Banking Policy: Urgent and Precedent-Setting Next Steps"

A Policy Workshop convened by the Working Group on Global Markets, Hoover Institution; the Rock Center for Corporate Governance, Stanford Law School; and the Stanford Graduate School of Business

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Over the past nine months, severe stress in the financial markets has given rise to a host of new Federal Reserve actions and lending facilities. In December, the Fed created a new Term Auction Facility for depository institutions. In March, it created a Term Securities Lending Facility for primary dealers, announced an unprecedented loan to Bear Stearns, intervened financially in Bear's purchase by J.P. Morgan, and then opened its discount window to investment banks through the creation of a primary dealer credit facility. More recently, the Fed has offered to open the discount window to Fannie Mae and Freddie Mac.

These unprecedented actions raise important near-term policy issues, as well as questions about the future role of the Fed and the broader legal and regulatory regimes that govern financial markets. On July 22, to address these critical issues, the Hoover Institution's Working Group on Global Markets, the Rock Center for Corporate Governance at Stanford Law School, and the Stanford Graduate School of Business hosted a workshop bringing together economic, financial, and legal experts to address these critical issues. Participants presented and discussed new research, reflected on the principles that should govern legal and regulatory reform, and considered various policy options. This document summarizes the workshop proceedings and suggests some preliminary conclusions and priorities for further research.

Opening Remarks

George Shultz opened the workshop by discussing some of the key challenges facing the U.S. financial system and stressing the importance of timely, forward-looking policy responses. Invoking the adage that "an ounce of prevention is worth a pound of cure," he argued that it is critical to identify ways to prevent future crises and reduce the need for emergency government intervention in the financial markets. From a policy standpoint, he emphasized the importance of encouraging responsible behavior in the markets by setting sensible standards of behavior and by resisting the temptation to intervene excessively when firms behave unwisely. He argued that high-risk behavior by financial actors had been a major driver for the current crisis and stressed that the government should intervene prudently and in a limited fashion. He also asserted that it would be important to wean private sector beneficiaries off of public support. Throughout his remarks, Shultz cited historical evidence to support the claim that government restraint can incentivize market actors to behave more responsibly in the long run.

George P. Shultz

FINANCIAL MARKET FUNCTIONING AND THE EFFECTIVENESS OF THE NEW CREDIT FACILITIES

David Wessel of the *Wall Street Journal* chaired the workshop's first session, which focused on two interrelated issues: the possible efficiency or stability problems in the markets for credit risk transfer, including cascading and interconnectedness; and the purpose and effectiveness of the Fed's three new loan facilities: the Term Auction Facility (TAF), Term Securities Lending Facility (TSLF), and Primary Dealer Credit Facility (PDCF).[1]

Darrell Duffie of the Stanford Graduate School of Business presented first, discussing systemic "plumbing problems" that recent turmoil has revealed in the financial markets. He argued that today, concerns about systemic risk extend well beyond the commercial banking system, and that investment banks and specialty finance companies play increasingly central roles (Fig. 1).

