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Outlook Update: US State Housing Finance Agencies Outlook Revised to Stable

HFAs have evolved to meet the demands of the new lending environment

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Moody's outlook for US state housing finance agency sector is stable. The outlook expresses our expectations for the fundamental credit conditions in the sector over the next 12 to 18 months.[1]

» **We have revised our sector outlook to stable from negative as HFAs have diversified their business models to address their loan financing challenges**. In order to remain competitive during the economic and housing downturn, HFAs diversified their loan financing strategies, utilized new bond structures to lower borrowing costs, and lent to new customer bases for both their single family and multifamily programs. We expect these changes to stabilize the HFAs, as they now have the capability to finance loans in a variety of mortgage and interest rate environments.

» **HFAs' asset positions and profitability remained solid during the downturn and are trending upwards**. HFA asset-to-debt ratios increased in 2011 and 2012 after holding firm during the downturn. HFA profitability declined somewhat during the downturn due to low investment returns and higher than usual delinquency rates, but profitability improved in 2012 as full spread mortgage loans continue to produce profits, loan sales to the secondary market produced fee income, and refundings produced savings. These positive trends are likely to continue going forward as profitability continues to fuel asset accumulation, HFAs continue to de-leverage, and mortgage insurance covers the bulk of losses due to foreclosures.

» **Counterparty credit quality has stabilized. Stress tests indicate that HFAs can absorb the new, lower bank and primary mortgage insurer (PMI) ratings**. In 2013, we revised the outlook on the US Mortgage Insurer Sector to positive, stabilized the outlook of the US Banking Sector, and revised the outlook on the United States' Aaa rating to stable. Many of the individual company ratings in the mortgage insurance and banking sectors have also steadied. The ratings in these sectors remain well below their pre-recession levels, but stress case cash flow and loan loss tests indicate that the HFAs can withstand significant haircuts to the payment capacity of these counterparties.

[1] A negative sector outlook indicates our view that fundamental credit conditions will worsen. A positive outlook indicates that we expect fundamental credit conditions to improve. A stable sector outlook indicates that conditions are not expected to change significantly. Since sector outlooks represent our forward-looking view on conditions that factor into ratings, a negative (positive) outlook indicates that negative (positive) rating actions are more likely on average.

- **Home prices are increasing which will reduce losses for HFA portfolios**. Median home prices are rising in states with Moody's-rated HFAs and Moody's Analytics anticipates continued improvement. While rising home prices reduce the losses for HFAs, median home prices are not projected to return to peak levels until 2016, which means losses will continue to occur.
- **We expect HFA delinquencies to remain relatively high in the near term, but HFAs' balance sheets are strong enough to absorb them going forward**. We expect the unemployment rate to continue to slowly decline through 2013 and 2014, but remain above 6.5%.[2] HFAs will continue to experience relatively high and/or rising levels of delinquencies and foreclosures as new delinquencies enter the pipeline and HFAs work through their backlog of seriously delinquent loans. While this will continue to pressure HFAs in the near term, loan loss stress tests show that HFAs can absorb probability of default rates and price declines that are significantly higher than the current levels they are experiencing.

HFA's New Business Model is More Flexible and Nimble

HFAs diversified their business models during the economic and housing market crises in order to address the loan financing challenges that emerged during this period. Beginning in late 2008, HFAs faced difficulties financing loans by issuing tax-exempt mortgage revenue bonds (MRBs), their traditional business model, because MRBs yields were not low enough to allow HFAs to offer mortgage loans at competitive rates to first time homebuyers.[3] In 2010 and 2011, HFAs were able to issue bonds at below market rates under the US Treasury's New Issue Bond Program (NIBP) which allowed them to remain competitive in the mortgage market. Recognizing that a new solution would be needed post-NIBP, HFAs developed new loan financing strategies, some of which make use of the bond market and others that do not, in order to stay active in the affordable housing market. Going forward these strategies can be interchanged with MRBs to achieve the highest volume of loan originations and the best financial outcome.

