

## **Ben S Bernanke: Addressing weaknesses in the global financial markets – the Report of the President's Working Group on Financial Markets**

Speech by Mr Ben S Bernanke, Chairman of the Board of Governors of the US Federal Reserve System, at the World Affairs Council of Greater Richmond's Virginia Global Ambassador Award Luncheon, Richmond, Virginia, 10 April 2008.

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In recent months, the Federal Reserve has been intensely focused on the continuing strains in financial markets. Healthy, well-functioning financial markets are essential to sustainable growth. In particular, much experience shows that economies cannot perform at their full potential when financial conditions are such as to restrict the supply of credit to sound borrowers. We are addressing these financial strains and their potential economic consequences with a number of tools, including the provision of extra liquidity to the system and reductions in our target for the federal funds rate.

Even as we have worked to resolve the current crisis, however, the Federal Reserve has also been part of a national and international effort to draw at least some preliminary conclusions about the sources of the current turmoil as well as the implications for public policy. In my remarks today I will discuss some of these conclusions and, in the process, identify some measures that should be taken to strengthen the global financial system in light of the recent experience.

In the United States, policymakers' efforts to identify the sources of the financial turmoil and the appropriate public- and private-sector responses have been coordinated through the President's Working Group on Financial Markets (PWG), chaired by the Secretary of the Treasury. The group's other principals include the heads of the Securities and Exchange Commission (SEC), the Commodity Futures Trading Commission, and the Board of Governors of the Federal Reserve System. With the support of the staff of the respective agencies, the PWG began to address these issues last fall, as the severity of the financial turmoil became increasingly apparent; in mid-March, we issued a brief statement outlining our tentative conclusions and policy recommendations.<sup>1</sup> At the international level, the Financial Stability Forum (FSF), whose membership consists of central bankers, regulators, and finance ministers from many countries, including the United States, will also soon release a report on the causes of and potential responses to the turmoil. I describe these policy development processes to underscore the cooperative nature of the enterprise, both among the U.S. authorities and between the United States and other countries. Given the global nature of our financial markets and institutions, international cooperation is essential to making the regulatory and supervisory structure more effective. As I will discuss, many of our recommendations involve actions to be taken by market participants, and so their buy-in and cooperation is essential as well. We have consulted extensively with market participants on these issues and will continue to do so.

As you may know, the Department of the Treasury recently issued a blueprint for regulatory reform in the United States. The focus of the Treasury's work is on the appropriate design principles for our regulatory system – including the system's structure and governance, the appropriate scope of regulators' responsibilities, and how those responsibilities should be allocated across agencies – rather than on the specific issues raised by the current crisis. Given its focus on fundamental reform, the recommendations of the Treasury blueprint are mostly intended to be undertaken in the longer term. In that respect, it is an important first

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<sup>1</sup> President's Working Group on Financial Markets (2008), "Policy Statement on Financial Market Developments (1.36 MB PDF)," March.

step, and we look forward to working with the Congress and others in developing a framework that modernizes our financial and regulatory architecture. The analysis of the PWG that I will be discussing today is more sharply focused on recent events, and its recommendations are intended to be part of the near-term and medium-term effort to restore more normal functioning of financial markets and to improve the operation of the current system.

## Diagnosis

Let me begin with the diagnosis of the causes of the crisis, focusing primarily on the U.S. case and the conclusions drawn by the PWG.

Although many factors played a role, to a considerable extent the current problems arose in the implementation of the so-called originate-to-distribute approach to credit extension. The originate-to-distribute model breaks down the process of credit extension, from origination to the ultimate financing, into component parts, or stages, in a manner reminiscent of how contemporary manufacturers distribute the stages of production across firms and locations. This approach has had considerable benefits, including increased access of small and medium-sized borrowers to the broader capital markets, but pitfalls in its implementation are now evident.

