

# PERSPECTIVES

# FINANCIAL INDUSTRY

# Perspectives

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## Home Financing for Low- and Moderate-Income Borrowers: What Are the Trends in Denver?

JAMES HARVEY AND KENNETH SPONG

*James Harvey is a policy economist and Kenneth Spong is a senior policy economist in the Division of Supervision and Risk Management of the Federal Reserve Bank of Kansas City.*

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Home financing plays a critical role in fulfilling family housing needs and in supporting local neighborhoods and public services. Over the last decade, home lending markets have seen a number of dramatic changes, and many of these changes would appear to be making home financing more readily available and affordable. For instance, our recent history of a strong economy and low interest rates is spurring record levels of home building, mortgage lending, and homeownership. Technology and financial market innovation also are changing the home lending and credit evaluation process, the contributions of various lenders, and the importance of secondary market activities and mortgage-backed securities. Other notable factors include a legislative and regulatory environment putting increased emphasis on fair lending and community development and a rapidly growing set of neighborhood and public institutions serving the affordable housing market.

An outgrowth of all of these changes is a rapid increase in the volume of home lending across much of the United States. This trend has been particularly evident in the Denver metropolitan area. The dollar volume of loans extended for home purchases in Denver increased by nearly fourfold between 1992 and 2002, and Denver housing prices appreciated at

approximately twice the average annual nationwide rate during the 1990s.<sup>1</sup> In addition, 71 percent of Denver households now own their homes compared to less than 66 percent in 1995.<sup>2</sup>

These results thus illustrate a significant increase in home lending and homeownership, but they don't specifically address a key question—how have families with low- and moderate-incomes fared in their quest to obtain financing and become homeowners? Access to home financing, in fact, is a particularly important issue for lower-income families as they attempt to improve their housing options and begin building wealth. Such financing is also a very critical element in sustaining and revitalizing the neighborhoods in which many lower-income families live. In addition, the affordable housing issue is a topic of interest because of the legislative, regulatory, and community efforts over the last decade to encourage greater homeownership among low- and moderate-income households and to improve lower-income neighborhoods.

This article will examine these topics by looking at the trends in home financing during the last decade for low- and moderate-income borrowers and neighborhoods in Denver.<sup>3</sup> The first part of the article describes the various developments that have influenced and changed mortgage lending in recent years. The next part will provide an overview of mortgage lending patterns in the Denver metropolitan area. The final two parts will look at home lending to low- and moderate-income borrowers and within low- and moderate-income Denver neighborhoods.

## **CHANGES AND DEVELOPMENTS IN HOME LENDING**

A number of factors would suggest that the flow of credit to low- and moderate-income borrowers might have improved in recent years—both nationally and in the Denver metropolitan area. Among the most important of these are economic conditions, technological developments, regulatory and legislative changes, and

the growth and importance of community organizations and special lending programs.

### *ECONOMIC CONDITIONS*

The economy plays a particularly important role in home borrowing by influencing both the willingness of households to undertake the long-term commitments required to purchase and finance homes and the willingness of lenders to extend their funds on a long-term basis. On an individual level, economic conditions are likely to influence many of the factors that go into a person's home purchase decision, including current employment status, recent job history, financial resources, and optimism about the future. Also, the level of interest rates prevailing in the economy have a direct bearing on one's ability to purchase a house, since home lending rates are a critical variable influencing the level of mortgage payments and the overall affordability of housing. For lower-income individuals working to build up their financial resources and achieve progress in their jobs, these economic factors are likely to be especially important in their homeownership quest.

Over the last decade, the U.S. economy has provided one of the most stimulative environments on record for the housing market. The longest period of uninterrupted growth in U. S. history occurred between 1991 and 2001.<sup>4</sup> During this growth period, the unemployment rate dropped from a high of 7.8 percent in June 1992 to a cyclical low of 3.8 percent in April 2000. This long period of expansion consequently provided most potential home purchasers with good employment records and an optimistic view about their future financial positions. These beneficial effects may be particularly significant for lower-income borrowers, who commonly are viewed as being the first to suffer from less prosperous conditions.

The substantial decline in mortgage interest rates is providing a further stimulus to housing. The average interest rate on new 30-year, fixed-rate mortgages fell from 10.13 percent in 1990 to 6.54 percent in 2002.<sup>5</sup>

Since then, 30-year rates mostly have stayed below 6.0 percent—an interest rate environment last achieved in the early 1960s. This interest rate environment has thus helped to lower mortgage payments and allow more families to participate in the affordable housing market.

A further outgrowth of these highly favorable economic and financial conditions is a surge in home construction and borrowing. Nationwide, the number of private housing starts increased by more than 62 percent from the beginning of 1992 to the end of 2002. The annual number of building permits issued in the Denver metropolitan area showed an even faster increase, with this number more than doubling between 1992 and 2002. Spurred on by lower interest rates, U.S. households increased their total home mortgage debt by 123 percent over the same period. This growth in debt exceeded that of household income, which increased by less than 75 percent during this time, and total household real estate equity, which rose by 101 percent. These trends would thus seem to indicate that home financing became much more affordable and more heavily used by the average household over the last decade.<sup>6</sup>

#### *TECHNOLOGICAL DEVELOPMENTS*

Technological changes over the last few decades have brought on a dramatic change in the way that home lending is done. Until the 1980s and 1990s, all home lending had followed virtually the same format. Lending decisions were based on one-on-one credit evaluations and personal interaction between borrowers and lending officers, and once loans were made, most depository institutions held the loans in their own portfolios.

Since then, the lending process has been greatly transformed by innovations in information processing, telecommunications, and financial instruments and markets. The “information age” and access to more extensive data sources on borrowers and on neighborhood housing markets now allow large financial institutions to make credit decisions and price loans through their own credit scoring and automated underwriting systems. Moreover, much of this can be done without any personal contact

with the borrower, except, in some cases, for signing the final loan documents. In addition, the development of mortgage-backed securities and the derivatives market is bringing a much wider group of investors and lenders into the mortgage market, thus helping to provide a more even flow of housing funds over time and across the country.

