

SECTION 4

THE IMPACT OF CRA ON MORTGAGE LENDING: A BENCHMARKING ASSESSMENT

As previous CRA studies have suggested, one way to understand the effect of CRA on residential mortgage lending is to compare the performance of CRA-regulated organizations and their affiliates to organizations not subject to the Act, including independent mortgage companies and credit unions. These 'non-CRA covered' lenders together accounted for about one-third of all lending to lower-income people and/or lower-income communities over the study period. Using these lenders as a comparison group, or a benchmark against which to examine the behavior of regulated entities loosely controls for a variety of factors that might also explain the expansion in overall CRA lending during the 1990s. Since both groups were influenced by general marketplace factors but only regulated institutions would have been influenced by CRA, the comparison has the potential to highlight the Act's independent impact on lending patterns.

Unfortunately, both conceptual and data issues make simple comparison between CRA-regulated lenders and other lenders difficult to develop and interpret. Before turning to the benchmark analysis, this section discusses these conceptual issues. It then describes the Joint Center's Enhanced HMDA Database that merges information on mortgage loan and borrower characteristics with data on the organization making the loan and the census tract and metropolitan area characteristics of the neighborhood where the loan was made. The benchmarking analysis points to the importance of employing such detailed data in any assessment of CRA's role in expanding credit access for lower-income and minority borrowers. At the same time, the benchmarking approach suggests that by controlling for loan product mix, it is possible to measure the extent to which CRA-regulated entities lead the market in the provision of mortgage capital to lower-income people and neighborhoods, particularly as it relates to prime lending and outreach to lower-income and minority borrowers.

THE DIFFICULTY OF THE BENCHMARKING APPROACH

Any effort to isolate the impact of CRA on mortgage lending to lower-income people and communities must account for the significant changes in the structure of the mortgage industry over time. As noted throughout this report, CRA was designed at a time when depository institutions dominated mortgage lending activities. In that era, deposits were the single most important source of mortgage capital and prime lenders (as opposed to subprime or manufactured housing lenders) conducted virtually all home purchase and refinance lending. The growth of independent mortgage companies, the rise of secondary market funding, and the advent of a whole new array of mortgage products (some of which are originated electronically) have dramatically changed the mortgage landscape. So have the rise of 'non-bank' financial services industry players, including insurance companies, investment houses and others, who have extended their business lines to include traditional banking and mortgage lending activities. Moreover, detailed HMDA data on the characteristics of loans and lenders were not available until 1993. As a result, for most of CRA's history, it was impossible to conduct any detailed comparisons of the lending patterns of CRA-regulated entities and others operating in market.

Several observations flow from these comments. The first relates to the dramatic rise in subprime and manufactured home lending, and to the equally significant differences in loan product mix between CRA lenders and their affiliates, and non-covered institutions. Because independent mortgage companies accounted for most of the growth in subprime and manufactured home

lending, comparisons of the level of growth of lower-income lending between CRA-regulated entities and others should carefully control for the differing product mix. Said another way, absent a careful accounting for the differing mix of loans made by regulated and non-regulated lenders, comparisons of CRA-eligible lending by each group will not be ‘apples to apples,’ and in fact will count subprime and manufactured home loans (with their generally higher interest rates and fees) as the same as conventional prime loans.

