

# Bridging the Gap to Scalable Community Reinvestment Lending Programs

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## Abstract

*The Community Reinvestment Act requires commercial banks and savings institutions to help meet the credit needs of borrowers in their communities, including low- and moderate-income neighborhoods. The CRA has been controversial since its enactment, with calls for both repealing and expanding it. One rationale for expanding CRA lending activities is the distinction between conforming and nonconforming CRA lending, and the fact that a large secondary market exists for the former but not the latter, essentially creating a dual market. In this market, marginal borrowers potentially face higher borrowing costs that may be disproportionate to their actual credit riskiness, can only obtain loans with alternative features that may increase default risk, and may suffer from predatory lending practices. However, not much is known about the lending risks associated with the nonconforming CRA segment of the market. In this article, we summarize the lessons learned from one large nonconforming community reinvestment mortgage program and provide insight into how the challenges associated with special community reinvestment lending might potentially be managed on a larger scale, via increased capital reserves, a mortgage insurance mechanism, and enhanced market liquidity in the special community reinvestment product space.*

## Introduction

### Community Reinvestment Lending in Context

A substantial mortgage finance infrastructure is available to low- and moderate-income households in the United States (Nothaft and Surette, 2001). This infrastructure includes initiatives supported by federal, state, and local governments, as well as initiatives in the nonprofit and for-profit sectors.

One such initiative is the Community Reinvestment Act<sup>1</sup> (CRA), which was enacted in 1977 in response to concerns about *redlining*, a form of geographically based credit rationing. The CRA requires depository institutions to provide credit in a “safe and sound manner” to the communities in which they collect deposits, including low- and moderate-income households and neighborhoods. Institutions subject to the CRA are periodically evaluated on the extent to which they meet this goal, and the results of the evaluation are considered by regulators when reviewing bank applications for mergers or changes in the location of branches (Ardalan, 2006; Ardalan and Davis, 2006; Hossain, 2004). Since 1996, CRA-regulated banks are estimated to have lent more than \$973 billion in small business loans and \$883 billion in community development loans to support affordable housing and economic development projects.<sup>2</sup>

Two other federal government initiatives amplify the potential impacts of the CRA: the housing goals of the government-sponsored enterprises (GSEs), Fannie Mae and Freddie Mac, and the work of the Federal Housing Administration (FHA). Under the Federal Housing Enterprises Financial Safety and Soundness Act<sup>3</sup> of 1992, as amended by the Housing and Economic Recovery Act<sup>4</sup> of 2008, Fannie Mae and Freddie Mac are subject to affordable housing goals covering their purchases of single-family and multifamily mortgages, including CRA-eligible loans. These mandates are intended to provide liquidity and a secondary mortgage market for prime, conforming mortgages made to low- and moderate-income households, as well as those in underserved geographic areas and markets (DiVenti, 2009).<sup>5</sup> Therefore, greater involvement by the GSEs may lead to the origination of more CRA-eligible prime, conforming loans. The GSEs are currently under the conservatorship of the Federal Housing Finance Agency (FHFA). In addition, the FHA insures nonconforming mortgages and thereby provides credit enhancements for borrowers who may have impaired credit history or liquidity constraints (Nothaft and Surette, 2001); these same borrowers are often served by CRA lending efforts. A secondary market for FHA loans exists through Ginnie Mae, which is a government corporation. Thus, the FHA may amplify the impacts of the CRA through its insurance programs.

The definition of a conforming mortgage has varied over time but generally reflects GSE guidelines stipulating loan and borrower characteristics, such as loan amount, downpayment as a fraction of the property value, credit score, debt-to-income ratio, loan-to-value ratio, and the extent of supporting documentation required.<sup>6</sup> These guidelines are intended to standardize both loan and borrower characteristics, thereby reducing or eliminating informational asymmetries for investors and permitting very accurate prediction of default and prepayment risks (Green, 2008). CRA-eligible loans, namely those for which institutions that are subject to the CRA regulations can receive low- and moderate-income lending credit during their CRA assessments, can be either conforming or

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<sup>1</sup> Pub. L. 95–128, 91 Stat. 1147, Title VIII.

<sup>2</sup> See <http://www.ffiec.gov/craadweb/aggregate.aspx> for data on community development lending and small business lending by year.

<sup>3</sup> Pub. L. 102–550, 106 Stat. 3941, Title XIII.

<sup>4</sup> Pub. L. 110–289, 122 Stat. 2654.

<sup>5</sup> The 2015–2017 housing goals are described at <https://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Adopts-Final-Rule-on-2015-to-2017-Housing-Goals-for-Fannie-Mae-and-Freddie-Mac.aspx>.

<sup>6</sup> For example, see Fannie Mae’s 2016 eligibility matrix at [https://www.fanniemae.com/content/eligibility\\_information/eligibility-matrix.pdf](https://www.fanniemae.com/content/eligibility_information/eligibility-matrix.pdf).

nonconforming (Avery, Bostic, and Canner, 2000). During the 1990s, approximately 40 percent of prime, conforming loans purchased by the GSEs were made to low- or moderate-income borrowers, and about two-thirds of those loans were also CRA eligible (Nothaft and Surette, 2001).<sup>7</sup>

What little available evidence exists regarding nonconforming CRA-eligible mortgage lending suggests that, historically, this segment of the market has been relatively small and is served through special CRA lending programs (Quercia and Ratcliffe, 2009). Such programs have been adopted by CRA-regulated institutions for the purpose of enhancing CRA assessment ratings and primarily target low-income borrowers living in low-income neighborhoods. Special CRA loans typically carry nonconforming features that are designed to relax credit constraints or underwriting standards and thereby make credit available to marginal borrowers who would not qualify for a conforming mortgage. Such loans may permit higher loan-to-value ratios, higher debt-to-income ratios, lower borrower credit scores, or a combination of the three, and they may carry lower interest rates. A survey of large retail banking institutions conducted by the Federal Reserve Board of Governors suggests that special CRA mortgage lending represented about 5.6 percent of total CRA mortgage lending in 1999 (Avery, Bostic, and Canner, 2005, 2000). A more recent estimate suggests that special CRA programs originate about 20,000 to 30,000 loans per year (Herbert, 2009).