These technological innovations may help lower-income home borrowers in a number of ways. For instance, lenders are gaining access to a much richer set of information on such individuals and their neighborhoods—information that may help to reduce the cost and risk of lending. This decline in information costs also is bringing in a broader and more competitive range of lenders, including subprime mortgage lenders to serve borrowers with impaired or limited credit histories. Another possible outgrowth of technology and financial innovation is an increased flow of funds into low- and moderate-income lending as such loans are packaged and sold to new groups of institutions and investors. As a result, financial innovation is likely providing new avenues for expanding credit availability in lower-income markets.

#### *REGULATORY AND LEGISLATIVE CHANGE*

While much of the fair housing and community reinvestment legislation was first put in place between 1968 and 1977, most of the significant steps in fostering compliance with these laws have taken place more recently. These steps now are providing added impetus to efforts to improve lending to low- and moderate-income households and neighborhoods.

*The Community Reinvestment Act*—The Community Reinvestment Act (CRA) was passed by Congress in 1977 with the purpose of encouraging depository institutions to help meet the credit and development needs of their own communities, particularly the needs of low- and moderate-income persons and neighborhoods, in a manner consistent with safe and sound operations. CRA compliance is largely based on an institution’s low-income lending record within its “assessment areas,” which are those

areas surrounding its deposit-taking offices. Regulators must consider an institution's CRA performance whenever the institution or its parent company applies to open a branch or other deposit facility, acquire or merge with another institution, or form a bank holding company.

A number of developments have served to intensify the enforcement of the CRA in recent years and thereby increased the incentives for low-income lending. Beginning in 1990, Congress required regulators to publicly disclose an institution's CRA rating and provide a written evaluation of the institution's record in meeting community credit needs. These CRA disclosures have given depository institutions an added inducement to achieve high ratings as a means of preserving their public reputations and discouraging CRA protests by community groups. In addition, regulators substantially reworked CRA requirements in 1995 to create a more "performance-based" system, with more quantitative measures of performance and a direct emphasis on how an institution actually performs with regard to low-income lending in its assessment areas.<sup>7</sup> Another factor bringing added attention to an institution's CRA record is the merger boom of the past two decades—a development which has made favorable CRA ratings imperative for expansion-minded organizations. The importance of the CRA for organizations pursuing mergers increased notably after the Federal Reserve Board of Governors denied an application in 1989 because of deficiencies in CRA performance. This denial of Continental Illinois' proposal to acquire a bank became a major turning point in CRA enforcement and sent a strong message to bankers that "satisfactory," if not "outstanding," CRA performance ratings would be a crucial factor in pursuing acquisitions.<sup>8</sup>

*The Home Mortgage Disclosure Act*—The Home Mortgage Disclosure Act (HMDA) was enacted by Congress in 1975. The HMDA requires mortgage lenders to disclose information about their home lending in urban areas, thus giving the public and regula-

tors the means to determine which lenders best meet community housing needs. To create a more comprehensive picture of home lending patterns and spur lending to lower-income groups, Congress amended the HMDA three times between 1987 and 1991, increasing both the types of institutions that must report and the information reported. With the amendments, the act now covers virtually all institutions making home loans in metropolitan areas, including banks, savings associations, credit unions, mortgage lending subsidiaries or affiliates of these institutions, and independent mortgage companies.<sup>9</sup>

Since 1990, lenders have had to report data on each home purchase, refinance, or improvement loan application they receive, and this data must include loan purpose, loan amount, property location by census tract number, and final disposition of each loan request—approved, denied, withdrawn, etc. (As described in the Box A, HMDA reporters, beginning in 2004, must further include data on their loan pricing.) To the extent possible, lenders also must record each applicant's gender, race, and income level. All of this information is available to the general public from the lenders themselves and the regulatory agencies.

Over the last decade, the HMDA and these increased reporting requirements have played a critical role in encouraging low- and moderate-income lending. Most notably, the expanded HMDA data have provided community groups, researchers, lenders, regulators, and the U.S. Department of Justice with a starting point for analyzing the home lending records of the reporting institutions and their compliance with fair housing laws and the CRA. In fact, several highly publicized studies based on HMDA information have received much attention and sent a strong message to many lenders.<sup>10</sup> HMDA data further have provided much of the basis for several regulatory investigations and Department of Justice lawsuits under the fair lending laws, beginning in 1992 with the Justice Department's settlement of a race discrimination

## Box A

### NEW HMDA LOAN PRICING DISCLOSURES

To provide greater information on the subprime mortgage market and address concerns about unfair or deceptive lending practices, the Federal Reserve expanded the HMDA reporting regulations to include loan pricing data on higher interest rate loans. For home purchase, refinance, or secured home improvement loans originated in 2004 or thereafter, lenders must report the actual spread between the annual percentage rate on a loan and the yield on U.S. Treasury securities of comparable maturity, provided this spread exceeds 3 percent on first lien loans and 5 percent on subordinate lien loans. These spread thresholds were chosen to minimize reporting burdens, while focusing loan price reporting on the subprime loan market, where concerns about abusive lending practices would be more likely to arise. As of March 31, 2005, lenders are required to disclose their loan pricing data to anyone upon request, and the edited, aggregate data became available September 13, 2005, and can be found at: <http://www.ffiec.gov/hmdaadwebreport/NatAggWelcome.aspx>

The loan pricing data are designed both as a screening tool for the public and regulatory agencies to use in investigating subprime lending practices and as a means for ensuring a competitive marketplace. Since the reported data do not include a number of significant factors relevant to the pricing of loans—most notably, loan-to-value ratios, credit scores and histories, employment information, and borrower debt-to-income ratios—the new HMDA disclosures are limited in their ability to accurately identify instances of abusive or deceptive lending practices. The pricing data, though, are likely to prove useful for a variety of purposes. These include serving as a starting point for community groups and lenders to discuss loan pricing policies, identifying higher-rate markets in need of more competitive entry, and giving consumers and community groups better information on where to look for credit.

lawsuit against Decatur Federal Savings and Loan Association.<sup>11</sup> As a result, the HMDA now provides a significant part of the information that community groups and others use to assess the performance of lenders in meeting low- and moderate-income home credit needs.

#### *GROWTH OF COMMUNITY ORGANIZATIONS AND AFFORDABLE HOUSING AND LENDING PROGRAMS*

In Denver, a variety of groups and public authorities have assumed a very active role over the last decade in addressing affordable housing issues. These participants include community development corporations, neighborhood associations, religious organizations, foundations, other nonprofit groups, and state and local governments.

