

VOLUME

12

November 2009
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Financial Innovations Lab Report



*Financial Innovations for Housing:
After the Meltdown*

FINANCIAL INNOVATIONS LAB REPORT



MILKEN INSTITUTE

Financial Innovations Labs bring together researchers, policy makers, and business, financial, and professional practitioners for a series of meetings to create market-based solutions to business and public policy challenges. Using real and simulated case studies, Lab participants consider and design alternative capital structures and then apply appropriate financial technologies to them.

This Financial Innovations Lab Report was prepared by Betsy Zeidman, James Barth, and Glenn Yago.

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ACKNOWLEDGMENTS

We are grateful to the participants of the Financial Innovations Lab and the panelists of our Global Conference sessions on this topic for their contributions to the ideas and recommendations summarized in this report. We especially thank Phillip Swagel (former assistant secretary for economic policy at the U.S. Department of the Treasury and current professor at Georgetown University's McDonough School of Business) for his input on content and collaboration in providing alternative viewpoints and experiences regarding the housing crisis. Finally, we wish to express our appreciation to Milken Institute Financial Innovations Lab coordinator Caitlin MacLean; researchers Tong Li, Wenling Lu, and Patricia Reiter; executive assistant Karen Giles; and editor Melissa Bauman for their tremendous effort, along with all our Institute colleagues for their support.

The Milken Institute is an independent economic think tank whose mission is to improve the lives and economic conditions of diverse populations in the United States and around the world by helping business and public policy leaders identify and implement innovative ideas for creating broad-based prosperity. We put research to work with the goal of revitalizing regions and finding new ways to generate capital for people with original ideas.

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social capital: the bonds of society that underlie economic advancement, including schools, health care, cultural institutions, and government services.

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Real estate began to look like a sure-fire investment that was affordable to almost everyone—as long as home prices continued to climb and refinancing channels were open.

INTRODUCTION

From the initial stages of the meltdown in subprime home loans to the government's relief programs, the turmoil in the U.S. financial sector has sent shock waves throughout the global economic arena. Today, federal and state governments continue to struggle with the appropriate legislative and regulatory responses; massive deleveraging is occurring among financial institutions and corporations; the capital markets are sorting out competing financing models; and America's housing finance market remains in need of serious repair.

Given these developments, the Milken Institute, with the participation of the U.S. Department of the Treasury, hosted a Financial Innovations Lab in October 2008 to explore the roots of the meltdown and consider some approaches to moving beyond it. The Lab brought together investors, lenders, brokers, business leaders, government officials, academics, attorneys, ratings agencies, policy advisers, nonprofit organizations, and other experts from the housing finance and capital markets to review factors contributing to the meltdown. During the Lab and in follow-up conversations, the participants considered strategies, innovations, and products to help revive and revitalize the mortgage finance market and the housing market in general.

Participants discussed specific capital markets solutions (including jumpstarting securitization, promoting a covered bond market, and, more generally, introducing the Danish mortgage system into the United States); products to support affordable home mortgages (including shared equity and shared appreciation structures, down-payment assistance programs, an opt-out mortgage system, the use of loan loss reserves, and building savings into mortgage payments); mechanisms to stem foreclosure and reduce its collateral damage (including land banks, a lease-to-purchase mortgage product and bankruptcy modifications); and new and alternative sources of capital (including peer-to-peer lending through online platforms). This report summarizes the day's discussions and presents the various solutions.

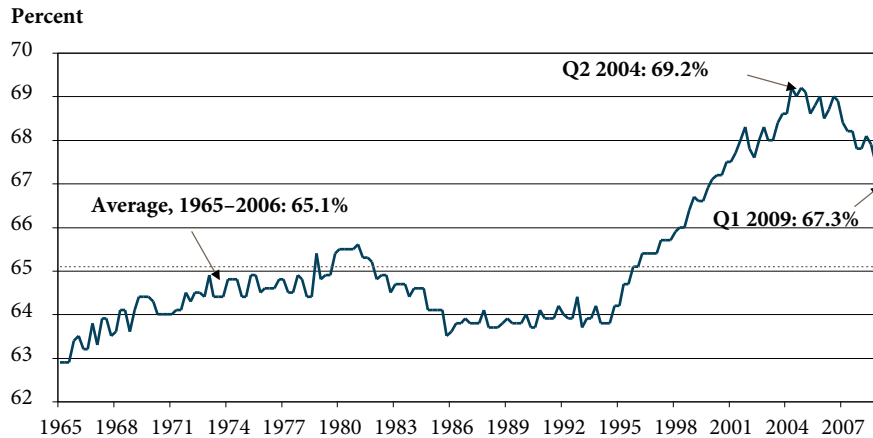
BACKGROUND

The genesis of the housing price bubble and the financial product failures that contributed to it emerged in the early part of this decade amid a stock price bubble and the subsequent monetary policy response. In January 2000, the Dow Jones industrial average closed at what was then a record high of 11,722 (with one prediction that it would reach 100,000 by 2020). By late 2002, the Dow had fallen nearly 40 percent, and the Nasdaq had plummeted almost 75 percent from its peak. Accounting scandals shattered trust in corporate governance, and the worst bear market in 75 years commenced.

Concerned about deflation, the Federal Reserve drastically reduced interest rates, paving the way for cheap credit that helped fuel growth in homeownership, which reached a record high of 69.2 percent in mid-2004 (see figure 1). Housing prices rose steadily at an average annual rate of 3 percent during the 1990s, but the annual growth rate shot up to nearly 9 percent from 2000 to 2006.¹ Real estate began to look like a sure-fire investment that was affordable to almost everyone—as long as home prices continued to climb and refinancing channels were open.

FIGURE

1

Credit boom pushes homeownership rate to record high

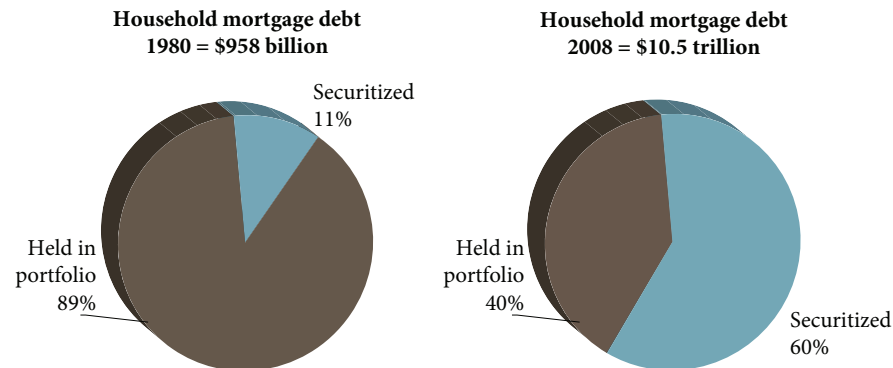
Sources: Barth, Li, Lu, Phumiwasana, and Yago (2009), U.S. Census Bureau, Moody's Economy.com.

Securitization, an innovation in mortgage finance, also helped fuel the growth. Historically, lenders used an “originate-to-hold” model for home mortgages. Institutions originated loans based on careful due diligence, and then serviced and held the loans in their portfolios. In the 1970s, securitization—an “originate-to-distribute” model—emerged, in which lenders packaged groups of loans into securities that were sold in the secondary market. With the loans off their balance sheets, lenders gained liquidity and were able to make more loans more successfully and at a lower cost to consumers.

Local and international institutional investors purchased securities backed by the home mortgages (mortgage-backed securities, or MBS), introducing new and broader sources of funding into the housing market. From 1980 to 2008, securitized home loans increased from 11 percent to 60 percent of all home mortgages, while the share that mortgage lenders held in their portfolios fell from 89 percent to 40 percent (see figure 2). The originate-to-distribute model also helped produce a new class of loan originators that earned fees without retaining any credit risk. From 1997 to 2006, these mortgage brokers' share of originations grew from 20 percent to 58 percent.²

FIGURE

2

Lenders sell mortgages instead of holding them

Sources: Barth, Li, Lu, Phumiwasana, and Yago (2009), Federal Reserve.

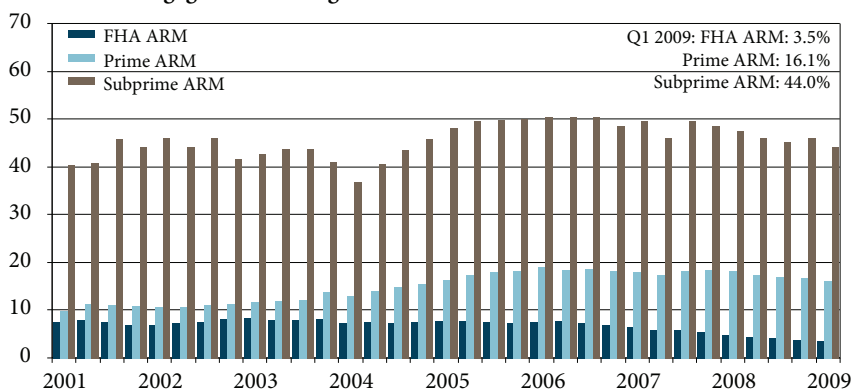
Securitization diversified risk among multiple parties, facilitated increased lending and homeownership, and created new business opportunities for those who only wished to originate or service loans. However, an unintended consequence of the originate-to-distribute model was that some lenders paid less attention to credit quality. With no ongoing responsibility for credit risk, originators had little economic incentive to ensure that borrowers were particularly creditworthy. As a result, borrowers with shakier credit histories or less collateral, known as subprime, were able to obtain mortgages with little or no down payment and other terms that reduced barriers to default. The proliferation of complex mortgage products that embedded higher levels of borrower, lender, and market risk began in this environment.