Loans made via such special programs are often referred to as “prime” mortgages, despite the facts that many of the borrowers served have subprime credit ratings and the flexible underwriting features of such mortgages cause them to carry somewhat higher default risk than prime, conforming mortgages (LaCour-Little, 2007). The borrowers who receive nonconforming loans also tend to be more heterogeneous than borrowers who receive prime, conforming loans, thus complicating the management of associated mortgage termination risks (Green, 2008). Special CRA loans can, however, be distinguished from subprime loans, due to the fact that they do not carry alternative loan features, such as prepayment penalties, balloon payments, reverse amortization, teaser rates, or high-cost interest rates, which tend to increase default risk irrespective of borrower credit quality (Aalbers, 2009; Ding et al., 2011). Subprime loans have tended to be favored by investors, higher-income households, and borrowers who are able to provide substantial downpayments but are unable or unwilling to provide complete documentation due to self-employment or temporary adverse financial shocks (Aalbers, 2009; LaCour-Little, 2007).

## **Innovation in Community Reinvestment Lending**

Numerous proposals have been put forward over the years concerning how CRA lending in general, and special CRA lending in particular, could potentially be expanded. One such proposal that surfaced in the late 1990s involved the creation of a secondary market for special CRA-eligible mortgages, which did not exist at that time (Quercia, Freeman, and Ratcliffe, 2011). In the absence of such an outlet, primary lenders must keep marginal CRA loans in portfolio (Bhutta, 2011), where they can cause an increase in required capital reserves, because higher default rates and higher economic capital requirements are associated with loans that have high loan-to-value ratios, are made to borrowers with lower credit scores, are geographically concentrated, or a combination

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<sup>7</sup> Note that the GSE housing goals have historically used higher income thresholds for targeted low- and moderate-income borrowers and communities than those specified by the CRA, so some loans purchased by the GSEs in satisfaction of their housing goals were not CRA eligible. See An et al. (2007) for a discussion.

(Calem and LaCour-Little, 2004). Some evidence suggests that the existence of a secondary mortgage market can increase loan originations and that this effect may be particularly pronounced for loans made to low-income borrowers (Gabriel and Rosenthal, 2007).

Thus, the proposal was to involve the GSEs in providing liquidity for special CRA lending activities and to reduce the need for lending institutions to hold special CRA loans on their books. Such a secondary market would essentially expand conforming loan criteria to include the type of nonconforming loan features that are typical of special CRA-eligible lending programs and thus potentially permit many more such loans to be made. It could also reduce the risk of lending to the special CRA borrower population by standardizing underwriting practices and providing geographic diversification. As a test of this idea, a targeted lending program, the Community Advantage Program (CAP), was implemented in 1998 as a demonstration of how a secondary mortgage market for special CRA-eligible mortgages might function in practice. The demonstration was intended to address concerns about whether such loans were too risky for investors and whether the borrowers receiving such loans would be financially better off as renters, given the relatively higher costs and personal financial risks associated with homeownership.<sup>8</sup>

To date, the performance of CAP mortgages and the housing experiences of CAP borrowers have been documented at length. CAP loans tend to have somewhat higher default risk than prime, conforming mortgages but substantially lower default risk than subprime loans made to similar borrowers (Ding et al., 2011). Most CAP borrowers have sustained homeownership, accumulated home equity, and characterized their decisions to become homeowners as positive (Quercia, Freeman, and Ratcliffe, 2011). In the years since CAP started, the GSEs have also implemented other special secondary market programs that provide an outlet for special CRA-eligible loan products. Examples include Fannie Mae's Community Home Buyer's Program and Freddie Mac's Affordable Gold Alt 97 program (LaCour-Little, 2007), which were in place in 2002; Fannie Mae's HomeReady mortgage program, which was implemented in 2015;<sup>9</sup> and Freddie Mac's Home Possible mortgage program, which was implemented in 2016.<sup>10</sup> Research from CAP was taken into consideration during the design of the more recent programs.

## Current Policy Challenges

Despite these changes in the secondary mortgage market, some researchers continue to believe that special CRA lending activities need to be greatly expanded. In particular, one rationale for expanding special CRA lending activities that has been proposed in the aftermath of the financial crisis is that the distinction between conforming and nonconforming CRA lending, and the fact that a large secondary market exists for the former but not the latter, essentially creates a dual market. In this market, marginal borrowers potentially face higher borrowing costs that may be disproportionate to their actual credit riskiness, can only obtain loans with alternative features that may increase

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<sup>8</sup> Although some lending programs targeted to low- and moderate-income households have historically been associated with objective increases in average wealth and higher standards of living among the program participants, considerable outcome variability exists, which has raised questions about the suitability of such lending (Galster and Santiago, 2008).

<sup>9</sup> See the HomeReady product matrix at [https://www.fanniemae.com/content/fact\\_sheet/homeready-product-matrix.pdf](https://www.fanniemae.com/content/fact_sheet/homeready-product-matrix.pdf). See also general information about Fannie Mae's flexible lending programs at <https://www.fanniemae.com/content/tool/flexibilities-for-creditworthy-borrowers.pdf>.

<sup>10</sup> See an overview of Home Possible at <http://www.freddiemac.com/homepossible/>.

default risk, and may suffer from predatory lending practices (Levitin and Ratcliffe, 2014; Quercia and Ratcliffe, 2009). Concerns about this dual market structure reflect the observation that a number of low-income and minority homeowners took out subprime loans during the housing market expansion of the early 2000s and might have faced lower default risk from more traditional mortgage products (Bostic and Lee, 2008; Ding et al., 2011). An expansion of special CRA lending through GSE secondary market programs would potentially serve this segment of the market.

In addition, the public mortgage finance infrastructure that supports lending to low- and moderate-income households has come under increasing scrutiny since the housing market slump that began in 2006 and the associated recession from 2007 to 2009. The CRA has always been controversial due its ambiguous wording, subjective implementation, limited mortgage market coverage, and tendency to prevent banks from achieving economies of scale through specialization (Hossain, 2004; Hylton and Rougeau, 1999; Marsico, 2005; Richardson, 2001). Assessing the effectiveness and adequacy of the CRA has proved difficult due to its lack of quantitative compliance criteria and its interaction with other financial regulations in determining lender incentives (Getter, 2015). Another longstanding controversy concerns the impact of the GSE housing goals with respect to housing market liquidity (Ambrose and Thibodeau, 2004; Bostic and Gabriel, 2006; Gabriel and Rosenthal, 2010). However, additional questions have recently been raised as to the extent to which the CRA, the GSEs, and the FHA may have contributed to economic volatility through the relaxation of underwriting standards (Nichols, Hendrickson, and Griffith, 2011). In particular, the contribution of the CRA (or lack thereof) to the financial crisis has been debated at length (Aalbers, 2009; Reid, 2013). Moreover, given that the GSEs currently remain in conservatorship, various proposals have been made for how to reorganize the U.S. housing finance system (Duca, Muellbauer, and Murphy, 2016; Seidman et al., 2013).<sup>11</sup> Thus, the future of the secondary market for special CRA-eligible lending activities remains unclear.

