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To: Stephen Klein, Chief Fiscal Officer, State of Vermont Legislative Joint Fiscal Office  
From: Bo Zhao, Senior Economist  
CC: Lynn Browne, Bob Tannenwald, Prabal Chakrabarti, and Darcy Saas  
Date: April 24, 2009  
Re: The Impact of Recent Credit Market Turmoil on New England State Housing Finance Agencies

This memo describes how recent credit market turmoil has affected housing finance agencies in the New England states, based on public information and interviews with agency officials conducted between March 31 and April 9, 2009.

## Institutional background

State housing finance agencies (SHFAs) are state-chartered entities created to promote homeownership and the availability of affordable rental housing for low- and moderate-income families. As states' affordable housing banks, SHFAs issue mortgage revenue bonds and multifamily housing bonds (collectively called "housing bonds") to finance low-interest mortgages and support the production of affordable rental apartments, respectively.<sup>1</sup> Because most housing bonds are tax-exempt, investors are usually willing to purchase them at lower interest rates. This enables SHFAs to offer mortgage rates that are typically 0.5 percent to 1 percent below the market rates otherwise available to low- and moderate-income homebuyers. In 2007 (the latest year for which data are available), SHFAs across the country issued nearly \$18 billion in new mortgage revenue bonds and \$5 billion in new multifamily bonds and closed over 126 thousand new loans (Table 1). Among the New England states, the number of new mortgages funded by SHFAs in 2007 ranged from 961 in Maine to 1,449 in Rhode Island.

In order to reduce borrowing costs, many SHFAs issue not only long-term fixed-rate bonds, but also short-term variable-rate bonds (also called "variable-rate debt"). To hedge against interest risk for their variable-rate debt, SHFAs usually enter into credit swap contracts. These contracts obligate the swap counterparties to pay SHFAs stipulated variable interest rates on the variable-rate bonds and obligate SHFAs to pay the counterparties stipulated fixed interest rates. In doing so, SHFAs transform variable rates into "synthetic" fixed rates, which, given past trends in credit market conditions, SHFAs expected to be lower than the fixed rates that they would have paid at the time of bond issuances. The Finance Director of California's HFA stated in a recent interview that, "Quite

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<sup>1</sup> Other core activities for SHFAs include running the low income housing tax credits program and the HOME investment partnerships program. For more information on these activities, see <http://www.ncsha.org/section.cfm/3>.

honestly, it worked very, very well for a long time.”<sup>2</sup> However, the terms of the credit swaps do impose credit risk on SHFAs.<sup>3</sup>

To reduce liquidity risk, SHFAs rely on liquidity facility providers to provide guarantees as buyers of last resort for variable-rate bonds, which are remarketed on a daily, weekly, or monthly basis. When no investors purchase variable-rate bonds, liquidity providers are obligated to buy them, but at an alternate interest rate and according to accelerated amortization schedules, both of which increase SHFAs’ costs.

Variable-rate bonds have become an increasingly important funding source for SHFAs. Between 2000 and 2007, variable-rate bonds as a percentage of total SHFA outstanding debt more than quadrupled, reaching 33.2 percent in 2007 (Figure 1). According to a 2008 survey of 34 SHFAs conducted by Fitch Ratings, nearly 80 percent of Michigan’s outstanding debt was in the form of variable-rate bonds, the highest in the nation (Figure 2). Among the four surveyed New England states, Vermont had the highest share of variable-rate outstanding debt, about 20 percent. Rhode Island and Massachusetts had low shares of variable-rate debt and New Hampshire did not have any variable-rate outstanding debt.<sup>4</sup>

## The impact of recent credit market turmoil

Since September 2008, the housing bonds market has experienced extraordinary disruption, making it difficult for SHFAs to raise funds for their programs. With the collapse of housing and subprime mortgage markets, investors became very risk-averse and were not inclined to invest in anything related to real estate. This included housing bonds, despite SHFAs’ mortgages’ lower delinquency and foreclosure rates than private lenders’ mortgages and the fact that SHFAs had never defaulted on a housing bond. Money market funds—formerly large buyers of housing bonds—stopped purchasing because they faced a liquidity crisis. Fannie Mae and Freddie Mac bought between 25 percent and 30 percent of the housing bonds market in pre-crisis years, but due to large losses and the resulting inability to immediately use the tax exemption of the housing bonds, they exited the market as well.<sup>5</sup>