Given the ready liquidity and the huge demand for mortgages triggered by relatively low interest rates and rising home prices, lenders relaxed underwriting standards and developed new products to attract ever more borrowers, including products for higher-end borrowers in the prime and near-prime market that also resulted in higher delinquency rates because of those products' flawed incentives. Option adjustable-rate mortgages, Alt-A loans, hybrid ARMs and other products requiring little or no down payment, no income verification, and low initial monthly payments drew first-time homebuyers into the market. ARMs also enabled lenders to shift the interest rate risk to borrowers, and they were a popular product with mortgage brokers. Originations grew fourfold from 2001 to 2005, and the largest share of adjustable-rate mortgages went to subprime borrowers (see figure 3). Outstanding subprime mortgages increased 14 percent annually from 1995 to 2006. Many borrowers and lenders operated under the assumptions that housing prices would continue to rise and that they could refinance before their adjustable rate jumped.³

FIGURE
3

Largest share of ARMs go to subprime borrowers

Percent of mortgages outstanding



Sources: Barth, Li, Lu, Phumiwasana, and Yago (2009), Mortgage Bankers Association, Moody's Economy.com.

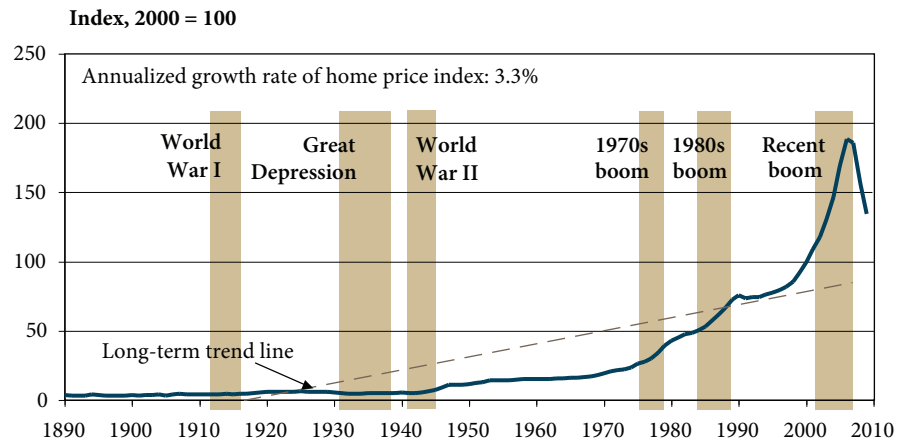
Investors had a large appetite for mortgage-backed securities. The vast majority of subprime loans were securitized (67.5 percent as of Q3 2008), which meant passing more than two-thirds of the credit risk through the capital markets to investors.⁴ Complex and highly leveraged mortgage and mortgage derivative products were developed to meet demand: collateralized debt obligations (CDOs) and CDOs of CDOs, and CDOs of CDOs of CDOs, etc. The complexity of these securities and the investors' distance from the original loans limited their ability to evaluate risk. Instead, they relied heavily on ratings agencies to evaluate the quality of the underlying loans. But an inherent conflict existed in the rating process: Agencies received fees from the issuers they rated. Additionally, ratings agencies applied historically low mortgage default rates to the securities, enabling many securities to achieve AAA ratings.

The high ratings were illusory. They were based on the false assumption that continually increasing home prices made leverage sustainable. In fact, there was a serious housing bubble. Housing prices have increased in 60 percent of the years over the past century, showing that housing booms are often followed by housing busts.⁵ Given those cycles, the extraordinary increases in housing prices should have been a warning (see figure 4).

Investors had a large appetite for mortgage-backed securities. The vast majority of subprime loans were securitized (67.5 percent as of Q3 2008), which meant passing more than two-thirds of the credit risk through the capital markets to investors.

FIGURE
4

Appreciation was extraordinary, even compared with previous booms

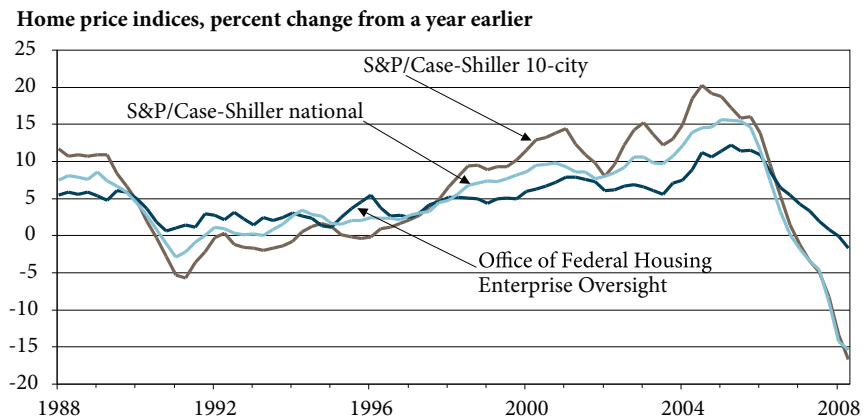


Source: Barth, Li, Lu, Phumiwasana, and Yago (2009).

As figure 5 demonstrates, the collapse began in 2005; by mid-2007 its existence was obvious to everyone. Whereas home prices increased in all states from 2001 to 2006, prices declined in 47 states from 2006 to 2008.

FIGURE
5

Collapse begins in 2005



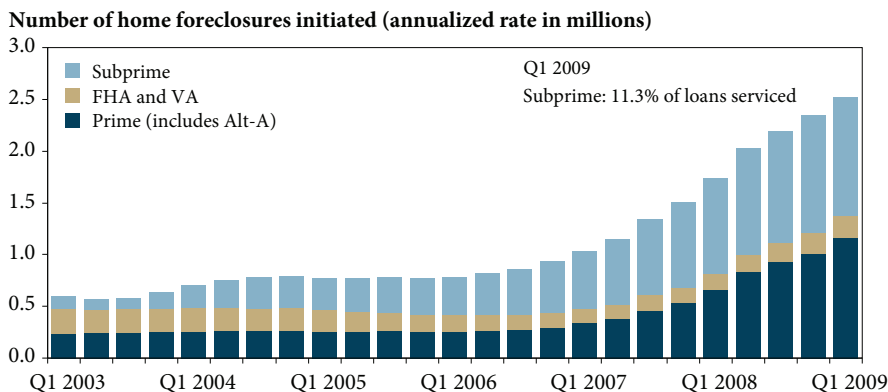
Source: Barth, Li, Lu, Phumiwasana, and Yago (2009).

Many homeowners, especially those who bought late in the boom, found their homes were worth less than the amount owed on their mortgages. With little equity in the homes, many borrowers with ARMs were unable to refinance, and foreclosures skyrocketed. From 2006 to 2008, 5.5 million foreclosures were initiated, with subprime mortgages accounting for more than half (see figure 6).

Just as mortgages' share of household debt reached a new high (see figure 7), financial firms carried a previously unseen degree of leverage.

FIGURE
6

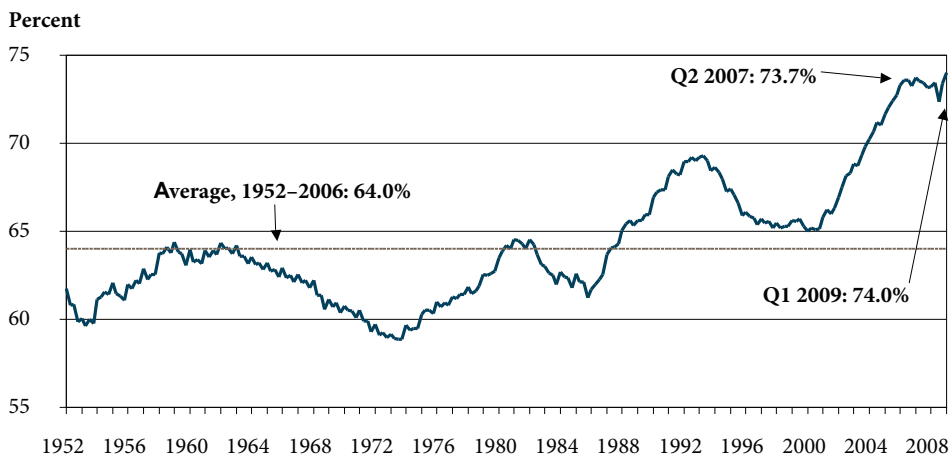
Subprime mortgages make up half or more of foreclosures since 2006



Sources: Barth, Li, Lu, Phumiwasana, and Yago (2009), Mortgage Bankers Association.