## **Roadmap**

We contribute to the ongoing policy discussion by reviewing some of the information that has been gathered from CAP and providing insights as to how the challenges associated with special CRA-eligible lending may be managed. We believe that any expansion or reorganization of the housing finance system that seeks to incorporate special CRA-eligible lending on a significant scale should be carefully designed with risk management in mind. In brief, the design and outcomes of CAP, combined with our reading of the relevant literature, suggest that increasing the scale of special CRA lending would require increased capital reserves, a mortgage insurance mechanism, and enhanced market liquidity in the special CRA product space.

The remainder of the paper is divided into four sections. First, we briefly discuss the historical background and implementation of the CRA. Second, we describe CAP and the data collection associated with the evaluation of this program. Third, we describe the demographic profile of CAP borrowers, the program's underwriting considerations, and the mortgage performance and wealth-building experiences of participating borrowers. Finally, we discuss implications for the scalability of special CRA lending.

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<sup>11</sup> See also a synthesis of proposed reforms at <http://www.urban.org/policy-centers/housing-finance-policy-center/projects/housing-finance-reform-incubator/jim-parrott-clarifying-choices-housing-finance-reform>.

## Community Reinvestment Act Background

The CRA was passed in 1977 in response to beliefs that lenders were rationing mortgage credit in low- and moderate-income and minority neighborhoods. Such credit rationing was believed to result from racial discrimination, statistical discrimination, informational asymmetries, the inability of lenders to achieve economies of scale, or some combination thereof (Ardalan, 2006; Ardalan and Davis, 2006; Avery, Bostic, and Canner, 2005; Hossain, 2004; Hylton and Rougeau, 1999; Klausner, 1995). In particular, economic theory suggests that an equilibrium in which profit-maximizing lenders rationally engage in credit rationing can exist as a result of either thin markets or imperfect information about the credit risks of heterogeneous borrowers (Lang and Nakamura, 1993; Stiglitz and Weiss, 1981). Further motivation for the CRA was provided by the belief that access to credit tended to carry positive community-level externalities that were not internalized by lenders and that the level of mortgage lending in the relevant neighborhoods might thus be socially suboptimal (Lang and Nakamura, 1993; Richardson, 2001). Some proponents of the CRA have also argued that banks benefit from the public sector with respect to deposit insurance and should therefore be required to provide credit broadly as a public service (Levitin and Ratcliffe, 2014).

In light of these beliefs, the CRA was intended to induce depository institutions to provide more credit in the locations in which they received deposits and particularly to induce such institutions to expand lending activity in low- and moderate-income and minority neighborhoods. The CRA reaches beyond existing fair lending laws by not only prohibiting discrimination in lending but also creating an obligation to proactively make credit broadly available to the target population groups (Ardalan and Davis, 2006; Levitin and Ratcliffe, 2014). The intention was that CRA loans might be less profitable than mainstream lending activities, but they should not undermine lender solvency (Avery, Bostic, and Canner, 2005).

The CRA was revised in 1995 in an effort to address concerns of both lenders and community groups with respect to the challenges of CRA assessment and enforcement (Hossain, 2004). In its current form, the CRA provides for a government assessment of lenders that varies based on institutional size and involves up to three tests—namely a lending test, an investment test, and a service test. The lending test consists of an evaluation of how loans are distributed across neighborhoods and income groups within the assessment area; loan frequencies, amounts, and product mixes are considered. The investment test evaluates lender investments in local economic development activities. The service test considers lender systems and processes for providing credit to various constituencies within the assessment area (Ardalan and Davis, 2006). The lending test is more heavily weighted than the other tests (Quercia and Ratcliffe, 2009). Lenders can meet their CRA obligations in a variety of ways,<sup>12</sup> including by providing funding for low-income housing initiatives, small businesses or farms, disaster recovery and neighborhood revitalization projects, and community services that are specifically targeted to lower income households or residents of distressed areas. Lenders can receive credit by lending directly or by purchasing qualifying loans originated by other lenders.

The CRA assessment assigns each bank a rating on a four-point scale, and this rating is taken into consideration during the approval process when bank applications are submitted for “new charters;

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<sup>12</sup> See a fact sheet describes the many activities for which banks can receive CRA credit at <https://www.occ.treas.gov/topics/community-affairs/publications/fact-sheets/fact-sheet-cra-loans.pdf>.

new branches or relocation of an existing branch; bank mergers and consolidation; and other similar corporate activities” (Office of the Comptroller of the Currency, 2014: 2). Small banks are evaluated primarily based on their lending activities. Larger banks are assessed based on lending, investment, and service activities. In each case, a given lender can opt to submit a strategic plan for meeting CRA objectives; if approved by the assessor, this strategic plan can provide context for the assessment so that it takes into consideration the unique characteristics of the lending institution in relation to its service area. The results of each assessment are made available to the public, which allows for secondary enforcement of CRA compliance and encourages collaboration with community groups via the pressure to maintain a favorable public image (Marsico, 2005).<sup>13</sup>

## **Community Advantage Secondary Market Demonstration Program**

The CAP is a secondary mortgage market demonstration program initiated in 1998 via a partnership among the Ford Foundation, Fannie Mae, and Self-Help, a nonprofit lender with headquarters in Durham, North Carolina. Under CAP, Self-Help purchased qualifying loans from the originating lenders and resold them to Fannie Mae while retaining recourse for an agreed period of time. Qualifying loans were those made to households with annual incomes of no greater than 80 percent of the Area Median Income (AMI) at the metropolitan statistical area level, or to minority households with annual incomes of no greater than 115 percent of AMI. CAP was designed to provide policy-relevant insights with respect to community reinvestment lending, as defined by the CRA, and to inform future housing policy.