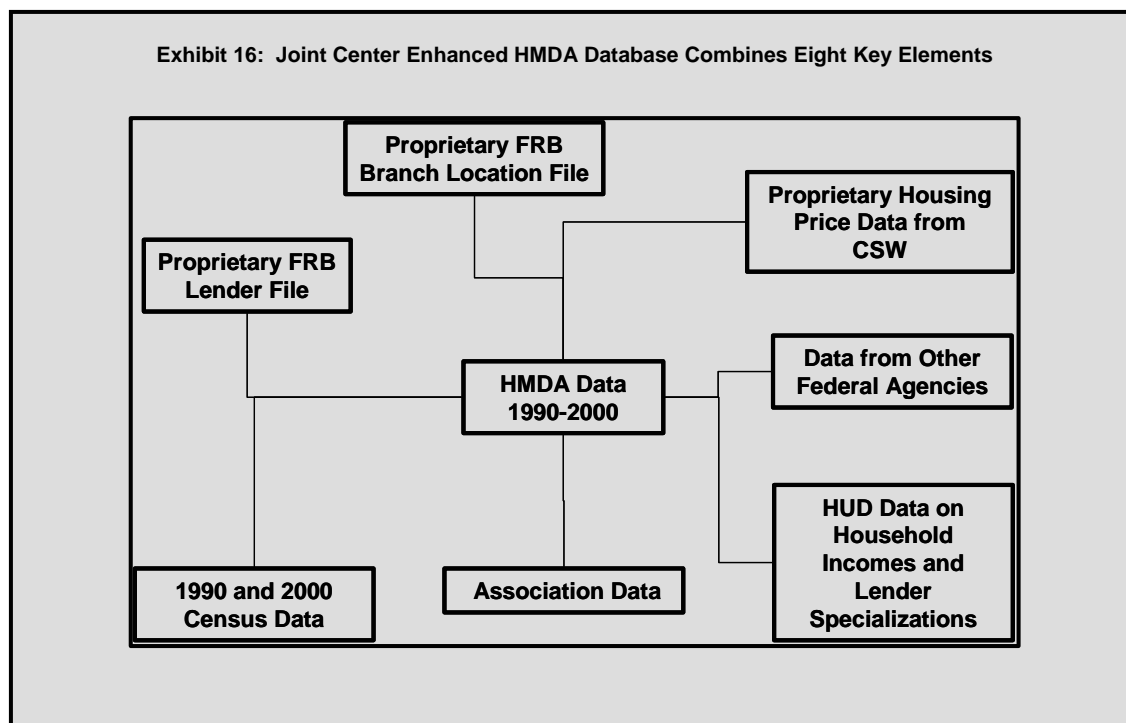
The second observation relates to the rise of out of assessment area lending by mortgage company affiliates or subsidiaries of CRA-regulated institutions. By the 1990s most of the larger, CRA-regulated entities formed and/or acquired mortgage banking subsidiaries or affiliates capable of operating outside of their CRA-designated assessment areas (defined here as the county, or counties, where a CRA-regulated entity operated *deposit-taking* branches). Today less than half of all mortgage lending by banking organizations (and less than a third of mortgage loans made by any entity) occurs within the assessment area of a CRA-regulated entity. This issue is important because bank and thrift regulators examine all lending as part of their safety and soundness and Fair Lending oversight, but only assessment area loans are subject to the further, detailed review mandated by CRA. In assessing the impact of CRA on residential mortgage lending it is therefore important to identify three different sets of loans: loans made by CRA-regulated entities within their CRA assessment area (‘Assessment Area Lending’), loans made by CRA-regulated entities outside of their CRA assessment areas (‘Out of Area Lending’), and loans made by entities not regulated by CRA (‘Non-CRA Regulated Lending’).

Next, it is important to understand that some of CRA’s impact on mortgage lending may have occurred prior to 1993, the date when detailed HMDA data are first available. Moreover, legislative and regulatory changes, along with equally important increases in the enforcement of Fair Lending legislation, combined in the 1980s to increase the incentives of CRA-regulated entities to seek out ways to serve lower-income and minority communities. As a result, the gains achieved in the 1980s as CRA-regulated entities searched out ‘new market’ opportunities may have carried over to the current period to the benefit of CRA-regulated entities and other market participants alike, and contributed to the surge in lower-income lending that occurred in the 1993 to 2000 period.

Whether CRA (along with expanded Fair Housing enforcement) worked to overcome barriers relating to discrimination and/or information barriers linked to lower-income borrowers or communities may be less important than its role in promoting the explosion of borrower and loan performance information that has occurred over the past quarter century. Although some of the most detailed information about borrowers and loan performance remains proprietary, much has seeped into the general marketplace to the benefit of all market participants. This represents a marked contrast to the paucity of borrower and loan performance information that was available when CRA was enacted in 1977. In short, beyond any direct effect CRA may have had on the lending of CRA-regulated entities, it is likely also to have had an indirect impact on the lending patterns of non-covered lenders, as ‘lessons learned’ by CRA-regulated entities were absorbed by other market participants.