FIGURE
7

Mortgages as share of household debt still rising



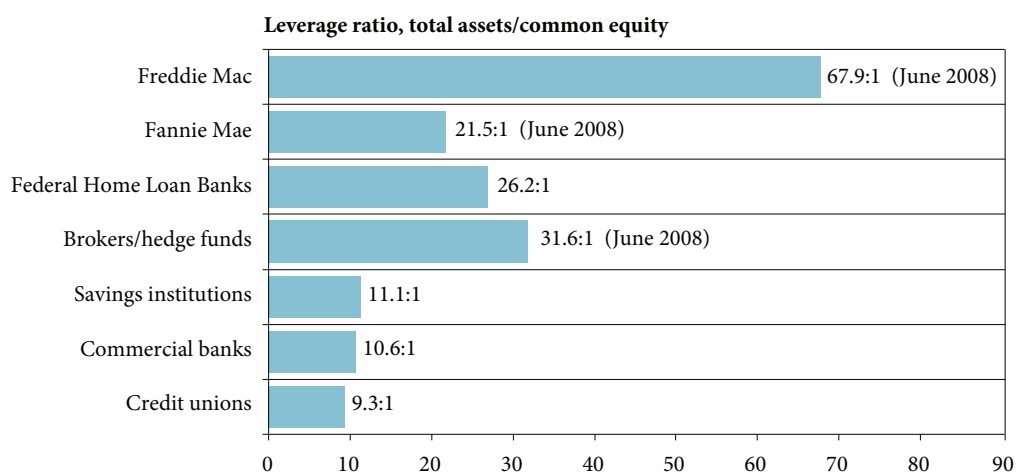
Sources: Barth, Li, Lu, Phumiwasana, and Yago (2009), Federal Reserve.

Lending effectively ground to a halt as credit and liquidity disappeared and firms hoarded cash. The fallout seeped into the general economy as credit spreads widened and uncertainty and fear rose.

In June 2008, leverage ratios of different types of financial institutions ranged from 9:1 to almost 68:1 (see figure 8). With so little capital supporting such risky loans, neither homeowners nor institutions could absorb the sudden, substantial losses. Financial stocks plummeted, losing slightly more than \$1 trillion in value from December 2006 to March 2009. After the rapid growth in subprime originations, subprime's share of all home loans declined more than 24 percent from 2006 to the second quarter of 2008. Lending effectively ground to a halt as credit and liquidity disappeared and firms hoarded cash. The fallout seeped into the general economy as credit spreads widened and uncertainty and fear rose.

FIGURE
8

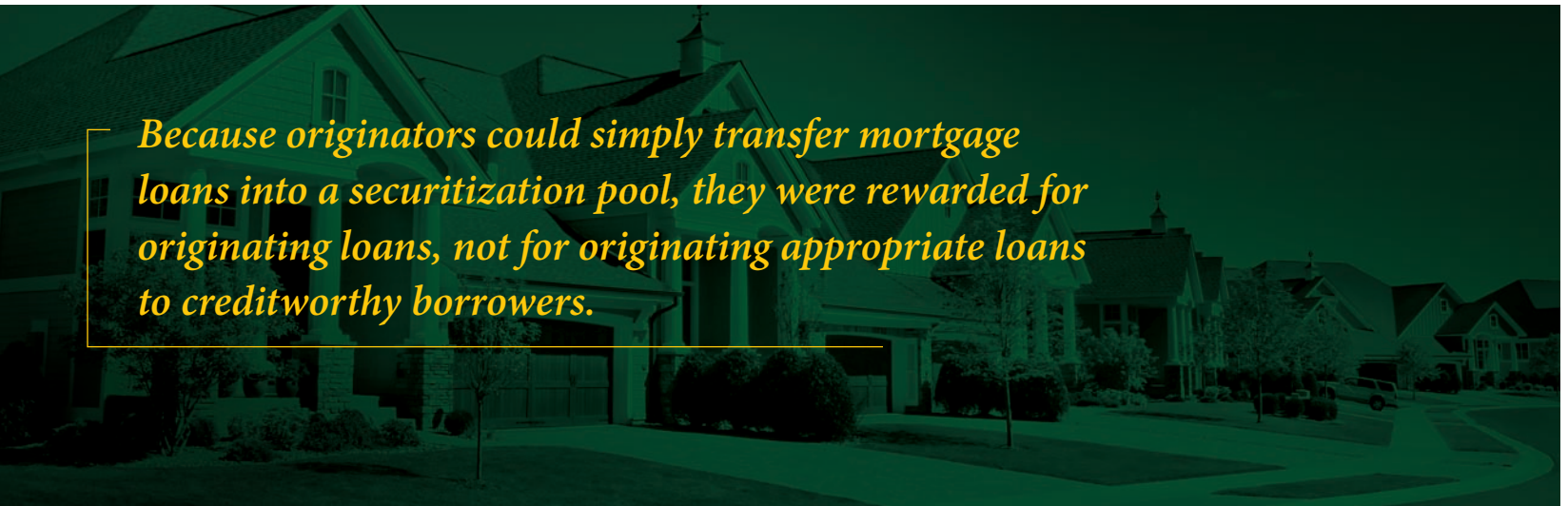
Leverage ratios of different types of financial firms, December 2008



Sources: Li, Lu, Phumiwasana, and Yago (2009), Federal Deposit Insurance Corporation, Office of Federal Housing Enterprise Oversight, National Credit Union Administration, Bloomberg, Google Finance.

In early October 2008, Congress approved the Emergency Economic Stabilization Act, which authorized the \$700 billion Troubled Asset Relief Program (TARP) to address the problem of banks' troubled assets. Bear Stearns had been acquired by JP Morgan Chase for a fraction of its market price just days earlier; Fannie Mae and Freddie Mac had in effect been nationalized; Lehman Brothers had been allowed to fail; AIG had been rescued; and Bank of America had purchased Merrill Lynch.

In this context, the Milken Institute Financial Innovations Lab looked beyond the crisis and considered alternatives for mortgage finance in the long run.



Because originators could simply transfer mortgage loans into a securitization pool, they were rewarded for originating loans, not for originating appropriate loans to creditworthy borrowers.

ISSUES & PERSPECTIVE

In retrospect, many factors contributed to the credit boom and bust that triggered the housing finance meltdown. Low interest rates resulting from lax monetary policy and global imbalances in savings helped drive up housing prices, creating an asset bubble. Investors' reach for yield allowed greater tolerance for leverage and a demand for riskier products in a low interest rate environment but without proper due diligence. An incentive/compensation system existed that encouraged excessive risk taking and poor corporate governance. Financial innovations such as excessively complex securitization and unregulated credit default swaps transferred risk to others too broadly and without recourse, weakening standards and increasing interconnectivity. Gaps and overlap in the regulatory structure left the government with no consistent, strategic approach to addressing the emerging crisis in the context of a housing price bubble.

When the bubble burst and housing values plummeted, deleveraging soared, which further depressed asset values and constricted credit. Even homeowners with solid credit had trouble finding willing lenders.

For capital to flow again, solutions must be identified that do not repeat past mistakes. Among those errors:

- *The misperception that the housing boom would continue.* As long as prices rose, the originate-to-distribute model seemed to convey little risk. Borrowers could always refinance and capitalize on their increased equity; lenders had no credit risk once the mortgages were securitized; investors assumed there would be few defaults because they relied on ratings agencies' evaluations of the loan pools; and ratings agencies assumed historic trends would hold and diversification would limit the number of defaults in any pool.
- *The lure of profit to be made from the huge demand for product and an unrealistic comfort with risk.* The originate-to-distribute model was a valuable funding source. With so much money chasing product, the market signaled an excellent opportunity for profit. Financial institutions responded accordingly and developed increasingly complex vehicles to meet market demand. As long as there were no catastrophes, the products expanded and engendered a false sense of security. During the Lab, Clark Judge of the White House Writers Group pointed out the natural tendency for mission creep, going "from kinds of risks that you've designed instruments for to risks that sort of look the same to saying risk is a commodity, all risks are the same, and pretty soon you've got an event such as we are going through now."
- *Lack of transparency in mortgages and in securitized pools.* As home prices outpaced income growth, many consumers took out second mortgages, often without informing the first lienholder. Tom Deutsch of the American Securitization Forum provided some startling statistics on 2006 residential mortgage-backed securities. While expected performance on the first lien may be based on 80 percent loan-to-value (LTV), the cumulative LTV (CLTV) may be closer to 90 percent. In the subprime market, the first-lien LTV was 88 percent, and just 55 percent had full documentation. In many cases, the full CLTV could not be determined because the second liens were "silent seconds." The vast majority of these mortgages were packaged into CDOs with less collateral than recorded.