The risk associated with CAP lending was managed in several ways. First, because it was acknowledged that special CRA mortgage lending posed a higher risk of default than prime, conforming mortgage lending, the Ford Foundation provided a \$50 million grant for the purposes of underwriting CAP loans and providing capital reserves that could compensate Fannie Mae in the event of unexpected losses. Second, Self-Help added a small risk fee to the mortgage interest rate; this risk fee ranged between 0 and 150 basis points and took the place of mortgage insurance. Third, the recourse arrangement of Self-Help permitted the return of loans with low credit quality; if a loan became delinquent very shortly after purchase, Self-Help returned it to the originator. Self-Help also retained recourse on each loan for a given period of time after reselling it to Fannie Mae, an arrangement that provided additional default risk protection for the GSE.

More than 46,000 loans totaling more than \$4 billion were purchased through CAP. Purchased loans were primarily 30-year, fixed-rate, low-downpayment mortgages. Origination dates range from 1983 to 2010, with 95 percent originated after 1995. CAP loans had a median original loan-to-value ratio of 97 percent and were originated at a median interest rate of 7 percent. The median original loan balance was \$79,000. In some cases, Self-Help purchased qualifying loans that had already been originated, and in other cases Self-Help collaborated with originating lenders to create a program-specific lending channel that would permit the future origination and resale of qualifying loans.

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<sup>13</sup> See also a presentation from the Federal Deposit Insurance Corporation at <https://www.fdic.gov/regulations/resources/director/presentations/cra.pdf>.

With further funding from the Ford Foundation, a subset of approximately 3,700 CAP borrowers who received loans between 1999 and 2003 were surveyed annually beginning in 2003. The survey collected information about homeownership experiences for the purposes of academic research and program evaluation. In 2004, a comparison group of about 1,500 renter households was also recruited and interviewed. These renter households were selected to be in the same metropolitan areas as the CAP homeowners and to be similar with respect to an income ceiling. The comparison panel was primarily intended to provide a point of reference from which to evaluate the wealth accumulation of the CAP owners. Details about the wealth accumulation and asset holdings of survey participants were collected by surveys administered in 2005, 2009, and 2012. The last year of survey data collection was 2014. Altogether, the survey data collected between 2003 and 2014 constitute the Community Advantage Panel Survey (CAPS).

Like other panel surveys, CAPS has experienced some attrition of participants over time. As of 2014, the final sample sizes were approximately 1,800 owner sample members and 800 renter sample members. Male and Hispanic respondents were the most likely to drop out during the survey period (Riley et al., 2015).

### **Sample Characteristics**

Exhibit 1 presents demographic and underwriting summary statistics for CAP participants and both CAPS samples. At the time of loan origination, the median CAP borrower was 32 years old and had an annual income of \$31,000 (or 60 percent of AMI), a credit score of 681, and a debt-to-income ratio of 37 percent. The median CAP property was valued at \$84,000 at the time of purchase, and the median CAP borrower's original equity in the property was approximately \$2,500. About 40 percent of borrowers were members of a racial or ethnic minority group, with about 19 percent Black and about 14 percent Hispanic representation. Thus, much of the sample comprises households from groups that have traditionally been underserved by financial markets. At the time of loan origination, about 14 percent of CAP properties were in rural areas, about 32 percent were in low-income census tracts, and about 30 percent were in minority census tracts. Nearly 70 percent of CAP properties were in the South, with approximately 30 percent in North Carolina. The subset of CAP borrowers who participated in CAPS presents a similar profile overall, except that survey participants were more likely to be in the Midwest and less likely to purchase a property in a minority tract.

The CAPS renters sample differs from the CAPS owners sample with respect to both demographic and geographic characteristics at survey baseline. Compared with the CAPS owners sample, survey participants in the CAPS renters sample had a higher median age at the survey baseline (39 versus 32) and had a lower median household income (\$19,000, or 30 percent of AMI, versus \$31,000, or 54 percent of AMI). In addition, renters were more likely to be Black (33 versus 20 percent) or Hispanic (19 versus 16 percent). Renters were also less likely to be married (28 versus 46 percent), less likely to have completed education beyond high school (25 versus 39 percent), and less likely to be employed (63 versus 92 percent). Finally, renters were more likely to be in the South (74 versus 62 percent). Because of these differences, existing analyses comparing the financial outcomes of these two samples have tended to employ selection models or matching methods as a means of correcting for sample imbalance on key respondent attributes.

## Exhibit 1

### Owner and Renter Characteristics by Sample

	CAP Portfolio N = 46,547	CAPS Owners Sample N = 3,743	CAPS Renters Sample N = 1,529
Age (median, years)	32	32	39
Income (median, \$)	30,792	30,672	19,000
Income (median, % of AMI)	60	58	33
Male (%)	57	54	30
Race (%)			
White	61	61	44
Black	19	20	33
Hispanic	14	16	19
Other	6	3	4
Marital status (%)			
Married	—	46	28
Widowed/divorced/separated	—	20	32
Never married	—	35	40
Educational attainment (%)			
Less than high school	—	9	20
High school diploma or GED	—	51	55
Associate's or trade school degree	—	14	8
Bachelor's degree	—	19	13
Graduate degree	—	6	4
Employment status (%)			
Working	—	92	63
Unemployed (looking for work)	—	3	12
Out of labor force	—	3	20
Retired	—	2	5
Geographic region (%)			
Midwest	16	26	14
Northeast	4	3	0
South	69	62	74
West	12	10	12
Rural (%)	14	18	—
Low-income tract (%)	32	30	—
Minority tract (%)	30	25	—
Purchase price (median, \$)	84,000	77,500	—
Loan amount (median, \$)	79,000	74,775	—
Loan-to-value ratio (median, %)	97	97	—
Debt-to-income ratio (median, %)	37	37	—
Credit score (median)	681	673	—

AMI = Area Median Income. CAP = Community Advantage Program. CAPS = Community Advantage Panel Survey. GED = general equivalency diploma.

