Editors' Summary

THE BROOKINGS PANEL ON ECONOMIC ACTIVITY held its eighty-sixth conference in Washington, D.C., on September 11 and 12, 2008. Several of the conference papers examine aspects of the current financial crisis: the relationships among recent global financial imbalances, mortgage lending, and volatile commodity prices; the errors made by lenders in judging subprime mortgages and instruments derived from them to have fairly low credit risk; the effect of mortgage foreclosures on the dynamics of home prices; the impact of mortgage credit losses on the supply of credit; and the implications for financial regulation of spillovers from failing financial institutions. The remaining papers deal with the role of the unofficial economy in economic development, and the effect of an undervalued currency on economic growth in developing countries. This issue of the *Brookings Papers on Economic Activity* presents the seven papers from the conference, comments by the formal discussants, and synopses of the discussions of the papers by conference participants.

In the first paper, Ricardo Caballero, Emmanuel Farhi, and Pierre-Olivier Gourinchas make the case that outsized international capital flows, the U.S. subprime crisis, and recent swings in oil and other commodity prices are interrelated phenomena. They argue that the root cause of all of these developments is a global scarcity of sound and liquid financial assets relative to the demand for such assets. As emerging market and commodity-producing nations searched for ways to invest their newfound wealth, they focused on U.S. financial markets, their own being relatively underdeveloped. The strong demand for U.S. assets pushed down required rates of return and created an environment conducive to asset bubbles, with the expansion of subprime lending and the rapid rise in home prices among the consequences.

However, market attempts to accommodate this excess demand for U.S. assets contained the seeds of their own demise, because U.S. assets became

"stretched" to an unsustainable degree. Ultimately, the housing and financial bubbles collapsed. At that point, according to the authors, the continued search for investment opportunities generated the dramatic run-up in commodity prices, especially oil. These new bubbles persisted until they weakened global economic activity to the point that the underlying demand for commodities receded.

In the view of the authors, these patterns will recur in some form as long as rapidly growing developing economies remain financially underdeveloped and the chronic shortage of financial assets persists. Only when the world economy generates enough safe and profitable stores of value to meet the demand by savers will this cycle end.

The second paper asks why sophisticated analysts did not anticipate that so many of the subprime mortgage loans and related assets they were holding would perform badly. Kristopher Gerardi, Andreas Lehnert, Shane Sherlund, and Paul Willen begin by showing that lenders made riskier loans in 2005 and 2006 than earlier, with the key difference being an increase in borrower leverage. However, they find that the change in mortgage characteristics was too small by itself to explain the recent surge in defaults. Instead, defaults have been spurred by the collapse in home price appreciation since early 2006.

To have misjudged the riskiness of subprime mortgages, then, lenders must have been mistaken about future trends in home prices, the sensitivity of foreclosures to changes in home prices, or some combination of both. Using data through 2004 only, the authors show that if analysts had known the future trajectory of home prices, they could have predicted the large rise in foreclosures with reasonable accuracy. Indeed, the authors' reading of research reports and media commentary by mortgage market analysts between 2004 and 2006 suggests that these analysts had a reasonable sense of the potential impact on the subprime market of home price declines. However, these analysts generally assigned a substantial price decline a very low probability, apparently putting more weight on the historical rarity of such events than on the risk posed by the unprecedented jump in home prices during the preceding decade.

In the third paper, Karl Case explores the mechanisms through which home prices are adjusting to restore equilibrium in the housing market. He explains that two different mechanisms are at work today. One is the traditional process in which prospective buyers search deliberately for homes that best suit them, while homeowners are reluctant to sell at a loss and thus tend to wait for better offers. This process generally restores equilibrium slowly, through growth in the quantity of housing demanded,

with relatively small changes in prices. The other equilibrating mechanism is auctions of homes acquired by banks and mortgage servicers through default and foreclosure. This process leads to more abrupt price declines, because institutional sellers are eager to move the properties off their balance sheets.

Case notes that both auctions and the traditional search mechanism have played important roles in previous, regional housing slumps. With housing demand now falling sharply in many parts of the country, auctions are becoming more common: between the third quarter of 2006 and November 2008, auctions climbed from 9 percent to 27 percent of total existing-home sales. Case concludes that home prices may well decline substantially further during the next few years, but he holds out hope that a faster turnaround is possible.