Denver community development corporations and other groups, for instance, have expanded the scope of services they provide to lower-income individuals and neighborhoods. Depending on the organization, these

services may include development of affordable housing, homebuyer education and counseling programs, down payment assistance programs, support for neighborhood restoration and rehabilitation projects, job training and educational assistance, and various social services. From a homebuyer's standpoint, a number of organizations now perform a much needed conduit function by helping to prepare prospective buyers for all aspects of the lending process: providing down payment and closing cost assistance, finding ways to improve credit scores, and linking homebuyers with appropriate lenders. On the affordable housing development side, a number of different partnerships have been launched to provide funding and assistance to nonprofit housing developers. Such partnerships include the Housing Development Project—a collaboration of the Enterprise Foundation, the city and county of Denver, several banks with Denver offices, and Housing Denver—a broad coalition of nonprofit organizations, banks, and developers that was started in 2003.



The last decade also has seen substantial growth in special housing programs. Some examples at the federal level include the Community Development Block Grant Program, HOME Investment Partnership Program, and the Low-Income Housing Tax Credits. In addition, Congress passed legislation in 1992 that calls for the U.S. Department of Housing and Urban Development to establish annual affordable housing goals for Fannie Mae and Freddie Mac to meet in their mortgage purchases covering low-income areas and borrowers.

At the state and local levels, housing and mortgage assistance programs include various revenue bond programs to provide reduced-rate, low down payment, and first-time homebuyer loans; state and local housing development commission programs; and financial support for local community development corporations. A major mortgage revenue bond program is the Colorado Housing and Finance Authority's MRB First Step, which offers below-market rate financing to qualified, first-time homebuyers with lower incomes. This program also includes an optional second mortgage to assist with the down payment and closing costs. In addition, the city of Denver enacted its Inclusionary Housing Ordinance in 2002. This ordinance requires any new development with 30 or more residential units for sale to make at least 10 percent of the units available on a moderately priced basis to households earning less than 80 percent of the Denver area median income. Before this ordinance, Denver had required developers rezoning land to residential uses to make a similar commitment to affordable housing.

## OVERVIEW OF HOME LENDING IN DENVER

The previous section indicates that a number of factors—the economy, technological innovation, more effective regulation, and growth in community groups and special lending programs—might be expected to have a favorable effect on home lending, especially lower-income lending. This section will provide an overview of home lending trends for the Denver metropolitan area between 1992 to 2002 and discuss some of the implications of these trends.

As shown in Table 1, home purchase lending for the entire Denver metropolitan area, as reported by HMDA filers, rose substantially between 1992 and 2002 (For information on how the numbers in Table 1 and the figures in other parts of this article were derived from HMDA and U.S. Census information, please see Box B on page 14).<sup>12</sup> The total number of loans to purchase a home, for instance, greatly increased from an average annual rate of just under 40,000 in the 1992-1994 period to almost 63,000 between 1999 and 2002. In the 1999-2002 period, this lending represented a yearly average of more than 13 home purchase loans for every 100 owner-occupied housing units in Denver, thus indicating a fairly rapid pace of buying and selling homes in the Denver area. This substantial increase in home lending suggests that the general economy, among other factors, must have provided a strong boost to the Denver housing market and to home borrowers.

The total dollar volume of lending also rose substantially from an annual average of under \$4.2 billion in the early years to more than \$10.6 billion by the 1999-2002 period—an increase of nearly 155 percent. In comparison, the GNP price deflator—a measure of inflation—rose by less than 15 percent over this time, which suggests that little of the increased lending can be attributed to inflation alone.<sup>13</sup> Similarly, while the population of the Denver metropolitan area experienced a rapid 30 percent growth rate

**Table 1**  
**Home Purchase Lending in the Denver Metropolitan Area (Average annual amount per period)**

	1992-1994	1995-1998	1999-2002
Total Number of Loans	39,856	49,053	62,867
Loans Per 100 Owner-Occupied Units	8.40	10.34	13.25
Total Amount of Loans (In \$ millions)	4,188	6,223	10,670
Average Size of Loan	\$105,069	\$126,862	\$169,727

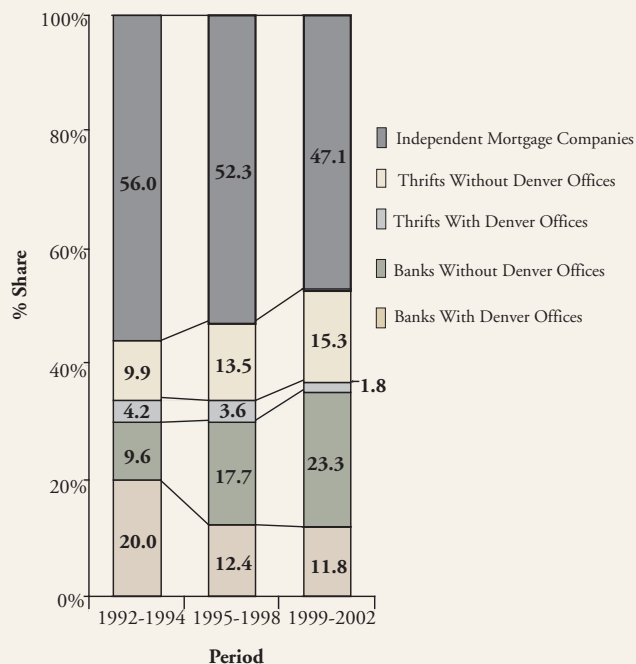
during the 1990s, this growth also appears to explain only a modest portion of the overall growth in home purchase lending. The average size of home purchase loans also increased substantially from just over \$105,000 to nearly \$170,000. This increase in loan size thus mirrors the rapid jump in housing prices throughout the metropolitan area in the 1990s. For lower-income families, though, housing price increases also could raise concerns about being gradually priced out of much of the Denver housing market. These increases in home prices and in the size of home purchase loans also may explain the recent efforts to develop affordable housing programs in Denver.