TURNING HOMES INTO PIGGYBANKS

HOW BORROWERS USED SUBPRIME LOANS:

60% Cash-out refinancing **30%** New mortgages **10%** Rate refinancing

Once the loans were securitized, investors had no way of knowing the composition of the pool. To their and the market's detriment, they did not pursue trying to uncover this information, relying instead on the opinions of ratings agencies. When delinquencies and defaults began to emerge, the lack of transparency became even more problematic. Pools of assets could not be sold, and banks were reluctant to lend to one another because they needed cash to cushion themselves in the liquidity crunch and they had no confidence in each other's balance sheets.

Tad Rivelle of Metropolitan West Asset Management observed the irony in the enormous concern over the lack of transparency in hedge funds when, in fact, the real opacity lay in the more heavily regulated institutions. Lab participants further noted that this opacity complicates the process of unwinding toxic loans. It would be extremely difficult to determine the composition of pools given the multiplicity of servicers for any one vehicle.

- *Misaligned incentives.* As the originate-to-distribute process and functioning of the market became more complex, incentives became misaligned at several points, reducing the likelihood of positive outcomes. Because originators could simply transfer mortgage loans into a securitization pool, they were rewarded for originating loans, not for originating appropriate loans to creditworthy borrowers. The dramatic lowering of interest rates by the Federal Reserve in 2001-03 exacerbated the problem, allowing risk to be underpriced. Mortgages with little or no down payment and/or minimal verification of income reduced or eliminated risk for borrowers, mainly because of the U.S. system of home loans with no recourse for the lender. It's worth noting that securitization did not prove to be as problematic in the credit card or auto loan areas, where recourse holds.

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THE FINANCIAL INNOVATIONS LAB

At the time of the Financial Innovations Lab in October 2008, the crisis in the mortgage and credit markets was at full force. The White House, Congress, and the Federal Reserve were developing a variety of emergency measures to inject fresh capital into the banks, stem foreclosures, restore liquidity, and ease the credit crunch.

While the foreclosure rate is high among subprime borrowers, most continue to meet their obligations.

The Lab looked beyond the immediate concerns and considered financial strategies, structures, and products that could help revive the housing finance market, would not replicate the known problems with the existing models, and might help prevent future meltdowns. In separate sessions, participants focused on pinpointing specific mechanisms that would engage the capital markets, identifying products that would help restart and preserve affordable housing finance, and finding approaches that would reduce the adverse impact of foreclosures. The exploration of solutions continued at the 2009 Milken Institute Global Conference.

The discussion of **innovative capital markets solutions** reviewed what went wrong with the originate-to-distribute model and proposed ways to reboot the market with tighter lending standards, greater transparency, stronger due diligence, and better alignment of interests among all parties.

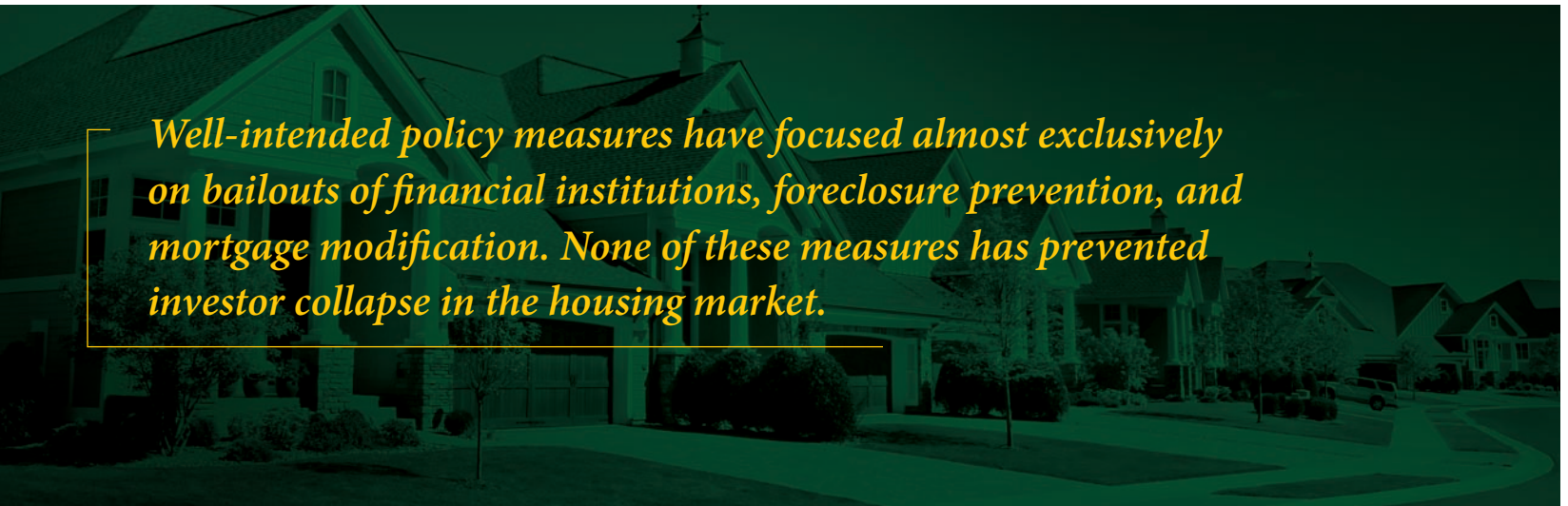
The discussion of **innovative solutions for affordability products** considered the need for continued capital access. For all their problems, subprime mortgages provided many marginal borrowers with access to valuable credit. Without the subprime loan markets, a few million individuals would have been denied loans and would not have become homeowners. While the foreclosure rate is high among subprime borrowers, most continue to meet their obligations. In fact, at the end of 2008, though troublesome and a serious concern, only 11 percent of all mortgages were delinquent, with just 3 percent in foreclosure, which is historically high.

Of course, many subprime loans did draw borrowers too far into debt and/or included unreasonable or confusing conditions. Lab participants considered a variety of products that might meet the financing needs more appropriately, including shared equity and shared appreciation structures, down-payment assistance programs, an opt-out mortgage system, the use of loan loss reserves, building savings into mortgage payments, and peer-to-peer lending.

The one immediate challenge participants did address was the increase in foreclosures. Lab participants explored several **means to reduce foreclosures and mitigate the collateral damage** to surrounding property. Among the solutions discussed were land banks, a lease-to-purchase mortgage product, and bankruptcy modifications.

Finally, **new and alternative sources of capital** were identified. Technology has enabled buyers and sellers to connect virtually without the need for third-party intermediaries, and several new platforms propose to link homeowners seeking capital directly to capital seeking opportunities.

In recent years, Milken Institute research and Financial Innovation Labs have emphasized that financial product complexity is not an innovation and that leverage cannot supplant appropriate credit analysis that underlies all successful and sustainable financial innovations. Ignoring these principles was an underlying factor in the mortgage and credit crisis. All innovations explored in this report adhere to two values: a return to innovation that increases capital access capable of sustaining economic growth and the restoration of fundamental credit analysis.



Well-intended policy measures have focused almost exclusively on bailouts of financial institutions, foreclosure prevention, and mortgage modification. None of these measures has prevented investor collapse in the housing market.

FINANCIAL INNOVATIONS FOR STABILIZING THE HOUSING MARKET

INNOVATIVE CAPITAL MARKETS SOLUTIONS

SOLUTION

1

Reboot securitization

Despite the problems that arose with the originate-to-securitize model, Lab participants agreed that liquidity provided by securitization is essential to a well-functioning housing market. Failed government regulatory and private lending policies drove homeownership to unsustainable levels. The challenge posed was how to reboot securitization and tap its strengths while preventing the issues that drove the system to crisis.

Well-intended policy measures have focused almost exclusively on bailouts of financial institutions, foreclosure prevention, and mortgage modification. None of these measures has prevented investor collapse in the housing market. The historical success of housing finance, however, was based on government policies that stimulated private capital to fund mortgages, mortgage-backed securitization, and housing-related credit. To encourage private capital to re-enter the market, mortgage lenders must improve asset quality and tighten underwriting, enabling a market recovery with a foundation for sustainable homeownership.

