## CALIFORNIA STATE AUDITOR

# California Housing Finance Agency

Most Indicators Point to Continued Solvency Despite Its Financial Difficulties Created, in Part, by Its Past Decisions



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February 24, 2011

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The Governor of California President pro Tempore of the Senate Speaker of the Assembly State Capitol Sacramento, California 95814

Dear Governor and Legislative Leaders:

As requested by the Joint Legislative Audit Committee, the California State Auditor presents this audit report concerning the decisions and actions of the California Housing Finance Agency (CalHFA) that contributed to its current fiscal condition and its future financial solvency.

The report concludes that, although CalHFA will continue to face significant risks, its major housing programs and the fund it uses to pay its operating expenses should remain solvent under most foreseeable circumstances. The report also concludes that past decisions by CalHFA, such as its decisions to significantly increase its use of variable-rate bonds and interest-rate swap agreements, and to launch new mortgage products that were easier for borrowers to qualify for, but that eventually proved to have high delinquency rates, contributed to its current difficulties. These decisions revealed the need for changes in how its board of directors (board) governs the agency. In particular, CalHFA's board should approve any new debt-issuance strategy or mortgage product prior to its implementation, which is something it had not always done in the past, and should include language in its annual resolutions delegating authority to CalHFA staff restricting staff's actions to the debt strategies and mortgage products specified in the annual delegations themselves, approved business plans, or subsequent board resolutions.

Respectfully submitted,

ELAINE M. HOWLE, CPA

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State Auditor

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### **Summary**

#### **Results in Brief**

The California Housing Finance Agency (CalHFA) is a state agency responsible for financing affordable housing. Using proceeds from the sale of bonds, CalHFA funds loans for single-family and multifamily housing for low- and moderate-income Californians. CalHFA is entirely self-supporting, and the State is not liable for the financial obligations of CalHFA deriving from bonds that it has issued or loans that it has insured.

Although profitable for many years, CalHFA suffered losses of \$146 million and \$189 million in fiscal years 2008–09 and 2009–10, respectively. The underlying conditions that contributed to these losses—high delinquency rates on CalHFA's single-family loans and the risks and costs associated with its high levels of variable-rate debt¹—resulted in lower credit ratings for CalHFA, which, taken together with its losses, raised questions about its future solvency.

To examine whether CalHFA is likely to remain solvent, we hired Caine Mitter & Associates Incorporated, a consultant firm with recognized expertise in housing finance agency issues (our consultant) and had it perform an analysis of CalHFA's financial position. Our consultant found that, although CalHFA will continue to face significant risks, its major housing programs and the fund it uses to pay its operating expenses should remain solvent under most foreseeable circumstances. However, by CalHFA's own calculations, the fund set up to provide insurance on its mortgages will become insolvent by summer 2011. Despite this and other financial stresses, our consultant's analysis shows that CalHFA's largest housing program—its Home Mortgage Revenue Bonds program—will likely remain solvent. Similarly, although the California Housing Finance Fund—the fund CalHFA uses to pay its operating expenses—faces risks, principally from its interest-rate swap agreements (interest-rate swaps),2 our consultant concluded that it should remain solvent under most likely circumstances.

One of the biggest threats to CalHFA's solvency is the amount of variable-rate bond debt it holds, which as of June 30, 2010, constituted \$4.5 billion, or 61 percent of CalHFA's total bond debt (excluding certain bonds issued in fiscal years 2008–09 and 2009–10). CalHFA

#### Audit Highlights...

Our review of the California Housing Finance Agency (CalHFA) revealed the following:

- » Losses of \$146 million and \$189 million in fiscal years 2008–09 and 2009–10, respectively, which were due, in part, to high delinquency rates on CalHFA's single-family loans and the costs associated with its high levels of variable-rate debt, raised questions about the solvency of CalHFA.
- » Although it will continue to face significant risks, its major housing programs and the fund it uses to pay its operating expenses will likely remain solvent. However, the fund set up to provide insurance on its mortgages will become insolvent by summer 2011.
- » Some of the biggest threats to CalHFA's solvency are the amount of variable-rate bond debt it holds—which as of June 30, 2010, constituted 61 percent of CalHFA's total bond debt—and the interest-rate swap agreements (interest-rate swaps) it entered into to mitigate the risks associated with variable-rate bonds.
- » The decisions approved by the CalHFA board of directors (board) to use variable-rate bonds and interest-rate swaps were a result of CalHFA's decision to pursue ever-increasing loan volume goals.
- » To increase loan volume, CalHFA introduced new 35- and 40-year loans, which provided for lower monthly payments and allowed borrowers to more easily qualify for loans. However, the delinquency rates for these borrowers proved to be twice as high as those with conventional 30-year loans.
- » The decisions to implement what turned out to be risky loan products were never brought before the board for a vote because such decisions are delegated to staff.

Generally, CalHFA's variable-rate debt is in the form of bonds with interest rates that periodically reset based on market conditions.

An interest-rate swap is a contractual agreement between two parties, known as counterparties, who agree to exchange cash flows over a certain period. These swaps may be used by issuers of variable-rate debt to create a synthetic fixed rate for such debt, thereby reducing the risk should interest rates rise.

started using variable-rate debt extensively in 2000 because the costs of this type of debt were less than the costs of the fixed-rate debt it had traditionally used to fund loans to borrowers. These lower costs allowed CalHFA to offer loans to lenders and borrowers at attractive interest rates, thus enabling it to increase its loan volume. To mitigate the risks associated with variable-rate bonds, primarily that interest rates would go up, CalHFA entered into interest-rate swaps with counterparties. However, interest-rate swaps entail risks of their own, including risks associated with terminating or replacing such agreements, which cost CalHFA \$39 million in fiscal year 2009–10 alone. The decisions to use variable-rate bonds and interest-rate swaps are a result of CalHFA's decision to pursue ever-increasing goals for its loan volume. CalHFA's board of directors (CalHFA board) was aware of and approved of these strategies and goals.

CalHFA is overseen by a 14-member board, each of whom is appointed by the governor, Legislature, or as specified by statute. State law also requires that the governor's appointees to the CalHFA board include members with certain types of experience. Annually, the board approves CalHFA's business plan and provides CalHFA with resolutions authorizing its staff to operate and manage the agency's bond and loan programs (annual delegations). The statutes establishing the composition of the CalHFA board do not appear to call for the kind of sophisticated financial expertise that would have been valuable in determining whether CalHFA should launch into variable-rate bond debt and interest-rate swaps to the degree that it did. Furthermore, the annual delegations appear to have been overly permissive. For example, they continued to authorize CalHFA staff to enter into interest-rate swaps when this was not a planned business strategy, and they also authorized interest-rate swaps for many years before the CalHFA board was briefed on the risks associated with these instruments. CalHFA modified the wording of these annual delegations in January 2011 after we brought this issue to its attention.

Another threat to CalHFA's solvency is the high delinquency rate on its mortgage loans.<sup>3</sup> Historically, CalHFA offered a standard 30-year fixed-rate mortgage, but in 2005 and 2006, to compete with alternative loan products being offered by the lending industry, CalHFA introduced two new primary mortgage loans: a 35-year loan in which the borrower made interest-only payments for the first five years, and a 40-year loan with fixed monthly payments. Because the 35- and 40-year loans required lower monthly payments than the 30-year product, and because underwriters assessed borrowers' qualifications based on those lower monthly payments, borrowers could more easily qualify for

The delinquency rate is the percentage of loans for which payments are past due.

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the 35- and 40-year loans than for the 30-year loans. Consequently, these two new loan products were popular with borrowers and, as of August 2010, they constituted approximately 40 percent of CalHFA's outstanding loan balances. However, over the past two years CalHFA has experienced increased delinquencies in mortgage payments from its borrowers, especially among borrowers with the 35- and 40-year loans. In fact, the delinquency rates for borrowers with these CalHFA products are presently twice as high as for borrowers who obtained 30-year conventional loans during the same time period.

Although the CalHFA board had some involvement in and knowledge of the 35- and 40-year home loan products, the decision to implement what turned out to be risky loan products was never brought before the board for a vote because CalHFA's board delegates these decisions to staff. If a new home loan strategy appears in CalHFA's annual update to its business plan, the board will ostensibly approve this change as part of its overall approval of the plan. However, because the annual delegations were so broad, CalHFA staff could launch a new loan product without presenting this strategy change to the CalHFA board for approval. In fact, the implementation of the 35-year home loan product occurred only two months before this new strategy would have appeared in the annual business plan that the board reviews and approves. Although a board with more financial expertise that was more engaged in questioning CalHFA staff about new initiatives may not have changed the decisions that CalHFA ultimately made, its recent financial difficulties created in part by these decisions provides an opportunity to examine the statutory makeup of the board and how the board provides oversight.

#### Recommendations

To ensure that CalHFA's business plans and strategies are thoroughly vetted by an experienced and knowledgeable board, the Legislature should consider amending the statute that specifies the composition of CalHFA's board to include appointees with knowledge of housing finance agencies, single-family mortgage lending, bonds and related financial instruments, interest-rate swaps, and risk management.

To provide better oversight of CalHFA, its board should issue a policy stating that it must approve any new debt-issuance strategy or mortgage product prior to its implementation, either directly or by inclusion in CalHFA's annual business plan.

Within its annual resolutions delegating authority to CalHFA staff, the CalHFA board should include language restricting staff's actions regarding debt strategies and mortgage products to those specified in the annual delegations themselves, the approved business plans, or subsequent board resolutions.

#### **Agency Comments**

CalHFA agrees with our recommendations, has begun implementing them, and plans to work with its board to complete implementation.

#### Introduction

#### **Background**

The California Housing Finance Agency (CalHFA) was created in 1975 as the State's affordable housing agency to make low-interest-rate home loans funded through the sale of tax-exempt bonds. Statute authorizes CalHFA to issue bonds, notes, and other obligations to fund loans for single-family and multifamily housing for low- and moderate-income persons and families. CalHFA repays the bonds that it issues with revenues generated through borrowers' repayment of mortgage loans. It then uses the difference between the interest rates on its mortgage loans and the interest rates it pays on its bonds to pay for its operating costs and other programs that promote affordable housing for low-income Californians. According to the proposed governor's budget for fiscal year 2011–12, CalHFA is financially self-supporting and has approximately 336 employee positions and a budget of roughly \$51 million. The State is not liable for financial obligations of CalHFA deriving from bonds that it has issued or loans that it has insured.

CalHFA administers the California Housing Finance Fund (finance fund), the California Housing Loan Insurance Fund (insurance fund), and two state general obligation bond funds. As of June 30, 2010, the audited financial statements of the finance fund, which includes CalHFA's bonds and notes and from which all of CalHFA's operational expenses are paid, showed assets of \$11.6 billion and liabilities of \$10 billion. The insurance fund, which insures loans in CalHFA's loan portfolio, had assets of \$66.8 million and liabilities of \$66.6 million as of December 30, 2009.

#### The Bonds Supporting CalHFA's Housing Loan Programs

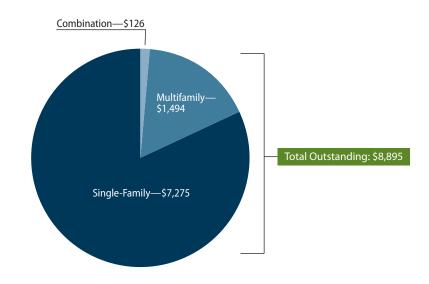
CalHFA issues housing revenue bonds<sup>4</sup> to support its single-family and multifamily loan programs. In its single-family loan programs, CalHFA uses bond proceeds to purchase the home loans of first-time home buyers from lenders that it approves in advance and that follow CalHFA's standards for originating loans. Traditionally, after it purchased these loans from the lenders, it retained ownership of them in its own portfolio.<sup>5</sup> Unless a loan is otherwise insured by the federal government, CalHFA carries the risk if a borrower stops paying. For the multifamily loan program, CalHFA originates the loans and deals directly with borrowers, who are

<sup>&</sup>lt;sup>4</sup> Revenue bonds are municipal bonds that are secured by a specific revenue source of the issuer.

<sup>5</sup> As discussed in Chapter 2, some aspects of CalHFA's business practices, including the practice of keeping loans in its own portfolio, have recently changed.

typically developers of apartment complexes or other multifamily dwellings. Similar to its single-family loans, CalHFA carries the risk that developers may default on their multifamily loans. As indicated in Figure 1, CalHFA has used the majority of the debt outstanding as of June 30, 2010, to support the single-family loan program.

Figure 1
California Housing Finance Agency Bonds Outstanding by Housing Program Type as of June 30, 2010
(In Millions)



Source: California Housing Finance Agency's audited financial statements.

CalHFA is able to offer mortgages at below-market rates because it can issue tax-exempt private activity<sup>6</sup> bonds for which bond buyers are willing to accept lower interest rates. However, the amount of these bonds it can issue in any one year is limited by the federal and state governments. The federal limitation is known as the private activity volume cap (volume cap), which specifies the amount of tax-exempt private activity debt each state is permitted to issue on an annual basis. The California Debt Limit Allocation Committee in the State Treasurer's Office then allocates portions of the volume cap to public entities in California, including CalHFA, based on each entity's application for debt allocation.

A private activity bond is a municipal security the proceeds of which are used by one or more private entities. In this case, CalHFA's mortgage holders would be the private entities using the bond proceeds. For these bonds to be tax exempt, they must be for a qualified purpose, such as single-family home loans.

Federal tax law allows public entities to issue more tax-exempt debt than they are allocated. For the first 10 years after bonds are issued from an entity's allocation, the entity may use loan prepayments—loans that borrowers pay off when they refinance, for example—to redeem bonds and issue additional tax-exempt debt without using any additional debt allocation. In addition, CalHFA has the ability to issue taxable bonds. However, because these bonds are taxable, bondholders require higher rates of interest, and thus taxable bonds are more costly to an issuer. As we discuss in Chapter 2, CalHFA can and has used taxable bonds to support the purchase of home loans in larger volumes than its debt allocation under the volume cap would have allowed.

#### Relationships Between CalHFA's Funds and Its Financial Obligations

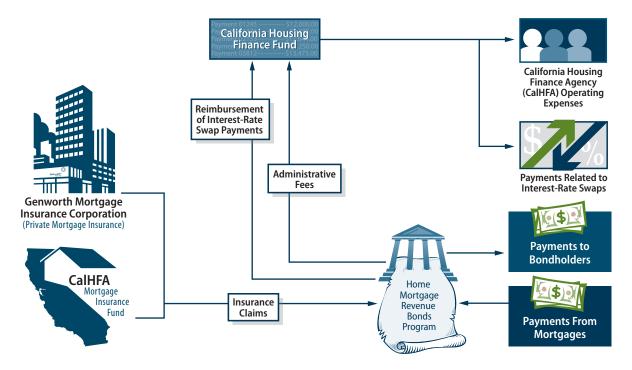
As shown in Figure 2 on the following page, the three major elements of CalHFA's financial structure are its finance fund, its Home Mortgage Revenue Bonds (HMRB) program, and its insurance fund. The finance fund pays CalHFA's operating expenses, expenses associated with CalHFA's interest-rate swap agreements (interest-rate swaps), 7 and other obligations not shown in the figure. Potentially, these other obligations could include bonds issued to finance multifamily home loans for which CalHFA has pledged its full resources should the principal assets (primarily loans on multifamily developments) not provide sufficient revenue to meet bond payments. Throughout this report, we refer to these types of obligations as agency obligations. In contrast, bonds issued under HMRB are *limited obligations* in that they are payable only from the assets included in the HMRB indenture agreement8 (primarily home loans). CalHFA has not pledged other agency resources to these bonds. Although CalHFA resources are not at stake for the bonds issued under HMRB, the health of HMRB is still important to the agency as a whole because, as shown in Figure 2, HMRB pays administrative fees to the finance fund and reimburses the finance fund for interest-rate swap payments related to variable-rate bonds issued under HMRB. Finally, when borrowers default on loan payments for single-family loans that are insured by CalHFA, its insurance fund pays to HMRB a set percentage of the principal and accrued interest owed on the loan. Up to 75 percent of

An interest-rate swap is a contractual agreement between two parties, known as counterparties, who agree to exchange certain cash flows over a certain period and may be used by issuers of variable-rate debt to create a synthetic fixed rate for such debt, thereby reducing the risk associated with an increase in interest rates. Under CalHFA's agreements with the counterparties, the State is not liable for any of CalHFA's interest-rate swaps.

<sup>8</sup> A bond indenture is a contract between the issuer of municipal securities and a trustee representing the bondholders. It establishes the rights, duties, responsibilities, and remedies of the issuer and trustee and determines the exact nature of the security for the bonds.

these insurance payments are reimbursed by Genworth Mortgage Insurance Corporation, a private mortgage insurance company with which CalHFA has an agreement for this purpose.

Figure 2
Interrelationships Between the Funds and Financial Obligations of the California Housing Finance Agency



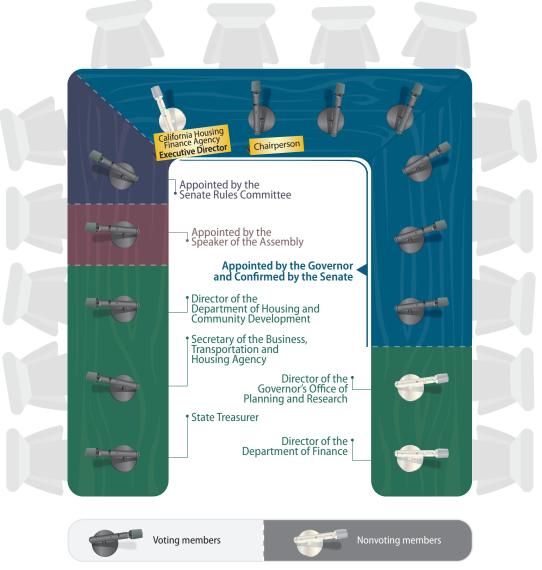
Sources: Bureau of State Audits' analysis of CalHFA's audited financial statements, bond indenture provisions, and other documents.

Note: An expanded view of CalHFA's funds and financial obligations, which includes additional detail and structures not shown here, is provided in Figure 6, on page 21 in this report.

#### **CalHFA's Governance Structure**

CalHFA is overseen by a 14-member board of directors (CalHFA board). State law requires the board to authorize CalHFA's sale of debt, and to approve major contractual agreements that exceed \$1 million in a fiscal year or another amount approved by board resolution. Figure 3 shows the composition of the CalHFA board, which is made up of individuals appointed by the governor and Legislature as well as state officials.