Exhibit 1 below compares MRBs with two newer strategies, the mortgage backed securities (MBS) pass-through bond structure and loan sales to the secondary TBA market or sales to Government Sponsored Entities (GSEs) such as Fannie Mae or Freddie Mac. The exhibit also indicates which economic environment may be the best fit for each model and illustrates how HFAs now have loan financing strategies that fit a number of market scenarios.

EXHIBIT 1

HFAs Gain Flexibility by Utilizing a Range of Business Models

Loan Financing Mechanism	Description	Key Features	Best Fit Scenario
Tax-Exempt MRBs	HFAs issue semi-annual pay, tax-exempt bonds and use the proceeds of the bonds to purchase whole loans or MBS.	» Loans and MBS are retained on the HFA's balance sheet, providing a long-term revenue stream » Bonds are issued under parity indentures which allow for cross-calling of bonds and recycling of loan repayments » Tax law limits the spread between loans and bonds as well as the type of homebuyers that can receive loans	When the spread between the tax-exempt MRB borrowing rate and the conventional lender's taxable borrowing rate is large; in this case, HFAs can offer lower-rate mortgage loans than conventional lenders.

[2] Moody's Investors Service. Update to Global Macro Outlook 2013-14: Rising Yields Dampen Recovery. August 2013. Report Number 156821.

[3] Moody's Investors Service. Secondary Market Funding Strategies Buoy State HFAs' Growth But Add to Their Risks. June 2012. Report Number: 143141.

EXHIBIT 1

HFAs Gain Flexibility by Utilizing a Range of Business Models

Loan Financing Mechanism	Description	Key Features	Best Fit Scenario
MBS Pass-Through Bonds	HFAs issue monthly pay, tax-exempt or taxable pass-through bonds and use the proceeds to purchase MBS. The pass-through structures are comparable to Agency MBS.	» HFAs retain MBS on their balance sheets which provides a long-term revenue stream » Pass-through structure generates substantially lower cost of funds than traditional MRBs by attracting buyers from the Agency MBS market » Loans financed with taxable bonds can be made to non-first-time homebuyers, expanding the HFA customer base	When there is a scarcity of Agency MBS in the market; in this case Agency MBS buyers are willing to purchase non-traditional MBS, such as HFA MBS, at competitive rates.
MBS Sale in the Secondary Market (TBA) or Direct Loan Sale to GSEs	HFAs originate mortgage loans using free cash or lines of credit and either 1) package the loans into MBS and sell them in the secondary market (TBA and/or specified pools) or to GSEs or 2) sell the whole loans directly to the GSEs	» HFAs earn up-front transaction fee income and long term servicing income (for HFAs that retain servicing rights), but otherwise HFAs do not any long term revenue stream from the mortgage loans » If mortgage rates increase, HFAs could lose money on direct loans sales or sales in the specified pool market if they did not hedge with TBA » HFAs that are less experienced in managing these programs are choosing to either take on the risks themselves or are paying fees to third parties to manage the programs and take on the risks » HFAs can earn positive carry on the loan warehousing facility in low interest rate environments » Loans can be made to non-first-time homebuyers, expanding the HFA customer base » HFAs generally fund down payment assistance to distinguish their product from conventional lenders	Can be used in any interest rate or mortgage rate environment

In addition to the strategies above, HFAs have utilized alternative bond structures to help facilitate the replacement of expiring liquidity contracts for variable rate demand bonds (VRDBs). These structures include floating-rate notes, direct bank purchases, and index floaters. These new instruments have similar risks as VRDBs (see Exhibit 2), including interest rate risk, renewal risk and the risk of bond acceleration due to an event of default. However these structures do not allow for optional tenders, eliminating remarketing and counterparty risk inherent to VRDBs.

EXHIBIT 2

Floating Rate Bonds Provide HFAs With Alternative to VRDBs

Risk	VRDB	Floating-Rate Bonds	Potential Financial Impact
Remarketing Risk	Yes	No	Failed remarketings can lead to bank bonds with accelerated repayment periods and higher interest rates.
Renewal Risk	Yes	Yes	Failure to raise funds to pay a bullet maturity or a mandatory redemption or failure to replace a liquidity agreement can lead to bond acceleration and higher interest rates. Renegotiating a liquidity agreement can result in higher fees.
Interest Rate Risk	Yes	Yes	Increased interest rates lead to increased bond debt service. VRDB interest is set by remarketing agent and can be affected by counterparty risk as well as issuer-specific factors, whereas floating-rate bonds are generally pegged to an index.
Counterparty Risk Associated With the Liquidity Bank	Yes	No	If a liquidity bank is downgraded, there is a greater likelihood of a failed remarketing or higher interest cost on the bonds.
Event of Default Risk	Yes	Yes	Certain events of default can lead to bond acceleration and higher interest rates.

