

SECTION 1

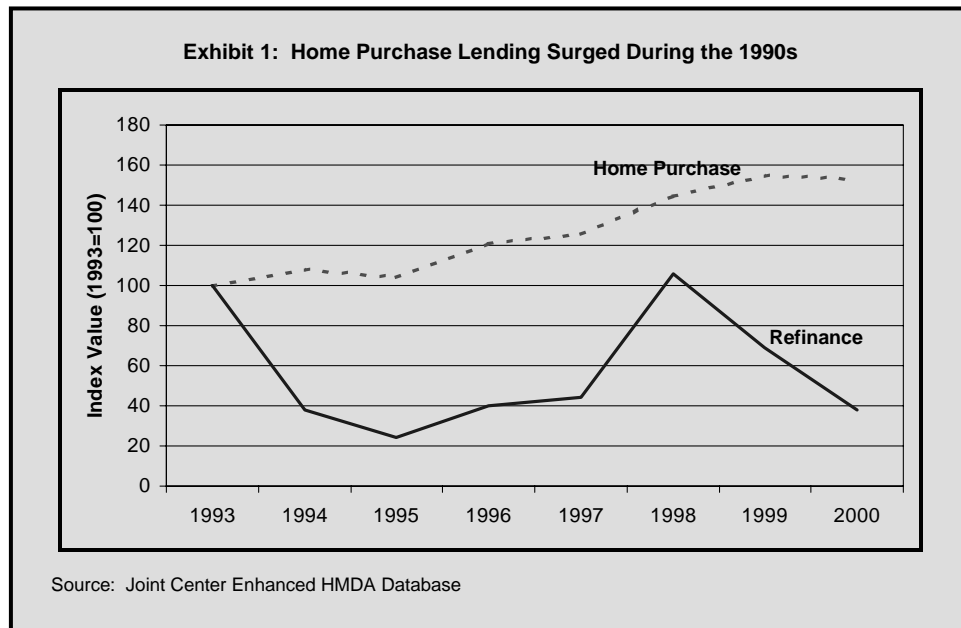
TRENDS IN RESIDENTIAL MORTGAGE LENDING IN THE 1990s

This study examines the impact of the Community Reinvestment Act (CRA) on mortgage lending for the period 1993 to 2000, the period for which the best data are available for the task (see Appendix 1). To establish the overall market context for the evaluation, this section documents - using data reported pursuant to the Home Mortgage Disclosure Act (HMDA) - the impressive rise in mortgage lending that was bolstered, if not led, by especially strong growth in the lower-income and minority segments of the market.

HMDA data has advantages and disadvantages for the purpose of examining trends in the mortgage lending industry over the 1990s. These characteristics of the data are evaluated in more detail in part D of this section, but it is important to note at the outset that as a result of improving HMDA coverage over the period, HMDA data may overstate actual growth in residential mortgage lending from 1993 to 2000. Despite these drawbacks, HMDA provides loan-level data on mortgage originations for the purchase or refinancing of homes geo-coded to the census tract level, and contains detailed information on borrower and lender characteristics. As such, HMDA represents the best data source available for investigating trends in mortgage lending over the study period.

MORTGAGE LENDING IN THE 1990s

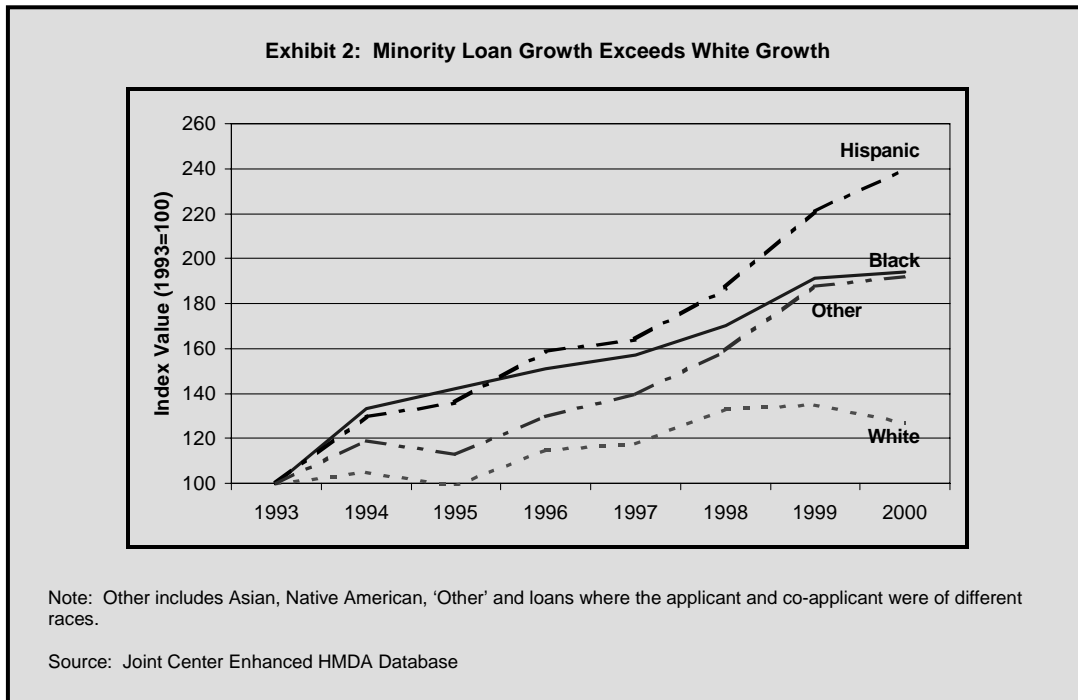
Buoyed by income and employment growth, modest mortgage interest rates, and innovative products for lower-income buyers, mortgage lending rose dramatically in the 1990s. As measured by HMDA, the number of loans for the purchase of one-to four family properties in metropolitan areas increased from 2.4 million in 1993 to 3.7 million in 2000, a gain of 53 percent (Exhibit 1). Interest rate sensitive home refinance lending exhibited a boom/bust pattern over the same period. Following a record-setting 1993, which saw 4.5 million refinancings, the sector eased through the mid-1990s before surging to new heights in 1998 (4.7 million refinancings). Refinancings



retreated in 1999 (3.1 million loans) and 2000 (1.7 million loans) in the face of higher interest rates, though they rebounded sharply in 2001.

As noted, these trends relate to metropolitan area lending, defined here as counties that were part of a U.S. Census Bureau designated Metropolitan Statistical Area (or MSA) for the entire study period. As a result, the study excludes counties that either became MSAs or became parts of MSAs during the study period. Since reporting problems are more severe in newly added metropolitan counties and in non-metropolitan counties, this geographic standardization not only measures loan growth for a fixed set of counties, it also serves to minimize potential bias resulting from reporting requirements being extended to additional areas over time.

It should be noted that all figures refer to 'originated loans,' as opposed to 'purchased loans.' Under CRA, an individual lender may receive credit for purchasing an existing loan from another institution. As a result, a single loan may be reported in HMDA more than once. Including purchased loans in this analysis would distort the observed trends because apparent changes in lending could simply reflect the increased or diminished likelihood of a loan having multiple owners prior to lodging permanently in a lender's portfolio, or being sold into the secondary



market.