Chart 1 shows the share of home purchase lending by the type of lender and the number of loans granted. Independent mortgage companies—those which aren't affiliated with a bank or thrift institution—have, by far, the largest market share in home lending, although this share has experienced a decline since the early 1990s. Bank and thrift organizations without deposit-taking offices in Denver have increased their market share substantially over this time frame and had the second and third largest market shares over the 1999-2002 period.<sup>14</sup> Banking organizations and thrifts with Denver deposit-taking offices both experienced declining market shares.<sup>15</sup> The declining share for banking organizations with Denver offices may be attributed, in part, to the city's volatile real estate market in prior years, a shift in lending strategies by some of the major Denver banks, and the interstate acquisition of most of the larger banking organizations. The substantial gains for financial institutions without deposit-taking offices in Denver, coupled with a declining market share for those with Denver offices, may indicate how much financial and technological innovation is transforming mortgage lending and taking away the advantages once held by local banks and thrifts.

## LENDING TO LOW- AND MODERATE-INCOME BORROWERS

Did low-and moderate-income households—those with less than 80 percent of the median household income in the Denver metropolitan area—benefit from the strong growth in Denver home lending? The trends in home lending are of particular importance to lower-income households because such financing plays a very significant role in their choice of housing and neighborhoods and in their financial prosperity. Also, the borrowing record of lower-income households may provide an indication of how well they did in keeping up with the rapidly rising home prices in Denver. In addition, the Denver lending trends may provide some perspective on which factors and public policies have been most influential in expanding homeownership—declining interest rates, technological and financial market innovation, tightening of CRA and HMDA regulations, and growth of community groups and special lending programs.

**Chart 1**  
**Share of Number of Home Purchase Loans Approved By Lender Type**  
*Denver Metropolitan Area*



As shown in Table 2, the dollar volume of home purchase lending to all low- and moderate-income borrowers increased significantly over the 1992-2002 period. This lending jumped from a yearly average of \$918 million in the 1992-1994 period to a \$2,419 million average between 1999 and 2002. Such lending growth, moreover, exceeded the rate for all borrowers in Denver, leaving low- and moderate-income borrowers with a slight increase in their share of overall home lending in Denver—from a 21.9 percent share in the 1992-1994 period to a 22.7 percent share in the final period. Given the very rapid growth and price appreciation that occurred in the middle and upper end of the Denver housing market during much of the 1990s, the fact that lower-income borrowers more than held their own represents a good sign of progress.

Table 2 also indicates that about three-fourths of all the home lending to low- and moderate-income borrowers occurred outside of low- and moderate-income census tracts.<sup>16</sup> For instance, just under \$600 million of the borrowing by low- and moderate-income households in the 1999-2002 period was for home purchases in low- and moderate-income census tracts, while more than \$1,820 million in borrowing took place in other census tracts. As a result, much of this lending is being dispersed into other parts of the

Denver metropolitan area—a sign that lower-income borrowers may be finding a range of opportunities in housing, employment, and public services.

According to Chart 2, independent mortgage companies have done the majority of the lending to low- and moderate-income borrowers in Denver, as based on the number of such loans each type of lender has approved. However, the lenders that have been most successful at increasing their share of low- and moderate-income home lending in Denver have been the banking organizations without a deposit-taking office in the Denver area. Their share has risen from 9.4 percent of the market in the 1992-1994 period to 23.2 percent between 1999 and 2002. Since the focus of the CRA would be on the depository institutions with deposit-taking offices in Denver, this increased lending activity by outside banking organizations would seem to imply that technology and market innovations, rather than regulation, are behind much of their lending gains. Chart 2 further shows that banking organizations with deposit-taking offices in Denver have shown the largest decline in market share—a decline that roughly mirrors the drop they have experienced in all home purchase lending.

Table 3 looks at low- and moderate-income lending by the size of each lender and their share of the total dollar volume of such lending in the Denver area. Of

**Table 2**  
**Home Purchase Lending to Low- and Moderate-Income Borrowers In the Denver Metropolitan Area (Average annual amount)**

	1992-1994		1995-1998		1999-2002	
	Amount (\$ Millions)	Share of All Lending	Amount (\$ Millions)	Share of All Lending	Amount (\$ Millions)	Share of All Lending
All Low- and Moderate-Income Borrowers	918.4	21.9%	1,394.8	22.4%	2,419.3	22.7%
Low- and Moderate- Income Borrowers in Low- and Moderate-Income Census Tracts	219.0	5.2%	361.4	5.8%	598.8	5.5%
Low- and Moderate-Income Borrowers in All Other Census Tracts	699.4	16.7%	1,033.4	16.6%	1,820.5	17.1%



the lower-income lending done by the banking organizations without deposit-taking offices in Denver, the vast majority of it has been by larger organizations. As shown in Table 3, outside banking organizations with more than \$10 billion in total assets have made nearly 16 percent of the loans to low- and moderate-income borrowers, while those with \$1 billion to \$10 billion in total assets have made a slightly more than 6 percent of these loans. Larger organizations also dominate the lending by banking organizations with Denver deposit-taking offices and by thrifts both with and without Denver offices.

## LENDING IN LOW- AND MODERATE-INCOME CENSUS TRACTS

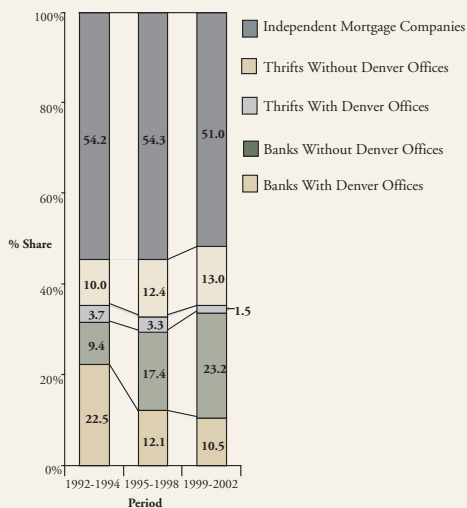
A second aspect of home lending is how much of it serves and helps support low- and moderate-income neighborhoods. Lower-income neighborhoods, in fact, are a key focus of the CRA and of many community group and public lending programs. Much of this

effort has been directed toward preserving or improving the housing stock in these neighborhoods and providing opportunities for more residents to own their own homes. Such efforts are also designed to contribute to the overall stability of the neighborhood, improve the quality of family life, and support the provision of public services.