The sharp decline in demand for variable-rate bonds particularly hurt SHFAs with a large exposure to this type of debt. Credit-rating firms downgraded liquidity providers and credit swap counterparties, concerning investors about the ability of these liquidity providers to buy back variable-rate bonds. This imposed more risk to investors because if liquidity providers failed their buy-back guarantees, investors could be stuck with the housing bonds that they might not want to hold in their portfolios. As a result, investors demanded higher interest rates from SHFAs to compensate for increased risk. Even so, many investors still shied away from variable-rate housing bonds. Because of the lack of investors, SHFAs had to sell unremarketed variable-rate bonds to liquidity providers under unfavorable terms, which significantly increased their borrowing costs and reduced their operational

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<sup>2</sup> Timiraos, Nick. “State Housing Agencies Get Caught in Credit Crunch” *Wall Street Journal*, March 11, 2009.

<sup>3</sup> For details on credit risk of the swaps, see *Massachusetts Housing Finance Agency Information Statement December 23, 2008*.

<sup>4</sup> According to *Fitch Ratings State Housing Finance Agencies Statistical Information Five-Year History* (July 2008), Connecticut had approximately 10 percent and Maine had slightly under 20 percent variable-rate outstanding debt in Fiscal Year 2007.

<sup>5</sup> Funk, Lynn. “HFAs’ Big Backlog” *The Bond Buyer*, December 31, 2008.

ability. Furthermore, some liquidity providers left the market, leaving fewer well-rated liquidity providers to serve SHFAs at reasonable terms. In a letter dated March 13, 2009 addressed to U.S. Treasurer Timothy Geithner and U.S. Department of Housing and Urban Development Secretary Shaun Donovan, the National Council of State Housing Finance Agencies reported that 12 SHFAs were holding \$3 billion in unremarketed variable-rate bonds.<sup>6</sup>

Interviews with housing finance authority officials reveal that the downgrade of liquidity providers has impacted SHFAs in New England to different degrees. New Hampshire has no exposure to the variable-rate debt. Rhode Island's HFA's (Rhode Island Housing) portfolio has historically had very little variable-rate debt rendering. This HFA has only one liquidity provider, which is considered one of the few strong participants in the market. As a result, liquidity provider concerns are much less of an issue for Rhode Island than for other states. Massachusetts's HFA (MassHousing) officials report that their variable-rate bonds were not performing to their expectations, but view their exposure to the variable-rate debt as manageable. Maine's HFA (MaineHousing) is financially strained by its inability to sell its variable-rate bonds. Likewise, Connecticut officials report that the downgrade of liquidity providers and increased costs of debt service has had a negative financial impact on its HFA (CHFA). Connecticut officials report that this has consumed resources that would otherwise be invested in additional affordable housing lending programs. Vermont also has high exposure to the variable-rate debt and reports facing a "major challenge" with liquidity providers. As a result, the state is seeking to replace existing liquidity providers and has had mixed results doing so. Vermont HFA's (VHFA) cash reserves are reportedly declining at a rate of \$400 to \$500 thousand per month due to excess interest on its variable-rate bonds.

The disappearance of investors drove up interest rates on housing bonds and increased SHFAs' borrowing costs. Thirty-year Municipal AAA bond yields, which are a close proxy of interest rates on long-term housing bonds, jumped from 4.85 percent on September 12, 2008 to 5.97 percent on October 17, 2008 and remained higher than 5 percent through early April, 2009 (Figure 3). As a result, SHFAs have had to raise their mortgage interest rates, rendering them unaffordable to some low- and moderate-income families.<sup>7</sup>

Citing concerns about higher borrowing costs, Moody's put the whole public housing sector on negative credit watch in November 2008 and warned that it could face credit ratings downgrades.<sup>8</sup> Of the New England states, only Vermont experienced a downgrade. In January 2009, Standard & Poor's lowered the rating on Vermont's single-family housing bonds from A+ to BBB+ and lowered rating on Vermont's multifamily bonds from AA- to A+, because it projected much higher losses on Vermont's loan portfolio than the agency had in its reserves. Officials in Vermont disagreed, regarding "...the rating action as based on a flawed model, which did not give the agency any credit for the relatively stable Vermont housing market, state economy, unemployment rate and very low foreclosure rate."