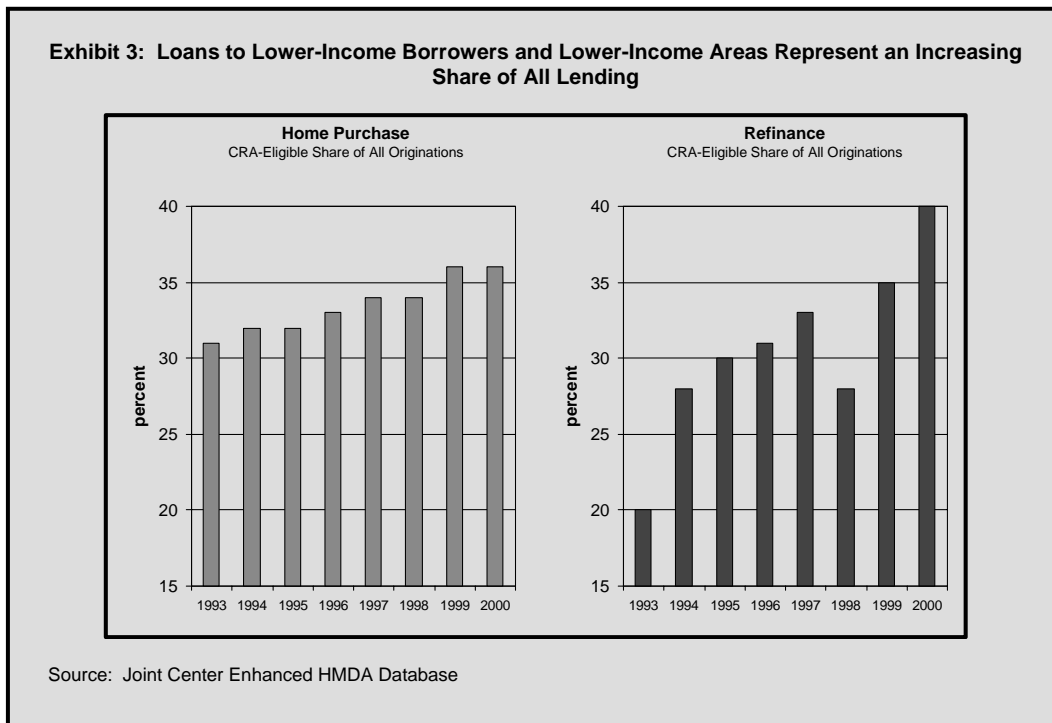
As measured by HMDA, mortgage lending gains were spread across all income, racial, and ethnic groups, with particularly strong advances recorded by minority borrowers. From 1993 to 2000, HMDA data indicate that the number of home purchase loans made to black borrowers increased by 94 percent, to Hispanic borrowers by 140 percent, and to other minority borrowers by 92 percent (Exhibit 2). Home purchase lending to white borrowers increased 27 percent over the same period. These changes corresponded to an increase in home purchase loans over the 1993 to 2000 period of 121,000 for blacks, 169,000 for Hispanics, 145,000 for other minorities, and 525,000 for whites. As a result of these trends, minority borrowers accounted for some 25 percent of total home purchase lending in 2000, up from 17 percent in 1993. Minorities also

posted similarly strong gains in home refinancing, where their share climbed from 13 percent in 1993 to 23 percent in 2000.

As documented in Harvard's Joint Center for Housing Studies 2001 report, *The State of the Nation's Housing*, the surge in lending fueled an equally strong uptake in homeownership. The number of homeowners grew by 8.1 million from 1994 to 2000 – a record increase for a six-year period. By the end of the decade, the national homeownership rate also reached a record 67.4 percent, up from 64.3 percent in 1990. Increases were spread across all income, racial, and ethnic groups, with minorities capturing up to 40 percent of the increase in homeownership that occurred from 1994 to 2000. Even so, the homeownership gap had narrowed only slightly by 2000, with the white homeownership rate standing at 73.8 percent and the minority rate at 48.1 percent.

A. Growth in Lower-Income Lending

The 1990s surge in home lending was led by lower-income borrowers and communities. (Throughout this report lower-income borrowers are defined as having incomes less than 80 percent of metropolitan area median income, and lower-income communities are census tracts with 1990 median family income that was less than 80 percent of their metropolitan area median). HMDA data indicate that home purchase loans to lower-income borrowers and/or lower-income communities increased by 77 percent, or 571,000 loans, over the period 1993 to 2000. The growth in the lower-income market far exceeded the 53 percent overall growth in home purchase lending. As a result, loans to lower-income people and communities expanded to account for 36 percent of all home purchase lending, up from 31 percent in 1993 (Exhibit 3). Further, these

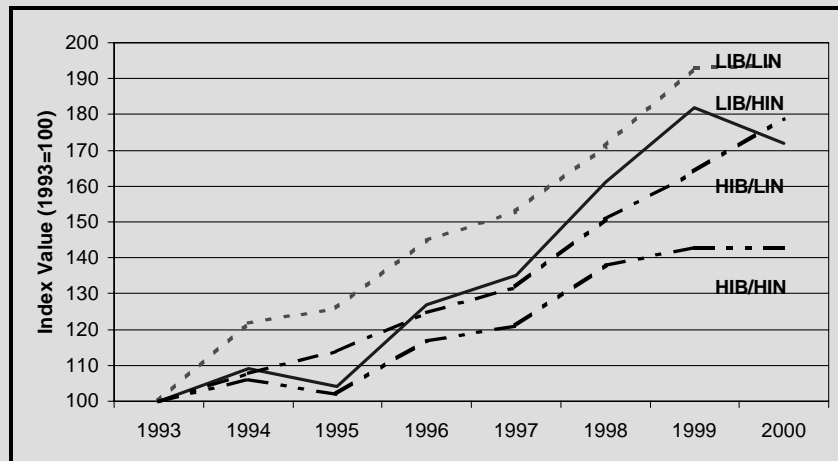


borrowers accounted for 44 percent of the 1.3 million-loan increase in home purchase lending between 1993 and 2000.

Lending to lower-income people and communities was also an increasing share of the more volatile home refinance market, rising sharply from 1993 to 1997. In 1998, the share of home refinance loans going to lower-income people and communities fell off, as large numbers of higher-income borrowers entered the market to refinance their homes at historically low rates. Even so, once the refinance boom began to subside, the share of refinance loans going to lower-income people and communities moved up sharply again, reaching a record high of 40 percent in 2000. These trends may reflect, among other things, the increasing tendency of lower-income borrowers to refinance their homes to repay credit card debt or other financial obligations, or to raise money to fund home repairs or other big-ticket purchases, as many higher-income borrowers have done. It also likely reflects increased marketing and outreach to lower-income borrowers and communities by mortgage lenders, including subprime specialists. Finally, an unknown portion of the increase is due to loans made using 'predatory' lending practices.