Throughout the financial crisis HFAs with multifamily programs bolstered their businesses by continuing to issue multifamily bonds, either via the NIBP program, new structures, or using traditional MRBs. We expect multifamily business to continue to be a revenue generator for HFAs going forward. MRBs were more conducive for multifamily loans than single family loans during the crisis because some of the multifamily products that HFAs offer are generally not available in the conventional market. These products include long term unenhanced loans or loans insured by state and local insurance funds. HFAs also utilized less traditional structures in order to obtain lower interest rates on their bonds. These structures include MBS pass-throughs and short-term construction notes. Additionally, many multifamily issuers diversified and strengthened their portfolios by increasing their use of the Federal Housing Administration's (FHA's) Risk-Sharing Program. Under the program, mortgage loans receive 100% insurance coverage from FHA. The HFA shares the loss with the US Department of Housing and Urban Development (HUD) for a pre-determined percentage of the insurance paid.

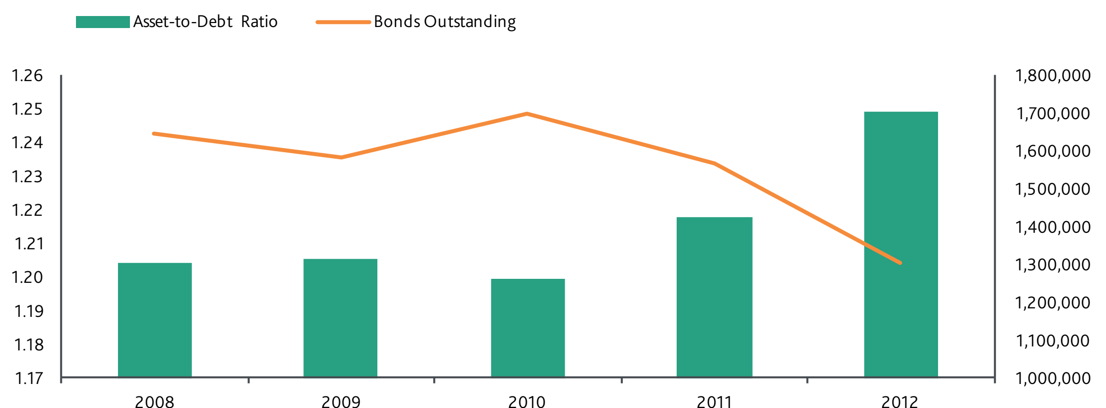
Positive Trends in Financial Position Expected to Continue

After remaining stable between 2008 and 2010, HFA balance sheets grew in 2011 and 2012 and will likely continue growing over the next 12 to 18 months. HFA asset-to-debt ratios remained steady around 1.20x, despite relatively high levels of delinquencies and foreclosures and reduced net revenues during the crisis (Exhibit 3). The key drivers listed below allowed HFAs to remain steady and then recover in 2011 and 2012.

- HFAs remained profitable between 2008 and 2011, generating enough net revenue to maintain net asset positions, and profitability improved in 2012
- Realized loan losses stayed low as government and private mortgage insurers continued paying claims, thereby mitigating potential losses from loan foreclosures
- HFAs deleveraged in 2011 and 2012, as they reduced bond issuance in favor of other strategies

EXHIBIT 3

Median Asset-to-Debt Ratios Improve While Bonds Outstanding Decline in 2011 and 2012