THE DATA FOUNDATION FOR THE ANALYSES

The database used in the analyses in this report combines data from eight sources. This section briefly describes this database (Exhibit 16), which is built around loan application level information released pursuant to the Home Mortgage Disclosure Act.



A. Home Mortgage Disclosure Act Data

The core database used to complete the statistical tests and to support important parts of the analysis in other sections of this report builds on information submitted by financial institutions under HMDA. As currently amended, HMDA requires most mortgage lenders to report for all loan applications the race and income of the applicant, the state, county, and census tract of the property included in the application, the type of loan applied for and the disposition of the application.

Exhibit 17 describes in greater detail the creation of the loan-level data used in this study. For the period 1993 to 2000, approximately 120 million records of loan applications and transactions are included in the HMDA data. HMDA data include information on both ‘originated loans,’ and ‘purchased loans,’ where ‘purchased loans’ are loans that are originated by one entity and sold to another HMDA reporting institution, either to hold in portfolio or to sell again into the secondary market. To avoid double-counting of any particular loan, all ‘purchased loans’ are eliminated from the sample, a step that reduces the initial count of HMDA data records by half.

The analysis also looks only at the 734 metropolitan area counties for which HMDA filers have been required to report in all years between 1993-2000. This geographic focus eliminates 20 percent of the remaining records, which are either in non-metropolitan counties, or in counties that were added to or dropped from the list of metropolitan counties during the study period. This geographic standardization is enforced to ensure that the additional data do not confound interpretation of trends in either the benchmarking or multivariate statistical analyses.

Note also that this study focuses on only HMDA reported loans originated to purchase or refinance a one-to-four family home. As a result, the study does not cover multi-family and other loans contained in the initial HMDA database. Exhibit 17 also indicates several other filters used to eliminate incomplete or inconsistent loan records from the final database. These incremental

filters bring the final count of HMDA records used to 24.4 million home purchase records and 20.8 million refinancing records.

Exhibit 17: Filtering of Raw HMDA Data Creates Usable Records

	1993	1994	1995	1996	1997	1998	1999	2000	All Years
Home Purchase Records (Millions)									
All HMDA Records	5.3	6.1	6.4	7.5	8.0	9.5	10.1	9.9	62.9
Filter for Originated Loans Only	3.2	3.5	3.5	3.8	4.0	4.5	4.8	4.8	32.2
Added Filter for Valid MSA Locations	2.6	2.8	2.7	3.1	3.2	3.7	4.0	3.9	26.1
Added Filter for Valid Tract Data	2.5	2.7	2.7	3.1	3.2	3.7	4.0	3.9	25.9
Added Filter for Valid Borrower Income	2.5	2.7	2.6	3.0	3.1	3.6	3.9	3.8	25.3
Added Filter for Valid Loan Amount	2.4	2.6	2.6	2.9	3.1	3.6	3.8	3.7	24.8
Added Filter for Valid Lender Assets	2.4	2.6	2.5	2.9	3.0	3.5	3.7	3.7	24.4
Refinancing Records (Millions)									
All HMDA Records	8.6	4.3	3.0	5.1	6.1	13.0	10.7	7.2	58.1
Filter for Originated Loans Only	6.1	2.5	1.6	2.6	2.8	6.7	4.4	2.4	29.1
Added Filter for Valid MSA Locations	5.2	2.0	1.3	2.1	2.2	5.6	3.5	1.9	23.8
Added Filter for Valid Tract Data	5.1	2.0	1.2	2.1	2.2	5.5	3.5	1.9	23.6
Added Filter for Valid Borrower Income	4.6	1.8	1.2	1.9	2.1	4.9	3.2	1.8	21.5
Added Filter for Valid Loan Amount	4.5	1.7	1.1	1.8	2.0	4.8	3.1	1.7	20.8
Added Filter for Valid Lender Assets	4.5	1.7	1.1	1.8	2.0	4.7	3.1	1.7	20.5

Source: Joint Center Enhanced HMDA Database

B. Federal Reserve Board Lender and Branch Location Files

The Federal Reserve Board (FRB) maintains two research databases that were also used in this study. The FRB lender file contains information that facilitates sorting lenders based on whether or not they are subject to CRA. It also allows individual HMDA filers to be aggregated based on common ownership. Finally, the FRB lender file contains information on the assets of HMDA reporters, which is necessary to establish a consistent minimum size limit for reporters because the asset threshold for HMDA reporting changed several times during the study period.