The growth in lending to lower-income people and communities was widespread. Since lower-income borrowers living in lower-income areas are generally considered the most difficult to reach and most likely to be underserved, Exhibit 4 disaggregates lower-income borrower/area growth into four borrower/area income categories. It shows that the fastest growth in home purchase lending was, in fact, for lower-income people living in lower-income communities. For this group, HMDA reported home purchase lending increased by 94 percent over the 1993-2000 period. Home purchase lending to lower-income people living in higher-income communities was also up by 72 percent over the decade, easily outstripping the 43 percent growth in home purchase lending for higher-income people living in higher-income areas.¹

Exhibit 4: Fastest Home Purchase Lending Growth Occurred in Lending to Lower-Income Borrowers Living in Lower-Income Neighborhoods



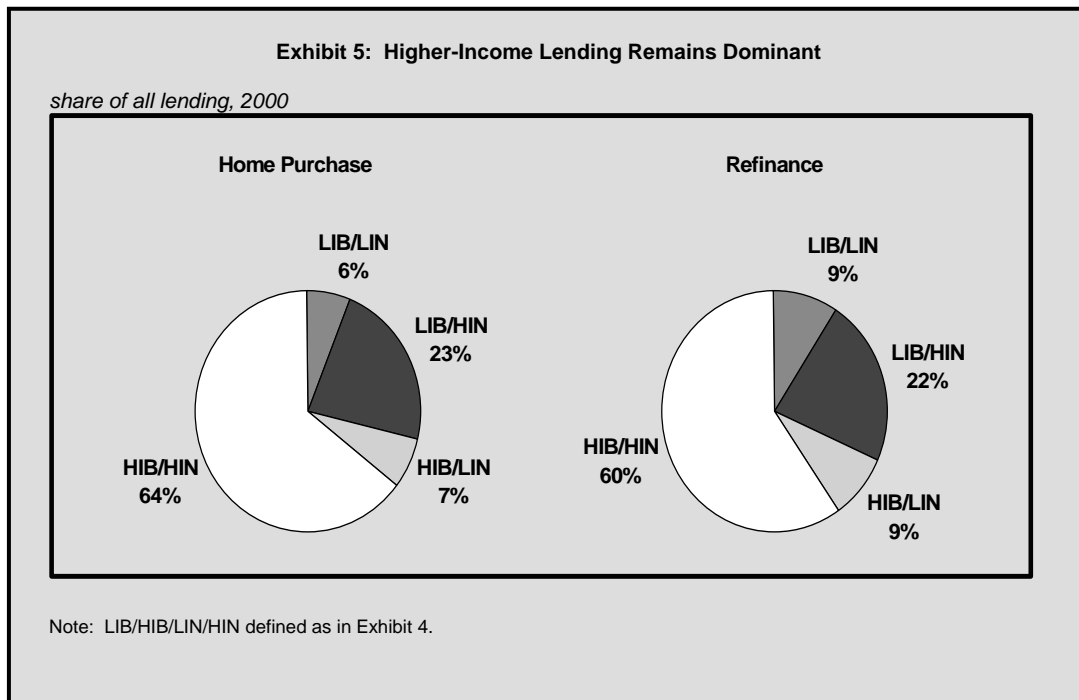
Notes: Lower-income borrowers (**LIB**) are those earning less than 80 percent of area median income in that year. Higher-income borrowers (**HIB**) are those earning at least 80 percent of area median income in that year. Lower-income neighborhoods (**LIN**) are neighborhoods with median income less than 80 percent of the MSA median in 1990. Higher income neighborhoods (**HIN**) are census tracts with median income at least 80 percent of the MSA median in 1990.

Source: Joint Center Enhanced HMDA Database

¹ Lending to higher-income people in lower-income neighborhoods increased by 79 percent. The percentages represent the following increases in lending 1993-2000: lower-income borrowers in lower-income neighborhoods by 112,000 loans; lower-income borrowers in higher-income neighborhoods by 349,000; higher-income borrowers in lower-income neighborhoods by 110,000; higher-income borrowers in higher-income neighborhoods by 715,000.

The steady and far-reaching growth in lending to lower-income people and communities, and especially minorities, represents one of the most important accomplishments of the 1990s. While the relative importance of specific factors is in dispute, these gains are generally considered to have resulted from technological advances in mortgage lending, Fair Housing/Lending enforcement efforts, the increasing importance of government-backed lending, particularly the Federal Housing Administration (FHA), the increased liquidity provided by secondary market financing, and CRA. Responding both to market and policy signals, lenders have made concerted efforts to reach lower-income borrowers. According to a recent Federal Reserve Board survey of the nation's largest banks, three-quarters of respondents reported offering special products to make homeownership more accessible to lower-income borrowers (Federal Reserve Board, 2000). Outreach tools include fee waivers or reductions, homeownership counseling, lower downpayments, or higher debt-to-income ratios. Moreover, new technologies - particularly automated underwriting and credit scoring systems - have enabled lenders to better evaluate risk and in so doing extend mortgage credit to lower-income borrowers by offering mortgages with lower downpayment requirements to creditworthy but nevertheless lower-income or lower-wealth borrowers, or by making higher priced loans to potential borrowers with less than perfect credit histories.

As impressive as the shift toward lower-income market segments is, it is noteworthy that loans to lower-income people and communities still represent a fairly small share of the total. Exhibit 5 indicates that, according to HMDA data, home purchase loans to higher-income people living in higher-income neighborhoods still account for 64 percent (or 2,384,538 loans) of all home purchase and 60 percent (or 1,018,503 loans) of home refinance loans. In contrast, lending to lower-income people living in lower-income communities represented just 6 percent (or 231,852 loans) of all home purchase lending and 9 percent (or 160,056 loans) of home refinancings in 2000. Likewise, home purchase lending in lower-income neighborhoods (for households of all



income levels) accounted for only 13 percent (or 480,819 loans) of total home purchase lending. For home refinancings, lower-income areas captured a slightly higher share of 18 percent (or 305,502 loans). This is in spite of the fact that within metropolitan areas, lower-income neighborhoods comprise approximately 35 percent of all households and 20 percent of all owner households.

Looking at all lower-income households (regardless of where they live) produces a similar picture. As indicated in Exhibit 5, fully 29 percent of all home purchase lending (or 1,066,358 loans), and 32 percent of home refinancing (or 537,952 loans), goes to lower-income households. Among these figures, lower-income families living in higher-income areas account for the largest share of all lower-income lending. Again, these figures represent notable progress over 1993, when lower-income households accounted for just 25 percent (or 605,175 loans) of total home purchase lending, and 14 percent (or 644,903 loans) of home refinancing. Even so, with lower-income households accounting for 37 percent of all households, and 32 percent of all owner families, the increases have not enabled lending to lower-income families to reach parity with lending to higher-income households.

B. Loan Type Varies by Income

Along with attractive mortgage interest rates and robust economic conditions resulting in low unemployment, the growth of innovative mortgage products helped to fuel lending increases across the board, with their impact often felt most strongly among lower-income borrowers and areas. These include new forms of subprime lending and manufactured home lending, as well as more extensive use of existing government-backed loan programs.