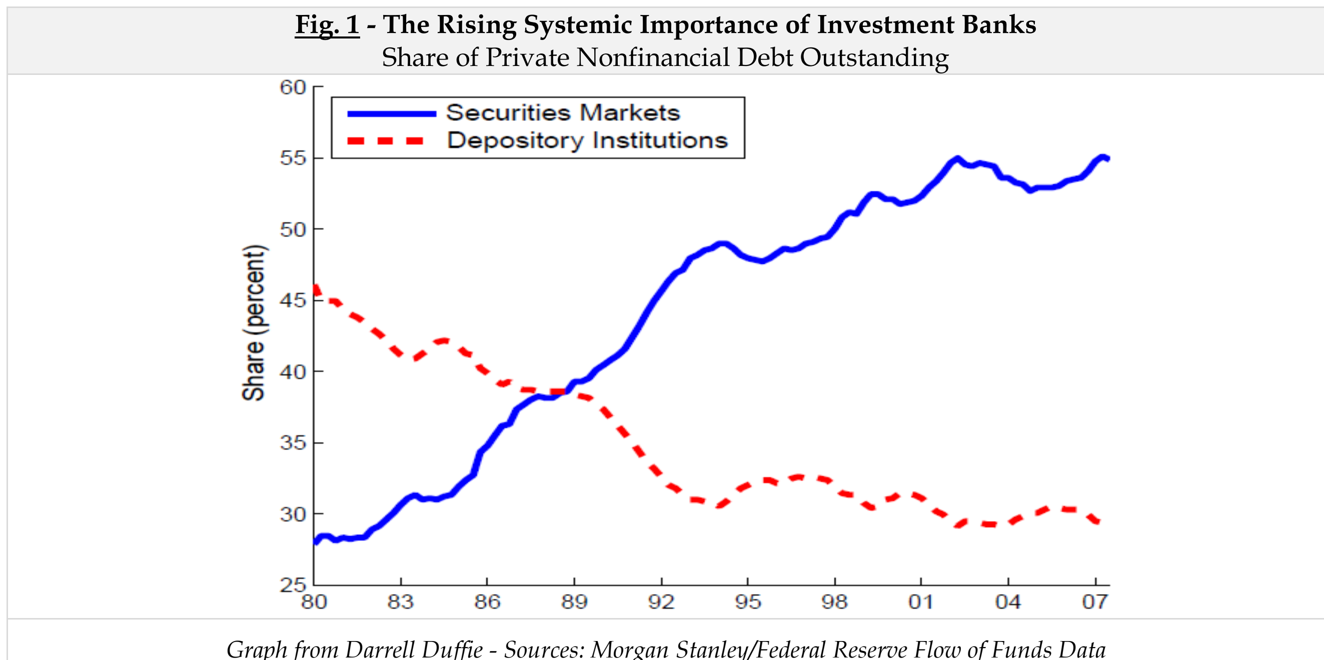


Fig. 1 - The Rising Systemic Importance of Investment Banks
Share of Private Nonfinancial Debt Outstanding

Graph from Darrell Duffie - Sources: Morgan Stanley/Federal Reserve Flow of Funds Data

Duffie noted that large broker-dealers rely heavily on short-term financing, often in the overnight repo market, and can lose access to funds when their swap counterparties lose confidence. He argued that credit risk transfer mechanisms are designed to protect against this possibility but have not functioned properly in the past year. Banks supposedly following the "originate to distribute" model for asset-backed securities actually held back significant amounts of collateralized debt obligations ostensibly designed for non-bank investors. As they accumulated those problematic assets, banks became net purchasers (rather than net providers) of credit risk insurance and began to withdraw liquidity from the markets, exacerbating the credit crunch. Duffie then examined the systemic effects of the breakdown in credit risk

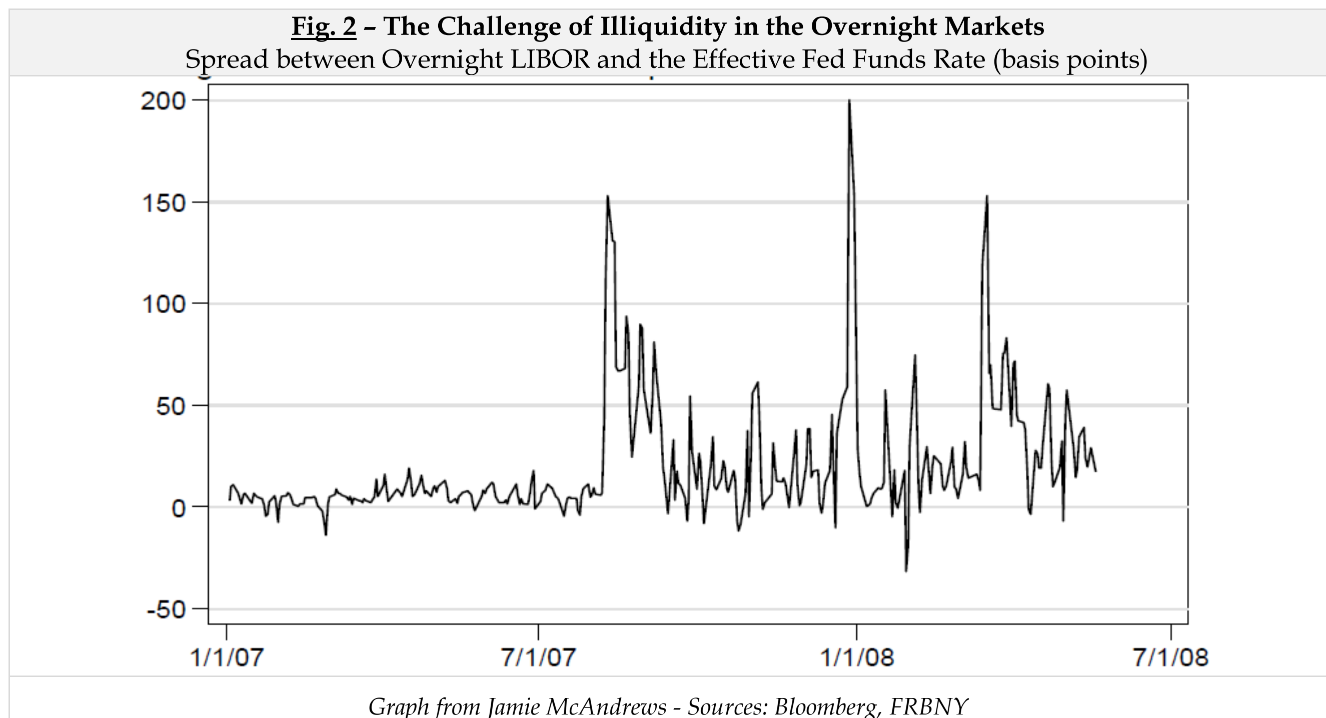
[1] The TAF provides collateralized one-month loans to banks with terms set at auction. The TSLF offers collateralized one-month loans of Treasury securities to primary dealers in a fixed amount at terms set at auction. The PDCF opens the Fed's discount window to primary dealers.