The FRB branch location data are also the source of our assessment area definitions. This report assumes that CRA-regulated lenders' performance is assessed in (and throughout) all counties in which the lender operates a deposit-taking branch office, hence defining a lender's assessment area as being all counties in which it has deposit-taking branches. While this may differ from lenders' actual assessment areas, which are in some cases comprised of portions of counties, counties are generally the level at which assessment areas are defined by lenders and regulators, and using county-based assessment area definitions produces a reasonable approximation of actual assessment areas (Avery *et al.*, 1999).

C. HUD Data on MSA Median Household Incomes and Lender Specializations

This report classifies loans by both the income of the loan applicant and the income of the census tract where the property is located, relative to the overall median income for the Metropolitan Statistical Area or MSA. The Department of Housing and Urban Development prepares annual estimates of MSA median household income, which were appended to the HMDA records used in this analysis. In addition, HUD prepares an annual listing of particular HMDA reporters that specialize in subprime or manufactured home lending. The HUD lender specializations were also appended to the core HMDA records in the database.

D. Data on Census Tract and Metropolitan Area Characteristics

The statistical analysis in this report exploited certain data from the 1990 Census (such as the age of the housing stock) as control variables, and combined 1990 and 2000 Census data on census tract population to produce growth indicators for each of the 45,000 census tracts included in the analyses. The report also used data from other federal agencies, including the Bureau of Labor Statistics. These included, for example, metropolitan area unemployment rates, that were linked to the database and used to define control variables for the statistical analysis.

E. House Price and Affordability Price Data

Case Schiller Weiss, Inc. (CSW) maintains zip code level housing price indices for major metropolitan areas. CSW provided zip code level house price changes for Los Angeles, Chicago, and Boston. Since zip codes typically include two or more census tracts, the assumption made in this study was that house price changes are the same for each census tract in a zip code. In addition, the report also utilized the National Association of Home Builder (NAHB) estimates of the share of homes that are affordable to a median income household in each MSA.

F. National Community Reinvestment Coalition CRA Agreement Database

Finally, the National Community Reinvestment Coalition (NCRC) provided data on the year, amount and location of CRA agreements between community groups and lenders. These data were joined to the database at the MSA level.

BENCHMARK COMPARISONS

This section lays out a series of benchmark comparisons intended to understand the effect of CRA on regulated lenders by comparing their home purchase lending record against that of non-CRA covered lenders. Since both groups were influenced by the same changes in the marketplace but non-CRA covered lenders (independent mortgage companies and credit unions) were not subject to CRA regulations, the comparison has the potential to highlight the independent effects of CRA on lending patterns. Using the Joint Center's Enhanced HMDA database to carefully control for loan product mix, this analysis demonstrates how CRA-regulated entities continue to lead the market in the provision of prime conventional conforming residential mortgage loans to lower-income people and neighborhoods, particularly in terms of their greater outreach to African-American and Hispanic borrowers.

Exhibit 18 presents information on the CRA-eligible share of prime lending, where 'CRA-eligible' refers to loans made to lower-income households and/or to households living in lower-income areas. The exhibit makes two important points. First, in 1993 among CRA-regulated

lenders operating in their assessment areas the share of all prime home purchase lending made to CRA-eligible borrowers exceeded the equivalent share for ‘out of area lenders’ and non-covered entities (including independent mortgage companies). In that year, CRA-regulated entities operating in their assessment areas made 31.9 percent of their prime home purchase loans to CRA-eligible borrowers, against 30.5 percent for out of area lenders, and 28.6 percent for non-CRA lenders.