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<sup>6</sup> "NCSHFA Sends Geithner and Donovan HFA Support Plan Recommendations" National Council of State Housing Finance Agencies, March 2009 press release.

<sup>7</sup> For example, MaineHousing increased mortgage interest rates multiple times in November 2008. Source: Gallagher, Noel "Housing Agency Feeling the Pinch" *Portland Press Herald*, October 19, 2008.

<sup>8</sup> Funk, Lynn. "HFAs' Big Backlog" *The Bond Buyer*, December 31, 2008.

However, Moody's has not changed Vermont's rating. Both Standard & Poor's and Moody's recently upgraded their ratings on Massachusetts.

Unable to issue new bonds at reasonable rates, some SHFAs have turned to alternative funding sources. Massachusetts, New Hampshire, and Rhode Island reported "recycling payments of loans." According to HFA officials, recycling entails the re-use—or re-lending—of cash payments and prepayments on existing loans (that are received each month) into new mortgages committed and closed each month. When a loan prepays, the HFA uses the cash payoff to make a second, new loan instead of paying off the bond issued to make the first loan. Compared to issuing new bonds, recycling is less predictable and provides a smaller amount of money for funding new mortgages. In addition, the federal government has strict rules regarding recycling loans payments; SHFAs are allowed to recycle for up to ten years after a bond is originally issued.

Mortgage interest rates have recently dropped to record lows. Ironically this has hurt SHFAs' competitiveness. The interest rates offered by SHFAs are now about 0.5 percent to 1 percent higher than market rates, which make their mortgages less attractive to borrowers. They have lost applicants with strong credit scores to the private market. Maine officials noted that some households have a "wait-and-see attitude" in terms of loan applications; they think that the SHFA's rate is "too expensive relative to the market rate." However, SHFAs still have some advantages relative to private lenders: They have more resources to assist low-income new homebuyers and have lower loan-to-value requirements. Private lenders have significantly tightened credit standards, making advertised low interest-rate mortgages actually unavailable to many homebuyers.

Without enough funds, housing agencies in such states as California, Texas, and Wisconsin have shut down their mortgage programs.<sup>9</sup> Fortunately, none of the New England states reported suspending residential mortgage programs, but they are all experiencing a slowdown in loan volume.

Officials at New England HFAs also reported struggling with operating the low income housing tax credits program—a major funding source for affordable rental housing projects—because of a lack of investors. Traditional tax credits buyers (such as banks, Fannie Mae, and Freddie Mac) experienced huge losses in 2008, making the tax benefits offered by these credits unattractive. As a result, low income housing tax credits have been very hard to sell. Their value dropped from more than 90 cents on the dollar in pre-crisis years to less than 78 cents in late 2008, which is driving a slowdown in multifamily rental unit production.<sup>10</sup> According to Connecticut HFA officials, several major affordable housing developments stalled due to a lack of investment capital. HFA officials in Connecticut, Maine, and New Hampshire reported allocating federal stimulus dollars to subsidize affordable housing developments in their states. New Hampshire's HFA (New Hampshire Housing) anticipates some progress in low income housing projects in 2009 due to the federal stimulus package and

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<sup>9</sup>Timiraos, Nick. "State Housing Agencies Get Caught in Credit Crunch" *Wall Street Journal*, March 11, 2009.

<sup>10</sup>Pristin, Terry. "Affordable Housing Deals Are Stalling" *New York Times*, November 12, 2008.

expectations of recovering credit markets. But the agency also emphasized that they have only a few affordable housing projects planned in 2009.

HFA officials in New England all noted that credit market conditions improved slightly in 2009 compared to 2008, but conditions remain poor relative to 2007. Massachusetts and Rhode Island referred to a recent housing bond issuance by Kentucky's HFA as evidence that debt issuance has started to pick up. However, Vermont officials stated that they remained "...very concerned about the availability of any refunding opportunities or access to reasonably priced long-term capital going forward." And, according to the officials at New Hampshire Housing, the outlook is still gloomy: 2009 is expected to be better than 2008, but not by much.