Based on the 1990 Census data used to track home lending in this study, 143 census tracts, or about one-third of the 426 tracts in the Denver metropolitan area, were low- or moderate-income tracts. As shown in Figure 1, most of these tracts are inner-city neighborhoods located near the Denver central business district. Apart from lower incomes, other common characteristics many of these census tracts share is an older housing stock, more rental properties, higher minority population, and more limited employment opportunities within the census tracts. However, unlike many urban areas, the number of owner-occupied housing units in Denver's low- and moderate-income neighborhoods experienced fairly rapid growth between the 1990 and 2000 Censuses, increasing by nearly 41 percent. This increase even exceeded the rate of growth for the entire metropolitan area.

The previous section showed a strong growth in lending to the low- and moderate-income households that were buying homes in low- and moderate-income neighborhoods. Significant support to these neighborhoods, however, could come from home purchase loans made to households in other income groups. As shown in Table 4, the volume of such lending to home purchasers at all income levels rose from a yearly average of \$425 million during the 1992-1994 period to \$1,387 million between 1999 and 2002. This represents a 226 percent increase compared to the 155 percent increase in home lending across all census tracts. As a result, low- and moderate-income neighborhoods have experienced a gain in their share of all home purchase lending. This increased lending suggests that conditions may be improving in many of these neighborhoods, but their lending share is still just a little over one-eighth of all home lending in Denver.

**Chart 2**  
**Share of Number of Home Purchase Loans Approved By Lender Type To Low- and Moderate-Income Borrowers Denver Metropolitan Area**



**Table 3**  
**Home Purchase Lending to Low- and Moderate-Income Borrowers In the Denver Metropolitan Area By Type and Size of Lender**  
*(Share of average annual lending, 1999-2002)*

	Market Share According to Size of Organization by Total Assets				Total Share
	\$0-100 Million	\$100-1,000 Million	\$1-10 Billion	More than \$10 Billion	
Commercial Banking Organizations with Denver Offices	0.03%	0.51%	0.79%	8.57%	9.90%
Commercial Banking Organizations without Denver Offices	0.01%	0.43%	6.10%	15.84%	22.39%
Thrifts with Denver Offices	0.00%	0.00%	0.10%	1.20%	1.30%
Thrifts without Denver Offices	0.02%	0.41%	4.09%	7.81%	12.34%
Denver area Independent Mortgage Companies *					24.45%
Non-Denver Independent Mortgage Companies *					29.06%
Total **					100.00%

\* Asset size was not available for independent mortgage banks.

\*\* Includes other lender types not listed above, such as credit unions.

**Figure 1**  
**Income Distribution by Census Tracts—1990**  
*Denver Metropolitan Area*

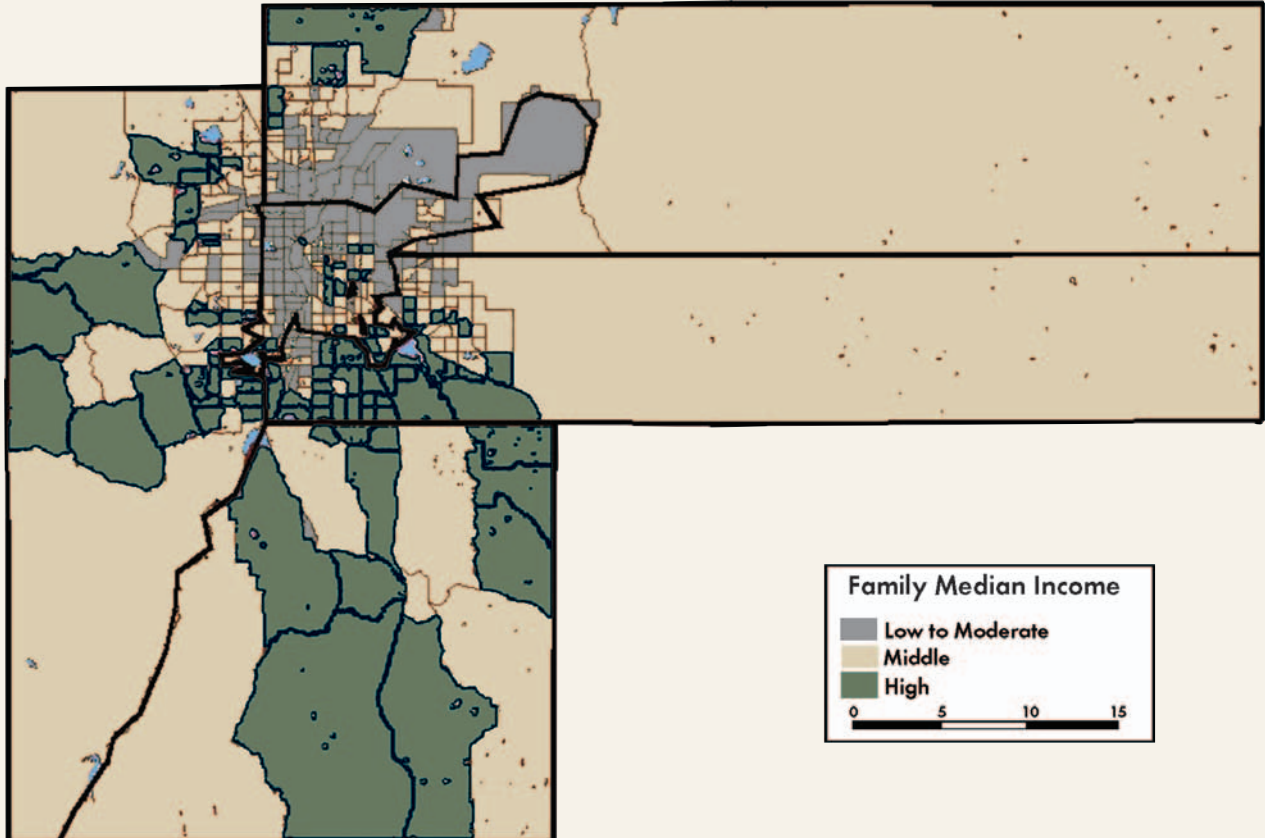


Table 4 also shows that the dollar amount of lending in low-and moderate-income neighborhoods during the 1992-1994 period was divided fairly evenly between low-and moderate-income borrowers and other borrowers. For low-and moderate-income borrowers, this lending then increased at a faster pace than overall home purchase lending in Denver. Lending to other borrowers in low- and moderate-income neighborhoods, though, increased at an even faster pace, thus suggesting that improving neighborhood conditions may be drawing in households from other income groups. A more detailed way to look at the relative level of lending in low- and moderate-income neighborhoods is to compare the number of home purchase loans to the number of owner-occupied housing units.<sup>17</sup> This comparison helps adjust for housing differences across census tracts, especially between neighborhoods composed mostly of rental housing and others where single-family homes and the need for home financing may be more prevalent. Chart 3 consequently looks at the number of loans made annually per 100 owner-occupied dwellings.