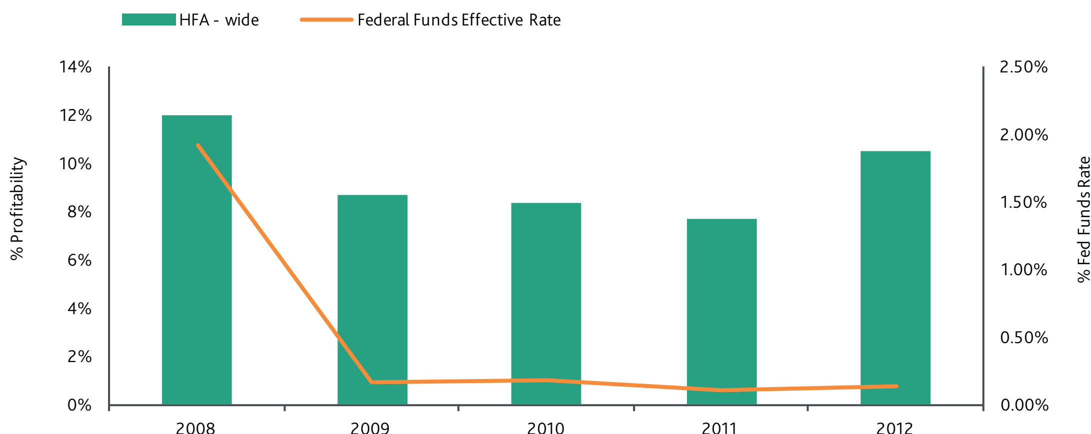


Source: Moody's adjusted audited State HFA financial statements

HFA income statements also remained resilient during the crisis despite low investment returns and relatively high loan delinquency rates. [4] Low investment returns drove HFA profitability to historically low levels, but profitability leveled off between 2009 and 2011 as interest rates hit their lows (Exhibit 4)

EXHIBIT 4

HFA Median Profitability Improved in 2012 Despite Low Investment Returns



Source: Moody's adjusted audited State HFA financial statements and Federal Reserve Board http://www.federalreserve.gov

In 2012 HFA median profitability increased and we anticipate that this will continue for the majority of HFAs going forward for the following reasons.

» The majority of HFA assets are mortgage loans that earn interest at rates at a spread above the bonds rate thereby driving program profitability. Issuance under the NIBP programs in 2010 and 2011 allowed HFAs to add more full spread mortgage loans (loans that maximize the amount of allowable spread between bond yields and mortgage loan yields allowable under federal tax law) to their balance sheets.

» Newer bonds programs, such as the NIBP programs and any MRB or MBS pass-through bonds issued during the crises, have incorporated very low reinvestment rates into their assumptions. Therefore the bond profitability does not rely on earnings on non-mortgage assets.

» HFAs that sell loans to the secondary market receive fee income that adds to HFA revenue streams.

» Low interest rates have allowed HFAs to reduce interest costs by refunding existing debt into lower yielding debt.

» Low rates have reduced the cost of unhedged variable rate debt.

» Fees for third party liquidity are declining.

[4] HFAs maintain sizable cash balances in highly rated instruments including short-term Treasuries and money market funds that are highly correlated to the Fed funds rate. The Federal Reserve anticipates that its current low target range for the federal funds rate, which drives HFA investment returns, will be appropriate at least as long as the unemployment rate remains above 6.5%. (http://www.federalreserve.gov/newsevents/testimony/bernanke20130717a.htm). Moody's Macroeconomic Board's central forecast does not project unemployment to drop below 6.5% in 2013 or 2014 (https://www.moodys.com/research/Update-to-Global-Macro-Outlook-2013-14-Rising-yields-dampen--PBC_156821).

Counterparty Credit Quality has Stabilized

The credit quality of key HFA counterparties stabilized in 2013, as described below, thereby improving the credit profile of the HFAs.

- In May 2013 we revised the US banking sector outlook to Stable from Negative
- In June we revised the outlook for the US mortgage insurer sector to Positive from Negative
- In July we affirmed the US government's rating at Aaa and revised its outlook to Stable from Negative

As their counterparties stabilize, HFAs have less need to use unencumbered assets to further capitalize individual bond programs. In the past, some HFAs have responded to counterparty downgrades within their individual bond programs by collateralizing the program to offset the increased risk associated with the counterparty. The collateralization was achieved by transferring assets into the program from outside sources such as other bond programs or the HFA's unencumbered assets.