transfer mechanisms, including the inability of banks to act as "shock absorbers," a loss of faith in credit risk transfer products, and the spillover into municipal bond markets.

James McAndrews of the New York Fed gave the second presentation. He argued that financial crises are important opportunities for policymakers and regulators to learn and to mobilize political will to make necessary reforms. He argued that the events of the past year have helped analysts and policymakers better understand the vulnerabilities of secured financing markets and the increasingly central role of investment banks in the markets.

McAndrews then discussed how the Fed has attempted to deal with one particular recent problem—the disintegration of the Eurodollar market. He showed how spreads between LIBOR and the effective Federal funds rate increased sharply in August 2007 (Fig. 2).

Fig. 2 – The Challenge of Illiquidity in the Overnight Markets
Spread between Overnight LIBOR and the Effective Fed Funds Rate (basis points)



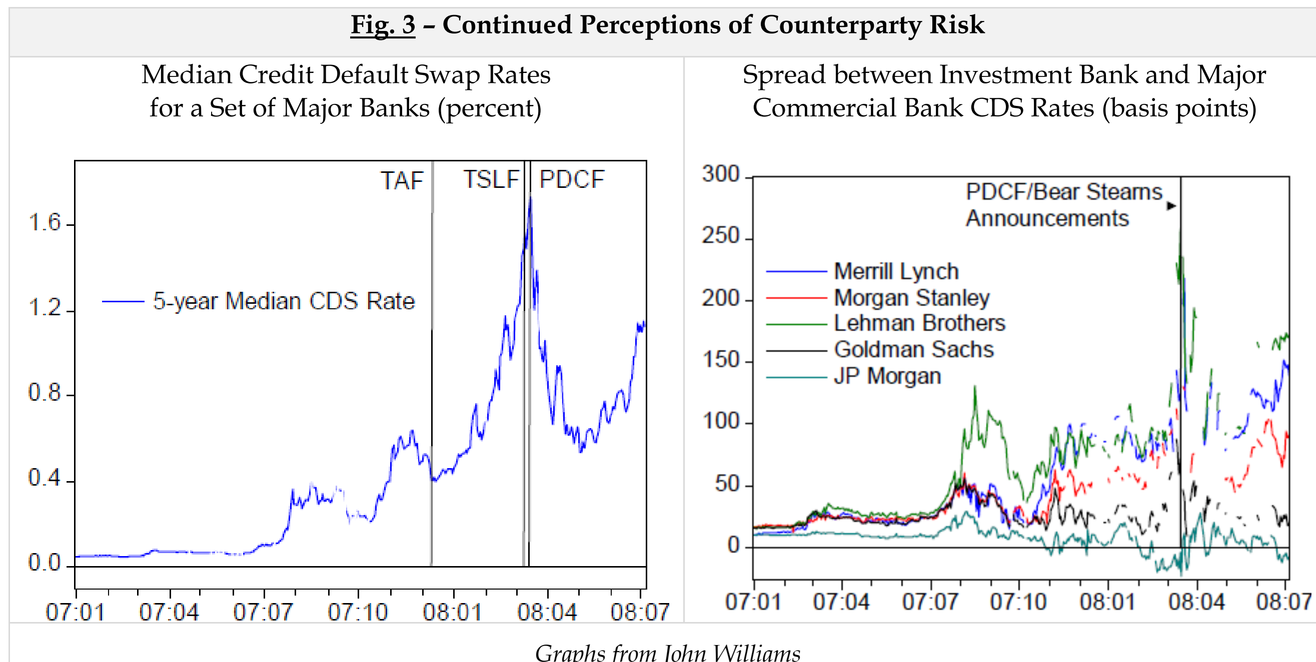
Graph from Jamie McAndrews - Sources: Bloomberg, FRBNY