Several key recommendations emerged from the Lab discussion:

- *Return to strong due diligence and sound underwriting.* Lab participants returned repeatedly to the importance of ensuring the credibility of loans' underlying collateral. As Jeff Lubell of the Center for Housing Policy said, "Liar loans, teaser interest rates that expire ... these things are just lousy underwriting." Participants recommended eliminating some products (e.g., high LTV mortgages and no-doc loans) and carefully assessing borrowers' ability to pay. On the other hand, Catherine Godschalk of Self-Help cautioned against a blanket rejection of products. Her organization has a 25-year history of making high LTV loans to subprime low-income borrowers, she said, and its low loss rates are a direct result of solid underwriting.
- *Increase transparency and disclosure.* Access to information about both the underlying properties and the loans in a securitized pool is a necessity. Among the mechanisms discussed were:
 - *Added data reporting* to provide investors with as much detail as possible. Deutsch discussed Project RESTART, a new initiative of the American Securitization Forum, which proposes disclosing 135 data fields of pool and loan-level information at the initiation of a residential mortgage-backed securities transaction.
 - *Regular reports on performance* over time of underlying loans in mortgage-backed securities, another effort of the American Securitization Forum.
 - *Reports on valuations and trades in the secondary market* to follow real-time market value.
 - *Eliminating silent seconds* to protect against overleveraging. David Wyss of Standard & Poor's noted that Texas outlawed second mortgages and home equity loans until 1997. He suggested a less onerous provision requiring first mortgage holders to be notified of a second mortgage.

- *Loan comparisons* to help investors and borrowers make informed decisions. Disclosure should include the process for disseminating information as well as the type of information shared. Project RESTART could enable investors to compare loans and transactions across issuers.
- *Ensure all parties have some of their own funds at risk and do not excessively leverage.* One of the most consistent recommendations was ensuring retained interest at all transaction levels. Frank Altman of the Community Reinvestment Fund USA described his experience securitizing seemingly risky community and economic development loans. His firm has financed or funded more than a billion dollars in loans nationwide with no losses to investors. In addition to strong underwriting based on “credit, capacity, and character,” he attributes the lack of losses to risk sharing. CRF USA always maintains a piece of the action, and Altman says it gives his investors comfort knowing “we have put our own neck in the noose.” Obtaining representations and warranties from loan originators was also recommended, including possible repurchase obligations for issuers.
- *Streamline regulation.* Participants discussed the likely increase in regulation and expressed some concern about the unintended consequences of reactive regulation. Most agreed, however, that the existing patchwork regulatory system had failed to heed warning signals. Ellen Seidman of Shorebank and the New America Foundation emphasized the importance of regulatory “rules of the game” to keep products from going too far. Others suggested the possibility of a federal regulator for non-bank originators.
- *Be attentive to signs of impending problems, even when profits are growing, but target action appropriately.* Several participants noted that no one could have foreseen the magnitude of the housing crash. But Seidman and Godschalk pointed out that many in the community development world had issued warnings. They were witnessing borrowers obtaining loans that were beyond their means. Wyss said S&P had predicted that housing prices would decline. While price declines were in line with S&P’s downside estimate, default and foreclosure rates are far higher than forecast, a fact he attributed to the layering of multiple risks. Wyss recommended targeted action that battles bubbles, not the whole economy.

CRF USA always maintains a piece of the action, and Frank Altman says it gives his investors comfort knowing “we have put our own neck in the noose.”

SOLUTION	
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	<i>Promote a covered bond market</i>
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As noted, one of the challenges with securitization is the ability of the lender to transfer credit risk. Because home loans are non-recourse, lenders may seek to offload this risk. A covered bond is a dual-recourse product in which the issuer retains some credit but not interest rate risk, so it could serve as a complement to securitization.

COVERED BONDS ARE POPULAR IN EUROPE

The market for covered bonds is well-developed in Europe. In fact, Frederick the Great created the first, the Pfandbrief in Prussia in 1769, and in the 240 years since, there has never been a Pfandbrief default.⁶

They remain quite popular in Europe for public-sector loans and residential mortgages, with EUR 2.1 trillion (almost US \$3 trillion) outstanding at the end of 2007.⁷ Interest in the United States has been slower to develop, with Washington Mutual (now part of JPMorgan Chase) and Bank of America being the only institutions to have issued covered bonds at this time.

A covered bond is collateralized with loans that remain on the issuer's balance sheet. New debt is issued, backed by the mortgage loans. This debt is serviced by cash flow directly from the issuer in contrast to cash flow from the mortgages. Unlike securitization, if a loan becomes delinquent, the issuer must replace it. This continuing exposure to credit risk should help better align incentives and lead to more prudent underwriting while maintaining the liquidity necessary for a robust mortgage program.

Launching a covered bond market in the United States would demand that several conditions be met: regulatory clarity; a simple homogenous structure with high quality and standardized collateral; "blue chip" issuers, at least at the outset; deep and liquid markets to allow trading; competitive pricing; commitment from the broker/dealer and institutional investor communities; and discount window eligibility. Last year, the Treasury Department and several large banks (Bank of America, JPMorgan Chase, Wells Fargo, and Citibank), supported by the Securities Industry and Financial Markets Association, came together to back such an effort, and issuers prepared to ramp up issuance. Activity stalled when the financial meltdown broadened.

Yet, even before the calamity, challenges existed to building a U.S. covered bond market. Federal Home Loan Banks (FHLB), as government-sponsored entities (GSE), advance funds that effectively function as covered bonds; the borrower (the financial institution) keeps the mortgages on its books and must provide overcollateralization although the terms are shorter than for a covered bond. Because of the GSE involvement, these loans can be priced at a lower rate than private covered bonds. It's worth noting, however, that depository institutions that wish to borrow from FHLBs must buy equity worth 5 percent of the borrowed amount and post collateral of 120 percent to 130 percent of the loan. Covered bonds do not require equity buy-in, and the recommended overcollateralization is 105 percent.⁸

Alex Pollock of the American Enterprise Institute stressed that legislation would probably be needed to address the inherent conflict that would exist between the covered bond investors and the FDIC and other deposit insurers. Any claim on collateral by investors would be a loss to the insurer. Legislation would need to determine the specifics of the "cover pool" as well (e.g., size quality, asset mix, and oversight). In Europe, the United Kingdom and the Netherlands established such markets without legislation, while Spain has a weaker form of legislation but great overcollateralization and much

higher credit spreads. Germany and France have very tight legislation, and their markets have held up well. Michael Lea of Cardiff Economic Consulting noted that asset-liability matching provisions are key to the ongoing success of a covered bond market, and they are built into European legislation. This could pose a significant challenge to the establishment of a U.S. market, given the historical popularity of fully pre-payable fixed-rate mortgages.

There has rarely been a more challenging time to launch a new financial product. In fact, development of a U.S. covered bond market has definitely stalled amid attention to the broader financial crisis. Many of the rescue programs launched since the Lab have focused on restarting the securitization market (e.g., the Term Asset-Backed Securities Loan Facility, or TALF). S&P and Fitch Ratings proposed revised covered bond ratings methodologies to link a bond's rating more closely to the issuer's rating and to increase required overcollateralization.⁹ In June 2009, Rep. Scott Garrett (R-NJ) and Rep. Paul E. Kanjorski (D-PA) jointly introduced the Equal Treatment of Covered Bonds Act of 2009. As proposed, this legislation would help designate these bonds as a specific type of financial instrument and clarify their treatment in the case of an issuer's insolvency, allaying potential investor concerns. However, Congress seems unlikely to add covered bonds to its crowded agenda any time soon.

Despite the challenges, the covered bond may be a good product for these times. As a dual-recourse bond, it provides investor protection through both the issuing institution and the cover pool but does not totally rule out the insolvency of an institution and investor losses. By keeping credit risk with the issuer, it acts as an incentive for solid underwriting. As Mary Tingerthal of the Housing Partnership Network and James Tanenbaum of Morrison & Foerster stressed, the size and complexity of the mortgage market should make room for needed multiple financing options.

SOLUTION

3

*Expand mortgage credit institutions and borrower flexibility
(Danish model)*

Under this model, which originated in 19th century Denmark, when a mortgage issuer sells a mortgage, it is obliged to sell an equivalent bond with a maturity and cash flow matching the underlying home loan. While similar to securitization, it differs in the following ways: 1) The issuer of the mortgage bond remains responsible for all payments on them. 2) Mortgage holders can also buy back the bonds in the market and use them to redeem their mortgages in circumstances when interest rates rise and house prices fall, enabling borrowers to reduce the amount they owe as bond prices fall.

The bond's terms match the interest rate and maturity of the loan, and bonds are collateralized by pools of identical mortgages—generally 80 percent LTV ratio, fully amortizing, fixed-rate, 30-year loans with recourse. The issuer keeps the mortgage on its books, and if the borrower fails to pay, the issuer buys the mortgage out of the pool at the lower of par or market price. The bonds issued exactly match the loans made.

There has rarely been a more challenging time to launch a new financial product. In fact, development of a U.S. covered bond market has definitely stalled amid attention to the broader financial crisis.

As Alan Boyce of Absalon noted during the 2009 Milken Institute Global Conference, this approach combines characteristics of both covered bonds and securitization. Like standard covered bonds, the Danish instruments keep credit risk with the loan originators. Similar to securitization, the system creates tradable instruments, facilitating liquidity.