Source: California Health and Safety Code, sections 50901 and 50903.

The governor appoints six members of the CalHFA board, subject to Senate confirmation. State law requires that four of these appointees be from among the following categories:

 An elected official of a city or county engaged in the planning or implementation of housing, housing assistance, or a housing rehabilitation program.

The governor also appoints, and the Senate confirms, the executive director of CalHFA, who is a nonvoting member of the board.

- A person experienced in residential real estate in the savings and loan, mortgage banking, or commercial banking industry.
- A person experienced as a builder of residential housing.
- A person experienced in organized labor in the residential construction industry.
- A person experienced in the management of rental or cooperative housing occupied by lower-income households.
- A person experienced in manufactured housing finance and development.
- A person representing the public.

State law also requires that the governor's appointees to the CalHFA board include two members who are residents of rental or cooperative housing financed by CalHFA or who are persons experienced in counseling, assisting, or representing tenants. In addition, one of the board members appointed by the governor must be a resident of a rural or nonmetropolitan area. The two legislative appointments are considered members of the board representing the public.

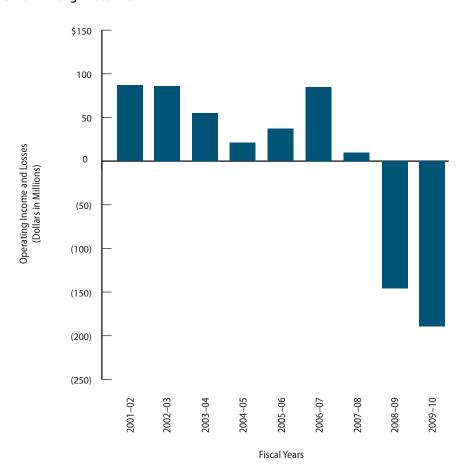
#### CalHFA's Recent Financial Difficulties

With plummeting home values and high levels of unemployment, CalHFA—as well as other lenders across the nation—have had many borrowers become delinquent on their home loan payments. Between 2005 and 2010, California's housing values experienced the second largest drop in the nation, decreasing by 31 percent. Homeowners are more likely to default on their mortgages when declining home prices result in the value of their homes being less than their mortgage amounts. Also, with California's unemployment rate increasing from roughly 5 percent to 12 percent over that same time period, out-of-work Californians had difficulty making their mortgage payments. As a result, California's statewide 90-day delinquency rate<sup>10</sup> increased from 1 percent to 11.5 percent between 2005 and 2010. Swept up in this same trend, CalHFA calculated that its 90-day delinquency rate on its conventional home loans—loans not insured by the federal government—increased from just less than 1 percent in 2005 to more than 10 percent in 2010.

<sup>10</sup> The 90-day delinquency rate is the percentage of mortgage loans for which payments are at least 90 days past due.

CalHFA's primary source of income is interest generated on mortgage loans it owns. However, with rising delinquencies and subsequent foreclosures, CalHFA's interest revenue from loans has declined significantly. For example, in fiscal year 2008–09, CalHFA's net interest revenue from loan programs was \$450 million. In fiscal year 2009–10, this amount declined to \$393 million, resulting in a \$57 million loss in revenues. Combined with home loan losses, declines in investment income, and costs associated with terminating certain interest-rate swaps, CalHFA has experienced significant operating losses in recent years. The combined operating income from the six fiscal years spanning 2002–03 through 2007–08 was surpassed by the losses of \$146 million and \$189 million in the two subsequent fiscal years as shown in Figure 4.

Figure 4
California Housing Finance Agency's Operating Income and Losses Before Transfers
Fiscal Years 2001–02 Through 2009–10



Source: California Housing Finance Agency's (CalHFA) audited financial statements.

Note: Transfers are external funds transferred to CalHFA to administer particular programs. Excluding fiscal years 2002–03 and 2008–09, transfers for the years shown in the figure ranged from \$12 million to \$49 million. In fiscal years 2002–03 and 2008–09 the transfers were \$18,000 and \$448 million, respectively. None of the transfer amounts are included as a component of operating income or loss in the financial statements.

The underlying conditions that contributed to the operating losses just described—high delinquency rates and the risks and costs associated with CalHFA's variable-rate bond debt11—resulted in lower credit ratings for CalHFA. Credit rating agencies, such as Moody's Investors Service, Inc. and Standard & Poor's Rating Services, rate an entity or its bonds based on its ability to meet its financial obligations. As shown in Figure 5, CalHFA's issuer credit rating, which is a rating of CalHFA's ability to meet its obligations from its finance fund, and the ratings for HMRB are currently rated as a low credit risk, reduced from their very-low-credit-risk rating prior to 2009. The downgrades in CalHFA's credit ratings have resulted in decreased financial flexibility for CalHFA. As will be discussed in Chapter 1, further rating downgrades pose a significant threat to CalHFA's future solvency. Also discussed in Chapter 1 is the decrease in the credit rating for CalHFA's insurance fund from a low-risk rating in 2008 to a near default rating prior to its subsequent withdrawal from the ratings at CalHFA's request in 2010.

In addition to the losses it sustained in the past two fiscal years, in December 2008 CalHFA lost access to the line of credit from the State's Pooled Money Investment Account (PMIA), which it had been using to purchase single-family loans. <sup>12</sup> The Pooled Money Investment Board determined that it could no longer make loans to CalHFA and other state agencies from the PMIA due to the State's worsening budgetary situation. As a result of losing access to the PMIA line of credit, CalHFA suspended its remaining single-family loan programs (it had already suspended certain loan products earlier in the year).

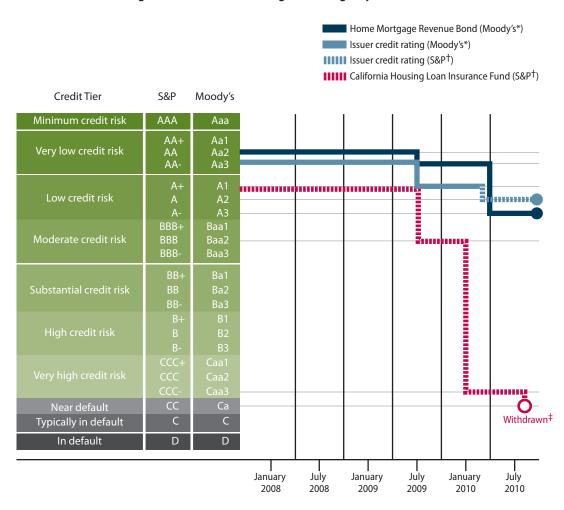
Also in late 2008, CalHFA faced increased financial risks and costs associated with its variable-rate bond debt. At that time, the municipal bond market experienced significant difficulties, and consequently CalHFA faced significant financial stress from its *variable-rate demand obligation bonds*, which are a type of bond that gives bondholders the right to tender (or sell back) the bonds at any time. To make these bonds marketable, CalHFA entered into standby agreements with various commercial banks (liquidity providers) to purchase bonds from bondholders who tendered their bonds for payment. Under these agreements, bonds purchased by the liquidity providers become what are known as *bank bonds* (because the bank providing liquidity owns the bonds). CalHFA must pay the banks holding the bank bonds a penalty rate of interest. In addition, the schedule for paying back the bonds is

<sup>11</sup> Generally, variable-rate debt consists of bonds with interest rates that are periodically reset based on market conditions.

<sup>12</sup> CalHFA's executives explained that CalHFA began using the PMIA line of credit because it allowed continuous lending and did not have some of the drawbacks and inefficiencies associated with a loan-purchasing model that relied entirely on bond proceeds.

significantly accelerated, with a five-year repayment schedule being common, compared to repayment schedules in excess of 20 years for most of the bonds CalHFA issues.

**Figure 5**Decreases in the Credit Ratings of the California Housing Finance Agency



Sources: Standard & Poor's Rating Services and Moody's Investor Service, Inc.

Note: Unless both ratings for the fund or financial obligations were the same for a certain time period, we displayed the lower of the two ratings.

- \* Moody's Investor Service, Inc. (Moody's).
- † Standard & Poor's Rating Services (S&P).
- <sup>‡</sup> The California Housing Finance Agency (CalHFA) stated that it requested that S&P withdraw its rating on the insurance fund due to its particularly low rating and because the agency was not planning to write new mortgage insurance in the near term. Under these conditions, CalHFA determined that continuing to pay S&P a fee to maintain its rating of the insurance fund was not prudent.

By early October 2008, CalHFA's bank bonds exceeded \$1.1 billion, and consequently CalHFA faced significant unanticipated payments that could have negatively affected its finances. Although CalHFA managed to decrease the amount of its bank bonds to \$120 million by February 2009, it still needed to replace many of its former

liquidity providers because they were either no longer willing or able to act in that capacity or had become too expensive. In October 2009 the federal government announced the Temporary Credit and Liquidity Program, whose purpose was to provide assistance to state housing finance agencies by replacing their existing liquidity agreements with banks. This program provides CalHFA with \$3.5 billion in liquidity support between January 2010 and the end of 2012, when the program is set to expire. We further discuss in Chapter 1 the role of this program in CalHFA's ongoing operations.

As we noted earlier, the State is not liable for the financial obligations of CalHFA, and consequently the financial problems described here will not affect the State's General Fund. Moreover, according to a deputy treasurer at the State Treasurer's Office, there would not be any direct effect on the rating or credit of the State's bonds should CalHFA default on payments of its bonds. However, the deputy treasurer added that, although it is impossible to quantify the collateral damage of CalHFA failing to pay its bondholders, such a failure certainly would be noticed in the California bond market and would contribute to a general unease about the safety of municipal bonds in California.

#### Scope and Methodology

The Joint Legislative Audit Committee (audit committee) asked the Bureau of State Audits to determine the decisions and actions that contributed to the current fiscal condition of CalHFA and to examine its future financial solvency. Specifically, we were asked to identify what actions, policies, and procedures led CalHFA to issue the types and amounts of variable-rate debt it issued since 2000 and to establish any related interest-rate swaps. The audit committee also asked us to identify what actions, policies, and procedures led CalHFA to issue certain types and amounts of mortgage loans and to establish certain types of insurance programs related to these loans. Further, the audit committee asked us to identify the roles of staff, advisers, and consultants in developing and implementing decisions related to the types of bonds issued, including related interest-rate swaps, loans purchased, and insurance established by CalHFA. In addition, we were requested to determine to what extent the CalHFA board was informed of and involved in decisions related to the types of bonds issued and to evaluate how the current governance structure of CalHFA promotes or inhibits prudent financial decision making.

The audit committee also asked us to identify steps CalHFA has taken to avoid insolvency, evaluate the appropriateness of these steps, and identify any additional steps CalHFA should consider

to improve its short- and long-term financial position. We were further requested to examine CalHFA's current financial position and determine the likelihood that CalHFA will remain solvent, paying particular attention to temporary credit and liquidity arrangements CalHFA has with federal government—sponsored enterprises set to expire in 2012. Finally, the audit committee asked that we review and assess any other issues that are significant to the continued financial solvency of CalHFA.

To determine what actions, policies, and procedures led CalHFA to issue the types and amounts of variable-rate debt it issued since 2000 and to establish any related interest-rate swaps, we reviewed state laws and regulations, CalHFA board meeting minutes and materials, financial records, and the terms of CalHFA's bond indentures. We also interviewed current and former CalHFA staff to determine the considerations that led CalHFA to issue its variable-rate debt.

To determine what actions, policies, and procedures led CalHFA to purchase certain types and amounts of mortgage loans and to establish certain types of insurance programs related to those loans, we reviewed state laws and regulations, board meeting minutes and materials, program manuals, loan data, and memoranda and planning documents related to product development and implementation. We also interviewed current and former CalHFA staff to determine what internal processes and procedures CalHFA used to identify the types and amounts of loans it would purchase and how those loans would be insured.

To determine the roles of staff, advisers, and consultants in developing and implementing decisions related to the types of bonds issued, including related interest-rate swaps, loans purchased, and insurance established by CalHFA, we interviewed current and former CalHFA staff, and reviewed board minutes and materials, planning documents, and other documentation CalHFA retained on file.

To determine the extent to which the CalHFA board was informed of and involved in decisions related to the types of bonds issued and to evaluate how the current governance structure of CalHFA promotes or inhibits prudent financial decision making, we reviewed state laws and regulations governing the board's role in these decisions. We also reviewed board minutes and other documents related to board meetings or provided to board members, and we interviewed current and former CalHFA staff members to gather their perceptions about the board's role in CalHFA's governance structure.

To identify steps CalHFA has taken to avoid insolvency, evaluate their appropriateness, and identify any additional steps CalHFA should consider to improve its short- and long-term financial position, we retained the services of Caine Mitter & Associates Incorporated (our consultant), a consulting firm with significant experience in analyzing and reviewing issues related to state housing finance agencies. The firm submitted a successful proposal in response to our office's solicitation of competitive bids to provide specialized support for our review.

As part of its work, our consultant reviewed a report commissioned by CalHFA on the California mortgage market and CalHFA's exposure, and performed its own assessment of CalHFA's current financial condition and its bond programs, assessing in particular the exposure associated with CalHFA's outstanding bonds and analyzing the risks that CalHFA's current debt structure poses to its solvency.

To examine CalHFA's current financial position and determine the likelihood that it will remain solvent, particularly with respect to temporary credit and liquidity arrangements CalHFA has with federal government—sponsored enterprises set to expire in 2012, our consultant reviewed analyses previously conducted by rating agencies and CalHFA consultants, performed cash-flow analyses using a variety of stressful assumptions it selected, and assessed CalHFA's past and current use of temporary credit and liquidity arrangements. In addition, our consultant reviewed additional information that rating agencies and other outside observers use to evaluate housing finance agencies, including CalHFA's multifamily loan portfolios, its interest-rate swaps, investments, and insurance providers.

We relied on various electronic data files when performing this audit. The U.S. Government Accountability Office, whose standards we follow, requires us to assess the sufficiency and appropriateness of computer-processed data. We obtained an extract from CalHFA's debt management system to identify bond issuance amounts, dates, rate types, and hedge<sup>13</sup> statuses and an extract from CalHFA's mortgage reconciliation system to compare lending volumes and delinquency rates among CalHFA's different loan products. We assessed the reliability of the data we obtained from these two systems by conducting data-set verification procedures and performing accuracy and completeness testing of the data. We did not identify any issues when performing data-set verification procedures.

 $<sup>^{13}</sup>$  A *hedge* is a protective action taken to protect against a financial risk, as we discuss in Chapter 1.

We tested accuracy by selecting random samples of 29 bonds issued for the period January 1998 through June 2010 and 29 loans purchased by CalHFA from January 2000 through August 2010, and found no errors in either sample. Further, to test the completeness of the data we obtained from the debt management and mortgage reconciliation systems, we haphazardly selected a sample of 29 hard-copy source documents for each system, traced them to the two systems, and found no errors. Therefore, based on our testing and analysis, we found the extracts of the debt management system for the period January 1998 through June 2010 and the mortgage reconciliation system for the period January 2000 through August 2010 to be sufficiently reliable for the purposes of this audit.

As part of our review, we also analyzed the internal control environment within which CalHFA's board and upper management made key decisions, including potential risks concerning conflict of interest, fraud, and ethics. We interviewed current and former employees, reviewed mandated statements of economic interests for board members and upper management, and analyzed turnover in upper management positions. We found no issues of note regarding conflicts of interests or turnover in the upper management positions we reviewed. At times, former employees expressed concerns about particular events they indicated they experienced during their tenure at CalHFA. Many of these concerns were not within the scope of the review requested by the audit committee. When within our scope, we adjusted our procedures to attempt to corroborate the concerns expressed to us. Our report presents only those issues that we could corroborate with evidence or multiple sources of firsthand testimony gathered from interviews with current and former CalHFA officials.

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### **Chapter 1**

## THE CALIFORNIA HOUSING FINANCE AGENCY WILL LIKELY AVOID INSOLVENCY UNDER MOST FORESEEABLE CIRCUMSTANCES

#### **Chapter Summary**

Declining home values, rising mortgage delinquencies and foreclosures, a weakened state and national economy, and a high proportion of variable-rate bond debt and associated interest-rate swap agreements (interest-rate swaps) have put the solvency of the California Housing Finance Agency (CalHFA) at risk. Although CalHFA is facing significant challenges, Caine Mitter & Associates Incorporated (our consultant), determined that CalHFA will likely avoid insolvency under most foreseeable circumstances. However, our consultant acknowledged that a great degree of uncertainty continues to exist, with the following factors being of greatest concern:

- Losses on single-family loans due to declines in home values and increases in foreclosures.
- Changes in interest rates that affect the cost of CalHFA's variable-rate bond debt and related interest-rate swaps.
- Private insurance providers and investment companies with which CalHFA has investment contracts (also known as counterparties) failing to meet their obligations.
- Variable-rate bonds being converted to more expensive bank bonds.

Our consultant concluded that none of these factors will immediately lead to insolvency upon occurrence. In each case, continued solvency will depend on the severity, duration, and combination of circumstances that occur. Even so, almost all of the financial scenarios modeled by CalHFA for the rating agencies and our consultant indicate that CalHFA will remain solvent. Our consultant concluded that the recent efforts CalHFA has taken to remain solvent have been proactive and prudent and have contributed, at least in part, to the continued solvency of the agency.

## The Overall Financial Solvency of CalHFA Depends on Its Solvency in Two Key Areas

Analyzing whether CalHFA will remain solvent involves determining whether it has the ability to meet future bondholder and other obligations and still have sufficient funds to continue operation. Although CalHFA has numerous bond programs, the following two issues are key in examining CalHFA's solvency:

- The ability of the Home Mortgage Revenue Bonds (HMRB) program to pay bondholders.
- The ability of the California Housing Finance Fund (finance fund) to pay bondholders and interest-rate swap counterparties for the housing bonds, programs, and agreements for which CalHFA has pledged the agency's full resources, while continuing to finance the operational needs of the agency.

These two issues—CalHFA's ability to meet the obligations of both its HMRB and its finance fund—are interrelated, and the solvency of the finance fund will be dependent, in part, on the financial strength of HMRB. Although it had control over its past decisions, CalHFA's solvency is now highly dependent upon forces outside of its control, including the financial strength of its counterparties, interest rates, foreclosure rates, home values, rating agency standards, and other economic forces. Our consultant examined each of these factors and its potential impact on the solvency of CalHFA.