McAndrews attributed this phenomenon to differences in reserve requirements, a time zone mismatch, and the use of different intermediaries in New York and London. He stated that these and other factors rationed market players out of the term lending markets and forced them to rely more heavily on overnight markets. He noted that the Fed responded by establishing FX swaps with European central banks and announcing the TAF to inject liquidity while reducing the stigma of approaching the discount window. He also touched on the motives for the TSLF and PDCF, which were designed to provide liquidity in the repo markets after the Bear Stearns crisis showed that the possibility of a fire sale of collateral could generate a debilitating run on liquidity by counterparties.

John Williams of the San Francisco Fed followed with an analysis of the apparent effects of the new Fed facilities to date. He noted that the facilities have changed the composition but not size of the Fed's balance sheet. Current sums outstanding include $212 billion for the TAF (including the FX swaps with European central banks), $114 billion for the TSLF, and $9 billion for the PDCF. Williams argued that despite the introduction of the TAF, heightened

perceptions of counterparty risk continue to drive large spreads between 3-month LIBOR (and other unsecured term lending) and overnight rates. He also asserted that while the TSLF appears to have reduced stresses in the repo markets, counterparty risk has raised investment banks' credit default swap spreads back to March levels (Fig. 3).

Fig. 3 – Continued Perceptions of Counterparty Risk



Graphs from John Williams

In discussion, participants discussed the relative importance of monetary policy and plumbing problems in the derivatives markets as possible causes for the market turmoil. Second, the group reviewed the apparent effects of the new facilities and discussed whether those effects were desirable. Third, participants explored the important counterfactual question of what would have occurred absent Fed intervention. The group concluded that there is a pressing need for further research on the mechanisms whereby financial problems can cascade and spill over into depository institutions and the real economy.

Policy Interventions and Lessons Learned from the Fannie Mae, Freddie Mac, and Bear Stearns Crises

In the second session, chaired by John Cogan of the Hoover Institution and Stanford University, panelists addressed recent Fed intervention to support particular financial institutions. They discussed the current problems facing Fannie Mae and Freddie Mac and the Bear Stearns crisis last spring and examined the rationale, effect, and implications of the Fed's support for those institutions.

Peter Wallison of the American Enterprise Institute began by focusing on recent Fed and Treasury efforts to support Fannie and Freddie. He argued that the current crisis was largely one of the government's own making, as special exemptions and an implicit Federal guarantee of Fannie and Freddie enabled those institutions to expand beyond their original mandates, assume excessive risks, and ultimately contribute to the lack of stability in the markets. He asserted that while the decision to support Fannie and Freddie was necessary given their central role in the U.S. mortgage markets, past policies had allowed them to expand well beyond their core mandates of providing liquidity in the mortgage markets and increasing access to affordable housing.

Peter J. Wallison

Wallison contended that recent Treasury and Fed actions to support the GSEs reinforces that they will not be allowed to fail and emphasized the need for stronger, more critical government oversight of the GSEs and for plans to reduce the scope of their operations. He warned that the survival of Fannie and Freddie will be good news in the short run but carries huge medium-term risks—both to the financial system and to U.S. taxpayers—should they continue to accumulate losses. Wallison argued that similar principles apply to Fed interventions in the investment banking industry, asserting that the Fed's recent intervention to support Bear Stearns—while perhaps necessary given market conditions—will introduce undesirable moral hazard into the investment banking industry as well.