All bonds are tradable and transparent; the price can be tracked daily. Borrowers can monitor movement, and if interest rates rise, they can take advantage of Denmark's special feature: the buyback option. This enables borrowers to repurchase their loans, providing flexibility. If a mortgage's rate rises, the corresponding bond declines in value, allowing the borrower to purchase it at a reduced rate and gain equity in the home. Borrowers can then obtain a new, smaller mortgage with a higher coupon rate. This approach limits the growth of negative equity in periods of declining home values.¹⁰ The buyback option is exercised frequently: In 2001-2005, as yields fell from the 6 percent to 7 percent range to the 4 percent to 5 percent range, almost 100 percent of mortgages were prepaid.¹¹

Implementing this type of product in the United States would require several adaptations, including converting the GSEs into principle of balance guarantors only; allocating credit risk between the originator and the federal guarantor; entitling borrowers to refinance their loans at the market value of the mortgage, based on transparent bond pricing; establishing full recourse for all mortgages; and establishing a single regulator for the system.¹²

Many of the features that are central to the system (e.g., standardized mortgages, higher down payments, and full-recourse loans), could easily be built into a standard securitization model. The potential of the Danish program is worth exploring in more depth.

INNOVATIVE SOLUTIONS FOR AFFORDABILITY PRODUCTS

SOLUTION	
4	<i>Foster shared equity</i>

Currently, homeownership is an all-or-nothing proposition—renting at zero percent ownership or owning 100 percent of the risk and reward. Shared equity is a concept that implies reduced assets in exchange for reduced liability. It is often referred to in two contexts. One approach attempts to balance wealth generation for individual owners by preserving affordable housing. Some form of subsidy, either a tax benefit or a direct subsidy, reduces the price of the home in exchange for a share of appreciation. There may be limits on the resale of property in an area and/or the appreciation of housing values. An alternate approach is the private-sector, shared-equity model in which investors provide a share of the housing cost in exchange for a portion of appreciation (a model for which appears below). Both approaches foster access to homeownership at reduced levels of debt, and lenders reduce their risk by maintaining a share of ownership.

Currently, homeownership is an all-or-nothing proposition—renting at zero percent ownership or owning 100 percent of the risk and reward. Shared equity is a concept that implies reduced assets in exchange for reduced liability.

The form of shared equity that aims for wealth generation generally includes three models: limited equity cooperatives, community land trusts, and deed-restricted housing.¹³ During the Lab, Jim Gray of NCB Capital Impact argued that these products ensure occupancy, promote ongoing maintenance, avoid foreclosure, and are effective, sustainable, and durable. The community land trust (CLT) model involves a nonprofit organization established to hold land so that property built on it is perpetually affordable to the designated community. CLTs often are used to extend homeownership in times of rising housing costs by keeping the rights to the underlying land in the hands of a separate entity and not passing along appreciated values to new purchasers.

Under another approach, the shared appreciation mortgage (SAM), the lender agrees to accept some or all payment in the form of a share of the increase in property value. A new SAM proposal by Andrew Caplin, Noel Cunningham, Mitchell Engler, and Frederick Pollock¹⁴ was mentioned during the Lab. Those authors describe the SAM as a deferred-payment loan and argue that this structure spreads risk more effectively and increases affordability. In lieu of monthly payments, borrowers repay a lump sum upon termination. If the value of the house has risen, that sum represents a share of the appreciated value, greater than what would be owed under a traditional mortgage. But if the value declines, the borrower pays back only the original principal. The borrower has saved monthly payments and interest expenses; the lender loses the periodic interest payments but gains upside if the house increases in value. In effect, the lender has obtained equity in the property.

The authors acknowledge that SAMs would be most appealing to people who plan to stay in one house for a long time; the longer the holding period, the lower the cost of capital to the borrower. They argue for a shorter term than the traditional 30-year mortgage, and they suggest that the share due at termination should increase the longer the loan has been outstanding. These adaptations would address some of the problems faced by the Bank of Scotland with its SAM program in the United Kingdom in the 1990s. In that case, lengthy terms (until the death of the last co-borrower) created uncertainty about potential returns and reduced investor interest. Those SAMs were taken off the market in 1998.

The authors believe investors would be very interested in SAM-backed securities because aligned interests would result in appropriate pricing. Because the amount owed on a loan is directly related to the property's value, investors would demand accurate valuation of the underlying collateral. The key challenge noted is uncertainty about tax treatment. An earlier Treasury ruling required investors to pay taxes on SAM income before receiving payment, though borrowers could not deduct the payment until it was made. The authors suggest either allowing both borrower and lender to accrue contingent interest during the SAM term or recharacterizing SAMs as equity instead of debt. Neither is simple, though, and both would have unintended consequences. Yet given the model's interesting approach to risk sharing, it is worth exploring.

A related variation is the home equity fractional interest security (HEFI) as designed by John O'Brien of the University of California, Berkeley, Haas School of Business. The HEFI would facilitate financing support by a passive equity co-investor and thus reduce the overall cost of a new home purchase. For distressed homeowners, the proceeds from the HEFI security would be used for partial satisfaction

of an existing lien or consideration for forbearance or mortgage restructuring by an existing lender, helping the homeowner avoid foreclosure.

SOLUTION

5

Allow down-payment assistance programs

Down-payment assistance programs (DAPs) provide first-time homeowners with funds to cover their down payment. A down payment is often a new buyer's highest hurdle, and these programs allow borrowers who might otherwise be excluded to enter the housing market. However, the conditions under which down-payment assistance is offered vary, and whether the buyer or seller benefits depends on the program itself.

DAPs primarily fall into two categories—nonprofit and government agency. Among the nonprofit DAPs, the majority have been seller-funded (e.g., a nonprofit makes a grant to the potential buyer and receives a contribution from the home seller, generally a developer). While DAPs can help increase homeownership, the seller-funded model definitely benefits the seller and developer more than the borrower. The sales price is often increased by the seller to compensate for the sum paid to the lender, resulting in high LTV ratios and reducing the borrower's equity.

During the Lab, the Hudson Institute's John Weicher, who also is a former FHA commissioner, cited a federal Government Accountability Office (GAO) study of FHA-insured loans.¹⁵ The study found that, holding other variables constant, DAPs generate higher default rates and insurance claims than similar loans without the assistance. Seller-funded DAPs performed the worst, with the probability of a loan going into default 76 percent higher and the probability of delinquency 110 percent higher than loans with no assistance. DAPs without seller funding were less problematic but were still 49 percent more likely to go into default and 21 percent more likely to be delinquent.

Several explanations exist for the weaker performance of DAPs. Those seeking assistance are likely to be lower-income, have lower credit scores, and/or have fewer resources to fall back on. The borrowers' reduced equity may play a role because they have less at risk. Earlier GAO research found that, again controlling for other factors, higher LTV ratios correlated with higher claims.¹⁶

The Housing and Economic Recovery Act of 2008 prohibited seller-funded DAPs, though it allowed government agency DAPs and nonprofit programs that do not rely on seller financing. Earlier this year, the FHA Seller-Financed Downpayment Reform Act of 2009 was introduced in the House, proposing revised requirements for seller-funded DAPs. No action has been taken on this bill, and a return of seller-funded DAPs seems unlikely in the near future. Yet with increased risk mitigation efforts, such as incorporating information on down-payment assistance when underwriting loans and mandating mortgage counseling, DAPs could still be a good model to support homeownership among low- and moderate-income Americans. As Altman, of the Community Reinvestment Fund, noted, local governments can use Community Development Block Grant funds for down-payment assistance programs. Better-designed down-payment assistance programs that would not subsidize developers to the detriment of potential owners could avoid some of these problems.

SOLUTION

6

Introduce an opt-out home mortgage system

The opt-out home mortgage is an intriguing new product (proposed in a recent paper by Michael Barr, Sendhil Mullainathan, and Eldar Shafir) that could help combat the problem of borrowers receiving loans with terms that they don't understand and that are inappropriate to their circumstances.¹⁷ Behavioral finance shows that when given a great deal of information, people often default to the status quo rather than analyze the material and make an affirmative choice in their best interest. This would indicate that increased transparency and disclosure and the accompanying increase in information about mortgage products might not have the desired effect of encouraging better decisions.

The opt-out product would respond to this tendency and help people act in their best interest. Under this model, lenders would be required to offer standard mortgages with clear terms and solid underwriting. Unless borrowers opt out and choose an alternate product, they would receive the standard mortgage. If a borrower does opt out, the lender would have to provide additional disclosure and face more legal exposure.

The authors recognize that a standard mortgage may not be the most appropriate product for some borrowers. They also value the importance of financial innovation in creating a variety of products for different audiences. For instance, lower-income and new entrants to the housing market may not have the large down payments required. As a possible solution, the authors suggest including a less traditional mortgage (e.g., a five- or seven-year ARM) in the pool of default choices. However, unlike the subprime mortgages previously offered to these borrowers, the terms would be clear at the outset. This model would be integrated into President Obama's proposed Consumer Financial Protection Agency.