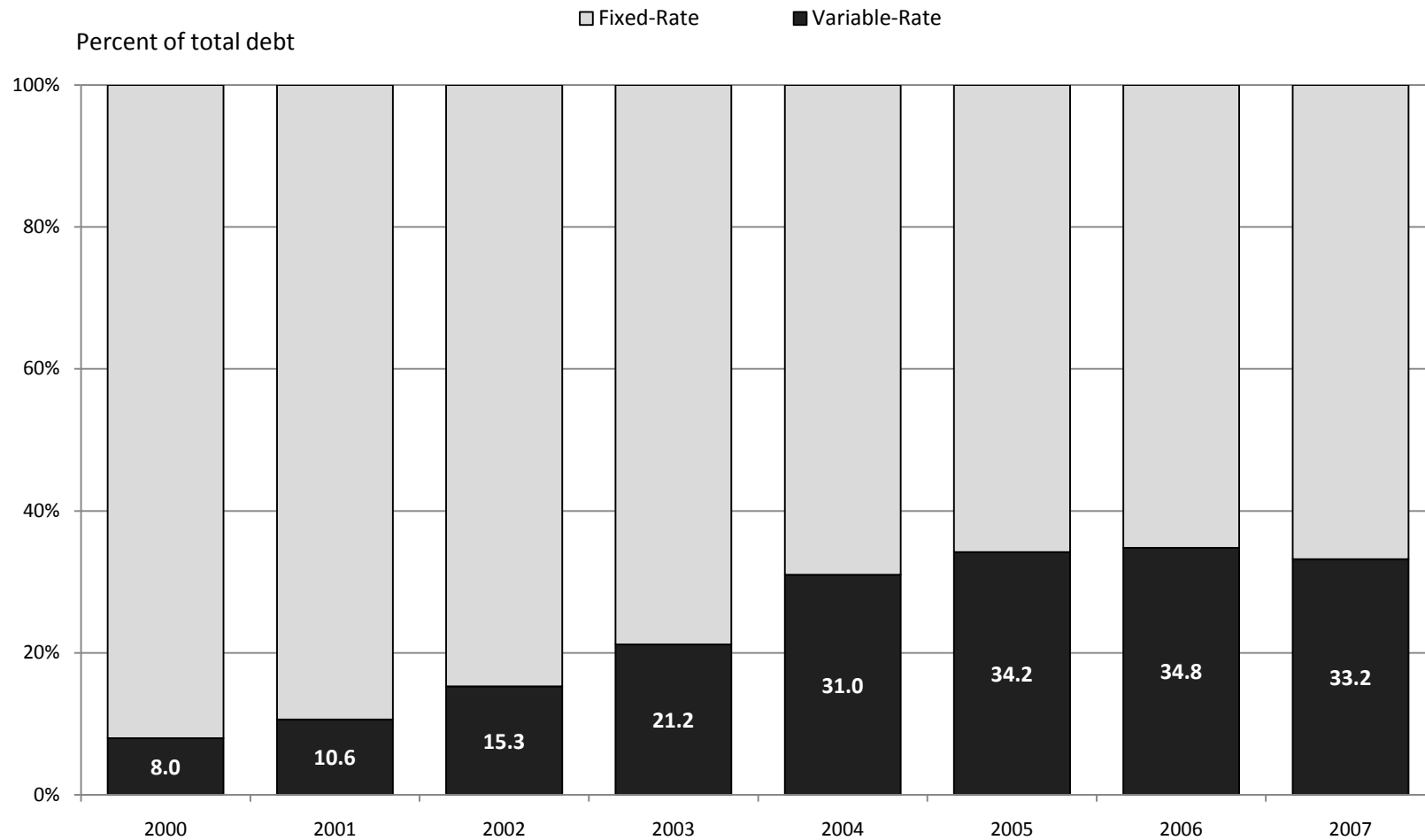
**Table 1. 2007 Housing Bonds Issued by State Housing Finance Agencies**

	<b>Total 2007 Issuance (\$)</b>	<b>New Loans Closed</b>
<b>Mortgage Revenue Bonds Production</b>		
Connecticut HFA	N/AV	N/AV
MaineHousing	381,000,000	961
MassHousing	240,166,962	1,263
New Hampshire HFA	209,930,000	1,380
Rhode Island Housing	301,937,237	1,449
Vermont HFA	144,772,481	993
US total	17,772,806,356	126,611
<b>Multifamily Bond Issues</b>		
Connecticut HFA	N/AV	-
MaineHousing	0	-
MassHousing	173,051,000	-
New Hampshire HFA	12,410,000	-
Rhode Island Housing	88,600,000	-
Vermont HFA	36,282,000	-
US total	4,901,877,810	-

Source: National Council of State Housing Finance Agencies.