Differences also exist between CAPS participants and the larger population of low-income households. Compared with similar low-income participants in the 2003 Current Population Survey, CAPS respondents tend to be much more likely to live in the South; they also appear to be somewhat more educated and more attached to the labor force. Compared with low-income homeowners in the Current Population Survey, the CAPS owners sample also tends to be younger and exhibit greater representation of males. However, these two groups appear to be similar with respect to distributions of race, income, and household size. Compared with low-income renters in the Current Population Survey, the CAPS renters sample demonstrates higher representation of Black and female participants but similar distributions of income and household size (Riley, Ru,

and Quercia, 2009). These differences between CAPS participants and the general low-income population should be kept in mind when considering the generalizability of analyses based on CAPS data.

## **Mortgage Performance**

As of the end of 2016, approximately 17 percent of the CAP loan portfolio remained active. An additional 71 percent had prepaid, 5 percent had been returned to the originator, and 7 percent had been terminated via foreclosure sale. With respect to worst-ever payment delinquency status, more than 80 percent of CAP loans had never been 90 or more days delinquent. Approximately 62 percent had never been delinquent at all, an additional 15 percent had been at most 30 days delinquent, and about 4 percent had been more than 30 but at most 60 days delinquent.

When compared with the broader mortgage market, CAP rates of serious delinquency (that is, at least 90 days late on payments or in foreclosure) during the financial crisis generally fell between those for fixed-rate prime loans and those for other mortgage products. This relationship is illustrated in exhibit 2; CAP serious delinquency rates over time are compared with those for prime fixed-rate loans, prime adjustable-rate loans, subprime fixed-rate loans, subprime adjustable-rate loans, and FHA loans. Exhibit 2 covers the period from the second quarter of 2006, when the housing market peaked, to the end of 2009, when subprime serious delinquency rates reached their maximum. In the fourth quarter of 2009, active CAP loans exhibited a serious delinquency rate of about 10 percent. By contrast, prime fixed-rate loans exhibited a serious delinquency rate of about 5 percent, whereas prime adjustable-rate loans, subprime fixed-rate loans, and subprime adjustable-rate loans exhibited serious delinquency rates of 18, 22, and 43 percent, respectively.<sup>14</sup>

CAP loans thus exhibit default risk that is higher than that of fixed-rate prime loans but lower than that of adjustable-rate prime loans or subprime loans. The intermediate risk profile of CAP mortgages reflects the similarities between CAP borrowers and subprime borrowers with respect to credit characteristics but also the differences in loan products received. The former received loans at fixed rates, high loan-to-value ratios, and near-prime interest rates, whereas the latter received subprime or adjustable-rate loans that could generate mortgage payment shocks. In consequence, CAP mortgage performance reflects less risk layering than that of subprime loans. The mortgage product can mediate the relationship between borrower origination credit profiles and observed mortgage performance (Ding et al., 2011; Pennington-Cross and Ho, 2010). This pattern is consistent with the idea that special CRA lending may pose somewhat higher costs to lenders than conforming prime lending and may thus require higher loss reserves or subsidization, either from other business lines or from external organizations, in order to be viable.

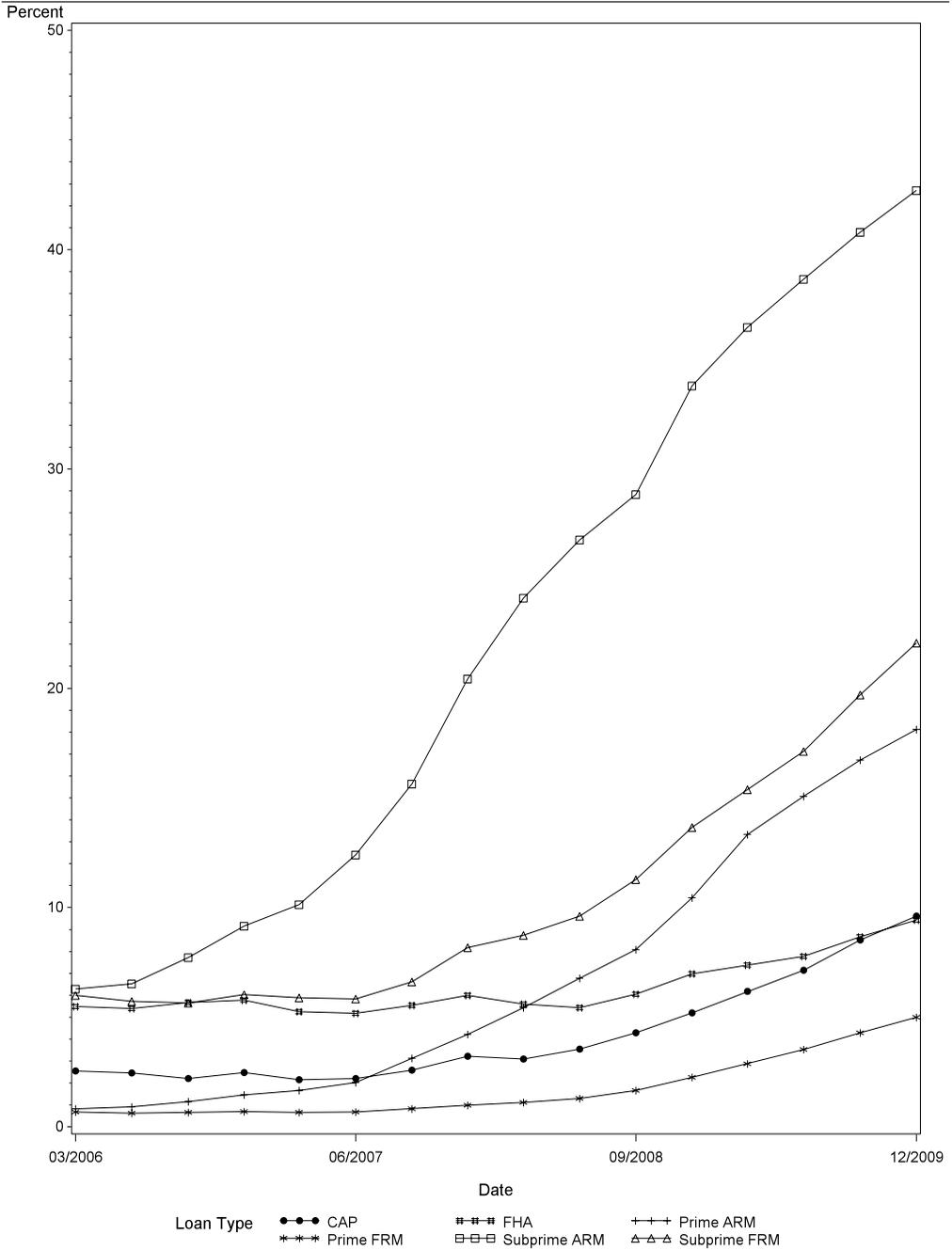
However, CAP mortgage performance does generally reflect the effect of standard underwriting factors, including household income, credit score, loan-to-value ratio, and debt-to-income ratio (Quercia, Pennington-Cross, and Tian, 2012). Thus, lower incomes, lower credit scores, higher loan-to-value ratios, and higher debt-to-income ratios are all associated with increases in default risk for CAP loans, as they are for other loan products.