The emergence of subprime lending was one of the most significant events impacting mortgage market trends in the 1990s. According to one industry estimate, subprime loan originations increased from \$35 billion in 1994 to \$160 billion in 1999 (Mortgage Market Statistical Annual for 1999). As a percentage of all mortgage originations, the subprime market share increased from less than 5 percent in 1994 to almost 13 percent in 1999. By 1999, outstanding subprime mortgages amounted to 8 percent of the \$4.8 trillion in outstanding single-family mortgage debt.

Equally significant increases were recorded for government-backed lending, particularly for loans insured by the Federal Housing Administration (FHA). From 1993 to 1999, FHA-insured lending for home purchase surged from 563,000 to 919,000 loans, before falling back to 847,000 loans in 2000. FHA lending focuses on the lower-income segment of the market, including underserved minority communities. In 2000, minorities accounted for 40 percent of all home purchase mortgages insured by FHA, up from the 22 percent figure recorded in 1993 (U.S. Department of Housing and Urban Development, 2000).

Manufactured home loans also grew notably during the 1990s, as did sales of manufactured homes. From a low of 195,000 units in 1990, placements of manufactured homes grew to an all time record high of 369,000 units in 1998 before falling back at the end of the decade (Joint Center for Housing Studies, 2001). According to the Census Bureau, over the decade, manufactured housing accounted for between one-quarter and one-third of all production of single-family detached homes (U.S. Census Bureau, Construction Statistics, 2001), and was a particularly important component of housing production activity in the fast growth areas of the South and West.

Using available HMDA data it is possible to assess the trends in government-backed, subprime, and manufactured home lending by borrower and lender characteristics, as well as location. While HMDA does not label the loan type directly, HUD supplies a list of each lender's 'specialization' in prime, subprime, or manufactured home lending. Government-backed loans are directly identified in HMDA, and are defined here as loans made by prime lending specialists that are insured or guaranteed by FHA, the USDA's Rural Housing Service, or the Veterans Administration. Each of these three types of lending are considered 'alternatives' to conventional prime lending in that they typically entail different pricing and terms than conventional prime mortgages, which remain the standard.

By 2000, the share of refinance lending captured by firms specializing in subprime loans was fully 25 percent, up from only 2 percent in 1993. On the home purchase side, subprime represented 6 percent of all loans, up from 1 percent in 1993. Among lower-income borrowers, subprime represented 8 percent of home purchase loans in 2000 and 36 percent of refinancings. For lower-income people living in lower-income areas, the figures are even higher, at 13 percent for home purchases and 48 percent for refinancings.

Government-insured or guaranteed lending, particularly loans insured by the FHA, were also a significant source of lending over the period - again especially for low-income households (Bunce, 2000). In 2000, HMDA data suggest that government-insured or guaranteed loans accounted for 21 percent of overall home purchase lending. For home purchase loans to lower-income borrowers and in lower-income areas, government-backed loans comprised 32 and 28 percent of the total respectively, and fully 36 percent of home purchase lending to lower-income people living in lower-income neighborhoods. Government-backed loans are a decidedly smaller share of refinancings, capturing 2 percent for both higher- and lower-income borrowers. The government-backed share is lower for refinancings because many families 'graduate' out of government-backed loans, which often, but not always, have higher rates and fees than conventional loans.

Equally significant was the growth of HMDA reported manufactured home lending. The number of loans made by firms specializing in manufactured home lending more than tripled between 1993 and 2000. By 2000, lending by manufactured home lending specialists accounted for 3 percent of overall home purchase lending and 7 percent of home purchase lending to lower-income people.²

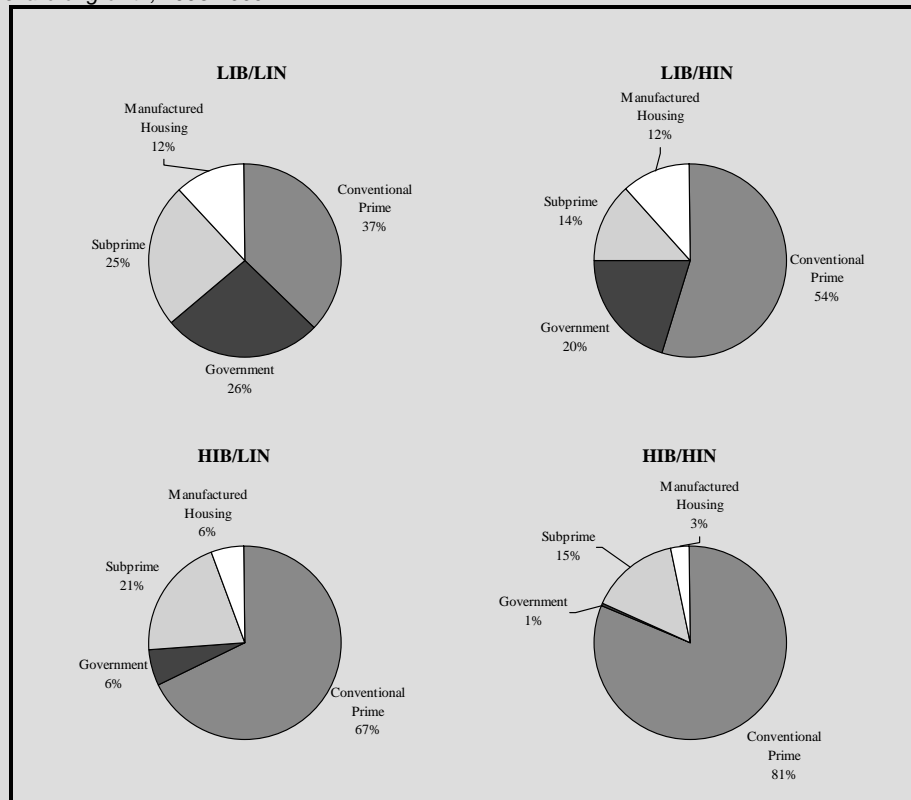
Together, the emergence of these new loan types and new affordable housing options were a major contributor to the overall growth of home lending. Over the 1993 to 2000 period, government-backed, subprime, and manufactured home lending accounted for nearly one third of the 1.3 million overall increase in the number of home purchase loans. The role of these alternative financing types was particularly pronounced in lower-income market sectors (Exhibit 6). They are most prominent in lending to lower-income borrowers in lower-income markets, where HMDA reporting suggests that little more than a third of lending is in the form of conventional prime loans. A quarter of the growth in lending to this particular segment of the market came from subprime lending specialists and another 26 percent from government-backed, and fully 12 percent from manufactured housing. These numbers are in significant contrast to higher-income area and borrower lending, where conventional prime lending accounted for 81 percent of all 1993-2000 home purchase lending growth.

² These shares were 4 percent overall and 9 percent for lower-income people in 1999 before the manufactured housing sector entered a deep recession.