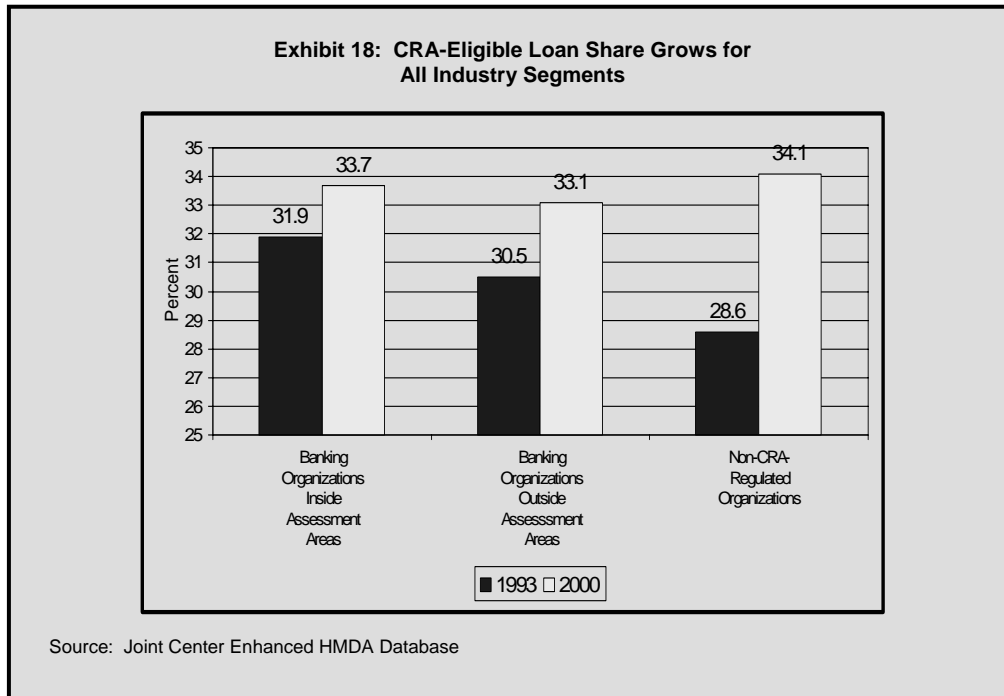


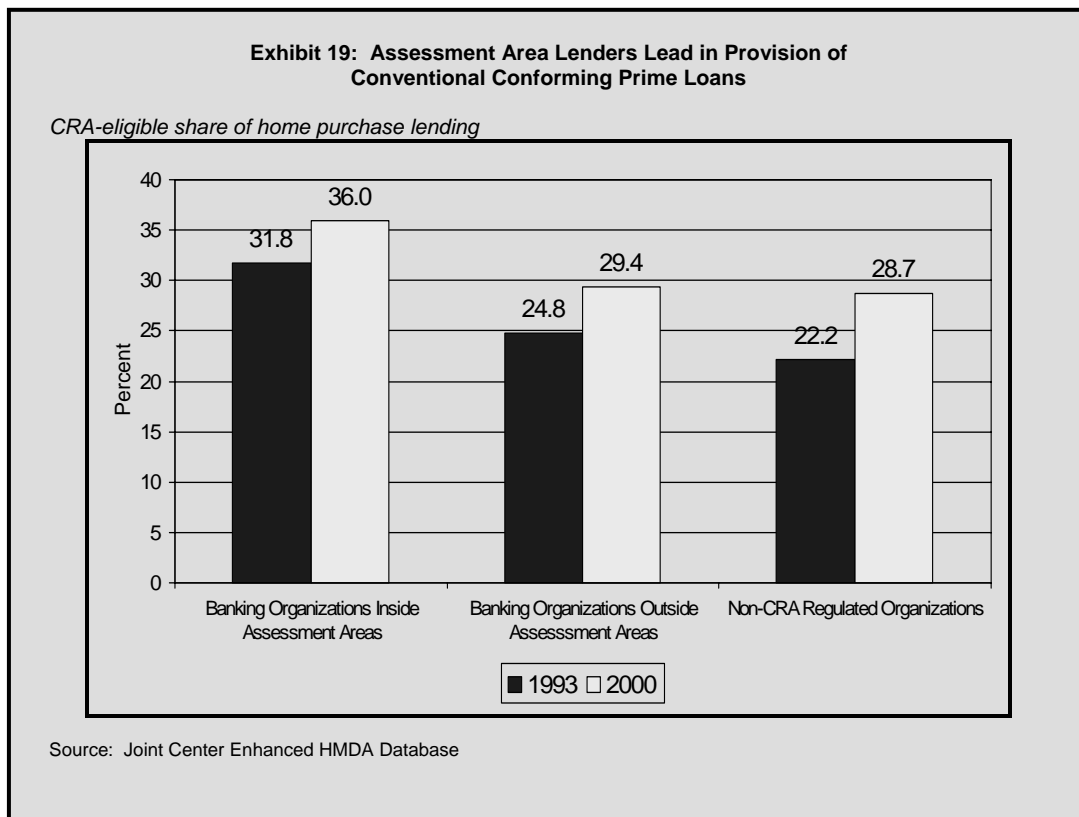
Exhibit 18 also demonstrates that over the 1993-2000 period, the CRA-eligible share of prime home purchase lending advanced broadly among all lender types. The strong economy, technological advances, and increased competition surely played a role in this general advance of CRA-eligible prime lending. Indeed, by the end of the period, the CRA-eligible share of prime loans made by independent mortgage companies eclipsed that of banking organizations. In the presence of CRA, which applies only to regulated lenders operating in their assessment areas, the more rapid growth of CRA lending by independent mortgage companies merits further attention. In particular, critics of CRA have cited similar findings to argue that CRA is unnecessary. They argue that if entities that fall outside of CRA’s reach are as likely to make prime loans to lower-income borrowers as regulated entities, competitive pressures must be insuring that markets for lower-income lending remain active and viable, and there is little need for CRA.