John Gunn of Dodge & Cox then drilled down to examine the state of affairs at Fannie and Freddie. He noted that the two institutions were adversely affected by the falling home prices and the adverse impact of high oil prices on equity markets. He expressed cautious optimism that they would be able to survive the present turmoil and manage their losses due to increased profitability. Using Fannie as an example, Gunn showed that while its on-balance portfolio has suffered from the housing decline, its guarantee business has grown significantly over the past several years (Fig. 4).

Gunn also explained that Fannie Mae's market share for securities based on first new mortgages has doubled to 50%, and he argued the diminishing share of problematic loan vintages in Fannie's asset portfolio bodes well for the institution. Gunn concluded by arguing that Fannie and Freddie differ from Bear Stearns, because they enjoy better liquidity positions and greater access to capital.

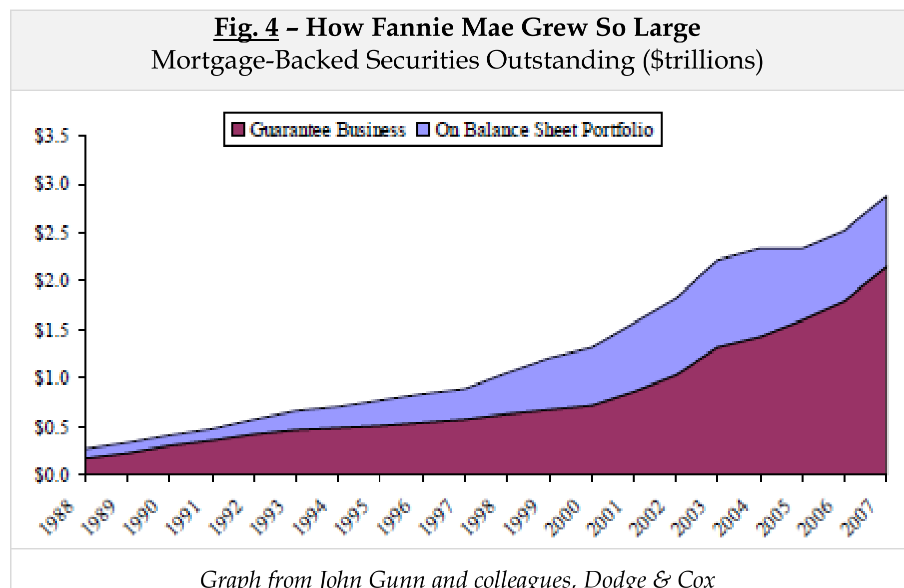


Fig. 4 – How Fannie Mae Grew So Large
Mortgage-Backed Securities Outstanding ($trillions)

Graph from John Gunn and colleagues, Dodge & Cox

In discussion, Richard Herring of the Wharton School of Business returned to the Bear Stearns case and used the example of the 1989 failure of Drexel Burnham Lambert to argue that

public intervention is not always necessary when a financial firm faces severe stress. Participants discussed how the financial system has changed since 1989 and considered how to apply the lessons of the Drexel case. The group then analyzed ways to reform Fannie and Freddie, citing the need to clarify their objectives, promote sound management, and prevent the emergence of future need for crisis-driven government support.

ARE THERE ALTERNATIVES TO FEDERAL RESERVE INTERVENTION BEYOND DEPOSITORY INSTITUTIONS?

Michael Boskin of the Hoover Institution and Stanford University chaired the third session, which focused on possible alternatives to Fed intervention to help failing financial institutions or their creditors. Franklin Edwards of Columbia University presented and began by discussing whether bankruptcy laws can provide an alternative to Fed intervention. He noted that the bankruptcy code, which excludes banks, focuses on restoring a debtor firm to solvency, and maximizing the total recovery for its creditors. To prevent the need for a fire sale, courts generally stay the debtor's contracts during bankruptcy proceedings, temporarily barring creditors from pursuing their claims.