These figures illustrate how over the 1990s, lenders created new mortgage products or expanded use of government-backed loans to meet the mortgage credit needs of lower-income people and communities. Yet, all three of these alternative mortgage types have their critics. The relatively low share of conventional prime loans in lower-income segments of the market raises the issue of whether borrowers typically receive credit on the most favorable terms for which they might qualify. For example, subprime loans carry higher fees and interest rates, as they must in order to compensate lenders for assuming greater risk. A recent Department of Treasury and Department of Housing and Urban Development report used private industry data to estimate that more than half of all subprime loans originated from July through September 1999 had coupon rates in excess of 10.5 percent, well above the rate for prime conventional mortgages, which ranged from 7 to 8 percent over the same period (U.S. Department of Treasury and U.S. Department of

Exhibit 6: Lower-Income Home Purchase Lending Growth was Led by Subprime, Government, and Manufactured Home Lenders

share of growth, 1993-2000



Notes: Subprime, manufactured, and conventional prime lending are defined using HUD's lender specialization list and therefore represent loans by specialists in each business line rather than actual loans of each type. Government loans are those by prime specialists that are identified in HMDA as FHA, VA, or RHS loans. LIB/HIB/LIN/HIN defined as in Exhibit 4.

Source: Joint Center Enhanced HMDA Database

Housing and Urban Development, 2000). Moreover, some fraction of subprime loans are predatory, with agents employing aggressive sales tactics or taking unfair advantage of the borrower's lack of understanding about loan terms. One contention is that mortgage brokers in search of higher fees may steer lower-income borrowers into higher cost subprime loans, even

though the borrower would have qualified for a lower cost prime loan (U.S. Department of Treasury and U.S. Department of Housing and Urban Development, 2000).

Similarly, while government-backed loans can be an important source of credit for lower-income households, they have their critics (National Training and Information Center 1997; Bradford, 2000). Some advocates argue, for example, that as a result of the reduced risk and enhanced fee structure of FHA-insured loans, lenders may arbitrarily steer lower-income home seekers to FHA, even though the borrower would qualify for a conventional prime loan with lower interest rate and fees.

Manufactured housing raises other concerns, largely stemming from the fact that almost half of all manufactured homes are placed on rented land and financed with consumer, as opposed to real estate, loans. As a result, many manufactured homes are financed at rates that are from 2 to 5 percentage points higher than those on conventional prime real estate loans (Vermeer and Louie, 1996; Collins, Carliner, and Crowe, 2001).

C. Minorities Increasingly Depend on Government and Subprime Loans

The overall expansion of mortgage lending fueled dramatic growth in homeownership among minorities. Although representing less than one-fifth of all owners, minorities received 34 percent of the increase in home purchase lending from 1993 to 2000. Despite these gains, however, access to mortgage capital for minorities is not yet on a par with whites, as suggested by large and persistent gaps in the homeownership rates of whites and minorities. In 2000, the black homeownership rate stood at 47.6 percent, the Hispanic rate at 46.3 percent, and the rate for other minorities at 53.9 percent – all considerably below the 73.8 percent homeownership rate of whites. While a significant portion of these differentials reflect differences in household income, wealth, age and family composition among the various racial and ethnic groups, these differences do not account for all of the homeownership gap, and the most recent attempt to survey existing evidence suggests that discriminatory practices persist in the marketplace (Yinger, 1998).

Exhibit 7: Conventional Prime Loans Account for a Small Share of Minorities' Home Purchase Lending Growth

share of growth, 1993-2000

	Borrower Race/ Ethnicity			
	White	Black	Hispanic	Asian/ Other
	Lower-Income Neighborhoods			
Lower-Income Borrowers	51.2	20.0	35.3	49.0
Higher-Income Borrowers	85.2	45.7	37.2	72.6
All Borrowers	71.1	28.3	36.0	63.6
	Higher-Income Neighborhoods			
Lower-Income Borrowers	69.0	29.5	41.6	64.8
Higher-Income Borrowers	96.6	49.1	52.5	84.9
All Borrowers	87.0	39.0	47.7	80.7
	All Neighborhoods			
Lower-Income Borrowers	65.7	19.7	39.5	61.3
Higher-Income Borrowers	94.9	48.4	49.5	83.6
All Borrowers	84.5	32.3	44.6	78.4

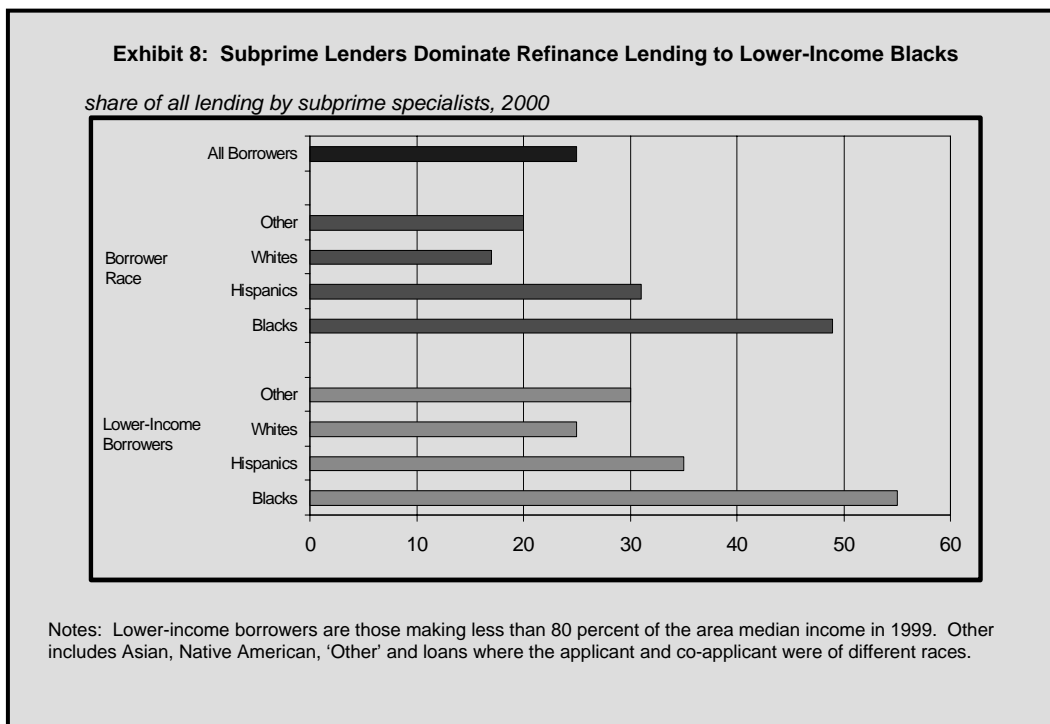
Source: Joint Center Enhanced HMDA Database

Exhibit 7 leaves little doubt that lending to whites and minorities displays fundamentally different patterns. Though it may be entirely the result of the differential risks borrowers of each group present to lenders, the disparity across race and ethnicity is substantial. Prime conventional lending (*i.e.* loans made at the most favorable rates and on the most favorable terms) accounted for fully 85 percent of growth in home purchase lending to whites in the period 1993 to 2000. In contrast, prime conventional lending accounted for 32 and 45 percent of home purchase loan growth for black and Hispanic households respectively.