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<sup>14</sup> See the Mortgage Bankers Association's National Delinquency Survey at <https://www.mba.org/news-research-and-resources/research-and-economics/single-family-research/national-delinquency-survey>.

**Exhibit 2**

**Serious Delinquency (90+ or Foreclosure) Rates by Mortgage Product, 2006–2009**



ARM = adjustable-rate mortgage. CAP = Community Advantage Program. FHA = Federal Housing Administration. FRM = fixed-rate mortgage.

Sources: CAP database; Mortgage Bankers Association

## Appreciation and Return on Equity

Exhibit 3 shows the real FHFA purchase-only house price index for the period of 1991 to 2017. All nominal index values are adjusted to 1991 values using the Consumer Price Index for all urban consumers less shelter. As illustrated, national house prices exhibited considerable volatility during the period of CAP program evaluation. Thus, many of the CAP borrowers who sold their homes during the study period experienced historically high rates of house price appreciation and return on equity. Among those CAPS owners who sold their CAP properties during the survey period, 89 percent sold their houses for at least what they initially paid, and the remaining 11 percent incurred a loss from sale. Those who experienced a gain from the sale reported a median nominal gain of nearly \$26,000, whereas those who experienced a loss from sale reported a median nominal loss of about \$10,000.

The CAP borrowers who retained their CAP properties experienced modest gains more consistent with long-term rates of market appreciation. As of the fourth quarter of 2016, CAP properties had appreciated at a nominal annualized rate of about 2 percent since loan origination, which corresponds to a potential annualized return on equity of approximately 19 percent. This latter leveraged rate of return on equity compares favorably with returns on alternative unleveraged investment vehicles, as the Dow Jones Industrial Average returned a nominal annual return of about 4 percent during the study period, and the 10-year Treasury bill rate was about 5 percent at the time of CAP loan origination.

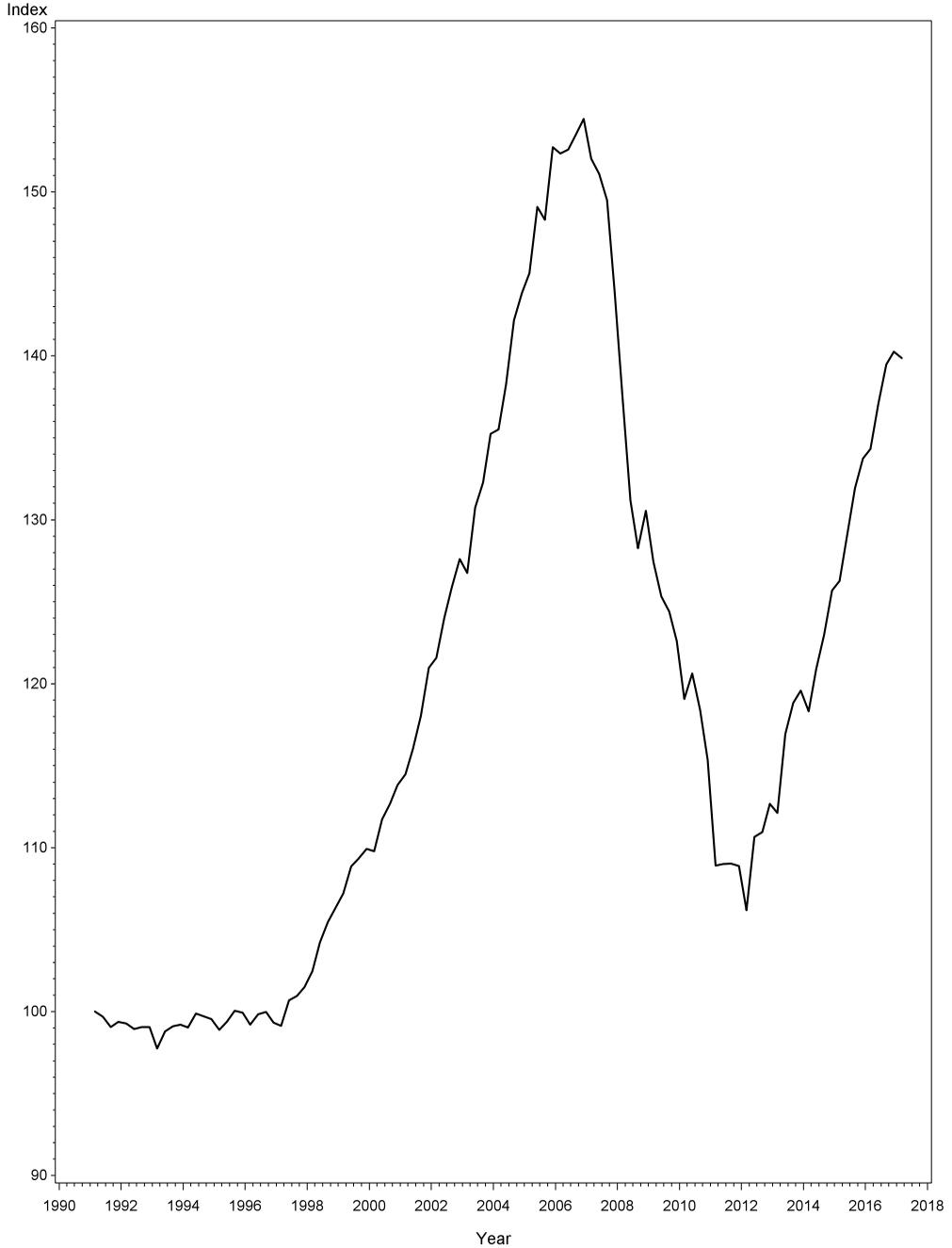
More specifically, exhibit 4 illustrates the potential gains in home equity that CAP borrowers remaining in their CAP properties could have achieved as a result of the evolution of house prices between CAP property purchase and the end of 2016. We calculate potential home equity as the difference between the market value of the property<sup>15</sup> and the most recent observed unpaid principal balance on the CAP mortgage. At the median, CAP borrowers potentially experienced nominal equity growth of about \$44,000 after loan origination; including the original equity held in the property at the time of purchase, the median CAP borrower would have accumulated about \$46,000 in home equity. The upper 75th percentile represents accumulated total equity of about \$76,000, whereas the lower 25th percentile represents accumulated total equity of about \$25,000. This variation across CAP properties primarily reflects geographic differences in local and regional housing market conditions.