The standard rebuttal to such a challenge is that CRA itself established and helps maintain the conditions that enable independent mortgage companies to succeed in their efforts to reach lower-income borrowers and communities. The Act accomplished this first by demonstrating that market opportunities existed in serving previously neglected borrowers and areas, and second by enforcing ongoing credit access in lower-income places ensuring that housing markets in these areas remain viable.

This line of argument further suggests that the gains in credit access that lower-income borrowers and areas enjoyed over the 1990s amid unprecedented national economic growth will not endure without regulatory oversight during less favorable economic times. Some observers of this debate argue simply that the slight advantage independent mortgage companies now hold in the

CRA-eligible share of prime lending is too small and too new to imply any firm conclusions. And some note that simply looking at prime lending is not sufficient to determine whether or not CRA has an important ongoing influence on credit flows because it lumps together conventional prime lending with government-backed loans, loan types that have noticeably different costs and associated fee structures and fails to exclude ‘jumbo’ lending, little of which flows to lower-income borrowers.

To examine this issue, Exhibit 19 looks only at *conventional conforming* prime loans for the three lender types. Removing government-backed loans make sense, as this lending is mostly a pass-through operation, with loans largely originated by mortgage brokers and sold quickly into the secondary market via Ginnie Mae mortgage-backed securities. Limiting this assessment to conforming loans does not give undue weight to those lenders operating chiefly in the jumbo market. The exhibit shows the share of all conventional prime loans that each type of lender makes to CRA-eligible borrowers and areas. It indicates that CRA-regulated institutions operating in their assessment areas make a notably higher share of these loans to CRA-eligible clientele than do either CRA lenders outside of assessment areas or non-CRA lenders. Exhibit 19 again shows the gap across lender types is closing, potentially in response to enhanced understanding of how to profitably lend to these borrowers and markets stemming from experience acquired by CRA-regulated lenders in response to CRA obligations.



In recognition of the fact that CRA’s initial impetus along with the push for Fair Lending legislation came from activism and municipal regulations that responded to ‘redlining’ and other elements of racial/ethnic discrimination in mortgage markets, Exhibit 20 extends the benchmarking analysis to examine racial and ethnic variations in lending patterns. The exhibit highlights the fact that loans to African-Americans and Hispanics are much more likely to be

CRA-eligible, presumably because these groups have lower average incomes and are more likely to live in lower-income census tracts than whites.