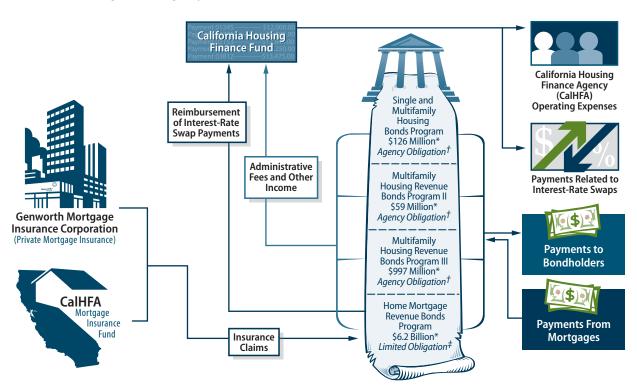
As we discussed in the Introduction, CalHFA issues revenue bonds to finance affordable housing and uses the proceeds of these bonds to purchase single-family loans and make multifamily home loans. CalHFA then uses revenue generated by these home loans to pay principal and interest on the bonds. Additional income generated after bond payments are satisfied provides income to CalHFA. Expanding on Figure 2 in the Introduction, Figure 6 depicts the flow of payments among the major funds, obligations, and programs within CalHFA.

Additionally, all payments to counterparties under CalHFA's interest-rate swaps are agency obligations, including those associated with the variable-rate bonds contained within the HMRB portfolio. Obligations under HMRB are limited obligations payable only from assets specifically pledged under the indenture agreement<sup>14</sup> (mainly home loans). The other major bond programs of CalHFA shown in Figure 6 are agency obligations that must be paid from CalHFA's finance fund should the underlying assets fail to provide

<sup>14</sup> A bond indenture is a contract between the issuer of municipal securities and a trustee representing the bondholders. It establishes the rights, duties, responsibilities, and remedies of the issuer and trustee and determines the exact nature of the security for the bonds.

sufficient revenue to meet payment requirements. As indicated in Figure 6, CalHFA relies on the administrative fees and other income generated from its various bond programs, and the reimbursement of payments related to interest-rate swaps from HMRB, to meet these agency obligations and to fund its operating expenses.

**Figure 6**Expanded View of the Interrelationships Between the Funds and Financial Obligations of the California Housing Finance Agency



Sources: Bureau of State Audits' analysis of CalHFA's audited financial statements, bond indenture provisions, and other documents.

- \* Amounts shown are bonds and notes outstanding as of June 30, 2010.
- † For these indenture agreements, CalHFA has pledged financial support from the California Housing Finance Fund should the assets within the indenture (mainly home loans) fail to provide sufficient revenue to meet bond payments.
- <sup>‡</sup> Obligations under the Home Mortgage Revenue Bonds indenture agreement are limited in that they are payable only from assets included in the indenture. CalHFA has not pledged agency resources.

As will be discussed later in this chapter, many of the loans in HMRB are insured by the California Housing Loan Insurance Fund (insurance fund). Genworth Mortgage Insurance Corporation (Genworth) provides 75 percent reinsurance on most of the insurance fund's obligations. Not shown in Figure 6 is a reserve of CalHFA funds (gap reserve) established to bridge the gap between the HMRB requirement that certain CalHFA mortgages be insured for up to 50 percent of their unpaid principal balance and the primary insurance policy on these

mortgages. In 2005 CalHFA made a decision to lower the coverage for primary insurance policies on certain HMRB mortgages to 35 percent, thus lowering borrowers' premiums as well.

After it lowered borrowers' coverage requirement to 35 percent, CalHFA's mortgage insurance fund issued a secondary policy in 2006 under which the insurance fund committed to cover the next 15 percent gap in coverage (gap policy). The finance fund agreed to indemnify, or reimburse, the insurance fund for the amount of covered claims paid under the gap policy. As the real estate market deteriorated and the number of defaults on mortgages increased, more claims were filed against both the primary insurance and gap policies. The claims paid by the insurance fund related to the gap policy have been reimbursed by CalHFA through the gap reserve in the finance fund. Ultimately, CalHFA capped the total of all gap reserve payments at \$135 million in March 2010.

CalHFA capped the total of all gap reserve payments at \$135 million in March 2010.

CalHFA has various other programs not shown in Figure 6, including a few small multifamily programs, a new single-family bond program, and a new multifamily bond program. The smaller multifamily programs are agency obligations, and our consultant evaluated them as part of its assessment. Both new programs contain bonds sold to the U.S. Treasury under a federal initiative to provide support to housing finance agencies and are limited obligations of CalHFA secured only by the assets within the bonds' indenture agreements. These programs were created only recently and were thus not included as part of our consultant's assessment, but they are both rated as a very low credit risk (Aaa) by Moody's Investors Service, Inc. (Moody's).

## Although Stressed by Recent Events in the Home Loan Market, HMRB Will Likely Remain Solvent

Severely depreciating home values and dramatically increasing delinquency and foreclosure rates have resulted in significant losses to HMRB. As of June 30, 2010, it had \$6.7 billion in assets, of which approximately 78 percent represented mortgage loans. <sup>15</sup> Due in part to the declining real estate market, the fund balance for HMRB (also known as its equity, or assets minus liabilities) decreased by 17 percent, from \$427 million at the end of fiscal year 2008–09 to \$353 million at the end of fiscal year 2009–10. To better understand the impact of possible future losses in HMRB, CalHFA commissioned Milliman, Inc. (Milliman)—a company

<sup>15</sup> The remaining 22 percent of HMRB assets are nonmortgage assets, primarily deposits in the State's Surplus Money Investment Fund and other investments. Our consultant analyzed the creditworthiness of any counterparties related to these investments and found nothing of any particular concern but acknowledged that some risk exists whenever returns on an investment are dependent on a counterparty (sometimes known as counterparty exposure).

that provides actuarial studies for the real estate industry—to analyze the probability of and severity of HMRB losses associated with home loan defaults. These losses, which were estimated as of September 2009, were modeled under varying market conditions.

The baseline analysis performed by Milliman resulted in projected losses to CalHFA of \$337 million after considering payments it received from third-party mortgage insurers, including Genworth, the Federal Housing Agency (FHA), and the United States Department of Veterans Affairs (VA). Of this amount, Milliman projected that the insurance fund and gap reserve would cover \$293 million, creating a net projected loss of \$44 million to HMRB. When our consultant reviewed Milliman's calculations, declining conditions within the insurance fund and the cap placed on the gap reserve led our consultant to adjust these calculations. As a result, our consultant concluded that under Milliman's baseline projections, the estimated net drain on HMRB resources would be \$149 million (as opposed to the \$44 million estimated earlier). However, our consultant pointed out that these projected losses are still well below the HMRB fund balance of \$353 million.

In addition to the baseline scenario, Milliman analyzed a variety of other scenarios involving increasing financial stress to HMRB. The most stressful scenario modeled by Milliman assumed an additional 10 percent decline in home values beyond the 15 percent decline already projected in the baseline scenario and an 80 percent foreclosure rate on CalHFA's interest-only loans. (These loans are discussed in Chapter 2.) This scenario resulted in projected losses to HMRB of \$626 million after considering payments it received from third-party mortgage insurers. Of this amount, Milliman assumed that the insurance fund and gap reserve would cover \$500 million, creating a net projected loss to HMRB of \$126 million. Once again our consultant adjusted these figures for the limited resources in the insurance fund and gap reserve and then estimated that the net drain on HMRB would be \$438 million under this more stressful scenario.

Although this amount is much greater than HMRB's fund balance of \$353 million, these losses would be experienced over a period of several years. During that time HMRB would have the ability to generate additional revenue. Consequently, our consultant stated that an analysis of HMRB's cash-flow projections, which model the timing of the receipt of revenues and the payment of obligations, would indicate whether HMRB could sustain such heavy losses. Our consultant stated that CalHFA has run HMRB cash-flow projections for Moody's that demonstrate an ability—under a certain set of assumptions—to sustain loan losses of up to \$534 million. In analyzing these cash-flow projections, our consultant concluded that, although there are differences in key underlying assumptions

Under certain baseline projections, the estimated net drain on HMRB resources from home loan losses would be \$149 million—still well below the HMRB fund balance of \$353 million.

between the cash-flow projections run for Moody's and the Milliman study (for example, which specific loans go into default and the number of loans that go into foreclosure), the timing of the annual losses is similar. This conclusion indicates that, holding other factors constant, HMRB has the ability to remain solvent in situations that Milliman considers to be extreme. We provide additional information on cash-flow projections later in this chapter.

Genworth's ability to pay claims is crucial to the solvency of HMRB in a severe loan loss situation.

Both our consultant's analysis of the Milliman study and the Milliman study itself assumed that Genworth, the FHA, and the VA would pay all required mortgage insurance claims. If Genworth were to stop paying claims, the losses to HMRB under Milliman's baseline and most stressful scenarios would increase to \$429 million and \$855 million, respectively. Our consultant concluded that it is unlikely that HMRB could sustain losses of \$855 million, meaning that Genworth's ability to pay claims is crucial in a severe loss scenario like the one modeled by Milliman.

## Insurance Providers' Ability to Pay Claims Is Key to HMRB's Ability to Sustain Losses

As of December 31 2009, CalHFA's insurance fund had \$67 million in assets—a decrease of \$15 million from the previous year-end total. In October 2010 CalHFA projected that, given the current level of delinquencies and foreclosures, these funds will be fully depleted by the summer of 2011. While Moody's currently rates the insurance fund as a high credit risk (B2), Standard & Poor's Rating Services (S&P) rated the insurance fund as a very high credit risk (CCC-) and then, based on a request from CalHFA, withdrew its rating on the insurance fund. In the contract of the

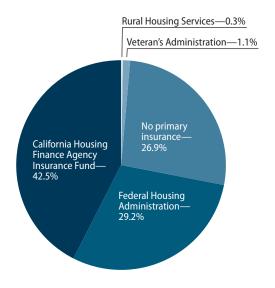
In addition to mortgage loan insurance, CalHFA has set aside certain other funds for mortgage loan losses, which are known as the gap reserve. However, to reduce the agency obligations drawing on its finance fund, in March 2010 CalHFA capped the amount it would contribute to the gap reserve at \$135 million. As of December 2010, CalHFA reported that the gap reserve had a balance of \$47 million, and it projects that these funds will also be depleted by the summer of 2011.

<sup>16</sup> Although not audited, CalHFA's draft year-end statement for 2010 reported insurance fund assets of roughly \$32 million.

<sup>17</sup> CalHFA stated that it requested S&P to withdraw its rating on the insurance fund due to its particularly low rating and because the agency was not planning to write new mortgage insurance in the near term. Under these conditions, CalHFA determined that continuing to pay S&P a fee to maintain its rating of the insurance fund was not prudent.

As shown in Figure 7, as of July 2010, 42.5 percent of all loans in HMRB had primary insurance coverage from the insurance fund. The FHA insures another 29.2 percent of HMRB home loans, the VA covers 1.1 percent, and Rural Housing Service (RHS) insures 0.3 percent. Finally, 26.9 percent of HMRB loans do not have any primary insurance because, at least at one point, the loan-to-value ratio on these loans reached an 80 percent threshold, which releases mortgage holders from the premiums associated with this type of insurance.

**Figure 7**Sources of Insurance for Loans in the Home Mortgage Revenue Bonds Loan Portfolio



Source: California Housing Finance Agency's Homeownership Loan Portfolio Delinquency, Real Estate Owned, and Loss Report, as of July 31, 2010.

Although the insurance fund will not be able to pay all claims, the fund notably has an reinsurance agreement with Genworth, a private mortgage insurance company, for it to pay 75 percent of most insurance fund claims. This means that even though balances in the insurance fund will be depleted by the summer of 2011, CalHFA can continue to rely on Genworth to pay at least a portion of the losses that occur on loans covered by the insurance fund.

<sup>18</sup> The RHS is a federal program promoting safe and affordable housing in rural areas across the United States.

<sup>19</sup> As indicated earlier, the gap policy provides a secondary source of insurance coverage on CalHFA loans.

Our consultant stated that the mortgage portfolio of HMRB has the greatest exposure to Genworth, through Genworth's reinsurance of the insurance fund's losses, and the FHA. Genworth is a national private mortgage insurance company with a total risk in force<sup>20</sup> of \$34 billion in the second quarter of 2009 (compared to its risk in force of \$605 million for HMRB alone). In a report issued in May 2010, Moody's described Genworth's moderate-credit-risk (Baa2) rating for its insurance financial strength as reflecting "uncertainty about ultimate losses in the face of high levels of delinquencies and a challenging economic environment, mitigated in part by the company's substantial paying resources and implicit support from its parent, Genworth Financial Inc." The report also pointed to Genworth's capital resources, which are equal to 1.5 times its expected losses.

In February 2011 S&P downgraded Genworth's rating from a moderate credit risk to a substantial credit risk. More recently, in February 2011, S&P downgraded Genworth's rating from a moderate credit risk (BBB-) to a substantial credit risk (BB+). S&P reported that the downgrade was due to greater-than-expected losses in fiscal year 2010 stemming "largely from reserve increases related to the aging of the delinquency inventory as well as significant declines in loss-mitigation activities." Under S&P's credit rating scale, this downgrade from BBB- to BB+ dropped Genworth's rating from the lowest "investment grade" category to the highest "speculative grade" category, a classification that generally means the entity currently has the ability to pay obligations but faces significant uncertainties.

Our consultant stated that private mortgage insurance companies have suffered significant rating downgrades since the fallout of the subprime mortgage market in 2008, but the consultant was not aware of any failures to pay accepted claims by the major private mortgage insurers engaged by housing finance agencies. According to our consultant, despite being downgraded from a minimum-credit-risk (Aa2/AA) rating in recent years, Genworth remains one of the more highly rated major private mortgage insurance companies engaged by housing finance agencies.

The FHA covers 100 percent of the principal and accrued interest on loans for which it provides insurance coverage. Although the foreclosures on FHA-insured home loans will likely result in some processing-related expenses to CalHFA, our consultant stated that it is generally accepted that the federal government will support the FHA's obligations, if necessary.

<sup>20</sup> Risk in force is the total amount of mortgage loans insured multiplied by the average coverage per loan.

As was indicated earlier, by the summer of 2011 the insurance fund is expected to become insolvent, and the gap reserve is also expected to be depleted. These assumptions are indirectly accounted for in cash-flow projections for the rating agencies described in the next section. The results from these cash-flow analyses indicate that the insurance fund's insolvency and the depletion of the gap reserve will not in and of themselves cause HMRB to become insolvent.

Cash-flow analyses indicate that the insurance fund's insolvency and the depletion of the gap reserve will not in and of themselves cause HMRB to become insolvent.

#### Cash-Flow Analyses of HMRB Indicate Solvency in Most Circumstances

To issue or maintain their ratings on CalHFA bonds, rating agencies require CalHFA to regularly prepare cash-flow projections under a variety of assumptions and inputs. CalHFA, like all other state housing finance agencies, prepares cash-flow projections annually to demonstrate its ability to meet its obligations under the various stress scenarios determined by the rating agencies. These projections begin with an annual basis, derived from the agency's audited financial statements, and then model future revenues received from mortgage loans and investments as well as payments made to bondholders and counterparties based on various assumptions. Cash-flow projections provide insight into a housing finance agency's ability to meet obligations based on the timing of receipts and payments that could not otherwise be gleaned from its financial statements. They are particularly useful in their ability to examine the impact of changing interest rates on variable-rate bond debt and the impact of prepayments (discussed below) and losses on mortgage loans.

CalHFA has prepared numerous cash-flow scenarios for its HMRB based on its fiscal year 2008–09 audited financial statements. Numerous assumptions go into a cash-flow scenario, and the results of each scenario are highly dependent on these assumptions. Each of the four key areas of focus listed below involves assumptions that have been in some way included in each cash-flow scenario, resulting in a broad set of possible combinations of future events. Our consultant explained that the four key areas are as follows:

• Interest rates. In addition to variable-rate investments it holds, CalHFA has issued a large amount of variable-rate bonds that finance fixed-rate mortgages. CalHFA has entered into interest-rate swaps to mitigate some of the risks associated with its variable-rate bonds; however, even these agreements have risks and costs associated with them that depend, in large part, on the level of interest rates. To see the effect of various interest-rate environments on CalHFA's portfolio, cash-flow projections are run assuming high and low short-term interest-rate environments.

- Prepayment speeds. Single-family mortgage loans financed by CalHFA can be prepaid at the option of the homeowner at any time without penalty. Higher prepayments mean that homeowners are paying off mortgage loans faster, which means more cash is flowing into HMRB that can be used to pay off bonds early.<sup>21</sup> High prepayment scenarios allow CalHFA to reduce its exposure to its variable-rate bonds more quickly and tend to be less financially stressful on CalHFA than low prepayment scenarios.
- *Bank bonds*. As we discussed in the Introduction, in order for investors to purchase certain variable-rate bonds, a highly rated financial institution must agree to purchase bonds that cannot be sold to other investors. When one of these financial institutions purchases bonds, they become *bank bonds*. These institutions require significantly higher interest rates and earlier payoff periods for bank bonds. To assess the impact of bank bonds, cash-flow projections are run assuming that a portion of the variable-rate bonds become bank bonds.
- Loan losses. Single-family mortgage loans that go into foreclosure may result in losses to HMRB if insurance payments are not sufficient to cover the difference between the unpaid principal balance of the mortgage and the amount received upon sale of the property.

Table 1 summarizes the key results of the most recent cash-flow scenarios CalHFA prepared for Moody's and S&P. The table indicates if and when net assets in HMRB become negative under a given scenario. As indicated in the table, all but one of the scenarios (see the negative balance in the far right column) project sufficient funds to satisfy HMRB's obligations. In two additional scenarios, HMRB would have negative net assets for a period of time. Our consultant explained that, although negative net assets such as these are highly unfavorable and are cause for concern, HMRB would still ultimately be able to meet its payment obligations under these scenarios.

The scenario demonstrating the highest level of financial stress to HMRB (resulting in a negative balance of \$159 million) is the Moody's cash-flow scenario with high short-term interest rates, very low mortgage prepayment speeds, bank bonds for one year, and restrictions on bond reserve withdrawals. Our consultant stated that this finding would be consistent with the expectation that very low prepayment speeds would dramatically reduce the rate at

<sup>21</sup> Bonds issued under HMRB can be redeemed with money received from a prepayment at any time.