SOLUTION

7

Leverage loan loss reserves

A loan loss reserve is a dedicated sum that a lender holds in anticipation of losses. These reserves are required for regulated institutions. They enable a lender to extend credit to customers perceived to be riskier by providing a backstop. Capital access programs, deployed in more than 25 states and several municipalities, use loan loss reserves to advance small-business lending. Under this structure, the government, the borrower, and the lender contribute to a loan loss reserve. As an example, the California Capital Access Program holds a reserve of 8 percent—2 percent each from the borrower and lender and 4 percent from the agency administering the program. If a borrower defaults, a participating lender can tap its portion of the reserve.

Behavioral finance shows that when given a great deal of information, people often default to the status quo rather than analyze the material and make an affirmative choice in their best interest.

Community banks are an untapped resource that could increase their mortgage lending if risk could be mitigated. These institutions know their markets, perform sound underwriting, and, as a rule, suffer fewer losses than the market as a whole.

As the mortgage meltdown struck its urban neighborhood, Shorebank used a loan loss reserve to support a rescue refinance program for borrowers in or near foreclosure. The initiative offered 30-year, fixed-rate loans to homeowners whose initial rates were about to reset. A program-related investment (PRI) from the MacArthur Foundation enabled the bank to undertake this effort, providing the loan loss reserve protection in case of higher-than-expected defaults.

Community banks are an untapped resource that could increase their mortgage lending if risk could be mitigated. These institutions know their markets, perform sound underwriting, and, as a rule, suffer fewer losses than the market as a whole. (In 2008, the failure rate among banks with under \$1 billion in assets was one-seventh the failure rate for banks with assets over \$1 billion.¹⁸) However, rapidly rising foreclosures are devastating their neighborhoods and pulling down all home values, and job losses are generally higher in these areas. Community banks and lending institutions are being squeezed between increased demand and decreased supply of capital to deploy as their traditional funders—major banks and foundations—constrict credit and grants. Contributions to loan loss reserves by other parties can ease risk for lenders and enable them to continue lending amid turmoil.

SOLUTION

8

Build a savings plan into mortgage payments

Lower-income borrowers face difficulties not only accumulating the down payment needed for a mortgage but also paying the ongoing costs of homeownership. Building savings into mortgage payments could help address this challenge. Lab participants discussed several models. Seidman, of Shorebank, highlighted a St. Louis community development corporation's mortgage product with an escrow account that requires a small monthly cash contribution in addition to coverage for insurance and taxes. As the savings build, the homeowner can use the funds for home maintenance or for mortgage payments in the event of a layoff or other financial shock. Any funds left when the mortgage is paid off are returned to the homeowner.

Dan Sheehy of Impact Community Capital cited rent-to-own programs that incorporate similar equity-building opportunities. Lea, of Cardiff Economic Consulting, noted that Europe and Thailand have linked savings and loan programs that require savings and reward the borrower with reduced mortgage rates when they reach certain benchmarks. Such mechanisms to facilitate savings in connection with homeownership could be useful in fostering the affordable housing market.

MEANS TO REDUCE FORECLOSURES AND MITIGATE COLLATERAL DAMAGE

SOLUTION

9

Expand use of land banks

A land bank enables state and local governments to acquire, preserve, convert, and manage foreclosed and other vacant and abandoned properties. By permitting the relevant agency (public or nonprofit) to aggregate and obtain title to these properties, this model creates a usable asset that can help reduce blight, generate revenue, and facilitate affordable housing, making it a solution to both affordability and foreclosure challenges.

The Genesee County Land Bank is a case in point. During the Lab, County Treasurer Dan Kildee highlighted the woes of Flint, Michigan, in Genesee County, a weak market with a declining population (a 38 percent drop from 1970 to 2000), a rising unemployment rate, a city government that was in receivership from 2002 to 2004, and abandoned properties representing 12 percent of housing stock.¹⁹ Facing these circumstances, Kildee led an effort to reengineer the county's land assembly, tax collection, and foreclosure process to gain control of rapidly depreciating property. Rather than sell the receivables of tax liens from foreclosed property, the county borrows the receivables and acquires, manages, demolishes, and redevelops tax-foreclosed properties. This reduces the inventory of vacant property, lowers land acquisition costs, enables parcel consolidation and urban planning, and creates a potential benefit to new homeowners by lowering overall development costs.

By operating at a countywide level, the land bank is able to pool a large number of properties and cross-collateralize them, reducing risk and enhancing positive impacts on urban revitalization and homeownership. A Michigan State University study of 400 Genesee County Land Bank properties found that the process increased the value of the surrounding landscape by \$112 million at a cost of just \$3.5 million.²⁰

In Genesee County, several legislative changes were required, including reforming the tax foreclosure process, providing land bank authorities with a variety of development tools, and enabling all land bank properties to be classified as “brownfields,” which are abandoned or underused industrial and commercial facilities available for re-use. The particular adjustments would vary by locale. In Michigan, a Land Bank Fast Track Authority was created to make the process more efficient. Land Bank properties are tax-exempt, can sell at less than fair market value, and are subject to an expedited 90-day quiet title action to establish ownership by the land bank. The Genesee County Land Bank was the state's first, funded by tax foreclosure fees, land sales revenue, and tax capture.

Lab participant Lea questioned whether the program could be used to purchase properties not yet in foreclosure to obtain economies of scale during redevelopment. Kildee highlighted the example of an abandoned Flint hotel, which will generate tax increment financing to support the acquisition and development of additional properties. He also described the land bank's purchase

of Delphi Corporation's first world headquarters, holding it as tax-exempt property, redeveloping it, and returning it to the tax rolls. Lubell, of the Center for Housing Policy, suggested that the land bank model would be a good application for the expected \$4 billion in Neighborhood Stabilization Program (NSP) funds awarded to cities and states.²¹

Kildee stressed that the model works much better in a diversified market where at least some properties are functioning. He also said it was critical not to disaggregate properties and to set reasonable public expectations.

SOLUTION

10

Roll out a lease-to-purchase mortgage product

The lease-to-purchase product aims to stabilize neighborhoods with large foreclosure rates and enable first-time homebuyers and those with impaired credit to move toward ownership.

Another product that could both remediate the impacts of foreclosure and increase affordable housing is Self-Help Credit Union's lease-to-purchase product. As Godschalk described it, the product aims to stabilize neighborhoods with large foreclosure rates and enable first-time homebuyers and those with impaired credit to move toward ownership.

Self-Help provides direct home lending, lending to small businesses and nonprofits, and commercial real estate lending. It also runs a secondary market program with Fannie Mae that has purchased about \$4.5 billion in loans over its 10-year history, primarily mortgages for low- to moderate-income borrowers in 48 states. These are all 30-year, fixed-rate, full-documentation loans securitized by Fannie Mae with Self-Help maintaining the credit risk. The average borrower's income is 64 percent average median income (AMI), with 40 percent being minorities and 42 percent being female heads of household. As of the second quarter 2008, the serious delinquency rate was 2 percent.

The lease-to-purchase product is an adaptation of a product using the secondary market program. Local NSP-funded nonprofit agencies screened by Self-Help acquire foreclosed properties using an assumable mortgage provided by a local bank partner. Banks sell the mortgages in the Self-Help/Fannie Mae secondary market. Self-Help retains the credit risk, supported by a loan loss reserve, initially targeted at 10 percent. The agencies identify tenants based on their ability to afford the lease payment (no credit checks). Tenants must receive financial counseling and participate in a forced savings program. They have the right to assume the mortgage within one to five years, an assumption based on the standard underwriting criteria of the program.

Self-Help's pilot program launched in Charlotte, North Carolina, where Self-Help is acting as the nonprofit to acquire and manage the property, purchased for 40 or 50 cents on the dollar. They are partnering with a local Housing Partnership Network member for credit counseling, enabling each party to do what it does best. A significant Chicago pilot is now in development with the aim of deploying up to \$60 million over time. The local partner, Mercy Portfolio Services (an NSP grantee developed out of Mercy Housing), will include the lease-to-purchase product in its portfolio of tools used for the disposition of foreclosed properties. Organizations in Atlanta; New Haven, Connecticut; and Minneapolis are also considering the product; Atlanta aims to use it to preserve affordability in the areas surrounding the city.

Lease-to-purchase faces several challenges, including identifying nonprofits capable of handling scattered site property management, identifying the neighborhoods in which to work, finding the right tenants, and taking the program to scale. Several participants noted that a tenant may not qualify for financing at the end of five years or may choose not to purchase, leaving the property on the nonprofit's balance sheet.

SOLUTION

11

Permit bankruptcy modification to enable restructuring

Bankruptcy modification is one approach to restructuring that was hotly debated as foreclosures began to multiply in late 2008 and 2009. Opposed by many for creating a moral hazard, bankruptcy modification is viewed by proponents as a more cost-effective alternative to foreclosure. In April 2009, the U.S. Senate defeated an amendment to the Helping Families Save Their Homes Act that would have allowed bankruptcy judges to modify mortgages under certain conditions. Citigroup was the only bank to support the amendment. Concerns about bankruptcy cram-downs—involuntary reorganization plans imposed by the court—focus largely on the terms, which run counter to stimulating investor interest in mortgage finance.