To describe how the originate-to-distribute model works, let's consider a simplified description of how a mortgage loan is made and financed within this framework. In the first stage of the process, the originator – a lender or a broker serving as a lender's agent – extends the mortgage loan to a potential homebuyer. The originator is responsible for the underwriting – that is, for ensuring that the borrower is creditworthy and that the terms of the mortgage appropriately reflect the risks of the transaction. In the next stage, the originator sells the mortgage to another financial institution, let's call it the packager, which combines the mortgage with many other loans to create a marketable security. (This process usually involves the creation of a separate legal vehicle, which holds the underlying mortgages or other assets and issues claims against itself. I will skip the technical details here. Sometimes the originator and what I have called the packager are the same institution.) The most straightforward case involves combining the mortgage with other mortgages to create a mortgage-backed security (MBS); the owner (or owners) of an MBS has claims on the cash flows arising from the underlying mortgages. MBS are familiar financial instruments; indeed, the government-sponsored enterprises Fannie Mae and Freddie Mac have been creating and selling MBS for a long time, as have a number of other financial institutions.

However, much more complex securities can also be created, backed for example by a mix of different types of loans or other assets combined with various guarantees or hedges; in recent years the issuance of these so-called structured credit products increased sharply. Importantly, the newly created securities may be broken into pieces, or tranches, of varying seniority and credit quality. In the third stage of the originate-to-distribute process, these tranches are rated separately by one or more credit rating agencies, then sold to investors with differing preferences for risk or retained by the lender. In principle, the originate-to-distribute model spreads risk and reduces financing costs while affording borrowers greater access to capital.

In practice, however, problems arose in recent years throughout the originate-to-distribute chain, resulting ultimately in a broad retreat from this model late last summer. First, at the point of origination, underwriting standards became increasingly compromised. The best-known and most serious case is that of subprime mortgages, mortgages extended to borrowers with weaker credit histories. To a degree that increased over time, these mortgages were often poorly documented and extended with insufficient attention to the borrower's ability to repay. In retrospect, the breakdown in underwriting can be linked to the incentives that the originate-to-distribute model, as implemented in this case, created for the originators. Notably, the incentive structures sometimes often tied originator revenue to loan

volume, rather than to the quality of the loans being passed up the chain. Investors normally have the right to put loans that default quickly back to the originator, which should tend to apply some discipline to the underwriting process. However, in the recent episode, some originators had little capital at stake, reducing their exposure to the risk that the loans would perform poorly.

So long as house prices were rising, subprime borrowers saw their home equity increase and were often able to refinance into more-sustainable mortgages. However, when house prices began to fall, borrowers' refinancing options disappeared and the problems with subprime mortgage underwriting were exposed. Delinquency rates soared, particularly on subprime mortgages with adjustable rates. Because subprime mortgages were frequently securitized, often as part of complex structured credit products, the losses associated with these delinquencies spread throughout the system.

Although subprime mortgages were the most obvious example, the loosening of credit standards and terms occurred more broadly, reflecting a general boom in credit markets that peaked and then reversed last summer. This boom was characterized by a general erosion of market discipline, underpricing of risk, and insufficient attention by investors to the quality or riskiness of the instruments they purchased. For example, in the market for so-called leveraged loans, used to finance mergers or buyouts, investors showed themselves willing to purchase debt with few covenants or other protections.

The PWG also concluded that investors often took insufficient care in evaluating the risks of structured credit products, in part because they over-relied on the evaluations provided by the credit rating agencies. Unfortunately, the methodologies and assumptions the agencies used to rate many credit products proved faulty, and their data were inadequate (in part because of the lack of extensive experience with these products). When rising delinquencies and losses on mortgages forced the agencies to sharply downgrade many structured credit products, investors lost confidence in those ratings and became unwilling to provide new funds. As financing disappeared, the markets for these products and for related investments, such as asset-backed commercial paper, seized up.

Another factor that the PWG identified as contributing to the financial turmoil was weakness in the risk-management practices of large global financial institutions that created and held complex credit products. As demonstrated by comparative studies of institutions' performance, which we at the Federal Reserve conducted in concert with regulators both in the United States and abroad, some firms fell short in identifying and managing the risks they were taking. For example, some firms had not developed adequate capacity to measure their aggregate exposures to subprime credit risk across business lines, leaving them vulnerable to significant losses at the level of the entire firm. Thus, the spreading of risk that was one of the supposed benefits of the originate-to-distribute model proved to be much less extensive than many believed. The pullback of investors from structured credit products also imposed significant liquidity pressures on many of the largest financial institutions, which were left scrambling to fund instruments they could not sell or to meet contingent funding obligations for which they had not adequately planned. These weaknesses were particularly evident with respect to managing risks from exposures related to collateralized debt obligations, off-balance-sheet conduits that issued asset-backed commercial paper, and leveraged loan syndications. The combination of unanticipated losses, which reduced capital, and severe liquidity pressures has significantly reduced the ability and willingness of some large financial institutions to extend fresh credit or to make markets, with adverse effects for the broader markets and for the economy.