**Table 1**Summary of Cash-Flow Analyses Performed on the California Housing Finance Agency Home Mortgage Revenue Bonds Program

SHORT-TERM INTEREST RATE ENVIRONMENT	PREPAYMENT ENVIRONMENT	BANK BONDS	DURATION OF BANK BONDS	LOAN LOSSES	ALLOW BOND RESERVE DRAWS*	ADMINISTRATIVE FEE PAID†	LOWEST NEGATIVE NET ASSETS (IN MILLIONS)	PERIOD OF NEGATIVE NET ASSETS	LOWEST REVENUE, PLUS RESERVE (IN MILLIONS) <sup>‡</sup>		
Scenarios Required	Scenarios Required by Moody's Investor Services, Inc. (Moody's)										
High interest rates	Very low	100%	2011–12	No	Yes	2010–11			\$1 <sup>§</sup>		
High interest rates	Very low	20	2011–12	No	Yes	2010–11			1		
High interest rates	High	100	2011–12	No	Yes	2010–11			236		
High interest rates	Split <sup>ll</sup>	100	2011–12	No	Yes	2010–11			112		
Low interest rates	Very low	100	2011–12	No	Yes	2010–11			77		
Low interest rates	High	100	2011–12	No	Yes	2010–11			16		
Low interest rates	Split	100	2011–12	No	Yes	2010–11			82		
Additional Scenarios Requested by Moody's											
High interest rates	Very low	0		Low	Yes	2010–11			6		
Low interest rates	Very low	0		Low	Yes	2010–11			134		
High interest rates	Very low	0		High	Yes	2010–11	\$(4)	2016	9		
Low interest rates	Very low	0		High	Yes	2010–11	(2)	2017	50		
High interest rates	Very low	0		No	No	2010–11			21		
High interest rates	Very low	100	2011–12	No	No	2010–11	(45)	2027–47	(159)		
Low interest rates	Very low	0		No	No	2010–11			309		
Low interest rates	Very low	100	2011–12	No	No	2010–11			212		
Scenarios Required by Standard & Poor's Rating Services, Inc. (S&P)											
High interest rates	Low rising	0		No	Yes	2010–48			77		
High interest rates	Zero	0		No	Yes	2010–13			72		
High interest rates	Medium low	0		No	Yes	2010–48			71		
High interest rates	High	0		No	Yes	2010–48			56		
Low interest rates	High	0		No	Yes	2010–48			98		
Additional Scenario	Additional Scenarios Requested by S&P										
High interest rates	Low rising	0		Yes	Yes	2010–11			29		
High interest rates	Medium low	0		Yes	Yes	2010–11			128		
High interest rates	Medium high	0		Yes	Yes	2010–11			99		
Low interest rates	Medium high	0		Yes	Yes	2010–11			139		

Source: Caine Mitter & Associates Incorporated's analysis of cash-flow scenarios prepared in spring 2010 by the California Housing Finance Agency (CalHFA) for Moody's and S&P.

- \* The bond reserve is a source of funds that can be drawn on when there is a delay in receiving payments from other sources. Traditionally, rating agencies have viewed the bond reserve as a source of funds to meet any debt service shortfalls, but they have since modified their position to view draws on the bond reserve as a credit event that is separately modeled. Consequently, although most scenarios allow for withdrawals from the bond reserve, some Moody's scenarios specifically preclude such withdrawals.
- † Fees for administering CalHFA's bond programs are paid to the California Housing Finance Fund (finance fund) and then used to pay CalHFA's operating expenses, as shown earlier in Figure 6. In scenarios in which loan losses or bank bonds reduce the available revenue, the administrative fee is withdrawn for only one year. Failure to make such withdrawals annually will place additional stress on the finance fund.
- <sup>‡</sup> This column represents the lowest available combined fund balance in the Home Mortgage Revenue Bonds' (HMRB) revenue and reserve funds on any date during the projection period. Precisely when the lowest point occurs varies from scenario to scenario, but it is usually related to the timing of payments and receipts in a scenario. Scenarios with very low positive balances demonstrate less ability to make required cash payments. The scenario with a negative balance does not project adequate funds to meet all of HMRB's obligations in one or more periods. Failure to meet a scheduled obligation would create a default under HMRB and would reveal a potential solvency issue.
- This scenario would have resulted in a negative balance of more than \$76 million, except that CalHFA was allowed to assume that HMRB would not fully reimburse the finance fund for certain interest-rate swap payments. Our consultant explained that, within certain limits, the rating agencies allow entities being rated to model management decisions that they would ostensibly make in the short term should they have indications of a long-term financial problem.
- The term split refers to an environment that Moody's had CalHFA model in which the speed of prepayments on interest-only loans was dramatically higher than on all other loans. The higher rate of prepayments reflects the higher rates of default or refinancing that may be expected among interest-only loans after payments on principal begin to be required.

which CalHFA could redeem its outstanding variable-rate debt, and the costs of bank bonds in this situation would be quite high. Our consultant calculated that the presence of bank bonds for the one year assumed in the model would result in a projected increase of \$98 million in debt service payments under that particular scenario. Furthermore, under the same scenario, the temporary increase in interest payments would reduce the funds available to redeem other variable-rate debt, further increasing costs. Therefore, even though bank bonds were short-lived in that scenario, the additional costs led to a negative balance of \$159 million, a decrease of \$180 million over the scenario right above it in the table, which also had very low prepayment speeds and high short-term interest rates, but no bank bonds. The results from this scenario highlight the risk bank bonds pose to HMRB when combined with other financially stressful factors.

## Bank Bonds, if Combined With Other Stresses, Pose a Risk to CalHFA's Solvency

As can be seen in the cash-flow projections shown in Table 1, CalHFA's high level of variable-rate debt means that it faces the threat of significant costs should its variable-rate bonds become bank bonds. At least until December 2012, this risk is minimal because a federal liquidity program makes bank bonds unlikely. To date, whether this program will be extended is unknown, but our consultant believes that the federal government would have a natural incentive to do so because of the potential costs to some of its sponsored enterprises should the program not be extended.

CalHFA has variable-rate debt in its HMRB, Multifamily Housing Revenue Bonds III (MHRB III), and Housing Program Bonds (HPB) programs. A breakdown of the fixed- and variable-rate debt in each of these three bond programs as of August 2010 is shown in Table 2.

The largest category of bonds in CalHFA's portfolio is variable-rate demand obligations, and these are the only bonds that could become bank bonds as a result of the process described here. The interest rate on variable-rate demand obligations is reset periodically (usually on a weekly basis) by a financial institution acting as a remarketing agent. The holder of a variable-rate demand obligation may tender, or sell back, its bond holdings to the remarketing agent for a price equal to the face value of the bonds. The remarketing agent then attempts to resell the bonds to alternate investors. In this way, variable-rate demand obligations maintain a short-term interest rate, despite having long-term maturities. In order for variable-rate demand obligations to be marketable, a highly rated financial institution must provide liquidity by agreeing to purchase any bonds tendered by an investor and not successfully

resold (liquidity provider). If bonds are purchased by the liquidity provider, they become bank bonds and are subject to a significantly higher interest rate and must be paid off more rapidly.

**Table 2**Amounts and Percentages of Fixed- and Variable-Rate Debt by Bond Program (Dollars in Millions)

TYPE OF BONDS	HOME MORTGAGE REVENUE BONDS	MULTIFAMILY HOUSING REVENUE BONDS III	HOUSING PROGRAM BONDS	TOTALS
Fixed-rate bonds	\$2,440 (40%)	\$228 (23%)	\$47 (35%)	\$2,715
Variable-rate demand obligations	2,609 (43)	597 (61)	79 (65)	3,285
Indexed securities*	998 (17)			998
Auction-rate securities and R-floats <sup>†</sup>		158 (16)		158
Totals	\$6,047 (100%)	\$983 (100%)	\$126 (100%)	\$7,156

Source: Caine Mitter & Associates Incorporated's analysis of outstanding bonds as of August 2010.

- \* This type of security pays an interest rate based on a formula attached to a recognized index.
- † These types of securities are very similar; both pay an interest rate based on periodic auctions.

As indicated in Table 2, CalHFA has, in addition to variable-rate demand obligations, \$1.2 billion in other variable-rate debt in the form of indexed securities, auction-rate securities, and R-floats. Indexed securities pay interest based on a formula attached to an index. The rates for auction-rate securities and R-floats are set during periodic auctions. Unlike variable-rate demand obligations, these types of variable-rate debt do not require a liquidity provider and therefore do not pose the risk that they will be converted to costly bank bonds.

As part of the U.S. Treasury's Temporary Credit and Liquidity Program (TCLP), all of CalHFA's variable-rate demand obligations currently have liquidity provided by Fannie Mae and Freddie Mac—two government-sponsored enterprises involved in affordable housing at the federal level. However, TCLP is scheduled to expire in December 2012. Given CalHFA's current credit position, our consultant believes it is unlikely that CalHFA will be able to find a financial institution that is willing to replace TCLP as the liquidity provider at that time. If TCLP is not extended, CalHFA's variable-rate bonds will be purchased by Fannie Mae and Freddie Mac and become bank bonds.

As indicated earlier, CalHFA modeled for Moody's the effect of bank bonds in its HMRB cash-flow analyses. The bank bond scenarios requested by Moody's assumed that CalHFA's variable-rate demand obligations would become bank bonds

immediately and remain so for one year, at which point they would be resold successfully. Additional cash-flow analyses that our consultant requested assumed that CalHFA's variable-rate demand obligations would become bank bonds beginning when TCLP expires, or upon the expiration of a hypothetical three-year extension of TCLP, and ending on the earlier of the scheduled maturity date for the bonds or 10 years from when they become bank bonds (a TCLP requirement). The Moody's bank bond scenarios were coupled with other stresses, such as high short-term interest rates and very low prepayment speeds. To isolate the impact of the expiration of TCLP, the additional bank bond scenarios that our consultant requested did not involve additional stress factors except for a moderate amount of losses from home loan defaults. As indicated in Table 3, HMRB could sustain the higher costs associated with bank bonds under a variety of scenarios, except when heavy loan losses are accompanied by low prepayment speeds (see the negative balance of \$4 million).

**Table 3**Additional Scenarios Demonstrating the Risk of Bank Bonds to the Home Mortgage Revenue Bonds Program

SHORT-TERM INTEREST RATE ENVIRONMENT	PREPAYMENT ENVIRONMENT	BANK BONDS	BANK BOND DURATION	LOAN LOSSES	ALLOW BOND RESERVE DRAWS	ADMINISTRATIVE FEE PAID	LOWEST REVENUE PLUS RESERVE (IN MILLIONS)
Low interest rates	Medium	Yes	2012–22	No	Yes	2010–48	\$120,000
Low interest rates	Low	Yes	2012–22	No	Yes	2010–48	20,000
Low interest rates	Medium	Yes	2015–25	No	Yes	2010–48	240,000
Low interest rates	Low	Yes	2015–25	No	Yes	2010–48	32,000
Low interest rates	Low	Yes	2012–25	Yes	Yes	2010–48	(3,900)
Low interest rates	Medium	Yes	2012–25	Yes	Yes	2010–48	262,000

Source: Analysis by Caine Mitter & Associates Incorporated of cash-flow scenarios prepared by the California Housing Finance Agency in fall 2010. Note: See Table 1 for footnotes describing the terms used in this table.

Based on the analysis of the cash flows represented by Table 3, our consultant concluded that bank bonds alone will not cause HMRB to become insolvent. However, an extended period of bank bonds coupled with other stresses, such as low mortgage loan prepayments, high short-term interest rates, or high levels of loan losses, would likely lead to insolvency.

Moody's also requested that CalHFA run cash-flow projections assuming bank bonds for the MHRB III program. In these projections as well, CalHFA was able to demonstrate an ability to meet its obligations. However, a prolonged period of bank bonds coupled with other stresses would likely lead to a failure of MHRB III to independently meet its obligations. Because MHRB III

is an agency obligation, not a limited obligation like HMRB, this could put additional strain on CalHFA's finance fund and potentially cause it to become insolvent.

Our consultant stated that there have been indications that Fannie Mae, Freddie Mac, and the U.S. Treasury may be considering extending the expiration date of TCLP for all participating housing finance agencies. Our consultant added that an extension of the program would appear to be financially prudent, since without this action it is unlikely that CalHFA would be able to find alternate liquidity and all of the bonds would become bank bonds, making Fannie Mae and Freddie Mac the largest holders of CalHFA bonds. The combination of bank bonds and other stress factors would increase the possibility that CalHFA would default on the payments of its bonds, resulting in losses to Fannie Mae and Freddie Mac.

#### CalHFA's Interest-Rate Swaps Manage Certain Types of Risk but Create Others

Variable-rate bonds, regardless of type, expose HMRB and the finance fund to interest-rate risk. *Interest-rate risk*, in this context, is the risk that short-term interest rates on its variable-rate bonds will rise to levels that exceed the rates being paid by the assets within HMRB (the interest rates on CalHFA mortgages, for example). To protect against this risk, CalHFA has entered into interest-rate swaps that require CalHFA to pay a counterparty a fixed-interest rate, and requires the counterparty to pay CalHFA a variable rate. The variable rate to be paid by the counterparty is intended to approximate the variable rate paid on the bonds. In this way, interest-rate swaps act as a *hedge* or protector against the risk of rising interest rates. Regularly scheduled payments on the swaps are made from, or backed by, CalHFA's finance fund (thus making them agency obligations). Swap payments related to HMRB are made by the finance fund and then reimbursed by available revenues from HMRB. Swap payments related to MHRB III, which also has interest-rate swaps tied to its variable-rate debt, are made directly from the indenture itself but are backed by the finance fund should that program not be able to meet its obligations. As of June 30 2010, approximately 69 percent of the variable-rate bonds in HMRB and approximately 71 percent of the variable-rate bonds in MHRB III were hedged with interest-rate swaps. As of the same date, CalHFA had 129 interest-rate swaps outstanding.

Variable-rate bonds, regardless of type, expose HMRB and the finance fund to interest-rate risk.

CalHFA is currently reducing its exposure to interest-rate swaps by exercising options to terminate these agreements.

Our consultant explained that, since the onset of the financial crisis in 2008, interest-rate swaps have created *basis risk*.<sup>22</sup> Except for a short period of time in the fall of 2008, the primary reason for basis risk in the past was the existence of bank bonds occurring within various CalHFA bond programs. With TCLP in effect, no bank bonds currently exist. However, should TCLP end, the resulting bank bonds would create additional basis risk.

In the absence of basis risk, our consultant explained, interest-rate swaps generally act as effective tools to reduce interest-rate risk. However, CalHFA has indicated that it is currently reducing its exposure to interest-rate swaps by exercising options to terminate these agreements. This action will help take financial pressure off of its finance fund stemming from the collateral requirements associated with the swaps, described in the next section. If short-term interest rates rise after this reduction in its swaps, CalHFA will have less of a hedge against higher interest rates. Our consultant concluded that it is unlikely that this reduction in interest-rate swaps in isolation would cause HMRB to become insolvent, even in a rising short-term interest-rate environment, but as demonstrated in the cash-flow analyses, rising interest rates coupled with other stresses could lead to insolvency for HMRB.

## Collateral Posting Requirements on Interest-Rate Swaps Pose a Risk to CalHFA's Finance Fund

Under its interest-rate swaps, CalHFA and each of its counterparties have agreed, under certain circumstances, to post collateral—set-aside funds in a designated bank account. Our consultant explained that, while the collateral remains an asset of CalHFA as long as it does not default on its swap obligations, the collateral is held by the counterparty and therefore is not available to CalHFA for other purposes. The amount of collateral is based on the market value of the swap and the credit rating of either CalHFA or the counterparty. The market value is determined by a generally accepted methodology that, when interest rates are low, results in the value of the swap being negative for CalHFA and positive for the counterparty. Conversely, when interest rates are high, the value of the swap will be positive for CalHFA and negative for the counterparty. When the negative value reaches certain predetermined levels associated with particular credit ratings, the party with the negative position must post collateral.

<sup>&</sup>lt;sup>22</sup> Basis risk is the risk that the floating rate on an interest-rate swap will not match the floating rate on the underlying bonds. This risk arises because floating rates paid on swaps are based on indices that represent marketwide averages, while interest paid on variable-rate bonds is specific to the individual bond issues.

With the low interest rates to date, CalHFA is in a negative position on all of its swaps. CalHFA calculated that, as of August 2010, its swaps had a negative value of \$376 million, with a requirement that a total of \$78 million of collateral be posted with various counterparties. Recently, long-term interest rates have risen, reducing the negative value and the amount of collateral required. In addition, CalHFA's issuer rating has recently been reviewed by both rating agencies, and our consultant does not believe it is at immediate risk of a downgrade. Therefore, our consultant concluded that dramatic increases in collateral posting do not appear imminent. However, if interest rates decline significantly or either of the rating agencies reduces CalHFA's issuer rating by two rating levels, our consultant concluded that CalHFA would be unable to post sufficient collateral and would be in default under its interest-rate swaps, which could essentially mean insolvency for CalHFA's finance fund. Although doing so exposes the HMRB to interest-rate risk, as described in the previous section, CalHFA stated that it is currently working to reduce its collateral posting risk by exercising termination options on its interest-rate swaps.<sup>23</sup>

In meetings with us and the rating agencies, CalHFA executives have been open about the fact that terminating the interest-rate swaps that hedge bonds in HMRB is essentially transferring risk from its finance fund to HMRB. This is because the collateral posting requirements and any other costs associated with the interest-rate swaps are agency obligations, while the interest-rate risk on any unhedged variable-rate bond debt is borne solely by the limited-obligation HMRB. CalHFA perceives the threats to the solvency of its finance fund as greater than any threats to the solvency of HMRB. As stated later in this chapter, our consultant agreed that, while interest rates continue to remain low, the collateral posting requirements are the more imminent threat to CalHFA's solvency.

## CalHFA's Multifamily Portfolios Do Not Appear to Be a Significant Risk to the Finance Fund

CalHFA has a variety of multifamily programs, which finance mortgages for apartment complexes and other multifamily dwellings. Two of the larger programs, Multifamily Housing Revenue Bonds II (MHRB II) and MHRB III, operate under indenture agreements similar to the HMRB indenture, with the bonds that finance them secured by mortgage loans and other

If interest rates decline significantly or either of the rating agencies reduces its issuer rating by two levels, CalHFA would be unable to post sufficient collateral, which could essentially mean insolvency for CalHFA's finance fund.