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<sup>15</sup> We use the FHFA metropolitan-level housing price indices to calculate market value for the CAP properties based on the original purchase price.

**Exhibit 3**

**FHFA Purchase-Only House Price Index, 1991–2017**



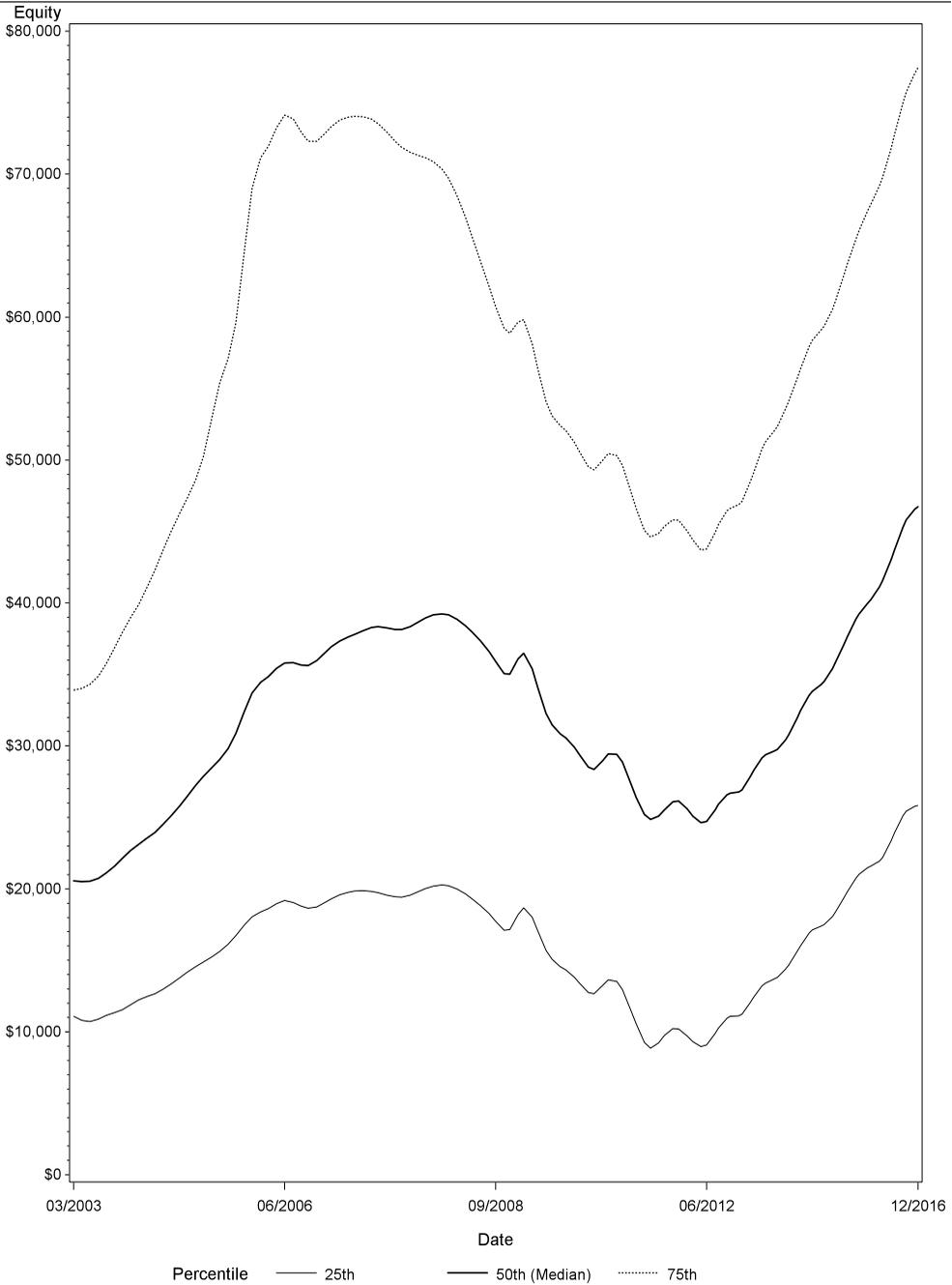
FHFA = Federal Housing Finance Agency.

Notes: Adjusted for inflation to 1991 values. Data as of the first quarter of 2017.

Sources: Bureau of Labor Statistics; FHFA

**Exhibit 4**

**Home Equity Potentially Accumulated by CAP Participants, 2003–2016**



CAP = Community Advantage Program.  
Sources: CAP database; Federal Housing Finance Agency

## **Wealth Accumulation**

As of the end of 2012, which was the most recent year in which comprehensive wealth accumulation and asset holdings information was collected from CAPS participants, the owners sample reported a median net worth of approximately \$70,000. This wealth represents primarily the value of home equity and retirement accounts, with liquid assets and the value of vehicles making secondary contributions. As of the end of the survey period, home equity represented about 23 percent of total net worth for the CAPS owners sample as a whole, and retirement account balances represented about 40 percent; net liquid assets (that is, liquid assets less unsecured debt) contributed an additional 20 percent, followed by the net value of vehicles, at 7 percent. More than 70 percent of CAPS owners reported having retirement accounts during the study period. In contrast, the renters sample reported median net worth of approximately \$11,000 in 2012, and about 40 percent reported having retirement accounts. In addition, when differences in 2005 wealth are considered in conjunction with tenure status during the period of the survey, the wealth gap between the two samples is particularly pronounced. For example, when those CAPS participants with less than \$10,000 in net worth in 2005 are considered, CAPS owners who remained owners reached a median net worth of about \$41,000 in 2012, whereas CAPS renters who remained renters accumulated less than \$1,500 at the median (Freeman and Quercia, 2014). Thus, CAP homeowners accumulated considerably more wealth than similar renters during the study period and were more likely to hold investment assets other than home equity.