The ratings of individual mortgage insurance companies and banks remain significantly below pre-crisis levels, but stress case projected cash flow tests indicate that HFAs have the financial wherewithal to compensate for reduced counterparty credit quality going forward. When counterparties are downgraded, the level of performance of the associated Guaranteed Investment Contracts (GICs), PMI, liquidity contracts, and swap contracts are reduced in our stress case projected cash flow runs.[5] The majority of HFAs have been able to absorb these haircuts in their cash flows due to their robust financial positions. However, on the whole, HFA cash flows have been weakened as a result of their relationships with these lower-rated counterparties and some individual HFAs remain vulnerable to additional counterparty downgrades.

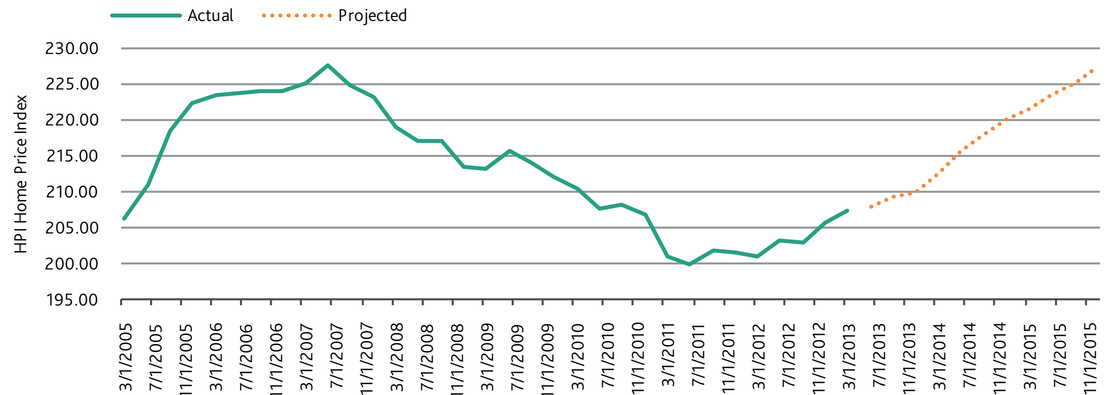
Home Prices are On the Rise

The median home price for states with Moody's-rated programs have been on the rise since they hit bottom in June of 2011 and they are projected to continue improving, as shown in Exhibit 5. Between June 2011 and March 2013 median home prices increased for the portfolio by 3.7% after a total decline of over 12%. Despite the improvement, median prices are not expected to hit peak levels again until 2016.

[5] Moody's Investors Service. Rating Methodology: U.S. Housing Finance Agency Single Family Programs (Appendix C, Appendix D and Appendix E). February 2013. Report Number: 142107.