<sup>&</sup>lt;sup>23</sup> In its October 2010 report on CalHFA's issuer credit rating, Moody's listed CalHFA's reduction in its interest-rate swaps as a positive management action. The rating agency concluded that further reductions in CalHFA's portfolio of interest-rate swaps would stabilize or increase CalHFA's issuer credit rating.

assets. However, MHRB II and MHRB III are different from HMRB in that the bonds are also secured by all agency resources—thus making them agency obligations, not limited obligations. In addition, CalHFA has a significant number of assets related to various other multifamily programs, including assets related to its HPB. Because these bonds are agency obligations, the credit quality of the multifamily portfolio is critical to the solvency of the finance fund.

Our consultant evaluated the multifamily portfolios on a loan-by-loan basis, using data provided by CalHFA as of June 30, 2009 (the most recent data available at the time of the analysis), and calculated a debt service coverage ratio (ratio) for each mortgage loan.<sup>24</sup> Using this ratio, our consultant calculated a loan amount for each multifamily development that could be sustained at a particular grade of financial creditworthiness. The total of these calculated amounts for CalHFA's various bond programs is \$1,331 million and is presented in the Adjusted Assets column of Table 4. Also presented in the table is the total unadjusted value, or book value, of the mortgage loans in CalHFA's multifamily programs, which is \$1,564 million.

**Table 4**Multifamily Bond Portfolios, Showing the Value of Loans (Unadjusted Assets)
Compared to the Loan Amounts That Borrowers Could Sustain
(Adjusted Assets) as of June 30, 2009

BOND PROGRAM	SECURITY FOR THE BONDS	BONDS OUTSTANDING (IN MILLIONS)	UNADJUSTED ASSETS (IN MILLIONS)	ADJUSTED ASSETS (IN MILLIONS)
Multifamily Housing Revenue Bonds III	Agency obligation and the mortgage loans under the indenture agreement	\$1,161	\$1,248	\$1,086
Multifamily Housing Revenue Bonds II	Agency obligation and the mortgage loans under the indenture agreement	60	64	64
Multifamily Housing Program Bonds	Agency obligation	51	48	30
Other programs			204	151
Totals		\$1,272	\$1,564	\$1,331

Source: Caine Mitter & Associates Incorporated's analysis of the California Housing Finance Agency's multifamily portfolio as of June 30, 2009.

<sup>24</sup> As used here, the debt service coverage ratio is a multifamily development's annual net operating income divided by its total annual debt payments of principal and interest.

Although the consultant-adjusted value of CalHFA's multifamily loan portfolio is \$233 million less than the unadjusted or book value, it still compares favorably with the amount of bonds outstanding. This indicates that, in aggregate, CalHFA's multifamily portfolio appears to be able to meet bond-payment obligations without drawing on the finance fund for additional resources. In addition, our consultant noted that delinquencies associated with CalHFA's multifamily and other program loans are low—only six of the 742 loans were more than 30 days delinquent as of September 2010.

CalHFA has variable-rate debt in both MHRB III and HPB. The risks related to variable interest rates, bank bonds, and interest-rate swaps would be similar to those described earlier for HMRB. However, our consultant concluded that overall, CalHFA's multifamily loan portfolio does not appear to be a significant risk to CalHFA at this time, based on the ratio analysis, the low level of multifamily loan delinquencies, and the consultant's review of the cash-flow projections for the multifamily programs run by CalHFA for the rating agencies.

#### CalHFA's Issuer Credit Rating Appears Stable

Due to the collateral posting requirements in CalHFA's interest-rate swaps, the solvency of the finance fund is highly dependent on CalHFA's issuer credit rating, which is a measure of CalHFA's ability to pay its agency obligations. As shown in the Introduction, this rating was downgraded to a low credit risk (A) by S&P in April 2010; Moody's followed with its own downgrade of CalHFA's issuer credit rating to a low credit risk (A2) in October 2010. Both credit rating agencies have assigned a negative outlook to CalHFA's issuer credit rating.<sup>25</sup> Although there is still significant pressure on CalHFA's finance fund, our consultant concluded that, based on a review of CalHFA and current rating standards, CalHFA's issuer credit rating is not likely to be downgraded in the next one to five years.

If a rating downgrade to CalHFA's issuer credit rating does occur during that time period, our consultant does not believe that it will drop more than one credit rating level. (As we stated earlier, a two-level drop in CalHFA's issuer credit rating would create collateral posting requirements that would likely cause CalHFA's finance fund to become insolvent). Our consultant based this conclusion on a number of factors, including the strength of CalHFA's multifamily portfolio, its decision to cap its gap coverage on mortgage loans, its participation in various federal programs,

Our consultant concluded that CalHFA's issuer credit rating is not likely to be downgraded more than one credit rating level in the next one to five years.

<sup>25</sup> The outlook of a rating refers to the rating agency's opinion of the direction of the rating over the medium term and does not necessarily mean that a rating action is imminent.

and other positive actions taken by CalHFA's management, as described in the next section. However, if the rating agencies move to more stringent standards for rating housing finance agencies, our consultant stated that there could be more immediate ramifications for CalHFA's ratings.

#### **CalHFA Has Taken Actions to Avoid Insolvency**

CalHFA has implemented numerous measures to avoid insolvency, some of which have already been described. Our consultant reviewed these efforts from a financial perspective and concluded that, while the impact of the strategies varies significantly, CalHFA's efforts show that it has been proactive in seeking to improve its financial position and outlook. The consultant agreed with the measures taken and did not have additional steps it would advise CalHFA to take. The following are the major actions CalHFA has taken.

Participation in federal programs. In January 2010 CalHFA was able to issue \$3.5 billion in outstanding variable-rate bonds using TCLP. Prior to its participation in TCLP, CalHFA had \$200 million in bank bonds and faced the prospect of increasingly large costs associated with these bonds. It also faced uncertainty over whether other liquidity providers could be found. As we discussed earlier, TCLP allowed CalHFA to temporarily resolve these issues.

In December 2009 CalHFA sold a total of \$1.4 billion in bonds to the U.S. Treasury as part of a new federal program called the New Issue Bond Program (NIBP). This federal program allows housing finance agencies to obtain low-cost funding for the continuation of their efforts to provide affordable housing. Under the NIBP, the proceeds of the original bond sales to the U.S. Treasury are held in escrow (cannot be used) until certain program requirements are met. For example, should a housing finance agency want to finance \$100 million in single-family loans, at least \$40 million must come from newly issued bonds sold to private investors. The remaining \$60 million would come from NIBP bond proceeds. When all requirements are met, the original NIBP bonds convert to fixed-rate bonds at a favorably low interest rate that the housing agency pays off over time with payments from associated mortgages. Although CalHFA has completed these conversions for only a small portion of the NIBP proceeds, it has until the end of 2011 to do so. Any NIBP bonds not converted by the end of 2011 will be retired using the funds remaining in escrow. Our consultant stated that although the results cannot be quantified at this time, participation in this program should enable CalHFA to generate additional revenue to offset reductions in revenue in other programs.

CalHFA's efforts show that it has been proactive in seeking to improve its financial position and outlook.

California in 2010 for the federal government's Hardest Hit Fund (HHF) program. Established in February 2010 to provide aid to families in states hit hardest by the downturn in the economy and housing market, the HHF program provides, for example, mortgage assistance for unemployed borrowers and reductions in principal for certain borrowers with negative equity in their homes. While assistance from the HHF program will be available to all eligible Californians, not just holders of CalHFA mortgages, CalHFA may be able to use the program to reduce losses on its mortgage portfolio by resolving defaults and preventing foreclosures. Because the program is still in its infancy, quantifying the help the HHF program will be to CalHFA's current problems is not possible. We discuss the development of this program further in Chapter 2.

Financing for Bay Area Housing Plan. CalHFA used its line of credit with Bank of America to provide interim financing for the Bay Area Housing Plan, which is discussed further in Chapter 2. This program finances 60 homes for people with developmental disabilities. The outstanding balance of the loans as of June 2010 was \$88 million. The line of credit financing these loans was set to expire in February 2011, and was unlikely to be renewed. In October 2010 the former governor approved legislation authorizing the California Health Facilities Financing Authority (CHFFA) to issue bonds to finance the Bay Area Housing Plan. In February 2011 CHFFA sold these bonds and was able to pay the balance owed to Bank of America. This action removed one potential financial threat to CalHFA's finance fund.

Capping the gap reserve. In March 2010 CalHFA decided to cap at \$135 million the total amount that the finance fund would provide to cover gaps in insurance on single-family mortgage loans. This decision reduces the agency's obligation to cover losses on mortgage foreclosures and shifts the burden of such losses to HMRB. This decision contributed to CalHFA's ability to maintain its current issuer credit ratings, reducing the amount of collateral that it needs to post under its interest-rate swaps.

Reducing exposure to interest-rate swaps. CalHFA has the option to periodically terminate a portion of its interest-rate swaps without any penalties. It is currently exercising these options to reduce the outstanding amount of its swaps. Although this action reduces the risk of additional collateral posting, it leaves variable-rate bonds in HMRB and MHRB III unhedged. Our consultant concluded that, since interest rates are currently low, the risk of additional collateral posting is a more immediate threat to CalHFA's solvency.

Capping the gap reserve reduces the agency's obligation to cover losses on mortgage foreclosures and contributed to CalHFA's ability to maintain its current issuer credit ratings. Active management of bond portfolio. Over the past four years, CalHFA has reduced the amount of its variable-rate bonds from 88 percent of outstanding bonds to 61 percent. Our consultant stated that CalHFA has also converted variable-rate bonds that were in the form of auction-rate securities, which had high interest rates following the collapse of the auction-rate market in early 2008, to variable-rate demand obligations (discussed earlier in this chapter). In addition, variable-rate demand obligations that were trading at relatively high interest rates because of poor performance by remarketing agents were transferred to new remarketing agents that have provided better performance.

Active management of single-family loan portfolio. With reductions in its mortgage origination business over the past several years (discussed in Chapter 2), CalHFA has reallocated staff and resources to bolster efforts related to preventing foreclosures and selling foreclosed properties. Our consultant concluded that these efforts, although very difficult to quantify, should have a positive effect by reducing losses and enhancing cash flow in HMRB. In addition, CalHFA has pooled mortgage loans to create mortgage-backed securities, selling them at a profit.

# CalHFA's Operating Expenses Continually Increased From Fiscal Years 2000–01 Through 2009–10

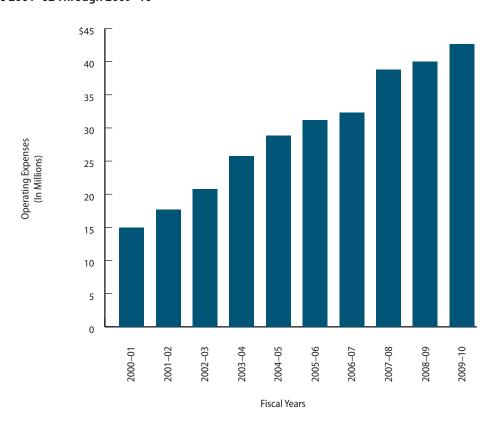
As we noted earlier in this chapter, CalHFA's finance fund pays for the organization's operational expenses. Even though CalHFA's operational expenses are a relatively small drain on the finance fund, they represent costs largely controlled by CalHFA. Therefore, we examined whether CalHFA reduced its operational expenses as part of its efforts to remain financially solvent. In analyzing CalHFA's operating expenses during fiscal years 2000–01 through 2009–10, we found that these expenses continued to increase even after CalHFA started having financial difficulties. As shown in Figure 8, the largest increase in costs over the last three fiscal years occurred in fiscal year 2007–08, when costs increased by \$6.6 million, or approximately 21 percent, over the previous year's costs.

Of the increase in fiscal year 2007–08, \$4.7 million, or 72 percent, was due to increases in staff costs, including an increase in staffing levels from the previous year from 279 filled positions to 299 filled positions and a general increase in staff pay. In August 2007 the Department of Personnel Administration announced a general salary increase of 3.4 percent for state employees, which included CalHFA employees. Additionally, eight members of senior management received raises approved by the CalHFA board, which combined with estimated benefits, accounted for roughly 9 percent

of the \$4.7 million increase in staff costs.

During fiscal years 2000-01 through 2009-10 expenses continued to increase even after CalHFA started having financial difficulties—in one year, 72 percent of the increase was due to increases in staff costs.

Figure 8
California Housing Finance Agency's Operating Expenses
Fiscal Years 2001–02 Through 2009–10



Source: California Housing Finance Agency's audited financial statements.

The increases in senior management salaries followed legislation allowing the CalHFA board to set the salaries of key exempt management positions. The legislation specifically included eight of CalHFA's top senior managers and required a compensation survey performed by an independent adviser to determine what senior managers were being paid at comparable housing finance agencies and other relevant labor pools. Ultimately, the pay raises for the eight positions as shown in Table 5 on the following page averaged 35 percent overall and ranged from 11 percent (executive director) to 88 percent (director of multifamily programs).

**Table 5**Increase in Senior Management Salaries at the California Housing Finance Agency

SENIOR MANAGEMENT POSITIONS	FISCAL YEAR 2006-07	FISCAL YEAR 2007-08	PERCENTAGE CHANGE IN SALARIES
Executive director	\$157,000	\$175,000	11%
Chief deputy director	120,000	175,000	46
Director of financing	122,000	170,000	39
Director of financial risk management	116,000	137,000	18
Director of homeownership programs	118,000	140,000*	19
Director of mortgage insurance	114,000	160,000	40
Director of multifamily programs	112,000*	210,000	88
General counsel	131,000	170,000	30
Totals	\$990,000	\$1,337,000	35%

Source: California Housing Finance Agency's personnel records.

Operating expenses have increased an additional 9 percent since fiscal year 2007–08, although staff costs have actually decreased slightly. According to CalHFA's accounting records and discussions with its management, the increase in operating expenses in fiscal years 2008–09 and 2009–10 was due to specialized assistance contracted by CalHFA to aid its legal department in debt restructuring and to aid the agency in processing delinquencies, foreclosures, and loan modifications, as well as for management of properties held by CalHFA after foreclosure. CalHFA believes that the contracted help will be needed only until the economy improves and CalHFA resumes its normal business operations.

<sup>\*</sup> Position was vacant during the fiscal year. We used the governor's budget to estimate the salaries for these positions.

#### **Chapter 2**

PAST DECISIONS BY THE CALIFORNIA HOUSING FINANCE AGENCY HAVE CONTRIBUTED TO ITS CURRENT DIFFICULTIES AND REVEAL THE NEED FOR CHANGES IN HOW IT IS GOVERNED BY ITS BOARD

#### **Chapter Summary**

Our review of the key decisions the California Housing Finance Agency (CalHFA) made between 1998 and 2010—increasing its loan volume and use of variable-rate bonds, entering into interest-rate swap agreements (interest-rate swaps), launching new mortgage products that were easier for borrowers to qualify for, and eventually adopting a new lending model that reduces risks to CalHFA—revealed that CalHFA officials informed its board of directors (board) of these actions. Through its annual approval of CalHFA's business plan, the board formally approved of some of these strategy changes. However, because the CalHFA board annually authorizes its staff to operate the organization's bond and loan programs (annual delegations) and did not restrict these delegations to the strategies they had previously approved, some major strategy changes through 2006—the launching of new, riskier mortgage products in particular—were done without the need for formal board approval. Additionally, the statute specifying the composition of the board does not appear to ensure that the board has sufficient expertise to provide adequate guidance to CalHFA on complex financial matters.

#### CalHFA's Decisions to Significantly Increase Its Use of Variable-Rate Bonds and Interest-Rate Swaps Contributed to Its Current Financial Difficulties

Although the use of variable-rate bonds and interest-rate swaps have contributed to CalHFA's recent financial difficulties, the decisions associated with the use of these instruments date back more than 10 years. From the information that can be gathered for 1998 through 2010, the decision to use variable-rate debt and interest-rate swaps was clearly based on recommendations from CalHFA staff but with the knowledge and approval of CalHFA's board through approval of annual delegations and business plans. As described in the Introduction, the board is the principal overseer of CalHFA and comprises numerous state officials, including the state treasurer and the director of the Department of Housing and Community Development, and individuals appointed for their relevant experience. Although the use of variable-rate debt and interest-rate swaps may have been an effective financial strategy

up until 2008, the collective decision to undertake an approach that included heavy use of these instruments was risky and has proven to be costly.

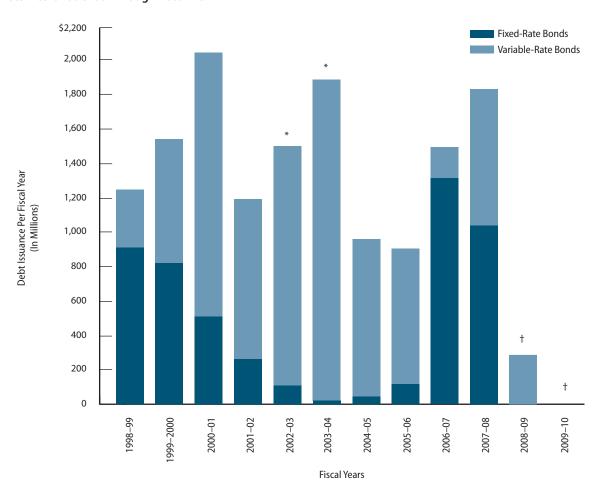
## To Attain Increasingly Large Home Loan Production Goals, CalHFA Began Using a New, More Risky Model for Issuing Debt

In its 1998 business plan, CalHFA set a goal of purchasing \$900 million in single-family loans. At the time, CalHFA executives admitted that this goal was aggressive, especially since the California Debt Limit Allocation Committee (debt limit committee) actually reduced CalHFA's share of the private activity volume cap allocation that year. However, CalHFA executives stated to the board that they believed they had strategies in place to meet this goal. In particular, CalHFA executives decided to use taxable bonds to expand loan production. To offset the higher interest rates on taxable debt, CalHFA would begin issuing a portion of its bonds at a variable rate to achieve a blended interest rate that was lower than it could offer had it issued only fixed-rate tax-exempt and taxable bonds (these concepts are discussed in more detail in the Introduction). At the time, according to CalHFA, fixed-rate bonds generally had a higher interest rate than variable-rate bonds.

CalHFA's former director of financing indicated to us that this strategy was designed to allow CalHFA to lower its cost of funds and offer borrowers a competitive rate on mortgage loans. CalHFA executives disclosed these strategies to the board, discussed the plans in open meetings, and obtained approval from the board for the annual business plan that included these strategies. Furthermore, CalHFA executives regularly updated the board on the growth of variable-rate bond debt, the measures being taken to ensure that CalHFA was protected against a rise in interest rates, and the risks associated with these measures.