These differences in wealth across the owners and renters samples in CAPS reflect the fact that the user cost of owning compared with renting a comparable property was lower for most of the study period. The user cost for owners reflects not only mortgage principal payments, but also mortgage interest, taxes, insurance, maintenance expenses incurred, opportunity costs, and house price appreciation. The user cost for renters is the monthly rent. The primary driver of the user cost for owners is house price appreciation, and therefore market house price trends determine whether owning is preferred to renting during any given period of time. Thus, the observed pattern in the relative user costs of CAPS owners and renters samples reflects the high levels of house price appreciation toward the beginning of the study and the fact that the CAP mortgages carried very low downpayments; the latter feature of these mortgages tended to reduce the opportunity cost of owning and to increase the benefit from even small amounts of house price appreciation (Riley, Ru, and Feng, 2013). A second factor contributing to difference in wealth gains between CAPS owners and renters involves gains in equity markets, as those CAPS participants with retirement savings have experienced increases in net worth as a result of appreciation in nonhousing investments.

## **Implications for the Scalability of Special CRA Lending**

Overall, the accumulated evidence from CAP suggests that many borrowers who take out special CRA loans can sustain mortgage payments and build home equity and that they will tend to accumulate more wealth than similar renters. In addition, it suggests that the default risks associated with special CRA mortgage lending can be managed. The key features of CAP that contributed to program viability were mechanisms for credit risk management and borrower credit enhancement, combined with a functional secondary market (Ding et al., 2011; Quercia, Freeman, and Ratcliffe, 2011).

First, CAP was made possible largely due to an underwriting grant from the Ford Foundation that was designed to bridge the gap between the projected default risks of CAP borrowers and those of more conventional prime borrowers. Self-Help also managed the elevated risks associated with CAP lending by adding a risk fee to the interest rate in lieu of mortgage insurance. Although CAP borrowers have demonstrated that they are of lower risk than similar borrowers who received subprime loans, they remain somewhat higher risk than prime borrowers who receive prime, conforming loans. Therefore, in order to serve the special CRA population, lenders must generally either cross-subsidize special CRA lending activities using profits from other business lines, increase their internal capital reserves, or receive external capital as a means of underwriting the increased risk associated with making special CRA loans.

Second, CAP was made possible through the collaboration of Fannie Mae, which agreed to purchase CAP loans from Self-Help and thereby create a secondary market for special CRA mortgages. This arrangement created greater liquidity in the special CRA lending space and permitted originating lenders to make many more CRA loans than would have been possible if they had kept these loans on their books. The ability of lenders to make special CRA loans on a rolling basis requires that they be able to sell the loans to external investors, such as the GSEs or buyers of mortgage-backed securities, from whom they can recover their initial capital. In addition, a centralized secondary market facilitates geographic risk pooling and the standardization of mortgage product offerings, which can reduce informational asymmetries for investors and the costs of lending to the target population.

These two pillars of program success suggest that any significant expansion of special CRA lending activities among depository institutions would likely require increased capital reserves, a mortgage insurance mechanism, and enhanced market liquidity in the special CRA product space. These implications are consistent with prior evidence from the broader literature suggesting that capital requirements for nonconforming loans made to lower-income borrowers may be substantial (Calem and LaCour-Little, 2004; Deng, Quigley, and Van Order, 1996), that lenders may be more willing to lend in lower-income neighborhoods when loans carry mortgage insurance (Ross and Tootell, 2004), and that lenders may increase loan supply in the presence of a secondary market (Ambrose and Thibodeau, 2004; Gabriel and Rosenthal, 2007).

Within the context of the current policy discussion concerning the uncertain future of the GSEs, one possible means of achieving these goals may be to leverage the existing integrated mortgage insurance and secondary market infrastructure provided by the FHA and Ginnie Mae. In practice, special CRA loan products and FHA-insured mortgages tend to serve a similar clientele and share many of the same loan features (LaCour-Little, 2007; Nothaft and Surette, 2001; Spader and Quercia, 2012). Thus, consolidating these lending activities has the potential to reduce administrative overhead by eliminating redundancy in program administration. It could also permit economies of scale, product standardization, and more accurate prediction of mortgage termination risks. This consolidation could be achieved by broadening the mortgage insurance function of the FHA to cover the special loan products that GSEs currently purchase to provide liquidity for special CRA loans and by transferring the secondary market function for these mortgages from the GSEs to Ginnie Mae.

Along these lines, note that FHA insurance activities expanded significantly in response to the subprime crisis (Immergluck, 2011); this expansion suggests that the integration of special CRA lending activities into the FHA insurance framework may be a natural extension of its historical function. Although FHA loans tend to be somewhat more expensive for borrowers than some special CRA loan products, they are arguably less expensive than many of the subprime loans that were issued during the early 2000s. Thus, if one is concerned about nonprice credit rationing or the existence of a dual mortgage market, in which the special CRA target population has access only to alternative and significantly more risky mortgage products, then the former type of loan product would seem to be preferable to the latter (Karikari, Voicu, and Fang, 2011).

Nevertheless, a key question for future research concerns the optimal scale of special CRA lending. With the exception of the Federal Reserve Board of Governors' 2000 survey of special CRA lending programs and the insights obtained from CAP, relatively little is known about the actual scale of special CRA lending at the national level, the features of such programs, how loan volume evolves in response to changes in economic conditions, or how much such activities can or should be expanded in practice. Moreover, the language of the CRA provides little quantitative or systematic guidance as to what level of lending in this space should ideally be achieved. A socially optimal level of special CRA lending would reflect and balance the tradeoffs inherent in lending to marginal borrowers, and identifying this social optimum should be a key priority for regulators before any large-scale expansion of special CRA lending activities. Further data collection concerning the demand for credit that exists among low- and moderate-income borrowers who would not qualify for conforming mortgages, the factors that influence their ability to manage credit, and the broader economic costs and benefits associated with lending to this population would facilitate this process.

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