Edwards noted that automatic stays came to be seen as posing systemic risk, leading legislators to exempt some types of "qualified financial contracts." Derivative counterparties are exempt from automatic stays and may generally modify or terminate their deals and liquidate the debtor's assets, even if the debtor is not technically in default. However, Edwards argued that the exemption made matters worse in the case of LTCM, encouraging a "liquidity run" on the firm that might have occurred without Fed intervention. He contended that the LTCM crisis showed that the bankruptcy code can exacerbate the systemic effects of a firm's implosion.

Edwards then turned to the bank insolvency process. He noted that the primary goals of that process are to arrive at a least-cost resolution and to minimize systemic risk. The FDIC can bypass the first goal to achieve the second. In bank insolvency proceedings, the FDIC closes a bank, acts as receiver or trustee, and carries out organizational changes necessary for administration under conservatorship or liquidation. Edwards argued the administrative (i.e., non-judicial) nature of the process makes it faster and contributes to greater legal certainty. The FDIC also has the authority to charter a temporary "bridge" bank as an alternative to liquidating a bank or managing it under conservatorship. He asserted that a key advantage to creating a bridge bank is that it can reduce systemic spillover by keeping a bank running while it is resolved in an orderly manner. To conclude, Edwards reviewed some possible ways in which elements of the bank insolvency process could be modified to establish an analogous regime for investment banks.

To commence discussion, Herring offered some brief comments on how bridge institutions could function as part of an improved system of dealing with failing financial firms. He asserted that applying them to investment banks would pose challenges. In particular, mechanisms would need to be created in a way that maintains market discipline by subjecting parties to appropriate risks of loss. Boskin stressed the importance of protecting against the possibility that ill-advised judicial actions could exacerbate systemic risk in the event of a crisis. The group also addressed other practical challenges of constructing a resolution regime for investment banks.

IS NEW REGULATION OR LEGISLATION NEEDED TO EXTEND THE TEMPORARY FED FACILITIES?

The fourth session, chaired by Kenneth Scott of Stanford Law School, addressed a number of key legal questions. Rodgin Cohen of Sullivan & Cromwell presented. Cohen set out five basic premises: that the current turmoil in financial markets represents the most severe financial crisis since the 1930s, that the government needs to play a key role in resolving market problems, that financial institutions fail due to losses in confidence and resulting illiquidity, that the Fed needs to permanently expand the discount window, and that changes should be made through legislation. After providing an overview of the legal framework governing Fed intervention in the financial sector, he turned to policy considerations.

H. Rodgin Cohen

Cohen argued that the new Fed facilities showed that concerns about spillover effects had trumped concerns about moral hazard. He supported the permanent extension of the new facilities as safeguards against future financial crises and contended the legislative action needs to be taken immediately to avoid continuing regulatory uncertainty. However, he cautioned that legislation would need to address a variety of difficult and critical questions. Which firms would have access to the facilities? How would they be regulated, and by what agency? What examination authority and sanctioning powers would that agency have? Cohen argued that the Fed is probably the most appropriate regulator, because a new regulator would require too much time to develop. He also argued that granting access to firms based on size would be unlikely; a more probable list would include primary dealers at the outset and grow over time. Finally, Cohen noted that the resolution mechanisms discussed in Session III would still need to be addressed.

In discussion, George Shultz questioned certain of Cohen's five premises. Shultz argued that poor management had contributed to the current crisis as well as illiquidity in the markets. He also challenged the notion that the Fed should intervene by granting selected non-bank financial firms permanent access to the discount window. The dialogue between Shultz and Cohen sparked a lively discussion on the sources of the current market turmoil and the severity of the current crisis in historical terms. Participants also discussed the legality of the new facilities, the merits of extending them, the need for legislation to do so, and the appropriate timing for legislation if desirable. Finally, the group noted the roles of other regulators, drawing attention to the recent MOU between the Fed and the SEC. Cohen characterized the latter as a step in the right direction but cautioned that involving multiple regulators presents the risk that problems will "fall through the cracks."

CLARIFYING THE CRITERIA FOR FEDERAL RESERVE INTERVENTION

The final session of the workshop, chaired by George Shultz, examined the considerable challenges to reforming the existing legal and regulatory framework and some ways in which reform might nonetheless be possible. Joe Grundfest of Stanford Law School began by focusing on the difficulty of reducing moral hazard in the markets. He argued that government "puts" are ubiquitous. Whether in flood zones or financial markets, politicians often find it irresistible to provide insurance to influential constituencies. He contended that puts represent a "perfect

form of pork" whereby the government provides off-balance-sheet subsidies. He argued that even having "skins in the game" does not eliminate moral hazard due to the nature of the limited liability corporate system.