EXHIBIT 5

Home Prices for Moody's Portfolio Will Continue to Rise

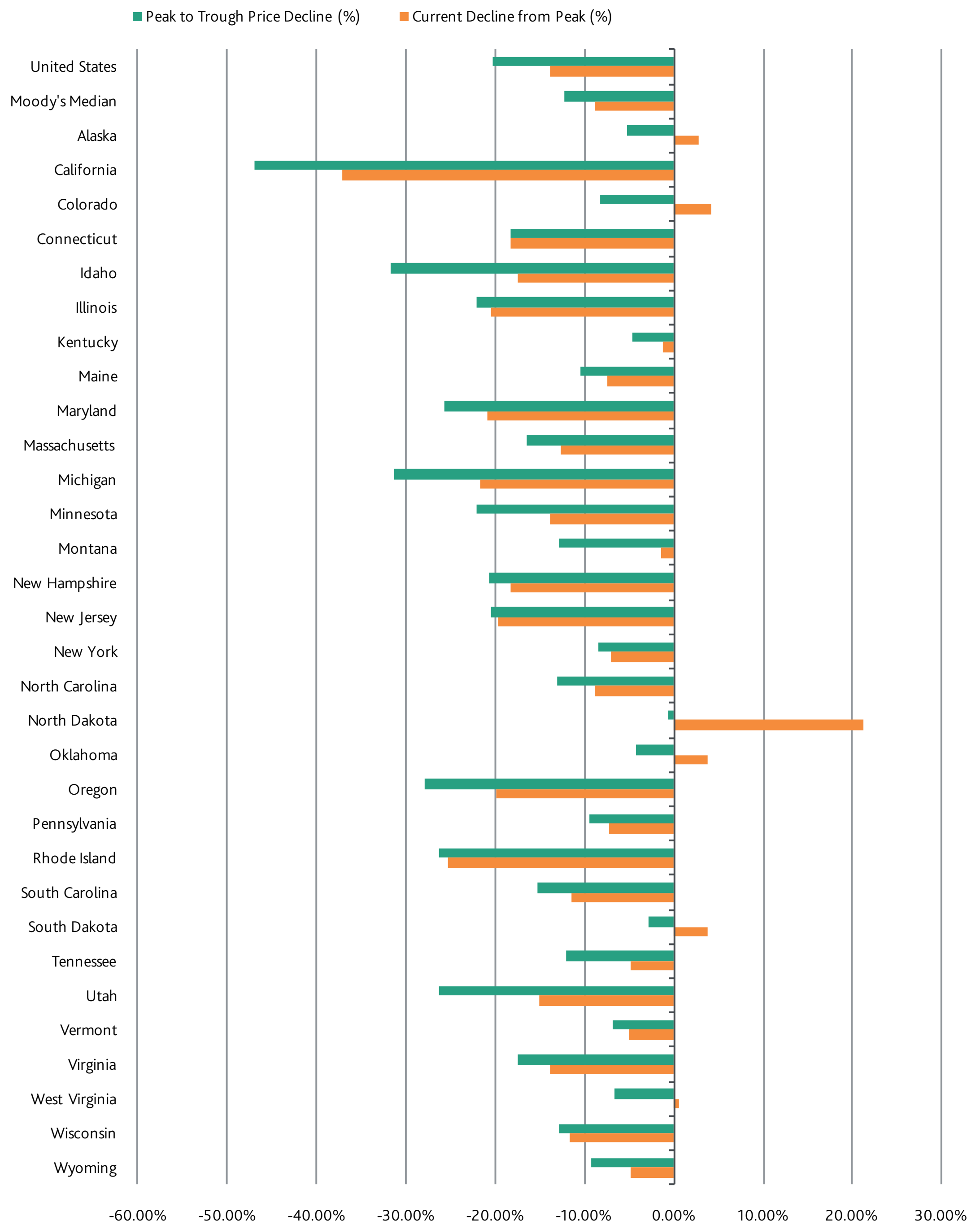


Source: Federal Housing Finance Agency, Moody's Analytics Data Buffet

As prices increase, the resale value of the homes narrow the gap between the outstanding mortgage loan balance and the amount of loss covered by the mortgage insurance. For example, private mortgage insurance companies typically only cover between 25% to 35% of losses. The remainder of the loss is covered by the sale of the home. Losses not only include the principal loss but also foreclosure expenses which vary by state and can be significant. As prices rise, many HFAs are coming closer to having 100% of their losses covered by the combination of insurance and the resale value of the home (Exhibit 6), depending on the level of expenses that also need to be covered

EXHIBIT 6

Price Declines from Peak Under 20% for Majority of HFAs[6]

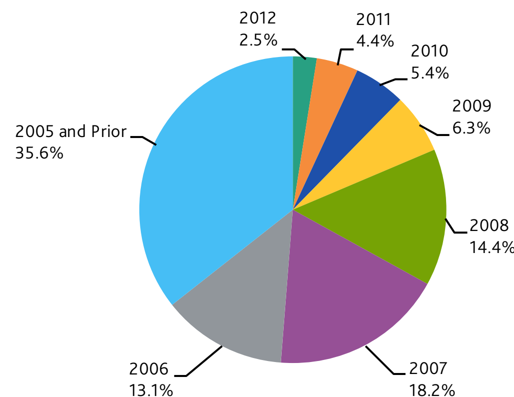


The distribution of loan vintages in HFA portfolios is another stabilizing factor. Only 45% of loans in states with Moody's-rated HFA whole loan programs were issued between 2006 and 2008 when prices were near peak levels (Exhibit 7). The remainder of the portfolio contains loans which have experienced smaller or no housing price declines and HFAs may earn money on these loans when they foreclose.