As shown in this chart, fewer loans relative to the number of owner-occupied units have been made annually in low- and moderate-income census tracts compared to other Denver neighborhoods. However, the rate of home purchase lending has still shown a substantial increase in low- and moderate-income neighborhoods. The number of loans in these neighborhoods, for example, has jumped from

**Table 4**  
**Home Purchase Lending in the Denver Metropolitan Area By Type of Census Tract**  
*(Average annual amount per period)*

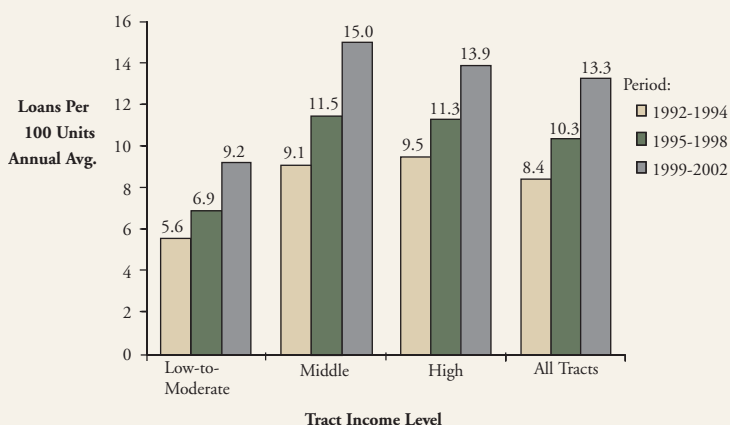
Census Tract Median Income	1992-1994		1995-1998		1999-2002	
	Number Of Loans	Amount (\$ Millions)	Number Of Loans	Amount (\$ Millions)	Number Of Loans	Amount (\$ Millions)
Low-to-Moderate Income						
Total	6,336	\$425	7,801	\$697	10,410	\$1,387
LMI* Borrowers	3,831	\$219	4,589	\$361	5,249	\$599
Above LMI* Borrowers	2,505	\$206	3,212	\$336	5,161	\$788
Middle Income	18,708	\$1,773	23,594	\$2,734	30,808	\$4,915
High Income	14,812	\$1,989	17,658	\$2,792	21,649	\$4,368
Total	39,856	\$4,187	49,053	\$6,223	62,867	\$10,670

\* LMI means low-to-moderate income.

an annual average of 5.6 loans per every 100 owner-occupied housing units in the 1992-1994 time period to 9.2 loans in the 1999-2002 period.

It is not clear whether this lower level of lending in low-and moderate-income neighborhoods is more reflective of differences in credit availability or other, mostly demand—related, factors. Housing turnover and home purchase lending rates in lower-income areas could be lower because some homeowners

**Chart 3**  
**Home Purchase Loans Approved Per 100 Owner-Occupied Units**  
**Denver Metropolitan Area**



received their loans through special lending programs and may stay longer to take advantage of these lending terms. In addition, some lower-income borrowers might choose to stay in their homes to avoid the added and often substantial costs of changing homes, including loan closing costs, real estate sales commissions, moving expenses, and possibly higher down payments. Other factors influencing lending rates could include less new home construction in some, possibly older and more established, neighborhoods; older homeowners holding on to their homes longer; and fewer job transfers. All of these factors could thus affect the demand for home loans, leaving some neighborhoods with fewer loans in relation to the number of owner-occupied housing units.

Another aspect of the lending picture in low-and moderate-income neighborhoods is which lenders are playing a major role in this market. Table 5 examines this topic by looking at the number of loans that each group of lenders made per 100 owner-occupied housing units in Denver neighborhoods. As shown in this table, independent mortgage companies were the most common lenders in low- and moderate-income neigh-

borhoods, and as a group, they increased their lending from an average annual rate of 3.06 loans per 100 owner-occupied units in the 1992-1994 period to 4.55 loans in the 1999-2002 period. Some of the greatest gains between these two periods, though, were achieved by thrifts and banking organizations without Denver deposit-taking offices, which tripled and quadrupled the numbers of loans they made, respectively, per 100 owner-occupied units in low- and moderate-income neighborhoods. In contrast, the lending rates for banks and thrifts with Denver offices didn't show as much change, and in some periods, experienced a decline in low- and moderate-income neighborhoods. This table further reflects the patterns in Chart 3, with all lender groups showing higher rates of lending per 100 owner-occupied housing units in middle- and high-income neighborhoods.

Overall, the Denver home lending numbers thus show that lending in low- and moderate-income neighborhoods generally has increased at a faster pace than in other neighborhoods. The rate of lending per 100 owner-occupied housing units in low- and moderate-income neighborhoods still trails that of other

Denver neighborhoods. However, that result may have as much to do with the extremely active housing market in other Denver neighborhoods during the 1990s and with the high costs lower-income households face in buying and selling homes.