As shown in Figure 9, CalHFA issued increasing amounts of variable-rate bonds, beginning especially in fiscal year 2000–01. In fact, in fiscal year 2003–04, variable-rate bonds accounted for approximately 99 percent of all issuances.

Figure 9
California Housing Finance Agency Issuances of Fixed- and Variable-Rate Bonds
Fiscal Years 1998–99 Through 2009–10



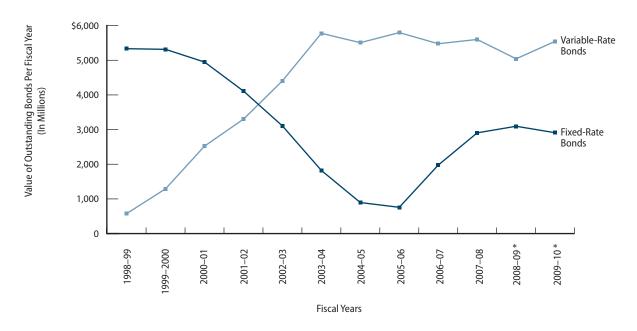
Source: California Housing Finance Agency's (CalHFA) debt management database.

The amounts shown in Figure 9 include some debt issued to retire earlier bonds. During this time frame, CalHFA used variable-rate bonds to refund and replace fixed-rate bonds. It did so at such a fast pace that, by June 30, 2006, CalHFA's variable-rate debt was \$5.8 billion, accounting for 88 percent of its total outstanding debt. In fact, the amount of its variable-rate debt was more than seven times the amount of its fixed-rate debt. Figure 10 on the following page displays the levels of outstanding bonds for the two different types—fixed rate and variable rate—for each fiscal year since 1998–99.

<sup>\*</sup> For these years, fixed rate issuances accounted for less than 2 percent of total bond issuances.

<sup>†</sup> For these years, CalHFA issued variable-rate bonds in the form of conduit debt, which means it issued the debt on behalf of another entity, and it does not therefore constitute a financial obligation of CalHFA. Also, in December 2009 it issued variable-rate bonds for the New Issuance Bond Program (NIBP) described in Chapter 1, the proceeds for which are held in escrow until they are converted to long-term bonds. Consequently, this figure does not reflect the conduit debt or unconverted NIBP bonds.

**Figure 10**California Housing Finance Agency Outstanding Bonds by Interest Rate Type Fiscal Years 1998–99 Through 2009–10



Sources: California Housing Finance Agency's (CalHFA) debt management database and audited financial statements.

\* For these years, CalHFA issued variable-rate bonds in the form of conduit debt, which means it issued the debt on behalf of another entity, and it does not therefore constitute a financial obligation of CalHFA. Also, in December 2009 it issued variable-rate bonds for the New Issuance Bond Program (NIBP) described in Chapter 1, the proceeds for which are held in escrow until they are converted to long-term bonds. Consequently, this figure does not reflect the conduit debt or unconverted NIBP bonds.

Recognizing the inherent risk in carrying such a high percentage of variable-rate debt, CalHFA specified in its fiscal year 2006–07 business plan that it would be looking for opportunities to issue fixed-rate debt as one of its financing strategies. By June 30, 2010, CalHFA had reduced the variable-rate portion of its bond portfolio to \$4.5 billion, or 61 percent of its total outstanding debt.26 Even with this reduction, CalHFA continues to rank high among housing finance agencies in its level of variable-rate bond debt. According to a statistical report issued by rating agency Fitch Inc., CalHFA had the highest percentage of variable-rate debt among all state housing finance agencies in both 2005 and 2006. By 2007 CalHFA's percentage of variable-rate bond debt had dropped to third highest nationally, and by 2009 it ranked fifth. According to an October 2010 report from Moody's Investors Service, Inc. (Moody's), CalHFA is unique among state housing finance agencies in its combined exposure to risks related to single-family mortgages and risks related to variable-rate bonds. The report stated that, although CalHFA has

 $<sup>^{\</sup>rm 26}\,$  These figures exclude certain types of variable-rate debt, as footnoted in Figure 10.

decreased its variable-rate debt, its level of such debt is still one of the highest by percentage among state housing finance agencies, exposing it to various risks associated with this type of debt.

### CalHFA Entered Into Interest-Rate Swaps to Reduce the Risk Resulting From Its Increased Amount of Variable-Rate Bond Debt

With the increased amount of variable-rate bonds it had outstanding, CalHFA took steps to manage, or hedge, the risk that interest rates would rise and increase the cost of its variable-rate bond debt (interest-rate risk). Although CalHFA used several different approaches to manage its interest-rate risk, as Figure 11 on the following page indicates, it used interest-rate swaps most frequently over the last 10 years.

In fiscal year 1997—98, CalHFA did not hedge the interest-rate risk because it believed the amount of its variable-rate debt was low enough that it could absorb increased debt service costs due to higher interest rates and it had enough in reserves to be able to redeem the variable-rate bonds quickly, if necessary. However, in January 1999 CalHFA executives reported to the CalHFA board that they were considering the use of interest-rate swaps.

Starting in December 1999, CalHFA began entering into interest-rate swaps as it increased the amount of variable-rate bond debt it issued. Although we could not find a record of the risks associated with interest-rate swaps being specifically discussed by or with the CalHFA board during 1999, a consultant—Swap Financial Group—assisted CalHFA executives in providing a seminar for the board on the benefits and risks associated with interest-rate swaps in December 2000.<sup>27</sup> During this seminar, Swap Financial Group explained the risks associated with both variable-rate debt and interest-rate swaps, and provided examples of each kind of risk. Additionally, Swap Financial Group included a discussion of the steps CalHFA had taken to mitigate each type of risk.

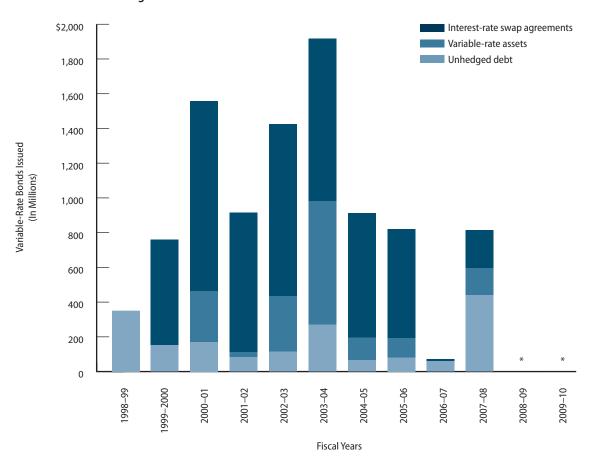
Figure 11 indicates that CalHFA began using variable-rate assets to hedge its interest-rate risk starting in fiscal year 2000–01. These assets are primarily of two types. The first type is a variable-rate loan to a borrower, which CalHFA's director of financing explained was mostly for multifamily projects. The second type is variable-rate investments, such as deposits in the State's Surplus Money Investment Fund and investment contracts with financial

Although CalHFA used several different approaches to manage its interest-rate risk, it used interest-rate swaps most frequently over the last 10 years.

<sup>&</sup>lt;sup>27</sup> CalHFA has engaged Swap Financial Group as its principal adviser for interest-rate swaps since 1999, and this company has also aided CalHFA in negotiating these agreements.

institutions that pay CalHFA a variable rate of return. In these contracts CalHFA received a rate of interest comparable to the interest it paid on the related bonds.

**Figure 11**Approaches to Managing the Risks of Variable-Rate Bonds the California Housing Finance Agency Issued for Fiscal Years 1998–99 Through 2009–10

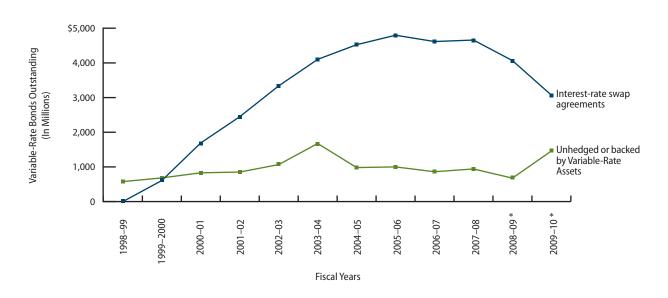


Source: California Housing Finance Agency's (CalHFA) debt management database.

Although CalHFA hedged its variable-rate debt in different ways, since fiscal year 2000–01 the combined total of its unhedged debt and debt hedged by variable-rate assets has been significantly less than its outstanding interest-rate swaps. As Figure 12 shows, CalHFA's use of interest-rate swaps steadily increased from fiscal years 1999–2000 through 2005–06 and declined rapidly after fiscal year 2007–08 due to disruptions in the financial markets.

<sup>\*</sup> For these years, CalHFA issued variable-rate bonds in the form of conduit debt, which means it issued the debt on behalf of another entity, and it does not therefore constitute a financial obligation of CalHFA. Also, in December 2009 it issued variable-rate bonds for the New Issuance Bond Program (NIBP) described in Chapter 1, the proceeds for which are held in escrow until they are converted to long term bonds. Consequently, this figure does not reflect the conduit debt or unconverted NIBP bonds.

**Figure 12**Variable-Rate Bonds Outstanding by Hedge Status
Fiscal Years 1998–99 Through 2009–10



Source: California Housing Finance Agency's (CalHFA) debt management database.

\* For these years, CalHFA issued variable-rate bonds in the form of conduit debt, which means it issued the debt on behalf of another entity, and it does not therefore constitute a financial obligation of CalHFA. Also, in December 2009 it issued variable-rate bonds for the New Issuance Bond Program (NIBP) described in Chapter 1, the proceeds for which are held in escrow until they are converted to long term bonds. Consequently, this figure does not reflect the conduit debt or unconverted NIBP bonds.

Although interest-rate swaps protected CalHFA against the risk of rising interest rates, market disruptions and low interest rates have caused these agreements to be costly. For example, CalHFA's audited financial statements for fiscal year 2008–09 indicate that it suffered a \$37.9 million increase in costs when the floating interest rate for its interest-rate swaps was lower than the floating interest rate for its underlying bonds, causing the swap payments to fall short of the bond payments. An increased expense of \$18.4 million occurred in fiscal year 2009–10 for the same reason. The risk of this occurring, known as basis risk, was discussed in Chapter 1. In addition, CalHFA paid \$39 million in fiscal year 2009–10 in payments associated with terminating interest-rate swaps.

In its annual delegations, the CalHFA board authorizes the executive director and his designees to enter into financial agreements as necessary to reduce, or hedge, risk and to lower CalHFA's borrowing costs. We searched through these delegations and found that, before CalHFA entered into two 1994 interest-rate swap options totaling \$86 million, the delegations began authorizing these instruments. The delegations continued to authorize interest-rate swaps for another four years before staff disclosed and launched into this strategy on a more regular basis

The board's annual delegations of authority were overly broad and should have been tightened to include only the business strategies known and approved by the board.

and even longer before the board was formally briefed on the risks associated with interest-rate swaps. This is one indication, among others discussed later in this chapter, that these annual delegations of authority were overly broad and should have been tightened to include only the business strategies known and approved by the board.

CalHFA staff requested, and the board approved in January 2011, delegations that appear to be limited to only those strategies and business practices that CalHFA plans on using in the coming year. However, we have not seen a specific board resolution, or policy statement, that these more restrictive delegations will be continued in the future.

### The Composition of the CalHFA Board Does Not Include Critical Areas of Knowledge and Experience

As noted in the Introduction, the composition of the CalHFA board is specified in statute, including individuals with certain types of experience. However, we noted that this law does not require the inclusion on the board of individuals with knowledge of complex financial matters such as the issuance of bonds, interest-rate swaps, and financial risk management.

CalHFA's executive director stated that, based on his experience with the board, he could see value in having more than one board member who has specific experience with and knowledge of overall strategies associated with the management of financial institutions, including various forms of risk management. The executive director acknowledged that appointing powers sometimes use the "public member" positions to appoint persons with this expertise, but stated that the CalHFA board has not consistently had representation by someone with this experience or knowledge among its appointed members. With regard to the financial risk associated with the issuance of bonds, the executive director stated that he appreciates the contributions of the state treasurer (or his or her delegate) to CalHFA's board, but does not feel that it is sufficient to have the state treasurer be the only one on the board with bond-financing experience. The executive director explained that, to have real discussion, or even debate, about complex financial strategies, a group requires more than one person with a depth of knowledge or experience in this area; otherwise, too much deference can be given to the one person possessing the knowledge or experience.

# To Compete With Subprime Lenders, CalHFA Offered New Types of Mortgages That Eventually Proved to Have High Delinquency Rates

CalHFA has traditionally offered mortgage loans with a 30-year term and a fixed interest rate to borrowers with low and moderate incomes. Lenders could offer these 30-year loans in combination with CalHFA's down payment assistance programs, or secondary loans, to provide lower- and middle-income borrowers the financial resources they needed to become homeowners. In 2005 and 2006, to compete with alternative mortgage products being offered by the lending industry, CalHFA introduced two new primary mortgage loan products with no down payment required: a 35-year loan in which the monthly payments were interest only for the first five years, and a 40-year loan with unchanging monthly payments.28 While these were not the first mortgage products to offer borrowers in California interest-only payments or extended loan periods, they were unique in that they combined these features with CalHFA's traditional advantages, such as below-market interest rates and secondary loan programs. However, in contrast to practices within subprime lending,29 CalHFA continued to require its lenders to maintain documentation of their underwriting decisions for each borrower. In addition, CalHFA subjected loans to an additional underwriting review by its mortgage insurance division when the amount borrowed was over 80 percent of the home's value.

As indicated in Figure 13 on the following page, CalHFA's new loan products featured lower monthly payments—though the 35-year product's payments increased in the sixth year—than its traditional 30-year mortgage. Because the 35- and 40-year products required lower monthly payments than the 30-year product, and because underwriters<sup>30</sup> assessed borrowers' qualifications based on those lower monthly payments, borrowers could more easily qualify for the 35- and 40-year loans than they could for the 30-year loans. However, according to CalHFA data, these longer-term loans resulted in higher percentages of defaults and delinquencies than the traditional 30-year loans.

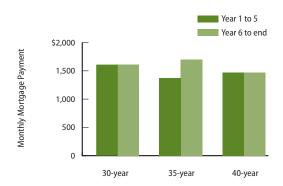
CalHFA's new loan products featured lower monthly payments than its traditional 30-year mortgage and borrowers could more easily qualify for the loans.

<sup>28</sup> At the same time that it introduced the 35-year interest-only product, CalHFA amended the terms of its 30-year loan to allow no down payment by the borrower.

<sup>&</sup>lt;sup>29</sup> Subprime lending generally refers to mortgage lending to borrowers with relatively weak credit histories, reduced capacity to repay, or incomplete documentation of information in their loan applications. Subprime loans typically require borrowers to pay higher interest rates than those that lenders require of less-risky borrowers.

<sup>30</sup> Underwriting is the process lenders use to determine whether a borrower's qualifications correspond to the level of risk a lender is willing to accept in making a particular type of loan.

Figure 13
Comparison of Monthly Payments (Principal and Interest) for a \$300,000 Mortgage, by Product



Source: California Housing Finance Agency's focus group documentation, November 2005.

Note: All three products listed in the figure featured a fixed-interest rate for the life of the loan. The 35- and 40-year loans had slightly higher interest rates than the 30-year loans; the payments shown in the figure include these higher rates.

A few years after CalHFA launched these new loan products, economic events outside its control—the collapse of major financial institutions, a steep decline in California real estate values, and a sharp increase in unemployment—led to an increase in mortgage defaults in California. In September 2008 the New York-based investment bank Lehman Brothers Holdings Inc. (Lehman) declared bankruptcy after investors discovered the large extent of Lehman's losses related to the subprime lending market. Other major banks facing similar crises, such as Bear Stearns Companies Inc. (Bear Stearns) and Merrill Lynch & Company, Inc., merged with stronger competitors. Countrywide Financial Corporation, which had grown into the nation's largest mortgage lender, collapsed as its portfolio of risky loans soured, and it was eventually acquired by Bank of America. Even those banks that survived this realignment, such as Wells Fargo & Company and J.P. Morgan Chase & Company, were exposed to ongoing real estate losses, as home prices fell and delinquencies on mortgage payments increased.

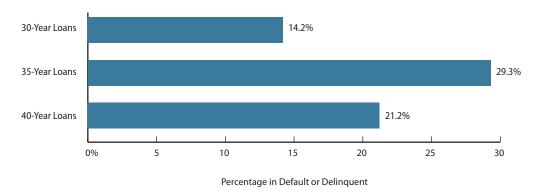
CalHFA's borrowers also experienced hardships resulting from these events. As unemployment rose in California, growing numbers of CalHFA borrowers no longer made their monthly mortgage payments, according to CalHFA data. Many borrowers no longer earned enough to stay in their homes and could sell their homes only at significant losses. CalHFA's delinquency and default statistics demonstrate that those homeowners whose capacity to borrow was inflated under CalHFA's 35- and 40-year loan options proved to be the ones particularly unable to keep up with their payments. As Figure 14 shows, borrowers who relied on the

CalHFA products with lower monthly payments have delinquency and default rates that are much higher than those of borrowers who obtained 30-year conventional loans during the same time period.<sup>31</sup>

Figure 14

Percentage of Conventional Loans Purchased by the California Housing Finance Agency Between 2005 and 2010

That Were Delinquent by 90 Days or More or in Default, by Loan Type, as of August 2010



Source: California Housing Finance Agency's mortgage reconciliation system.

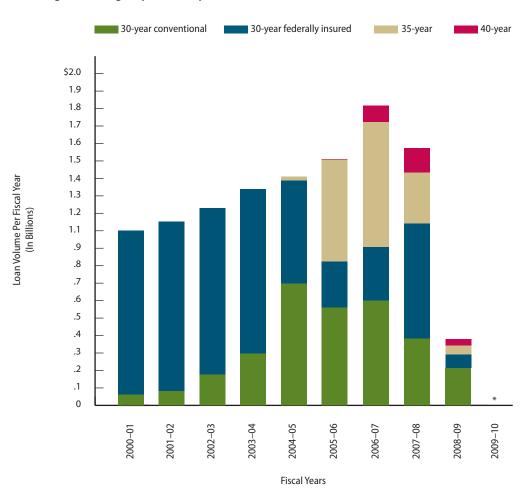
As of August 2010, CalHFA's 35- and 40-year loans constituted a significant portion of its conventional loan portfolio. Specifically, a CalHFA report indicates that these loans represented 40 percent of CalHFA's open loan balances (approximately 33 percent for its 35-year loans and 7 percent for its 40-year loans). Although offered for only a limited time, these products rapidly grew to make up a large percentage of CalHFA's current loan volume. As shown in Figure 15 on the following page, the 35- and 40-year loan products amounted to nearly half of CalHFA's lending in some years.