Exhibit 7 also shows that differentials in the composition of home purchase loan growth persist after controlling for the income of the household applying for a loan and the location of the property. For example, HMDA data indicate that between 1993 and 2000 conventional prime lending accounted for 97 percent of total home purchase loan growth for higher-income white borrowers living in higher-income neighborhoods. In contrast, conventional prime loans accounted for 49 and 53 percent of loan growth for similarly situated black and Hispanic borrowers. Indeed, the prime conventional lending share of loan growth for Hispanics and blacks with higher-incomes living in higher-income areas, more closely approximates the 51 percent share recorded for lower-income whites in lower-income neighborhoods.

Not surprisingly given the dearth of conventional prime lending to minorities, government-backed lending accounted for a disproportionate share of growth in lending to blacks and Hispanics. Over the 1990s, government loans accounted for 37 and 46 percent of growth for lower-income black and Hispanic borrowers in lower-income areas. Meanwhile, only 9 percent of growth in lending to comparably situated whites was government-backed.

The contribution of subprime lending specialists to lending growth by race/ethnicity presents a less distinct picture, as these lenders captured increasing shares of lower-income lending regardless of race/ethnicity. The only notable difference is in lending to *higher-income* blacks, where subprime loans accounted for 29 percent of home purchase lending growth 1993-2000, against 18 percent for higher-income whites and Hispanics.



Differences by race are more apparent in the refinance market, where subprime loans are especially common among lower-income blacks (Exhibit 8). Moreover, 36 percent of higher-income minority-borrowers refinanced their mortgage with a subprime lending specialist against only 14 percent of higher-income white borrowers. In fact, only 25 percent of lower-income white owners that refinanced their mortgage in 2000 did so with a subprime lending specialist.

Differences in the shares of loans or composition of lending growth by race and income reported in HMDA cannot be taken as proof of discriminatory practices in mortgage markets. At minimum, the results here do not control for most of the characteristics that lenders use to determine for which mortgage products particular applicants qualify. Discrepancies such as these, however, do fuel advocates' claims that the rise of alternative mortgage products has resulted in a new, and subtler, form of differentiation based on race and ethnicity in mortgage markets.

D. Limited Scope of Available Data Hinders Assessment of Mortgage Trends

This report relies primarily on HMDA data to illustrate mortgage lending trends. HMDA data have been collected since 1977, but because they were not reported at the loan-level by both depository and non-depository lenders until 1993, the discussion focuses on the 1993-2000 period. Even over this period, however, HMDA data have a number of limitations that bear directly on the actual numbers reported, if not the broad conclusions of the report. This section discusses these limitations in detail.

The first and perhaps most critical issue is the fact that HMDA's coverage of the mortgage market changed over the 1993-2000 period. One source of this differential coverage is the fact that non-depository lenders were first required to report in 1993 but some subset either did not do so, or did so haphazardly for several years. Over time HMDA reporting improved as lenders modified their information technology systems to deal with the reporting requirements. Overall reporting also improved when non-depositories were acquired by depository institutions that reported more completely. The share of loans HMDA reported may also have changed over time as small non-reporters merged into institutions with reporting requirements. Consequently, HMDA data are likely to overstate somewhat actual loan growth for the 1993 to 2000 period.

Exhibit 9 illustrates the HMDA coverage differentials for several types of home purchase lending for the period 1993 to 1996. For lending, there is a steady increase in coverage over the period, though the total change is relatively small. For purchases by Government Sponsored Enterprises (GSEs), improved reporting appears to have stabilized as early as 1994, with that year's reporting only slightly lower than the share two years later. The fact that 1995 was significantly higher is, however, suggestive of a general fluctuation in annual coverage of purchases.

Exhibit 9: Small but Steady Increase in HMDA Coverage

percent of loans covered

Year	FHA	GSE
1993	87.8	75.3
1994	88.0	80.4
1995	89.5	85.7
1996	93.3	81.6

Source: HMDA, GSE, and FHA data (reprinted from Scheessele, 1998)

A potentially more serious issue for the present use of HMDA data is the fact that the change in reporting requirements may differ by lender type, and that this differential may be carried through to borrower types based on the specialization of each type of lender. For example, if non-depositories were less assiduous reporters initially, non-reporting may overstate growth of lending more at the lower-income end of the market where non-depository bankers are most active. Therefore, some of the growth in lending to lower-income households relative to that for higher-income households could simply reflect differential reporting.

Finally, regulations governing collection of HMDA data have not kept pace with the changing structure of the industry or the characteristics of new mortgage products. These limitations have taken on new significance as a result of the growth of subprime, manufactured housing, and government-backed lending, and the corresponding trend toward the increasing segmentation of the mortgage market by income, race and ethnicity. In particular, HMDA does not collect even the most basic information on loan pricing and loan characteristics needed to assess the implications of the rapid growth of alternative mortgage products. HMDA data limitations are particularly significant in light of the fact that many firms who specialize in providing these alternative products (subprime lending specialists or consumer finance companies) are not CRA-regulated financial institutions, and hence are not subject to detailed lending reviews under CRA examinations. While care must be exercised to ensure that expanded HMDA data collection does not impinge on the privacy rights of borrowers or lenders, expansion of data collection to cover all segments of the mortgage market is needed to more clearly understand the full implications of the explosion of lower-income and minority lending that has occurred over the past decade.

Counterbalancing these limitations is the fact that HMDA is a large and fairly rich source of data at the level of the individual loan application. No other data source affords the opportunity to analyze lending patterns and trends by borrower income, race/ethnicity or gender. Further, HMDA loans are geo-coded to the census tract level, allowing a rich exploration of the impact of CRA on lending in lower-income, minority, or other historically underserved market areas.

Recognizing the limitations of current HMDA requirements, in January 2002 the Federal Reserve Board of Governors issued a Rule to expand the number of non-depository institutions subject to HMDA reporting requirements and to disclose pricing data on higher costs loans and to identify loans on manufactured homes. In particular, the new rule extends HMDA coverage by requiring all non-depository institutions with more than \$25 million in mortgage loans to report. Currently, non-depository lenders report for HMDA only if their residential lending (including home purchase and refinance loans) during the previous year equaled or exceeded ten percent of total loan originations. In addition, the new rule requires lenders to identify whether the loan is 'high cost' as defined by the Home Ownership and Equity Protection Act and to report the spread between the annual percentage rate (APR) and the yield on the comparable Treasury security when this spread exceeds 3 percent for first-lien loans and exceeds 5 percentage points for subordinate-lien loans. Finally, the new regulation requires lenders to report whether the loan involves a manufactured home.

Since these enhancements to HMDA data will not begin until 2003, it will be several years before researchers can assess their implications. As a result, using currently available HMDA data, it is important to focus on those trends that can be corroborated by other data sources. The strengths and limitations of currently available data also suggest that it is important to disaggregate the results by lender and borrower characteristics in an effort to control for reporting differentials across the various mortgage industry segments. And finally, they suggest the importance of focusing on the activities of larger lenders that have the best capacity to maintain accurate reporting systems. By proceeding cautiously, HMDA data can support a rich, and ultimately very insightful, empirical assessment of the trends in mortgage lending.