## SUMMARY

A variety of factors have influenced the demand and supply for home financing in the

**Table 5**  
**Home Purchase Lending in the Denver Metropolitan Area By**  
**Type of Census Tract and Lender**  
*(Number of loans made annually per 100 owner-occupied dwellings)*

Type of Lender	1992-1994			1995-1998			1999-2002		
	LMI*	Middle	High	LMI*	Middle	High	LMI*	Middle	High
Commercial Bank Organizations with Denver area Offices	1.35	1.86	1.69	0.82	1.39	1.49	0.93	1.73	1.80
Commercial Bank Organizations without Denver Offices	0.48	0.87	0.96	1.17	1.99	2.08	2.07	3.45	3.36
Thrifts with Denver Offices	0.22	0.32	0.48	0.25	0.38	0.46	0.16	0.25	0.30
Thrifts without Denver Offices	0.46	0.89	1.04	0.92	1.45	1.65	1.40	2.17	2.27
Independent Mortgage Companies	3.06	5.15	5.31	3.67	6.23	5.60	4.55	7.29	6.08
Total—All Lenders **	5.58	9.12	9.51	6.87	11.50	11.34	9.17	15.00	13.90

\* LMI means low-to-moderate income census tract.

\*\* Includes other lender types not listed above, such as credit unions.

Denver metropolitan area. A very strong economy and declining interest rates over the last decade have helped to increase the amount of home financing sought by all income groups in Denver. Technology and financial market innovation have further enabled this financing to be met through new channels and lending processes, while regulatory changes have provided additional lending incentives for local institutions to meet community housing needs. Also, Denver community groups, other organizations, local governments, and special lending programs have provided further support for low- and moderate-income lending.

All of these factors are reflected to various extents in the rapid increase in Denver home lending over the past decade. The total dollar volume of home purchase lending, as reported by HMDA filers, jumped by nearly 155 percent from the 1992-1994 time frame to the 1999-2002 period. During this time of substantial lending growth, low- and moderate-income borrowers and low- and moderate-income neighborhoods have more than maintained their position, with lending in these categories increasing as a portion of all home pur-

chase lending. As a result, home financing became more readily available to low- and moderate-income households, thus ensuring greater progress toward their homeownership goals.

One noteworthy development in the rising level of low- and moderate-income lending in Denver is the increasing role being played by banking organizations and thrifts without Denver deposit-taking offices. The fact that these organizations have overcome the lending advantages that local institutions once held suggests that innovations in technology and financial markets are dramatically reshaping our mortgage markets and bringing in new competitors. From a longer-term perspective, the emergence of such competition should greatly benefit low- and moderate-income borrowers, while providing a sign that lower-income lending can meet the same market tests as other forms of lending. To the extent this is true, a broader range of lenders and investors will develop to serve low- and moderate-income households, and a more continuous and competitive source of financing will be available to support lower-income neighborhoods.



## Box B

### DATA SOURCES AND METHODOLOGY

This study combines information from four separate data sources: 1990 and 2000 demographic data at the census tract level of aggregation from the U.S. Census Bureau; Home Mortgage Disclosure Act (HMDA) data on individual mortgage loan applications from 1992 through 2002; financial data on lenders from the reports they filed with regulatory agencies between 1992 through 2002; and information on the organizational structure of each lender from 1992 through 2002, including parent entity and branch locations, from the Federal Reserve's National Information Center database.

This study uses the Census Bureau's 1990 definition of the Denver Primary Metropolitan Statistical Area (PMSA), which included Adams, Arapahoe, Denver, Douglas, and Jefferson counties. The geographic coverage of some of the Denver census tracts changed between 1990 and 2000 and several new tracts were added. To allow a direct comparison of these census tracts between 1990 and 2000, this study takes 2000 census data and analyzes it on the basis of the 1990 census tract definitions for the Denver PMSA. This was done by aggregating the 2000 data from the block level into census tracts, using the geographic tract definitions that existed in 1990. The number of owner-occupied housing units in each census tract was derived from both the 1990 and 2000 census data and averaged by tract, creating an average value for each tract's owner-occupied units between 1990 and 2000.

Each census tract was defined as either low- and moderate-income, middle-income, or high-income, based on whether the 1990 median family income within the census tract was below 80 percent of the PMSA median income, between 80 and 120 percent of the PMSA median income, or above 120 percent of the PMSA median income. The low- and moderate-income criteria are the same as that used in the Community Reinvestment Act (CRA) in evaluating a lender's record in meeting credit needs.

The HMDA data used in this study include all approved home purchase loan records available for the Denver PMSA, for the 1992 through 2002 period. As a result, the numbers do not include loans to refinance homes, loans on mobile homes, or for home improvements. The 1992-2002 period was chosen because the same definition of low-to-moderate income areas, which was based on 1990 census data, applied throughout this period for lending institutions subject to CRA compliance. The study aggregates HMDA data on the number and dollar volume of approved home purchase loans into three periods: 1992 through 1994; 1995 through 1998; and 1999 through 2002. The principal reasons for aggregating the data into periods are to simplify the analysis and smooth any year-to-year fluctuations, thereby providing a clearer picture of the overall trends in home lending. The split between 1994 and 1995 is purposely chosen to correspond to the significant changes made in CRA regulations in 1995. The HMDA data on the income characteristics of each borrower also were used in the study to divide borrowers into low- and moderate-, middle-, and high-income groups, using the same cutoff levels defined for census tracts, but with the PMSA median income adjusted annually.

Both the HMDA lending data and the census-derived housing unit data were aggregated by census tract within each of the three census tract income groups. This allowed the lending data (both number and dollar volume of loans) to be scaled by the average number of owner-occupied units for tracts within each census tract income group. Thus, for instance, in the 1992 through 1994 period, there was an average of 6,336 home purchase loans approved annually in low- and moderate-income tracts. The average number of owner-occupied housing units from the 1990 and 2000 census in low- and moderate-income tracts was 113,478. Thus, the number of loans per 100 owner-occupied units was 5.6 ( $100 \times 6,336 / 113,478$ ). Scaling the number or dollar value of loans by the number of owner-occupied units helps to adjust for differences in basic loan demand characteristics across census tracts with different income characteristics. This

**Box B cont.**

may provide a more accurate measure of how well credit needs are being met across income groups.

Each home lender in this study is identified as either a commercial bank, insured thrift, or independent mortgage company on the basis of financial and structural data. The lending data include all the loans made by a bank or thrift, as well as any loans made by their affiliates. Credit unions are excluded from the analysis because their home purchase lending made up less than 1 percent of the amount approved by all HMDA reporters during the study period.

The study also tracks lenders according to the overall size of their organization. For banks and thrifts owned by holding companies, their size group reflects the total assets held by all subsidiary banks and/or thrifts within each organization. All lender size references in this paper thus refer to all the depository institutions in an organization and not to individual banks or thrifts. Comparable measures of asset size are not consistently available for independent mortgage companies, and they are excluded from any organizational size comparisons.