Grundfest then turned to the question of how regulatory regimes can best control and manage moral hazard. He cited the challenge of making government commitments credible (such as a commitment not to intervene in certain circumstances). He analogized certain political crises—including the Bear Stearns episode—to "political black holes" that would draw policymakers inexorably to intervene.

John Taylor gave the final presentation of the day, attempting to provide ways in which market players and policymakers can escape some of the challenges that Grundfest described. He argued that unprecedented recent developments—including the TAF, PDCF, TSLF, and actions to support Bear Stearns and Fannie and Freddie—require the establishment of a transparent new framework for policy actions, partly because uncertainty about future Fed interventions will contribute to market instability. He thus asserted that the Fed needs to set forth clear criteria about what will constitute "unusual and exigent circumstances" justifying intervention or the establishment of special facilities like the TSLF and PDCF. To promote transparency and accountability, Taylor also recommended establishing a regime of special reports akin to the Fed's existing reports on inflation and monetary policy or the IMF's "exceptional access reports." In the event of financial turmoil, preliminary reports would spell out the reasons for exceptional measures taken. *Ex post* reports would then assess the measures' impact.

John B. Taylor

Taylor then examined how alternatives to Fed intervention can help prevent crises from emerging. He used the example of the IMF's experience in developing collective action clauses (CACs). CACs—established after a series of debilitating crises in emerging markets in the 1990s—set up a mechanism whereby creditors of an indebted country can agree to a debt restructuring. Taylor contended that CACs helped prevent deeper crises requiring a painful international bailout. By establishing a credible alternative to a bailout, CACs also made it easier for the IMF to exercise restraint when appropriate.

Taylor thus returned to a theme that George Shultz emphasized in his opening remarks: that even clear guidelines do not ensure regulators will exercise restraint in times of uncertainty and crisis. Pressure to intervene will sometimes be high, and alternatives need to be developed to make it easier for regulators to refrain from overextension of the public safety net. As examples of ways to begin that process, Taylor cited the need for central counterparty clearing mechanisms, payment systems reforms, improved resolution processes for securities firms, and exploration of the role that bridge banks can play in containing systemic effects of a crisis.

PRELIMINARY CONCLUSIONS & RESEARCH PRIORITIES

In conclusion, the workshop generated significant agreement on a number of key principles, including the importance of a transparent and accountable legal and regulatory regime, the importance of managing moral hazard, and the need to develop market-based solutions that help avoid the need for crisis-driven government intervention. Nonetheless, the workshop discussions also revealed important differences of opinion on a number of key

analytic points. Participants voiced differing views on the precise origins of the current market turmoil, the appropriateness of the Fed's decisions to intervene, the exact impact of the Fed's actions, and the merits of making the three new facilities permanent. Participants also expressed a range of views on how to reform Fannie Mae and Freddie Mac and how to address problems in the housing and mortgage markets more generally.

The breadth of views expressed in the workshop provided a salient reminder of the importance of further research. Throughout the discussion, participants pointed to several priority areas for further investigation and voiced significant agreement that analysts should endeavor to do the following:

- Examine cascading mechanisms in the financial markets and the spillover effects of financial turmoil into depository institutions and the real economy;
- Analyze international policy issues, considering the economic and regulatory challenges of dealing with a crisis that originates in a foreign financial market or institution;
- Assess the market roles and functions of Fannie Mae, Freddie Mac, and other government-sponsored enterprises and propose strategies for optimal reform of those institutions;
- Explore possible modifications of the bank insolvency process that could be applied successfully to investment banks, considering the possible role for bridge banks;
- Review the existing legal framework for public intervention in the financial markets and develop strategies to improve and clarify that legal framework;
- Develop clearer criteria for Fed intervention or the extension of the new Fed facilities;
- Measure the effects of the Fed's recent actions in the markets; and
- Study market-based mechanisms that can serve as effective complements or alternatives to public intervention in the financial markets.

Finally, the workshop highlighted the importance of interdisciplinary research and dialogue. The group concluded that sound policy choices must be premised on in-depth understanding of monetary and financial economics, legal and regulatory principles, and the political and administrative processes that drive or impede effective reform.