Note: For Connecticut's mortgage revenue bonds in 2006, total new issuance was \$676,350,000, loans closed were 4,010; For Connecticut's multifamily bonds in 2006, total new issuance was \$3,600,000.

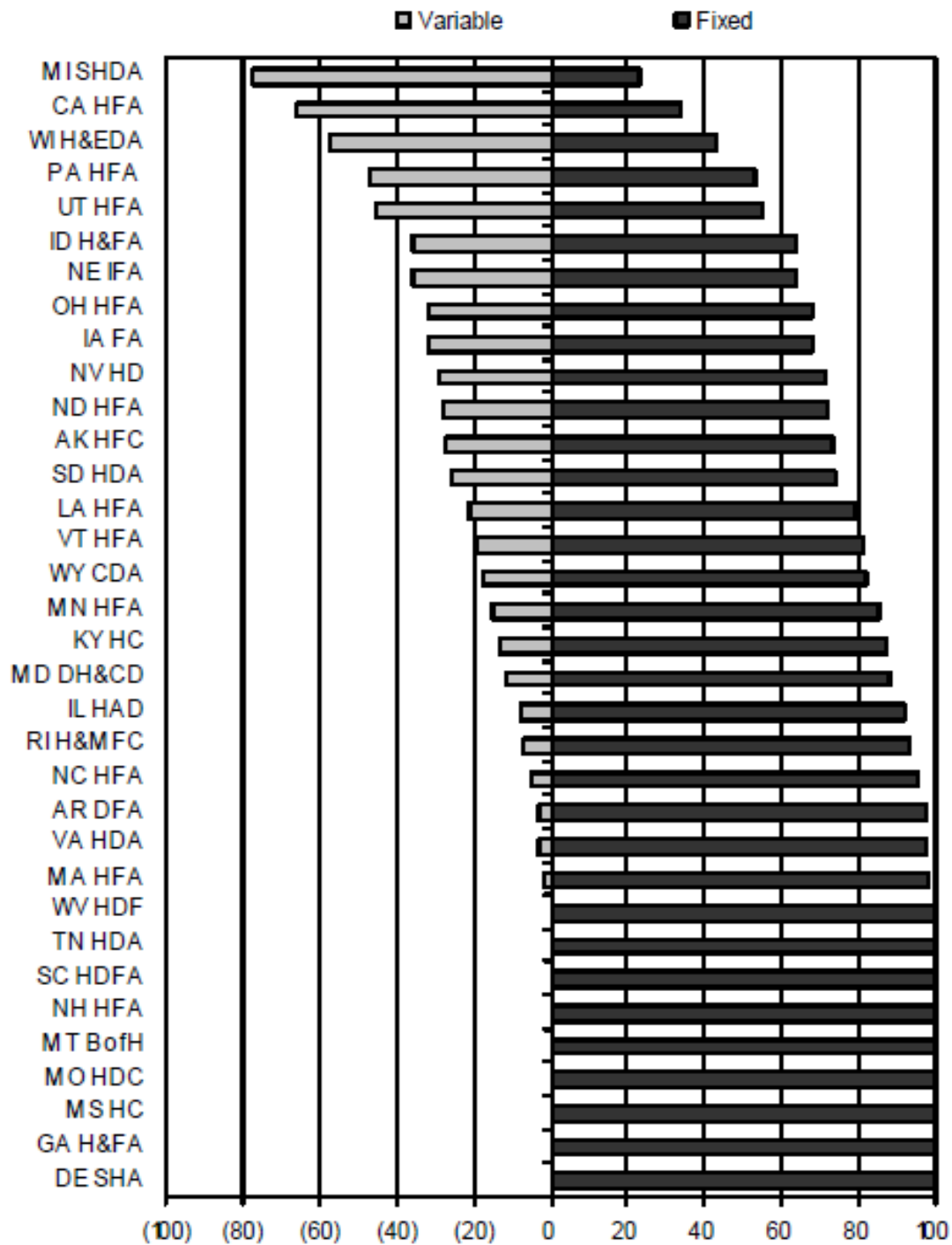
**Figure 1. Components of Outstanding Debt for All SHFAs**



Source: Fitch Ratings, State Housing Finance Agencies Statistical Information Five Year History (January 2009 and January 2008).

Note: Figures for DC HFA were included in charts for the first time in 2007.