CalHFA ceased purchasing single-family loans in December 2008, after it lost access to its traditional line of credit maintained by the State Treasurer's Office. CalHFA's executives explained that, under its traditional lending model, CalHFA had used the State Treasurer's Office line of credit—the Pooled Money Investment Account (PMIA)—to continuously purchase loans that would later be funded by bond proceeds. Because of the State's worsening fiscal condition, the PMIA board of directors decided to freeze this line of credit. According to CalHFA's executives, CalHFA could not obtain a similar replacement line of credit due to economic conditions in the private marketplace. Consequently, as shown in Figure 15, loan volume dropped significantly in fiscal year 2008–09, and

 $<sup>^{31}</sup>$  Conventional loans are mortgage loans that the federal government does not insure.

was virtually nonexistent in fiscal year 2009–10. CalHFA has only recently resumed its homeownership lending programs, and as we explain later, it has done so with a fundamentally different structure for managing risk.

**Figure 15**California Housing Finance Agency's Loans by Product and Fiscal Year



Source: California Housing Finance Agency's mortgage reconciliation system.

<sup>\*</sup> Less than \$1 million in 30-year conventional loans.

# CalHFA's Management, Without Objection From Its Board, Decided to Grow Loan Volume by Making More People Eligible for Its Mortgage Programs

In 2003 and 2004, because of rising home prices and the emergence of subprime lending, CalHFA management grew concerned that CalHFA was losing relevance in the market. Lenders were providing borrowers who had relatively low incomes—CalHFA's traditional customers—opportunities to obtain subprime mortgage loans, which had lower underwriting standards than those for traditional mortgage loans. Although subprime lenders' flexible underwriting terms made it easier for borrowers to initially qualify for loans, interest rates and monthly payments on these loans would often adjust upward during the course of the loan, making it difficult for borrowers who had not refinanced these loans to make their mortgage payments. With its traditional underwriting requirements and 30-year fixed-rate product, CalHFA stood to lose some of its potential customers to the relatively attractive and flexible terms of subprime lenders' mortgage products. To address these conditions, CalHFA developed the new loan products described in the previous section to increase the number of financing options available to borrowers. It also modified its underwriting standards to increase its customers' likelihood of qualifying for CalHFA loans. For example, in 2005 and 2006 CalHFA increased the allowable ratios of borrowers' monthly debt to their income.

#### CalHFA Focused on Increasing Its Lending Volume

Over a period of nine years, CalHFA sought to increase its loan volumes, from a goal of \$900 million in fiscal year 1998–99 to a goal of \$1.5 billion in fiscal year 2007–08. According to CalHFA, one reason for pursuing these higher loan volumes was a challenge to CalHFA in 1999 from then-Governor Gray Davis to increase its annual lending volume to \$1 billion. However, loan volumes were already approaching this level, and the then-governor probably would not have set this goal without any communication from CalHFA. Beginning in fiscal year 1998–99, CalHFA's business plans indicate a consistent focus on using loan volume goals as a measuring tool for the agency. Indeed, statements from former CalHFA officers indicate that, in their opinion, the agency became focused on the loan volume goals and accepted higher and higher risks to meet these goals.

CalHFA stood to lose some of its potential customers to the relatively attractive and flexible terms of subprime lenders' mortgage products.

CalHFA executives explained that the increases in real estate prices in the mid–2000s required CalHFA to increase the total amount that it loaned to maintain the number of loans it made to lower- and middle-income borrowers annually. The housing price increases presented multiple problems for CalHFA; not only did it have to find more funds to lend, but because of CalHFA's underwriting standards, it could not qualify buyers as easily as it had in the past for the increases in monthly payments required on traditional 30-year mortgages. Thus, the introduction of new products featuring lower monthly payments became necessary if CalHFA was going to achieve its increased lending goals.

### CalHFA's Board, Management, Consultants, and Staff Had Roles in the Development of New Loan Products

We examined the decision-making processes CalHFA used when it developed new loan products and found that management involved many stakeholders and leaders of relevant business divisions in the assessment of these products. While management apprised the board of the development of the new products, CalHFA's statutes, regulations, and past practices have not required the board to review and approve new mortgage products. In likely consequence, we found very little board member discussion on these matters.

We reviewed CalHFA's internal documentation of conversations with these stakeholders. We also reviewed documentation indicating that the directors of CalHFA's finance, homeownership, insurance, and marketing divisions contributed to developing and launching the 35- and 40-year products. In addition, staff members in various departments researched issues and developed communications related to the new products. For example, the marketing department was responsible for developing the targeted messages that CalHFA sent to borrowers, lenders, and realtors announcing new products and encouraging borrowers to choose CalHFA's loans over other products. CalHFA also used consultants to gather marketplace perceptions of the value and risks of its potential new products.

The board had opportunities to comment on CalHFA management's product development strategies in bi-monthly board meetings, but it rarely chose to do so.

We observed that the board had opportunities to comment on CalHFA management's product development strategies in bi-monthly board meetings, but it rarely chose to do so. Our review of board minutes and our conversations with former employees indicated that the chair of the board from 2004 to 2008 was an advocate for CalHFA's interest-only loan product, and no other board members raised concerns about the loan products at board meetings prior to their launch.

Although the board votes to approve CalHFA's annual business plan, which often mentions the products management will use to meet its goals going forward, the board annually authorizes management to introduce new products at any time of the year. While the instances we reviewed indicate that management informs the board of new products in the development pipeline and solicits feedback from the board about these products, the board does not formally evaluate each new product offering and vote to approve it. Consequently, when CalHFA launched its new 35- and 40-year loan products in March 2005 and March 2006, respectively, the board did not and was not required to vote on whether to approve of these actions. Although the strategies were included in the next respective business plans, which the board approved two months later, by then the products had already been developed and launched statewide.

The new loan products were included in the next respective business plans, which the board approved two months later, but by then the products had already been developed and launched statewide.

# CalHFA's 35-Year Interest-Only Loan Reflected Advice It Received From Investment Banks and Support From the Former Chair of Its Board

As we mentioned earlier, in reaction to the challenging business environment of the early to mid-2000s, CalHFA sought opportunities to increase its volume of loans purchased. In December 2003 CalHFA asked several major investment banks what it should do to achieve this goal. According to CalHFA's internal records, Bear Stearns—an investment bank that collapsed in 2008 after its investments in subprime mortgages plummeted in value—recommended that CalHFA expand its mortgage product offerings to include popular adjustable-rate loan options. Goldman Sachs—an investment bank that the federal government investigated in 2010 for helping investors profit from the subprime market's reversal of fortune—recommended that CalHFA offer a 35-year mortgage with payments of interest only for the first five years. However, CalHFA did not immediately act to offer such products. Later, according to the director of financing, at a September 2004 meeting during CalHFA management's annual trip to New York to visit with its underwriting banks and credit rating agencies, Bear Stearns recommended that CalHFA consider introducing an interest-only mortgage product. Focus groups CalHFA conducted in mid- to late-2004, which included borrowers, lenders, and realtors, also suggested that CalHFA offer more flexible financing options to borrowers.

In December 2003 CalHFA formed a working group of its division managers who collaborated to develop new product ideas. The former director of mortgage insurance held a leadership role in the working group. Several directors of the homeownership division were also involved in this working group, as were the director of

financing and several other members of CalHFA's staff. Department records indicate that the working group assigned specific individuals to different tasks required to develop and implement new products, although actual decision making about whether to launch new products does not appear to have been a purpose of this group.

In 2004 CalHFA management and the former CalHFA board chair noted the popularity of interest-only loan products in other parts of the country and in the California mortgage marketplace. In October 2004 CalHFA obtained information from Rhode Island's housing finance agency describing a 35-year interest-only product it had introduced in 2002. Rhode Island is another state in which subprime lending thrived in the early- to mid-2000s. Subsequently, CalHFA developed a 35-year interest-only product that was substantially similar to Rhode Island's product. This product allowed borrowers to make lower monthly payments for the first five years of the loan than a 30-year mortgage would require, but would then reset starting in the sixth year to a payment level at or above the payment level that a 30-year mortgage required. When CalHFA first launched this product, it qualified borrowers for the 35-year loan based on the lower initial payment rather than the higher payments that would start in the sixth year. CalHFA executives believed that such a product was more responsible than alternative loan products from subprime lenders that low-income buyers were turning to, because according to CalHFA, the terms of the alternatives included even larger jumps in payment amounts after the first few years than did CalHFA's 35-year loan.

At a CalHFA board meeting in January 2005, the former board chair—himself a mortgage banker—mentioned the increasing use of interest-only lending products in real estate markets in which affordability had become particularly low. At that time, management was already working on its strategy for launching CalHFA's 35-year loan product. When the executive director explained the product to the board in March 2005, no board members besides the former chair commented on the product and no board member asked about the potential risks associated with the product. Because authority to develop and launch new loan products is essentially delegated to CalHFA staff in annual board resolutions, CalHFA's board did not—and was not required to—vote on this or other lending programs.

We spoke with some former employees who told us they had been skeptical during the product development process of the product's compatibility with CalHFA's mission and its traditional level of tolerance for risk—to both CalHFA and its borrowers. One noted that his own initial opposition to the product was eventually replaced with comfort that the product made sense for CalHFA borrowers

Some former employees told us they had been skeptical during the product development process of the 35-year product's compatibility with CalHFA's mission and its traditional level of tolerance for risk. because all the payment terms would be known up front. Support for the product was comparatively strong: the former chair of the board and outside financial partners encouraged CalHFA to adopt an interest-only product, and the product's marketability made it appear to be a good fit with CalHFA's volume goals. In addition, at the time CalHFA was developing the 35-year product, management noted the challenges that escalating sales prices and adjustable-rate mortgages posed to CalHFA's customers, and some members of CalHFA's management stated that they believed the product's benefits to borrowers compensated for its potential risks. The combination of these factors apparently outweighed the concerns raised by staff during the product development process.

# CalHFA Developed Its 40-Year Loan Product After Staff Analysis and Following Fannie Mae's Decision to Promote This Lending Model

In March 2006, with the interest-only loan product established in the marketplace, CalHFA launched a 40-year product with a fixed interest rate and monthly payments that stayed the same throughout the life of the loan. CalHFA started to analyze a 40-year product shortly after Fannie Mae's May 2005 announcement that it would begin purchasing 40-year loans. A research paper CalHFA staff developed for the former director of mortgage insurance on a 40-year product concluded that the major benefit of the product was that it would provide an increase in purchasing power for borrowers and would require minimal agency resources to implement. The analysis also listed negative characteristics of a 40-year loan product, including slower equity growth for borrowers because of lower principal reduction early in the loan, and higher interest costs over the lifetime of the loan. The research paper indicated that CalHFA consulted lenders and conducted research to verify market interest in this product. In March 2006 CalHFA hosted six launch events across California for its lenders to promote the product. As with the interest-only product described earlier, management mentioned the new product to the CalHFA board, but the board asked no questions and voiced no concerns about it.

# CalHFA Loosened Its Loan Underwriting Standards to Qualify More Borrowers for Its Mortgage Products

As we indicated earlier, CalHFA designed the 35- and 40-year loan products to have lower initial monthly payments and, therefore, be easier to qualify for than its 30-year loan product. Additionally, CalHFA attempted to lessen other potential obstacles to homeownership by loosening certain financial thresholds for obtaining one of its loans. CalHFA published its underwriting standards for its new products in the same public lender bulletins

CalHFA designed the 35- and 40-year loan products to be easier to qualify for than its 30-year loan product.

in which it announced the products' availability, and each of these bulletins became part of the contract CalHFA had with its lenders. Although the general public can access these bulletins, they were addressed to lenders and conveyed detailed information lenders needed to know about CalHFA's new products and changes to its existing programs.

Since CalHFA does not directly make single-family loans to borrowers, it delegates the underwriting function to its lenders and periodically reviews its lenders' compliance with its underwriting standards. CalHFA performs a certification of a lender before authorizing it to sell CalHFA loans; after that, lenders are subject to a recertification process each year. Among other purposes, these authorization and recertification processes were designed to provide CalHFA with ongoing confidence that lenders underwrote loans that complied with its requirements. In addition to this monitoring activity, CalHFA's mortgage insurance division would perform an additional underwriting review on files that were subject to coverage by CalHFA's California Housing Loan Insurance Fund (insurance fund).<sup>32</sup>

While CalHFA did not reduce the credit scores it required from prospective borrowers, it did weaken other numeric qualifying standards.

We reviewed the lender bulletins that announced new underwriting standards for CalHFA products and found that, while CalHFA did not reduce the credit scores it required from prospective borrowers, it did weaken other numeric qualifying standards. Specifically, in 2005 CalHFA announced an increase to its allowable ratio of monthly debts to monthly gross income (debt-to-income ratio) from 36 percent to 45 percent. In August 2006 CalHFA announced an allowable debt-to-income ratio of 55 percent for loans approved via automated underwriting.33 As a result of these adjustments, some borrowers who were spending 55 percent of their monthly income on debt payments could qualify for a mortgage, whereas previously the level of debt payments had been ostensibly limited to 36 percent of income. CalHFA stated that, although these were the published ratios, exceptions up to 50 percent had been granted under the original 36 percent policy and added that the impetus behind the August 2006 policy was that CalHFA discovered that the automated underwriting program it had been using had no built-in, maximum debt-to-income ratios. Consequently, some loans with high debt-to-income ratios had been approved by the program. Even so, CalHFA's response to this discovery was to establish a ratio at a level higher than the previously published standards.

 $<sup>^{\</sup>rm 32}\,$  CalHFA's currently active homeownership programs do not use CalHFA's insurance fund.

<sup>33</sup> Lenders could use automated underwriting systems provided by Fannie Mae and Freddie Mac, government-sponsored enterprises that maintained automated systems to analyze loan applications' appropriateness for different lending programs. These automated systems could efficiently process a buyer's qualifications and verify for the lender whether a loan application would be eligible for purchase by the automated system's owner.

CalHFA also loosened its limits on loan size in proportion to home price. CalHFA designed the 35- and 40-year loan products to cover up to the full purchase amount of the home, thus eliminating the down payment. Moreover, on the same day that CalHFA rolled out the 35-year product, it announced that its 30-year loans could also cover up to the full purchase price of the home. Management explained to the board that these changes would permit CalHFA to preserve funds it had earmarked specifically for down payment assistance.

In contrast to its loosening of standards related to debt ratios and down payments, CalHFA never weakened its credit score policies for the home loans it purchased. In August 2005 CalHFA sent a bulletin to its lenders announcing for the first time that a minimum credit score of 620 would be "required" in evaluating mortgage applications. However, this minimum score was not an absolute qualifying standard. Under the terms of the bulletin, underwriters could approve borrowers with lower credit scores if they determined that other factors mitigated the risks suggested by a particular applicant's low score. Based on our review of data from CalHFA's mortgage reconciliation system, CalHFA continued to have successful home-loan applicants with credit scores below 620, but the percentage of such loans declined steadily after the August 2005 policy change. In 2008 CalHFA increased the credit score requirement to 680 or higher for certain loans, but by the end of 2008 CalHFA had suspended all of its loan programs, rendering this later policy change of lesser effect.

### CalHFA's Philosophy Toward Risk Management Changed Significantly in the Late 2000s

The increased credit score requirements described in the previous section provide one example of how changes in the real estate market between 2006 and 2008 led CalHFA to tighten various underwriting standards and seek new methods for identifying the risks in its portfolio. For example, in 2007 CalHFA changed its qualification standards for the 35-year loan product so that the borrower had to qualify based on the higher monthly payment that would kick in once principal payments began in year six of the loan. This change mirrored a Fannie Mae requirement and occurred at about the same time that CalHFA started selling loans to Fannie Mae to be packaged into mortgage-backed securities.<sup>34</sup> However, by the time CalHFA announced this change, it had already bought

Changes in the real estate market between 2006 and 2008 led CalHFA to tighten various underwriting standards and seek new methods for identifying the risks in its portfolio.

<sup>34</sup> Mortgage-backed securities are financial instruments that give investors beneficial interests in pools of loans that entities such as banks or government-sponsored enterprises collect and package for sale. Investors in shares of mortgage-backed securities are entitled to proceeds from borrowers' principal and interest payments.

In late 2006, when the real estate market turned, CalHFA started to recognize increasing losses on properties—particularly properties it insured.

and still held thousands of 35-year loans underwritten under the previous standard, which had based qualifications on the lower interest-only payments required in the loans' first five years.

The changes in the real estate markets also led CalHFA to update its methodologies for forecasting losses from its mortgage loans. In the early 2000s, CalHFA's forecasts for mortgage losses were less than 10 percent of the insured amount, even when loan-to-value ratio was 100 percent. As the new director of mortgage insurance explained to the CalHFA board, the real estate market had been so strong that a borrower could easily resell a property and pay off the loan. However, in late 2006, when the real estate market turned, CalHFA started to recognize increasing losses on propertiesparticularly properties it insured. According to the methodology in place as of August 2010, CalHFA now forecasts that even when a property's mortgage payments are only 60 days past due, there is a 70 percent likelihood of the property entering foreclosure, and for properties that CalHFA insures, the methodology projects that the insurance fund, and its reinsurer (see below), will absorb a loss equal to 40 percent of the unpaid principal balance on each delinguent loan.

Since 2003, Genworth Mortgage Insurance Corporation (Genworth)—formerly known as General Electric Mortgage Insurance Company or GEMICO—has reinsured a portion of CalHFA's loan portfolio. The original 2003 agreement between CalHFA and Genworth provided 75 percent reinsurance coverage to the insurance fund in return for CalHFA ceding 64.5 percent of its insurance premiums to Genworth. The agreement requires CalHFA's annual insured loan portfolio to have only limited percentages of loans above certain loan-to-value ratios and below certain credit scores. If CalHFA exceeds these limits, Genworth is entitled to revise the pricing terms for reinsuring that year's loans.