THE CHANGING INDUSTRY STRUCTURE

The 1990s witnessed dramatic changes in both the operation of mortgage lenders and the overall structure of the mortgage industry. Among the most important changes have been the explosion of new lending products, the ascendancy of large lending organizations, the expanding share of

loans originated through mortgage brokers and mortgage banking operations, the migration of some bank and thrift mortgage lending to separately incorporated affiliates and the growth of secondary mortgage markets with its attendant reduction in the share of lending funded by bank deposits. This section summarizes these significant trends and assesses their implications for the evolution of mortgage markets.

A. The Growing Importance of Securitization and the Rise of Mortgage Banking

Historically, deposit-taking institutions (thrifts and commercial banks) dominated mortgage originations. As recently as 1980, nearly half of all one-to-four family home mortgages were originated by thrift institutions. An additional 22 percent were originated by commercial banks (U.S. Department of Housing and Urban Development, 1997). That same year, mortgage companies and other lenders accounted for the remaining 29 percent of all one-to-four family mortgage loans. That distribution reflected the fact that deposits, and hence deposit-taking institutions (particularly thrifts), were the main source of funds for mortgage debt. Depository lenders held the loans they originated in portfolio because underwriting standards and mortgage documents varied considerably and third party investors were reluctant to purchase mortgages that lacked adequate credit enhancements and standard features.

Over the subsequent two decades this system changed dramatically. While banks and thrifts continue to originate loans and hold some of them in portfolio, mortgage brokers and retail mortgage bankers now originate a majority of mortgage loans. In 1997 (the last year that the Department of Housing and Urban Development conducted its Survey of Mortgage Lending Activity), mortgage companies were the dominant (56 percent) originator of one-to-four family mortgage loans. Their rise came at the expense of thrifts, which captured only 18 percent of loans in 1997, while commercial banks were up slightly, to a 25 percent share of all originations. Further marking the change in industry structure, much of banks' and thrifts' 43 percent share of originations flowed through their mortgage banking subsidiaries.

The rise to dominance of non-depository lenders has been facilitated by the rise of secondary market institutions. The ability to package and sell loans in the secondary market reduces the need to hold deposits (or other sources of cash) to fund mortgage loans because investors in the mortgage-backed securities that the GSEs and private conduits issue replace deposits as the source of funds for these loans. By mandating the standardization of loan contracts, Fannie Mae and Freddie Mac have played a role in streamlining and rationalizing the mortgage market.

Recognizing the importance of promoting access to affordable housing and homeownership, in 1992 Congress established three affordable housing goals to encourage the GSEs to expand lending for lower-income families, particularly those living in historically underserved neighborhoods. Interim goals established by the legislation were replaced with somewhat higher goals in 1995, and again in 2000. One objective of these goals was to encourage Fannie Mae and Freddie Mac to lead the market by introducing new affordable lending programs that better serve the mortgage lending needs of lower-income families and others who have found it difficult to access credit in the conventional mortgage market (U.S. Department of Housing and Urban Development, 2000).

The GSE goals helped support the substantial growth in lending to lower-income people and lower-income neighborhoods by expanding their purchases in these areas, and by developing new approaches to promoting affordable homeownership. Since 1993, the mortgage industry in general, and Fannie Mae and Freddie Mac in particular, have introduced new affordable lending programs and allowed greater flexibility in underwriting lower-income loans. A recent

Department of Housing and Urban Development study, however, suggests that the GSEs continue to trail other market players in affordable lending. For example, the study estimated that in 1999, together Fannie Mae and Freddie Mac purchased 41 percent of all home purchase loans in metropolitan areas, but purchased only 29 percent of all loans to low-income borrowers and only 20-22 percent of loans to African-American and Hispanic borrowers in MSAs (Bunce, 2000).

In addition to Ginnie Mae, an organization created to securitize the government-insured portions of the market, private market entities are also now active in the securitization business. While the largest share of conventional conforming loans (those made at standard terms for amounts below the federally-determined ceiling for GSE purchases) are typically sold to Fannie Mae and Freddie Mac, non-conforming mortgages (or 'jumbos') are also commonly pooled and sold as private-label securities, mostly by Wall Street investment banks. Individual loans underlying both GSE and private-label issues that are made at high loan-to-value ratios carry private mortgage insurance, but issuers of jumbo packages tend to provide additional credit enhancements beyond those of the conventional conforming GSE issues.

Securitization as discussed above has largely affected the market for prime mortgages – those made at the most favorable rates and terms to borrowers that present lenders and investors with small and manageable credit and collateral risks. Prior to the 1990s, subprime mortgages were chiefly extended by large finance companies, which financed them with secured and unsecured debt. Recently, however, securitization has also been aggressively extended into the subprime sector. Indeed, a recent joint report by the U.S. Department of Housing and Urban Development and the U.S. Department of Treasury noted that the securitization of subprime loans increased from \$11 billion in 1994 to \$83 billion in 1998, before easing back to \$60 billion in 1999 (U.S. Department of Treasury and U.S. Department of Housing and Urban Development, 2000). Issuers of subprime mortgage-backed securities have tended to be private firms, because, until recently, Fannie Mae and Freddie Mac purchased only prime loans.

B. The Rise of Large Banking Organizations

Paralleling the rise of mortgage brokers and the securitization of mortgage loans has been the rise of large banking organizations and their affiliated mortgage lending organizations. A study by the Federal Reserve Board noted that from 1975 to 1997, the number of banking institutions dropped by 40 percent, as a result of industry consolidation and a substantial number of bank failures (Avery, Bostic, Calem and Canner, 1999). Following the shake out in the late 1980s and early 1990s, the number of liquidations slowed, but stimulated by the globalization of financial services, and efforts to increase efficiency, reduce costs, or gain competitive advantages, the number of mergers and acquisitions continued to mount.

Regulatory changes also supported the consolidation of the financial services industry as the 1980s saw most state-level restrictions on intrastate banking removed or relaxed. At the federal level, interstate branching became a reality in the 1990s. This opened up opportunities for commercial banks to expand beyond boundaries that had been in place since the Depression, and enabled larger organizations to further enhance the scale and scope of their operations through merger and acquisition. Federal Reserve Board data indicate the scale of consolidation in the mid 1990s. From 1993 to 1997 alone, the number of banking institutions acquired in a merger or acquisition totaled 2,829, or 21 percent of the total. Over the same period, 431 new institutions were formed.

To understand the ongoing concentration in mortgage lending it is necessary to understand trends both within the mortgage sector and in the broader financial services industry (Avery, Bostic,

Calem, and Canner, 1997). Among the various financial services provided by banks and related businesses, consumer and mortgage lending require extensive marketing, customer support, account management and servicing operations. Large-scale operations are able to spread the high fixed costs associated with these tasks across a larger customer base. In addition to these classic 'scale economies,' larger organizations benefit from 'scope economies' that enable them to use data and information gathered from a large customer base to develop and cross-sell specialized, and potentially more profitable, consumer products to mortgage customers. Similarly, the organizations can reduce the average costs of mortgage originations by capturing the mortgage activity of their other customers.