**Figure 2. Percent Variable- and Fixed-Rate Outstanding Debt: Fiscal Year 2008.**

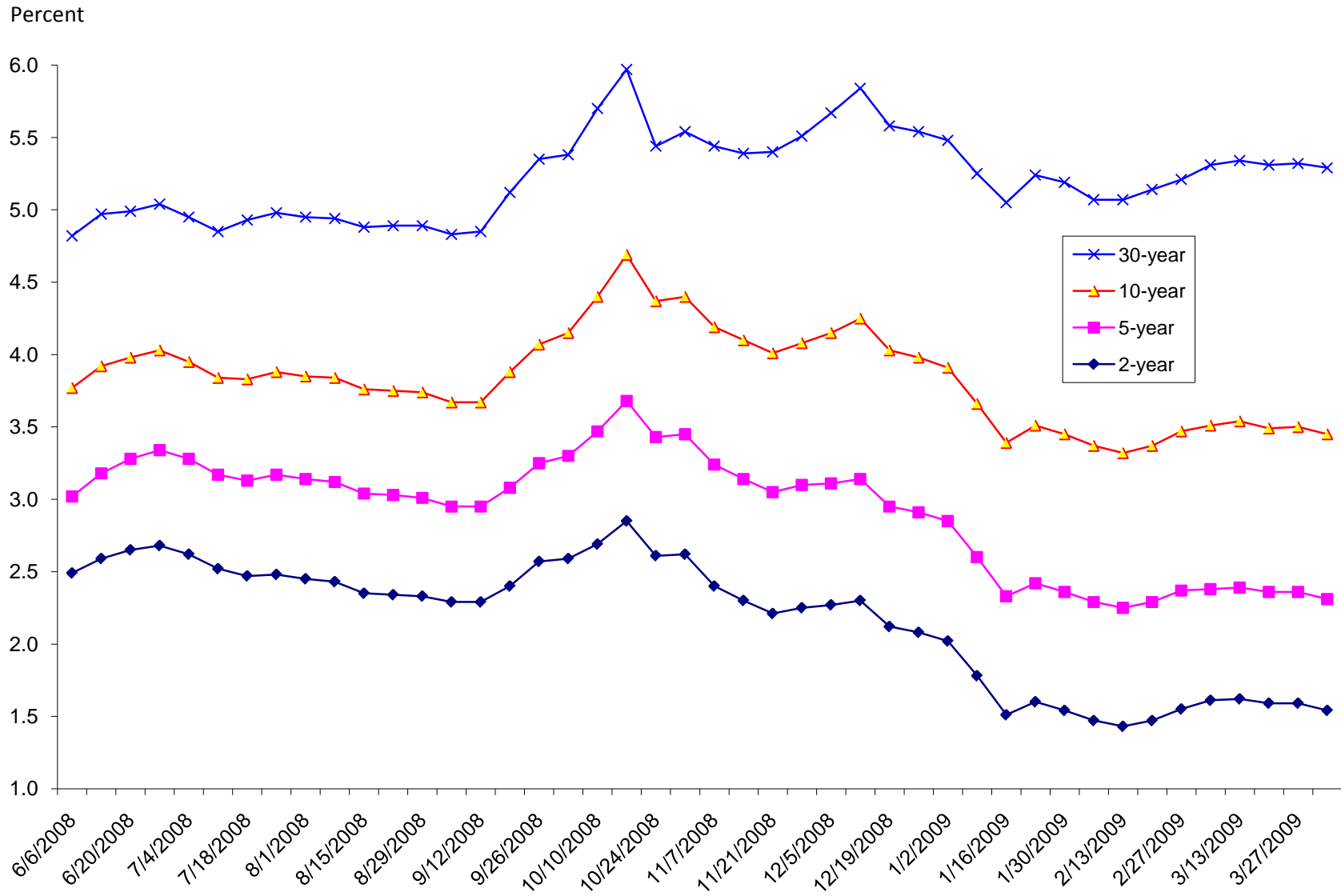


Source: Fitch Ratings, State Housing Finance Agencies Statistical Information (January 2009).

Note: The chart includes figures for 34 SHFAs. Percentages are approximate. The majority of the variable-rate debt is tied to swap contracts, minimizing SHFA variable-rate exposure.



**Figure 3. Municipal AAA Bond Yields  
(end of week)**



Source: Delphis Hannover via the Wall Street Journal