The CRA is based on the principle that depository institutions should meet the credit needs of their communities, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of the institution. Accordingly, the CRA only evaluates insured depository institutions within those metropolitan areas in which they have at least one deposit-taking office. This study consequently uses branch office structure data to divide bank and thrift organizations into two separate groups: those that have a deposit-taking office in the Denver MSA and would have their Denver lending factored into their CRA rating; and those with no deposit-taking offices in Denver and that would be lending outside of the CRA framework. The second group would include organizations with mortgage banking operations or loan production offices in Denver, but not include those with deposit-taking offices there. It also would include organizations that take loan applications from Denver borrowers through such means as the telephone, mail solicitations, the Internet, or mortgage brokers.

## ENDNOTES

<sup>1</sup>From 1992 to 2002, the total amount of home purchase lending in Denver increased from \$2.93 billion to \$11.5 billion. Denver housing price information is derived from: Office of Federal Housing Enterprise Oversight, *House Price Index*.

<sup>2</sup>U.S. Census Bureau, *Housing Vacancies and Homeownership Annual Statistics: 2004*, Table 14.

<sup>3</sup>A wide range of studies have looked at low- and moderate-income lending, both within markets and on a nationwide basis. Some of these are: Robert B. Avery, Paul S. Calem, and Glenn B. Canner, "The Effects of the Community Reinvestment Act on Local Communities," Board of Governors of the Federal Reserve System, March 2003; Mark Duda and Eric S. Belsky, "The Anatomy of the Low-Income Homeownership Boom in the 1990s," *Low-Income Homeownership Working Paper Series*, Joint Center for Housing Studies of Harvard University, July 2001; Jeffrey W. Gunther, Kelly Klemme, and Kenneth J. Robinson, "Redlining or Red Herring," *Southwest Economy*, Federal Reserve Bank of Dallas, May/June 1999, pp. 8-13; and Kirk McClure, "The Twin Mandates Given to the GSEs: Which Works Best, Helping Low-Income Homebuyers or Helping Underserved Areas?" *Cityscape: A Journal of Policy Development and Research*, vol. 5, 2001, U.S. Department of Housing and Urban Development, pp. 107-143.

<sup>4</sup>According to the National Bureau of Economic Research, the official arbiter of business cycle durations, the United States was in a growth cycle from March 1991 to March 2001.

<sup>5</sup>Federal Home Loan Mortgage Corporation, *Primary Mortgage Market Survey*, Monthly Average Commitment Rate and Points on 30-Year, Fixed-Rate Mortgages. Points charged on 30-year, fixed-rate mortgages also have declined from an average of 2.1 in 1990 to 0.6 in 2002, thus reducing the cost of homeownership even further.

<sup>6</sup>The numbers in this paragraph are drawn from the Census Bureau and U.S. Department of Housing and Urban Development, "New Residential Construction," *Joint Release*, and the Federal Reserve Board of Governors, *Flow of Funds*.

<sup>7</sup>The federal banking agencies also issued new CRA rules on July 19, 2005, that allow "intermediate small banks" (those with total assets between \$250 million and \$1 billion) to use the small bank CRA lending test and a flexible new community development test. These rules also expand the definition of community development for all banks to include activities revitalizing or stabilizing designated disaster areas and distressed or underserved rural areas.

<sup>8</sup>See Continental Bank Corporation, 75 Federal Reserve *Bulletin* 304 (1989).

<sup>9</sup>Some financial institutions are exempt from the HMDA reporting requirements because they do not have any metropolitan offices, fall below a fairly small size threshold, or devote only a small portion of their portfolio to mortgage lending.

<sup>10</sup>Among the more noteworthy studies are: "The Color of Money," a series of articles by Bill Dedman in the *Atlanta Journal Constitution* in 1988, describing lending patterns in Atlanta that seemed to favor white borrowers, and "Mortgage Lending in Boston: Interpreting HMDA Data," a study conducted by the Federal Bank of Boston in 1992 that investigated disparities in white and minority mortgage denial rates.

<sup>11</sup>For more on this, see U.S. Department of Justice, *Press Release*, "Department of Justice Settles First Race Discrimination Lawsuit Against Major Home Mortgage Lender," September 17, 1992.

<sup>12</sup>In Federal Reserve Regulation C (Home Mortgage Disclosure), a home purchase loan is described as "any loan secured by and made for the purpose of purchasing a dwelling." Under Regulation C, lenders use other categories or codes to report home improvement, refinancing, and multifamily dwelling loans.

<sup>13</sup>The change in the GNP deflator was calculated from the midpoint of the 1992-1994 period to the midpoint of the 1999-2002 time frame. The midpoint of these periods was used, since the figures in Table 1 are an average of the annual amounts during each period, and this average presumably would correspond most closely to the midpoint of each period. From the beginning of 1992 to the end of 2002, the GNP deflator rose by about 23 percent, which is still much less than the increase in home purchase lending.

<sup>14</sup>This study divides both banks and thrifts into two separate groups: those with deposit-taking offices in the Denver metropolitan area and those without a local banking office. The reason for drawing this distinction is that local lending by depository institutions with Denver offices would be factored into their CRA rating, while such lending by institutions without a local banking office would be outside of the CRA framework.

<sup>15</sup>The banks and thrifts with deposit-taking offices in the Denver area include not just those that have their headquarters or main banking office in Denver, but also those that have bank branches in Denver and their main office elsewhere. Also, the home purchase lending information for all bank and thrift organizations includes loans made in Denver by affiliated entities.

<sup>16</sup>In low- and moderate-income census tracts, the 1990 median household income is below 80 percent of the median income for the entire Denver metropolitan area. High-income census tracts are those where the median income is above 120 percent of the metropolitan median income, and middle-income census tracts are those in between these two criteria.

<sup>17</sup>The number of owner-occupied housing units in each census tract was derived from Census data for 1990 and 2000, and an average value from these two years of data was used in Chart 3 and Table 4 to adjust for changes in housing stock. See Box B —Data Sources and Methodology—for a more detailed discussion of how these lending rates were computed for this part of the paper.