[6] Peak prices are calculated as the highest prices through the end of 2008.

EXHIBIT 7

45% of HFA Whole Loans Were Issued from 2006 to 2008 at Peak Price Levels



Source: HFA Surveys

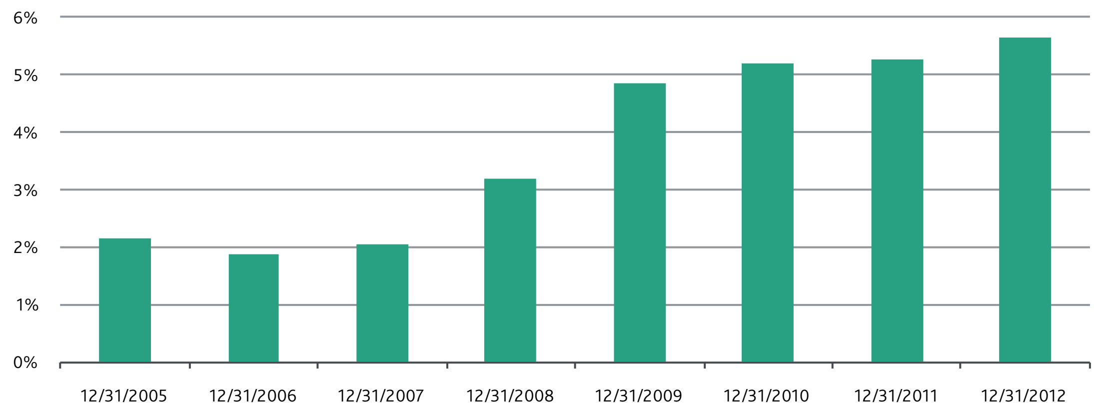
HFAs Can Sustain Current Levels of Delinquency Rates

HFAs will to continue to experience relatively high and/or rising levels of delinquencies and foreclosures in the near-to-medium term, continuing the trend experienced over the past 5 years (Exhibit 8). Relatively high unemployment is a key reason why delinquencies and foreclosures will remain high. We expect the unemployment rate to decline slowly, but through 2014 it will stay in a relatively high range between 6.5% and 7.5%, driving new loans into foreclosure. In addition, legacy loan delinquencies continue to clog HFAs pipelines as HFAs implement loan modification programs, loss mitigation initiatives, or as state foreclosure moratorium policies extend delinquency periods.

EXHIBIT 8

HFA Delinquency Rates Continue to Climb

% December YOY Seriously Delinquent (90+ and In Foreclosure)



Source: HFA Surveys

Loan delinquencies and foreclosures will continue to pressure net revenues and drive losses in the near term, but stress case loan loss tests show that the majority of HFAs can absorb probability of default rates and price declines that are significantly higher than the current levels they are experiencing. However, if an HFA's delinquency or foreclosure rates are unusually high, we may raise the assumed default rates in our loss calculations, which could increase stress case loan losses and put pressure on HFA ratings. Consequently, downgrades or negative outlook changes might occur if a program's asset-to-debt ratio is not robust enough to absorb the increased stress case losses.

Moody's Related Research

Special Comments:

- State HFA Delinquencies Continue to Climb Despite Improvement in Housing Market, May 2013 (153849)
- Secondary Market Funding Strategies Buoy State HFAs' Growth But Add to Their Risks, June 2012 (143141)
- Availability of Floating-Rate Debt Structures a Benefit for State Housing Finance Agencies, June 2012 (143161)
- The New Pass-Through Bond Issuance Strategy Is Credit Positive for HFAs, April 2013 (152258)

Global Risk Perspectives:

- Update to Global Macro Outlook 2013-14: Rising yields dampen recovery, August 2013 (156821)

Median Report:

- Moody's State Housing Finance Agency Medians Flashcard, September 2013 (158466)

Rating Methodology:

- U.S. Housing Finance Agency Single Family Programs, February 2013 (142107)

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