However, when the Lab occurred, the debate was still ongoing, and some interesting data were discussed. Adam Levitin of Georgetown University Law Center described the results of his research on the subject. As he noted, bankruptcy has been a significant mechanism for alleviating consumer financial crises for more than 110 years. When an individual faces financial distress, bankruptcy is one approach to modifying expenses. Bankruptcy judges can change the terms of debts—write down the principal, extend the term, change the amortization schedule, reduce the interest rate, etc. However, under current law, the only debt that cannot be modified is the mortgage on a single-family principal residence. If a homeowner cannot make the monthly payments and the lender is unwilling to negotiate, the property will go into foreclosure even if the borrower files bankruptcy.

In 1978, when Congress enacted the current bankruptcy law, it was thought that if borrowers were able to file bankruptcy and alter their mortgage terms, lenders would be more reluctant to make home loans, reducing homeownership. The law allows loans on vacation homes and rental properties to be modified because there was no concern about lenders refusing to make loans for these properties.

Levitin explored this assumption by examining a large sample of bankruptcy filings from 2001 (nationwide) and 2007 (in Riverside, California, an area with one of the highest foreclosure rates in the country). He determined that lenders would lose just 25 percent under bankruptcy and up to 60 percent under foreclosure. If the possibility of bankruptcy truly impacted lending, then the pricing of multifamily mortgages (where bankruptcy modification is allowed) should be higher to accommodate the increased risk. Levitin collected rate quotes on two-family residences versus single-family residences. The market was indifferent to bankruptcy modification risk.

Modifications, unlike foreclosures, allow a slow, steady trickle of losses that are predictable and stem larger, sudden losses.

Modifications, unlike foreclosures, allow a slow, steady trickle of losses that are predictable and stem larger, sudden losses. Given the increased cost of foreclosure over bankruptcy, why aren't lenders willing to modify mortgages? Levitin believes the answer lies in the incentive systems for mortgage servicers and securitization. Under most securitization structures, the servicers determine whether to modify a loan or foreclose. Sometimes, the securitization trust controls the decision, and occasionally modifications are banned or capped at a certain portion of the securitization pool. Among the explanations for the lack of modifications are difficulties contacting borrowers, real estate mortgage investment conduit (REMIC) rules, and requirements for servicers to repurchase loans they modify. However, Levitin found that none of the problems was widespread enough to account for the lack of modifications, given the seeming financial incentive to do so.

The cause is servicer compensation, he concluded. Servicers are not reimbursed for any costs incurred in a loan modification, but they are able to recover expenses incurred in a foreclosure. President Obama's Making Home Affordable program, launched in early 2009, recognized this challenge and provided a variety of financial incentives for servicers to encourage reasonable modifications. The incentives include both up-front payments and ongoing rewards for successful modifications (i.e., the borrowers continue to meet loan payments). Subsequent additions to the program offered foreclosure alternatives such as incentives for short sales or deeds in lieu of foreclosure for borrowers unable to participate in the loan modification program.

Jason Bordoff of the Brookings Institution noted that if bankruptcy modification were extended to principal residences and the rate of bankruptcy grew dramatically, the market would presumably price for this, reducing access to mortgages. Levitin responded that many of the people who opted for bankruptcy might have gone into foreclosure anyway. He acknowledged the potential moral hazard of people who are capable of making payments opting for bankruptcy instead, but he didn't consider this a huge risk because of the downsides of a bankruptcy filing.

Wyss, of S&P, said servicers have two concerns about modifications: that they would just delay foreclosure and that cases involving two mortgages involve two servicers as well. Levitin pointed out that bankruptcy actually addresses the issue of second liens because it dismisses the claim. As to the risk of delayed foreclosure, he cited a study showing that modifications that reduce the monthly payment have an 83 percent success rate.

Since the Lab, however, the Office of the Comptroller of the Currency (OCC) and the Office of Thrift Supervision (OTS) have reported rising re-default rates on modified mortgages, citing the ongoing economic downturn, poor initial underwriting, and the continued presence of excessive leverage among borrowers. The agencies acknowledge that the most recent data (first quarter 2009) does not reflect actions taken under the Making Home Affordable and FHA Home for Homeowners programs—both of which called for reduced monthly payments—or their directives to servicers to review completed modifications to ensure they are affordable and sustainable.²²

NEW AND ALTERNATIVE SOURCES OF CAPITAL

SOLUTION
12*Enable individuals to provide capital through new platforms*

As traditional credit providers have tightened the strings, a variety of alternate lenders are increasing activity. While they may not be specifically targeted at affordable housing, they increase the options for capital access. Peer-to-peer lending is a nascent industry in which individuals lend directly to one another. Prosper is the best-known player, having brokered \$178 million in loans for debt consolidation, autos, home improvements, and education since 2006.²³ The company is in a quiet period while awaiting SEC registration to sell securities but was briefly granted an intra-state exemption by the California Department of Corporations in late April 2009. During this period, Prosper demonstrated its Open Market initiative, which will provide an online secondary market in addition to the peer-to-peer transactions. Financial institutions list whole loans with maximum yield, Prosper lenders bid for listings, and Prosper issues new notes to winning bidders. The originator maintains the relationship with the borrower, and Prosper services the lenders. Lenders can resell as often as they please. Initially, the company plans to offer the platform for its current loan products but foresees extending it to mortgages.

This system would preserve many of the benefits of the originate-to-securitize model while addressing some of its problems:

- It would provide ready liquidity, enabling financial institutions to continue to extend credit.
- It would provide investment opportunities to a wide range of institutional and individual investors.
- It would maintain credit quality because listing institutions would be carefully vetted and registered, borrowers must have a minimum credit score of 640, and loans would be rated by Prosper based on historical loan performance data.
- It is transparent because lenders have full details on loan composition and performance, information on the originating institution, and borrowers' credit history (minimum credit scores and collateral will be required).
- Complexity would be dramatically reduced; the securities offered on Prosper would be backed by specific loans.

Another new offering is Primarq, a proposed integrated capital market system that facilitates equity sharing. Homeowners seeking to finance their down payment or monetize untapped equity would list the offering on a secure network, providing specific, standardized information about the property and financing requirements. Accredited investors would register their interest, and the system would use an auction protocol to propose a match, provide due diligence to the investor, and help close the transaction. A series of standard deal structures would provide consistency. Additionally, the market would provide a secondary trading platform to foster ongoing liquidity. Similar to peer-to-peer lending, this equity market is transparent and simple and extends capital access.



Prudent application of financial innovations, supported by realigned and proper incentives, will enable us to move beyond the crisis and improve the system for financing homeownership.

CONCLUSIONS

In the months since the Lab, President Obama has rolled out several programs to assist struggling homeowners and financial institutions. Some of these institutions have begun to rebuild their capital bases and have repaid government loans. However, others are using federal backstops and safe harbors to extend dependency on government support. Many fear the consequences of potential losses due to fallout from the recession, even though the worst appears to have passed. Others worry about possible collapses in the future if systemic changes are not made. Congress is considering the president's proposals for financial reform.

Beyond the recommended steps for the mortgage market, the crisis has necessitated a review of the country's financial regulatory oversight. Several systemic reforms are under discussion to help prevent or mitigate future credit booms and busts. These include:

- Regulatory focus on systemic risk
- Liquidity regulation that takes into account the maturity mismatches due to short-term funding of longer-term, illiquid assets
- Countercyclical regulation
- Addressing the concern that some financial institutions are too big to fail by, for example, taxing a financial institution's contribution to systemic risk
- Greater transparency by requiring the clearing and settling of credit default swaps through clearinghouses or on exchanges
- Changing fee structures for credit-rating agencies
- Requiring mortgage originators and borrowers to have capital or equity at risk
- Modifying incentive/compensation systems to discourage excessive risk taking
- Reforming the structure of the regulatory system
- Establishing greater cooperation among regulators in different countries

The specific solutions discussed at the Lab could contribute to rebuilding the housing finance market. Prudent application of financial innovations, supported by realigned and proper incentives, will enable us to move beyond the crisis and improve the system for financing homeownership.

APPENDIX I

Financial Innovations Lab Participants (Affiliations at time of Lab)

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ENDNOTES

1. James R. Barth et al., *The Rise and Fall of the U.S. Mortgage and Credit Markets: A Comprehensive Analysis of the Market Meltdown* (John Wiley & Sons, Inc., 2009), 50.
2. Ibid., 25.
3. Ibid., 50.
4. Ibid., 62.
5. The housing price calculation is based on the dataset put together by Robert Shiller. The Excel file is available for download at www.econ.yale.edu/~shiller/data/fig2-1.xls (accessed August 17, 2009).
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20. Ibid., 4.
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