At the same time, it is important to note that in 2000 the CRA-eligible share of conventional prime lending to blacks and Hispanics by CRA-regulated entities operating in their assessment areas is noticeably higher than the share of lending to blacks and Hispanics done by regulated entities operating outside of assessment areas, as well as the lending done by non-CRA lenders. For whites, the difference is minimal, but for blacks, assessment area lenders have CRA-eligible shares that are 17 percentage points (38 percent) higher than for outside assessment area lenders, and 20 percentage points (48 percent) higher than for non-CRA lenders. For Hispanics, the CRA-eligible share for in assessment area lenders is 13 percentage points (28 percent) higher than for outside assessment area lenders and 16 percentage points (39 percent) higher than for non-CRA lenders.

Exhibit 20: CRA-Eligible Share Varies by Race, Loan and Lender Type

	Banking Organizations				Non-CRA Regulated Organizations	
	In Assessment Area		Out of Assessment Area			
	1993	2000	1993	2000	1993	2000
	All Prime Lending					
Whites	29.6	30.9	28.3	30.4	26.7	31.2
Blacks	58.6	62.6	52.1	56.9	48.0	53.6
Hispanic	52.5	56.7	49.5	54.0	44.4	52.1
Other	29.1	27.2	27.8	27.6	24.6	28.1
All Races	31.9	33.7	30.5	33.1	28.6	34.1
	Conventional Prime Lending					
Whites	27.4	28.9	22.0	25.5	19.3	25.6
Blacks	59.2	60.6	42.4	43.7	29.4	40.9
Hispanic	51.1	54.4	38.9	42.6	31.6	38.8
Other	27.4	25.9	22.9	23.4	19.4	23.0
All Races	29.7	31.4	23.1	26.4	20.0	26.3
	Government					
Whites	43.3	50.1	41.5	48.8	41.1	45.4
Blacks	57.2	67.5	57.4	66.9	55.8	60.3
Hispanic	60.2	68.5	58.2	65.5	54.0	60.1
Other	40.7	45.0	39.0	44.8	36.7	40.7
All Races	45.4	54.2	44.2	53.9	43.6	49.5

Note: Other includes Asian, Native American, 'Other' and loans where the applicant and co-applicant were of different races.

These figures are consistent with the observation that CRA continues to encourage CRA-regulated entities to extend conventional prime lending to these historically underserved segments of the market. Other lenders, and indeed CRA-regulated entities themselves, are increasingly using other loan products, including government-backed loans and subprime loans, to manage the risks inherent in serving these markets. But in addition to their growing use of alternative lending products, CRA-regulated entities continue to lead others in extending prime conventional loans to lower-income people and communities, an outcome that was envisioned in the enactment of CRA more than two decades ago.

Finally, of course, it is possible that the growth of CRA-eligible lending simply results from the fact that CRA-regulated entities have acquired mortgage companies, including subprime lending specialists, that concentrate in lending to lower-income households. Previous Joint Center analysis on this issue suggests, however, that the impact of mergers and acquisitions on benchmarking comparisons is modest, especially when care is taken to account for differences in loan product mix by focusing on prime conventional loans (Belsky *et al.* 2001).

SUMMARY

These simple benchmark comparisons demonstrate the value of examining lending patterns across lender types. Disaggregating prime loans into government-backed and conventional components reveals that banks operating in their assessment areas do a larger share of lending to CRA-eligible people and communities than either these same institutions operating where they are not examined for CRA purposes or institutions that fall wholly outside the scope of the Act (primarily independent mortgage companies and credit unions). The differences across lender type are especially large for the share of lending to blacks and Hispanics that is CRA-eligible. The benchmark comparisons also hint at the variety of factors that must be controlled for in order to understand the independent influence of CRA on lending patterns. To better examine CRA's impact in such a complex setting, the next section of this report presents a series of multivariate models that seek to isolate the effect of CRA while controlling for the influence of a suite of other factors such as economic and housing conditions, borrowers' demographic traits, and lender characteristics.