The originate-to-distribute model thus broke down at a number of key points, including at the stages of underwriting, credit rating, and investor due diligence. Financial institutions were caught, in some cases, by inadequate risk management and liquidity planning. These problems notwithstanding, the originate-to-distribute model has proven effective in the past and with adequate repairs could be so again in the future.

## Recommendations

The PWG's recommendations flow logically from the problems that we identified. First, the weaknesses in the origination stage of the originate-to-distribute model must be corrected; no matter how elaborate and sophisticated, credit instruments can be no stronger than the underwriting that supports them. Market participants will not easily forget the lessons of the recent period, and so market discipline will help in this respect. I expect that, in the future, investors will be eager to ensure that their own interests and those of the originators are better aligned, which should lead to more conservative and careful underwriting.

But better consumer protections and disclosures, as well as greater supervisory scrutiny of the processes that originators follow and the incentives they face, are also needed. In the mortgage area, the PWG recommended action at both the federal and state levels, including, for example, stronger nationwide licensing standards for mortgage brokers and more consistent government oversight for all originators. In particular, the PWG recommended that the Federal Reserve use its authority to strengthen consumer protection rules and enhance required disclosures for mortgage originations.

I strongly support this recommendation, and its implementation is well under way. Specifically, the Federal Reserve has used its authority under the Home Ownership and Equity Protection Act to propose and seek comment on new rules that, for higher-cost loans, would strengthen consumer protections. The rules would restrict the use of prepayment penalties and low-documentation lending, require the use of escrow accounts for property taxes and homeowner's insurance, and ensure that lenders give sufficient consideration to borrowers' ability to repay. In addition, for all mortgage loans, we have proposed rules regarding broker compensation methods and the ability of appraisers to provide judgments free of undue influence, as well as rules regarding the accuracy of advertisements and solicitations for mortgage loans and the timeliness of required disclosures. We also plan to propose a revised set of required mortgage disclosures based on the results of a program of consumer testing already under way. We will monitor the effectiveness of the new rules and take additional steps as necessary. To strengthen enforcement, we have initiated a pilot program to improve the coordination among federal and state authorities in the examination of nonbank mortgage lenders.

Another problem identified by the PWG was the inadequate care by investors in their evaluations of securitized credits, particularly the more complex structured securitizations. More transparency about the risks and other characteristics of securitized credits on the part of their sponsors would obviously help. But more generally, investors must take responsibility for developing independent views of the risks of these instruments and not rely solely on credit ratings. Some investors, such as public pension funds, are subject to government oversight, and in these instances, the PWG will look to their government overseers to reinforce implementation of stronger due diligence practices. When investors employ advisers, the mandates and incentives given to these advisers should be structured so as to induce a more careful and nuanced evaluation of the risks and returns of alternative products.

Improving the performance of the credit rating agencies is another key priority. As I mentioned, analytical weaknesses and inadequate data underlay many of the problems in the ratings of structured finance products. Beyond improving their methods, however, the credit rating agencies would serve investors better by providing greater transparency. Credit rating agencies should, for example, publish sufficient information about the assumptions underlying their rating methodologies and models so that users can understand how a particular rating was determined. It is also important for the credit rating agencies to clarify that a given rating applied to a structured credit product may have a different meaning than the same rating applied to a corporate bond or a municipal security. Indeed, some have suggested that the agencies use different rating nomenclatures for different types of products. Transparency about methods should also help to reduce concerns about conflicts

of interest that might arise from the fact that issuers of securities pay the rating agencies for their work in rating those securities.

The credit rating agencies themselves clearly appreciate that concerns about the quality of ratings and potential conflicts of interest represent a fundamental challenge to their business model, and they have begun to address these issues. The SEC, which has regulatory responsibility for the credit rating agencies, is conducting a broad review of issues regarding potential conflicts of interest at the rating agencies and is likely to identify further measures that should be implemented.