There have been several amendments to the 2003 reinsurance agreement. A 2006 amendment changed some of the repricing conditions; this amendment occurred shortly after the current director of mortgage insurance arrived and began to reorient the insurance division to focus more on risk management. The 2006 amendment also extended the term of Genworth's reinsurance coverage from five years to 10 years, providing CalHFA longer term protection from the delinquency and default issues discussed earlier in this chapter. In addition, according to the current director of mortgage insurance, in 2008 Genworth proposed additional changes to CalHFA's underwriting standards for loans Genworth would reinsure. Genworth wanted CalHFA to tighten its credit score requirements, which it did by raising the required score to 680 or higher for certain loans; CalHFA's mortgage insurance director informed us that CalHFA did so

because management could see the deteriorating delinquency trends and because other mortgage loan investors were tightening their underwriting guidelines.

Genworth also wanted CalHFA to require higher borrower cash contributions to down payments (3 percent) at the time CalHFA's lenders originated loans. CalHFA management informed us that it initially expressed concern about increasing this requirement, because its average borrower contribution at the time was about half what Genworth wanted to require and neither Genworth nor CalHFA's outside actuary could produce statistics to justify an increase. Nevertheless, in November 2008 CalHFA announced to its lenders a new requirement that borrowers contribute at least 3 percent of the purchase price with their own funds. CalHFA and Genworth added a similar requirement to their reinsurance agreement in a December 2008 amendment. However, as described previously, CalHFA suspended its lending programs in December, minimizing the impact of this new requirement.

### CalHFA's Modified Mortgage Insurance Requirement Cost Less for Borrowers but Created an Additional Burden on CalHFA

CalHFA required all nonfederally insured mortgages above a certain loan-to-value percentage—usually 80 percent, a figure established by federal law—to be covered by mortgage insurance paid for by the borrower. In the early 2000s, mortgage insurance protected 50 percent of the principal amount outstanding for each covered CalHFA mortgage, as required by the bond indenture agreement under which these mortgage loans were financed. CalHFA staff believed this percentage to be far higher than the industry standard and recognized an opportunity to lower the costs for borrowers associated with CalHFA mortgages. In March 2005, therefore, CalHFA decreased its insurance requirement for borrowers to 35 percent of the outstanding principal.

Although the move to reduce to 35 percent the amount of mortgage insurance required helped borrowers, CalHFA still needed to meet its obligation to insure 50 percent of the loan's outstanding principal balance. To address this requirement, CalHFA issued the 2006 gap policy described in Chapter 1. As the real estate market deteriorated over the next few years, CalHFA's California Housing Finance Fund absorbed losses under the gap policy and faced the possibility of even higher losses in the future. This risk led CalHFA to cap these gap fund payments at \$135 million in March 2010. As we discussed in Chapter 1, CalHFA projects that gap funds will be depleted by the summer of 2011.

CalHFA recognized an opportunity to lower the costs for borrowers associated with CalHFA mortgages and thus, decreased its insurance requirement for borrowers to 35 percent of the outstanding principal.

# Federal Assistance Made Available Through Programs Such as the "Hardest Hit Fund" Will Help CalHFA Mitigate Its Single-Family Lending Losses

CalHFA is using federal assistance to mitigate its potential losses attributable to delinquent loan payments and defaults by its borrowers. In 2010 the federal government made funds available to states particularly hard hit by the decline in the real estate market. CalHFA applied for funds through this program in April 2010, and in June the federal treasury awarded California \$700 million in the first round of funding, with additional funds added in September, bringing the total to nearly \$2 billion. Because federal law set aside these funds for "financial institutions," CalHFA created the CalHFA Mortgage Assistance Corporation (CalHFA MAC), a nonprofit entity staffed by CalHFA employees but with its own set of bylaws and separate legal standing, to administer the funds. Program assistance will be available to all eligible Californians, not just CalHFA borrowers. CalHFA MAC agreed to establish four distinct methods of helping borrowers:

- Mortgage assistance for unemployed borrowers.
- Funds to help eligible delinquent borrowers become current on their loan payments.
- Principal reductions for certain borrowers with negative equity.
- Transition assistance for borrowers who decide they are financially unable to continue ownership of their homes.

CalHFA MAC provided us with its marketing plan and information about a pilot program it rolled out in October 2010 to inform borrowers that help was available. Although CalHFA MAC originally intended to launch the program statewide in November 2010, program staff explained that due to numerous changes in the size and scope of the project, and delays experienced in securing servicer participation, it has only recently started to make program funds widely available. Program staff informed us that CalHFA MAC expects these four programs to eventually help more than 100,000 homeowners avoid foreclosure. However, it is too soon to know how effective this program will be in helping distressed CalHFA borrowers with their loans.

#### CalHFA's Multifamily Loan Programs Achieved Generally Positive Results

Since it was created in 1975, CalHFA has financed more than 500 multifamily projects, which typically consist of affordable-rent apartments. Of these, according to CalHFA, only six projects

have underperformed to the extent that CalHFA had to assume ownership of the project. CalHFA staff believe the success of the multifamily projects is a result of the reliable cash flows they generate from tenants' rent payments, and also the requirement that the CalHFA board approve all such projects.

# CalHFA Generally Exercises Strong Controls Over Approval of Multifamily Projects

Multifamily projects are subject to numerous reviews during the approval process. Initially, the developer works with a CalHFA multifamily loan officer to define the project's financial structure and scope. If the results of a preliminary CalHFA review are favorable, the debt limit committee independently reviews the project to assess its compliance with the requirements necessary for debt support and tax advantages. CalHFA multifamily staff then perform a full due-diligence review of the project, including a complete underwriting. Then CalHFA's senior loan committee which includes the executive director, director of financing, legal director, and director of asset management—reviews the project. Once this committee has approved a project, it goes before the CalHFA board in the form of a formal resolution to provide the requested loan funds. We observed that the board usually has an opportunity to review project details and ask the developer and CalHFA staff questions, and then formally votes on a resolution approving the loan.

After the board approves a loan for a project, CalHFA continues to monitor the project's performance to ensure that disbursements of loan funds are appropriate. For example, when a developer requests a drawdown of authorized funds for a particular use, the drawdown must be verified as appropriate by CalHFA multifamily staff and approved by the multifamily director before the developer can receive the funds. In addition to these controls, for some projects, independent auditors review the developer's expenditures at different points in the project to ensure that the developer is adhering to the pre-established budget.

We reviewed six multifamily loan files to verify that key aspects of the controls mentioned above were functioning properly. We generally found the controls operating effectively, resulting in projects that developers completed on time and on budget. However, the approval process for a Bay Area housing project differed notably from CalHFA's normal multifamily approval process, as we discuss in the next section.

The approval process for a Bay Area housing project differed notably from CalHFA's normal multifamily approval process.

#### CalHFA Accepted Atypical Business Risks to Accommodate the Bay Area Housing Plan

One unique multifamily project known as the Bay Area Housing Plan, which involved the placement of developmentally disabled Californians out of developmental centers and into community-based housing, resulted in CalHFA exposing itself to unforeseen risk. Developmental centers exist to provide institutional care for developmentally disabled Californians. However, according to the Department of Developmental Services, institutional care was costly for the State, and advocates for the developmentally disabled argued that the quality of life at the centers was low. A 1999 Supreme Court decision required states to allow individuals with developmental disabilities to live in their communities when appropriate and reasonable. In its efforts to comply with this ruling, the Department of Developmental Services sought advice and support from other state agencies to develop a strategy for moving developmentally disabled residents of the Agnews Developmental Center in San Jose into community-based living environments.

According to the then-director of multifamily housing, in 2004 the California Health and Human Services Agency approached CalHFA asking it to look at the financial aspects of a plan it had developed for moving these individuals to community-based residential settings. The former director shared the plan with the CalHFA board and endorsed CalHFA becoming involved in this process by providing funding to the developer to purchase and acquire homes for the project. He expressed his belief that CalHFA's mission and financing plan were well-suited to support this project.

In two CalHFA board meetings in September 2005 and January 2006, board members raised questions about the project. According to the minutes of these meetings, the expense of the housing customizations needed to accommodate developmentally disabled residents was a primary source of concern. The houses that CalHFA's management proposed to build or refurbish would be financed at high loan-to-value ratios.

After these board discussions, the two initial resolutions to provide funding for this project passed unanimously. These resolutions gave management authority to work with the developer to select and fund specific properties that would eventually house people leaving the developmental centers. Soon thereafter, the developer of the properties began to obtain, build, retrofit, and otherwise enhance properties to make them suitable for housing former developmental center residents. Ultimately, the project came to involve 60 properties.

At about the same time that the CalHFA board approved these resolutions, the real estate market started to deteriorate, and financing difficulties related to this project presented new challenges to CalHFA management. Subsequent discussions between CalHFA's board and management highlighted the increasingly burdensome financial aspects of the project. Moody's took notice of the risks inherent in the project when it downgraded CalHFA's issuer credit rating in July 2009. However, Moody's took positive note of CalHFA's efforts to obtain legislative authorization to refinance this project from state resources other than its own. As indicated in Chapter 1, refinancing of this project from other state resources occurred in February 2011.

#### CalHFA's New Lending Model Reduces Risk to CalHFA, but It Also Reduces CalHFA's Profits

More recently, CalHFA has been working to implement a new lending business model based on mortgage-backed securities. Under the new model, CalHFA's loan portfolio risk is transferred from CalHFA to federal entities that guarantee the loans. CalHFA indicated that it is maintaining its existing lender certification process; it still reviews new lenders and is continuing its annual recertification process for all of its lenders. CalHFA's lenders still must comply with CalHFA-specific loan submission requirements. However, lenders now submit these loans for purchase by a master servicer (Bank of America). The master servicer will bundle the loans to create mortgage-backed securities guaranteed by Fannie Mae, Freddie Mac, or the Government National Mortgage Association. CalHFA will then purchase these securities, using funds it generates from issuance of bonds. Although CalHFA indicated that this will remove its exposure to risk from holding loans, its lender certification and recertification processes remain relevant under the new model because the loans backing the securities CalHFA purchases will still be originated by its approved lenders and are subject to removal from the pool of loans underlying the mortgage-backed securities if they do not qualify for inclusion. While reducing CalHFA's risks, this new model also reduces CalHFA's profits from each loan because the master servicer and the guarantor of the securities each collect a premium for the services they perform under this arrangement.

#### Recommendations

To ensure that CalHFA's business plans and strategies are thoroughly vetted by an experienced and knowledgeable board, the Legislature should consider amending the statute that specifies the composition of CalHFA's board to include appointees with

specific knowledge of housing finance agencies, single-family mortgage lending, bonds and related financial instruments, interest-rate swaps, and risk management.

To provide better oversight of CalHFA, its board should issue a policy stating that it must approve any new debt-issuance strategy or mortgage product prior to its implementation, either directly or by inclusion in CalHFA's annual business plan. The board should, where appropriate, prescribe limits on how much of the debt portfolio can be fixed- or variable-rate bonds, and what proportion of the loans it purchases can consist of mortgage products it identifies as riskier than other mortgage products.

Within its annual resolutions delegating authority to CalHFA staff, the CalHFA board should include language restricting staff's actions regarding debt strategies and mortgage products to those specified in the annual delegations themselves, the approved business plans, or subsequent board resolutions.

We conducted this audit under the authority vested in the California State Auditor by Section 8543 et seq. of the California Government Code and according to generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives specified in the scope section of the report. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Respectfully submitted,

ELAINE M. HOWLE, CPA

State Auditor

Date: February 24, 2011

Elaine M. Howle

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For questions regarding the contents of this report, please contact Margarita Fernández, Chief of Public Affairs, at 916.445.0255.

(Agency comments provided as text only.)

Business, Transportation and Housing Agency 980 9th Street, Suite 2450 Sacramento, CA 95814

February 11, 2011

Elaine M. Howle, State Auditor Bureau of State Audits 555 Capitol Mall, Suite 300 Sacramento, CA 95814

Dear Ms. Howle:

Attached is a response from the California Housing Finance Agency (CalHFA) to your draft audit report *California Housing Finance Agency: Most Indicators Point to Continued Solvency, Despite Its Recent Financial Difficulties Created, in Part, by Its Past Decisions* (#2010-123). Thank you for allowing CalHFA and the Business, Transportation and Housing Agency (BTH) the opportunity to respond to the report.

As noted in its response, CalHFA supports the report's recommendations and has already implemented portions of them. Additionally, CalHFA will place all three recommendations on the agenda of its Board of Directors' March 2011 meeting for discussion with the intent of furthering full implementation of the recommendations.

We appreciate your identification of opportunities for improvement related to the composition and governance policies of CalHFA's Board of Directors. If you need additional information regarding CalHFA's response, please do not hesitate to contact Michael Tritz, BTH Deputy Secretary for Audits and Performance Improvement, at (916) 324-7517.

Sincerely,

(Signed by: Traci Stevens)

Traci Stevens
Acting Undersecretary

cc: L. Steven Spears, Executive Director, California Housing Finance Agency

Attachment

(Agency comments provided as text only.)

California Housing Finance Agency 100 Corporate Pointe, Suite 250 Culver City, CA 90230

February 11, 2011

Ms. Traci Stevens, Acting Undersecretary California Business, Transportation and Housing Agency 980 Ninth Street, Suite 2450 Sacramento, California 95814

#### Dear Ms. Stevens:

The Board of Directors and executive staff of the California Housing Finance Agency (CalHFA or the Agency) are pleased to have had the opportunity to assist the Bureau of State Audits (Bureau) in its review of the current and future fiscal solvency and the governance of the Agency. CalHFA supports each of the Bureau's three recommendations and will agendize discussion to move forward with these recommendations at its next board meeting, scheduled for March 16, 2011.

The Agency is a publicly created enterprise with a mission to provide affordable financing alternatives to first-time homebuyers and to developers of affordable rental housing. More than 152,000 Californians have achieved the dream of homeownership and over 40,000 units of rental housing have been financed as a result of the Agency's loan programs. The Agency is very proud of its lending record and its ability to support affordable housing in one of the highest-cost states in the nation.

Fundamentally, the Agency is a mortgage bank and operates in an industry that has been impacted by the global credit crisis and financial market meltdown which has fed the most severe recession and collapse in real estate values since the Great Depression. CalHFA was not immune to these developments. Considering these challenges, the Agency is pleased that the Bureau has determined the Agency to be solvent today and expects it to remain solvent in almost all of the financial scenarios modeled.

The Agency appreciates the Bureau's acknowledgement of the benefits of the proactive measures and strategies employed by the Agency over the past three years to avoid insolvency and improve its financial position. As noted by the Bureau, CalHFA continued to require full documentation and underwriting of each borrower, which stood in stark contrast to the practices of many institutions engaged in the subprime lending that swept the nation and led to unsustainable home price appreciation.

CalHFA is playing a role in California's economic recovery with its recent return to homeownership lending activity with a new business model, adopted in 2009, that better protects Agency from real estate risk. While recognizing the efforts of the Agency in navigating through a serious downturn, the Bureau has provided three recommendations for consideration by the Legislature and the Board of Directors. The Agency is in agreement with the recommendations and portions of them have already been implemented. Following are those recommendations and the Agency's responses.

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To ensure that CalHFA's business plans and strategies are thoroughly vetted by an experienced and knowledgeable board, the Legislature should consider amending the statute that specifies the composition of CalHFA's board to include appointees with specific knowledge of housing finance agencies, single-family mortgage lending, bonds and related financial instruments, interest-rate swaps, and risk management.

The Agency and its Board of Directors agree with this recommendation and would support the legislative review of CalHFA's governing statutes that define the makeup of the Board to add more financial expertise while preserving the diversity of key constituencies represented by various board positions. The Board will agendize this recommendation for discussion on March 16, 2011 at its next board meeting and will then develop specific recommendations for statutory changes to strengthen governance.

To better provide oversight of CalHFA, its board should issue a policy stating that it must approve any new debt-issuance strategy or mortgage product prior to its implementation, either directly or by inclusion in CalHFA's annual business plan. The board should, where appropriate, prescribe limits on how much of the debt portfolio can be fixed or variable-rate bonds, and what proportion of the loans it purchases can be comprised of mortgage products it identifies as riskier than other mortgage products.

The Agency and its Board of Directors agree with this recommendation and the Board has already begun implementing it. In January 2011, it adopted annual resolutions delegating authority to staff that are more restrictive than in prior years. For example, Resolution 11-01 and Resolution 11-02 specifically limit the use of variable rate bonds to the restructuring of existing debt and provide that all new bonds issued to finance lending programs bear fixed rates of interest. The Resolutions also require that all new bond indentures be approved by the Board before any bonds are issued. Additionally, the Executive Director is now also required to determine with each issuance of refunding bonds (and upon the amendment or replacement of financial agreements) that the Agency and its general fund are not expected to bear greater financial risk than prior to the refunding transaction.

Accordingly, at its next meeting on March 16, 2011 the Board will agendize this recommendation of the Bureau for discussion and anticipates issuing a formal policy statement to guide delegations of authority in future years. As part of these discussions, the Board will also determine the need for formal policies to clarify the interrelationship of annual financing resolutions, business plans, operating budgets, delegations and strategic business development.

Within its annual resolutions delegating authority to CalHFA staff, the board should include language restricting staff's actions regarding debt strategies and mortgage products to those specified in the annual delegations themselves, the approved business plans, or subsequent board resolutions.

The Agency and its Board of Directors agree with this recommendation. As mentioned in the Agency's response to the previous recommendation, and acknowledged by the Bureau, resolutions

Ms. Traci Stevens February 11, 2011 Page 3

adopted by the Board in January 2011 are more restrictive than in prior years. At its next meeting on March 16, 2011 the Board will agendize this recommendation for discussion and anticipates issuing a formal policy statement to guide delegations of authority in future years. As part of these discussions, the Board will also determine the purpose of the business plan and how the plan relates to the annual financing resolutions, the operating budget, and other business development strategies.

The Agency appreciates the professionalism of the Bureau's audit staff and the opportunity to discuss the Agency's programs and challenges with them over the past six months. The Agency agrees with the recommendations of the Bureau and looks forward to working with the Legislature and the Board of Directors in implementing them.

Sincerely,

(Signed by: L. Steven Spears)

L. Steven Spears Executive Director

Cc: CalHFA Board of Directors

cc: Members of the Legislature

Office of the Lieutenant Governor

Milton Marks Commission on California State Government Organization and Economy

Department of Finance

Attorney General

State Controller

State Treasurer

Legislative Analyst

Senate Office of Research

California Research Bureau

Capitol Press