Jan Hatzius, in the fourth paper, analyzes the implications of mortgage losses for new lending. He estimates that if home prices fall an additional 15 percent from their level in mid-2008, total losses on residential mortgages will ultimately exceed $750 billion. About half of those losses will likely be borne by leveraged financial institutions in the United States, greatly reducing those institutions' equity capital. In addition, banks generally trim their desired leverage ratios when financial and economic conditions sour. All in all, Hatzius calculates that financial institutions might reduce their outstanding loans by more than $2 trillion from what they would have been otherwise.

The supply of credit will take a further hit from the sharp drop in issuance of asset-backed securities. Much-larger-than-expected losses on existing securities have undermined confidence in the firms that bundle individual loans, and in the rating agencies that evaluate the risk of those securities, so demand has tumbled. Taking together the different channels of reduced credit supply, Hatzius estimates that growth in aggregate demand could be reduced (before allowing for any multiplier effects) by roughly 2.5 percentage points on average in 2008 and 2009. He emphasizes the importance of government policies to boost private lending and to ensure continued lending by the government-sponsored mortgage enterprises Fannie Mae and Freddie Mac.

In the fifth paper, Stephen Morris and Hyun Song Shin reconsider the basic strategy of financial regulation. They explain that the traditional rationale for regulating financial institutions is to ensure their solvency and thereby protect the interests of retail depositors. This rationale has encouraged a focus on capital regulation in which the required capital buffer depends on the riskiness of an institution's assets. However, events

of the past year show that this approach does not ensure the stability of the financial system as a whole. The key problem is that actions taken by financial institutions to protect their own solvency can have spillover effects on other institutions; thus actions that are rational for individual firms can be counterproductive for the overall economy.

Therefore, the goal of financial regulation should be to mitigate these spillovers. One important type of spillover arises with assets that are not risky themselves but are systemically important because of the way they connect institutions. Drawing on an analysis of this interconnectedness, the authors recommend two new elements of financial regulation: a simple (non-risk-adjusted) leverage constraint, and a liquidity requirement that regulates the composition of asset portfolios rather than just their size.

In the sixth paper, Rafael La Porta and Andrei Shleifer examine the "unofficial" or "informal" sector in developing economies. Unofficial firms, which generally do not pay taxes or abide by regulations, account for up to about half of economic activity in poor countries. However, experts disagree about their role. In the "romantic" view, as defined by La Porta and Shleifer, unofficial firms are similar to official firms but are held back by legal barriers to official recognition and by lack of access to finance. Government policy that aims at helping these firms enter the formal sector would boost economic growth. In contrast, the "parasite" view holds that unofficial firms are too small to produce efficiently, but that the cost advantage of avoiding taxes and regulations allows them to undercut more-productive formal firms. From this perspective, eliminating unofficial firms would boost economic growth. Lastly, the "dual economy" view agrees that unofficial firms are inefficient but does not view them as threatening formal firms, because they are led by less-able entrepreneurs and sell to different customers. If this is the correct view, government tax and regulatory policy should support the formation of official firms but should neither foster nor discourage unofficial firms.

La Porta and Shleifer present evidence that supports the dual view over the romantic and parasite views. According to their data, unofficial firms are small and unproductive relative to official firms. In addition, unofficial firms employ managers with significantly less human capital, tend to use less physical capital, exploit external finance to a lesser extent, and pay their workers substantially less. Informal firms do not tend to become formal as they grow, but instead remain in their separate markets. The authors conclude that the existence of informal firms is important for poverty alleviation as long as the economy remains underdeveloped, but does not contribute much to productivity gains or economic growth.

The final paper in this issue is an evaluation by Dani Rodrik of the effect of the real exchange rate on economic growth. Rodrik observes that significant overvaluation of a currency is widely viewed as a detriment to growth, but that little consensus exists about the effects of undervaluation. His empirical analysis finds that undervaluation boosts economic growth just as strongly as overvaluation diminishes it. Noteworthy examples of this positive relationship between undervaluation and growth include China, India, some other Asian countries, and several African countries. However, undervaluation appears to be correlated with economic growth only for developing countries and not for rich ones.

Rodrik proposes the following explanation for his results: Developing countries suffer from institutional and market failures that hinder economic activity in general and production of tradable goods in particular. Currency undervaluation raises the domestic price of tradables relative to nontradables, which provides an offsetting boost to the tradable goods sector. By undoing the distortion away from tradable goods, undervaluation thus increases economic growth. Eliminating the distortion directly would avoid the costs of undervaluation but is often not feasible; an exchange rate policy of deliberate undervaluation appears to provide a feasible alternative.