As I noted earlier, the turmoil in financial markets has also revealed significant weaknesses in the risk-management practices of some large, globally active financial institutions; these weaknesses have exacerbated the problems in the markets by compromising the abilities of these key firms to absorb risk and serve as intermediaries. Prudential supervisors in the affected financial markets began joint work late last summer to identify common deficiencies on which they and the firms should focus. The supervisors concluded that the firms that suffered the most significant losses tended to exhibit common problems, including insufficiently close monitoring of off-balance-sheet exposures, inadequate attention to the implications for the firm as a whole of risks taken in individual business lines, dependence on a narrow range of risk measures, deficiencies in liquidity planning, and inadequate attention to valuation issues. To be sure, firms varied in the degree to which they were subject to these weaknesses, with better performance on these dimensions generally being reflected in better financial performance.

Correcting these weaknesses is, first and foremost, the responsibility of the firms' managements and they have powerful incentives to do so. But prudential supervisors, including the Federal Reserve, must also review their existing policies and guidance to identify areas where changes could help firms strengthen their risk management – a process that is already under way. Two areas of focus in this review will be capital and liquidity, the principal buffers that firms have against unexpected shocks. Regulators should adopt policies that lead financial institutions to hold capital and liquidity cushions commensurate with their firm-wide exposures to adverse market events. The PWG also will be asking U.S. regulators, working together and through international groups such as the Basel Committee on Banking Supervision, to enhance their guidance in a variety of areas in which weaknesses were identified. I expect, for example, to see work forthcoming on liquidity risk management, concentration risk management, stress testing, governance of the risk-control framework, and management information systems.

Off-balance-sheet vehicles have been singled out for attention because of the pressures they have put on financial firms' capital and liquidity during the current episode. The PWG made a number of recommendations on this topic, including urging regulators to require financial institutions to provide more detailed and comprehensive disclosures about off-balance-sheet commitments. The PWG also recommended that the Financial Accounting Standards Board (FASB) evaluate the need for further modifications to accounting standards related to consolidation and securitization, and that FASB and the International Accounting Standards Board achieve more rapid international convergence of accounting standards in this area.

## **Implications and conclusions**

This quick review of the recommendations of the President's Working Group on Financial Markets does not do justice to the many issues we considered in our discussions and in the work of the staff. But I think it does give you a flavor of the diagnosis and recommendations. Implementing these recommendations here in the United States, as well as working with our international partners to implement compatible and complementary measures abroad, will have many benefits.

Narrowly, these recommendations should help to improve and strengthen the originate-to-distribute model, which, despite recent problems, seems likely to remain an important component of our system of credit provision. In the vision set forth by the PWG, however, this model will be rebuilt on a foundation that includes higher standards of underwriting and due diligence, a closer alignment of the incentives of originators and investors, greater transparency and simplicity in the design of credit instruments and in the determination of credit ratings, and better risk and liquidity management by financial institutions that develop and hold these instruments. More broadly, these recommendations should moderate the likelihood and severity of future financial shocks and enable market participants to better withstand shocks when they occur.

Importantly, the PWG's approach relies on both market and regulatory discipline, not just one or the other. With respect to market discipline, in light of recent experience, investors are unlikely to rely solely on credit ratings in the future but will instead require more and better information from originators and sponsors of credit products. Credit rating agencies will also be tougher about the information they demand from securitizers, and I expect they will be more skeptical about especially complex and opaque instruments. To support these efforts to strengthen market discipline, the PWG called for the private sector to establish several working groups to make recommendations concerning best practices in key areas.

Regulation complements market discipline – for example, by requiring disclosures that improve the ability of consumers to shop and of investors to evaluate risks, by providing protections to less-sophisticated market participants (such as subprime mortgage borrowers), and by requiring that financial institutions meet high standards in their management of risk. We regulators must act to ensure that our policies and supervisory procedures are consistent with the objectives of improving the originate-to-distribute system and strengthening risk management more broadly. We will review some aspects of our regulations and strengthen our supervisory guidance and disclosure requirements in key areas, such as those relating to securitizations and off-balance-sheet vehicles. We will review our own use of credit ratings as a risk metric. And we must be sure that we are working effectively with both the private sector and other domestic and international regulators to help the system function better.

The process of implementing the PWG's implementations will be challenging, in no small measure because of the continuing pressures of short-term crisis management. However, we do not have the luxury of waiting for markets to stabilize before we think about the future. Indeed, many of the necessary changes that have been identified, including increasing transparency, improving risk management, and attaining better coordination among regulators, could provide important support to the process of normalizing our financial markets.