Finally, major technological changes also spurred major changes in the structure of the mortgage industry. Since increasingly loan origination systems operated via telephone, fax, and now the Internet, the link between the location of the borrower and the location of the lender today is less important than even a decade ago. As a result, many banks have abandoned operating some or all of their residential mortgage lending operations out of 'sticks and bricks' branches, but instead have created or acquired large mortgage banking subsidiaries that utilize technology to operate from centralized locations that serve entire metropolitan areas or larger regions. Moreover, electronic loan processing and underwriting, including the growing use of automated credit scoring and automated appraisal and underwriting tools, reduced the costs of loan origination and loan servicing, and allowed lenders to reduce costs by better managing risk.

For the most part, the new technology requires high fixed investment by firms, but once installed operates at extremely low marginal costs. As a result, increased technological sophistication in mortgage lending tends to favor larger lending organizations and has helped to foster

Exhibit 10: Mortgage Industry Consolidation Has Been Dramatic

Loans Per Year	Lenders	Loans	Share	Lenders	Loans	Share
	1993			2000		
More than 50,000	4	260,771	10.8%	12	1,444,121	39.0%
25,000 to 49,999	10	302,312	12.5%	13	470,955	12.7%
10,000 to 24,999	32	462,073	19.1%	27	414,508	11.2%
5,000 to 9,999	37	267,428	11.1%	41	287,787	7.8%
1,000 to 4,999	258	545,907	22.6%	249	541,066	14.6%
500 to 999	260	187,584	7.8%	259	179,401	4.9%
250 to 499	415	147,336	6.1%	363	125,962	3.4%
100 to 249	812	130,462	5.4%	746	119,448	3.2%
Less than 100	4,338	110,636	4.6%	4,327	116,283	3.1%
Total	6,166	2,414,509	100%	6,037	3,699,531	100%

Note: Share is percent distribution of home purchase loans.

consolidation in the mortgage business. At the same time, these trends have also supported the growth of mortgage brokers, who working on a fee-for-service basis, handle the front end of the mortgage application process, a function that often still requires a presence in a local market area, and some face-to-face communication with a loan applicant. Here, scale economies are decidedly less significant, and relatively small organizations continue to thrive as mortgage brokers.

In combination, these changes have promoted dramatic consolidation among mortgage lenders. In 2000, for example, only 12 lending organizations made more than 50,000 home purchase loans, but these 12 accounted for 39 percent of all home purchase loans made that year (Exhibit 10). Seven years earlier, in 1993, only 4 organizations topped 50,000 loans, and they accounted for only 11 percent of all home purchase lending. The number of lenders making between 25,000 and 50,000 loans per year also increased, though their share of the market was flat. Together, the top 25 home purchase lenders originated fully 52 percent of all home purchase loans in 2000. This group accounted for all but 102,000 of the nearly 1.3 million more home purchase loans originated in 2000 than in 1993.

Exhibit 10 also reveals, however, that there remain thousands of organizations that made fewer than 25,000 loans, including over 4,300 organizations that originated fewer than 100 loans in 1993 and 2000. Lenders in the 10,000-25,000 loan category saw an absolute decline in the number of loans, and saw their share of home purchase originations drop from 19 to 11 percent. The next group of lenders' (making 5000-9,999 loans) share also declined, from 11 to 8 percent, even as they originated 20,000 more loans than seven years earlier. Lenders making between 100 and 5,000 loans saw both their share of home purchase originations and number of loans decline over the period. Interestingly, however, the number of loans originated by the smallest lenders, those making fewer than 100 loans, actually rose, though these lenders accounted for a smaller share of all originations.

Exhibit 11 divides the lending organizations into two categories: banking organizations (*i.e.* commercial banks and savings associations with their mortgage and finance company affiliates) and other organizations (independent mortgage and finance companies and credit unions). The exhibit indicates that banking organizations led the growth of large organizations. By 2000, home purchase lending for the ten largest banking organizations totaled over 1.1 million loans, and the top 20 combined for a total of 1.5 million loans. Between 1993 and 2000, the largest banking organizations were responsible for 85 percent of the increase in home purchase originations by large (more than 50,000 loans) lenders, and 78 percent of the total increase.

Exhibit 11: Large Banking Organizations Led Mortgage Lending Growth

Number of Loans	Banking Organization				Non-CRA-Regulated Organizations			
	Lenders		Loans		Lenders		Loans	
	1993	2000	1993	2000	1993	2000	1993	2000
More than 50,000	2	10	155,085	1,161,815	2	2	105,686	282,306
25,000 to 49,999	5	10	149,018	341,556	5	3	153,294	129,399
10,000 to 24,999	21	18	301,236	286,624	11	9	160,837	127,884
5,000 to 9,999	26	21	189,288	146,278	11	20	78,140	141,509
1,000 to 4,999	141	109	302,513	240,739	117	140	243,394	300,327
500 to 999	138	134	97,277	92,231	122	125	90,307	87,170
250 to 499	254	194	88,734	67,856	161	169	58,602	58,106
100 to 249	619	456	99,128	71,437	193	290	31,334	48,011
Less than 100	3,175	2,844	86,561	82,183	1,163	1,483	24,075	34,100
Total	4,381	3,796	1,468,840	2,490,719	1,785	2,241	945,669	1,208,812

Note: Banking organizations include all commercial banks, savings associations, and their mortgage and finance company affiliates. Non CRA-regulated organizations include mortgage companies and credit unions.

The emergence of large bank lending operations reflects, in large measure, forces that prompted dramatic consolidation of retail banking operations within and across individual metropolitan market areas. Within-market consolidations reflect the increasing economies of scale in retail banking, and the trend for larger, more efficient banking operations to acquire smaller banks or otherwise increase their presence in a particular market. Growth of regional and even national banking operations also reflected the efforts of larger banks to capitalize on potential scale economies and name recognition, as well as reducing risk by diversifying geographically across numerous spatially distinct markets (Avery, Bostic, Calem and Canner, 1999).

At the same time, several large independent mortgage and finance companies competed head-to-head against banking organizations in mortgage markets across the country. These included the two largest, Countrywide Home Loans and Cendant Mortgage, that each made more than 50,000 home purchase loans in 2000. But many other independent mortgage banking operations either failed to grow over the period, or merged with or were acquired by a large banking operation. This latter category includes such large operators as North American Mortgage that was acquired by Dime Savings Bank, and Norwest Mortgage that merged with Wells Fargo and Company.

At the other end of the spectrum, the data confirm that the number of banking organizations originating less than 100 loans shrank by 10 percent between 1993 and 2000. This category of lender also made slightly fewer loans in 2000 than in 1993. In contrast, smaller independent mortgage companies and credit unions were on the rise. For example, over the period, the number of independent mortgage companies and credit unions making less than 100 home purchase loans rose 28 percent (from 1,163 to 1,483) and the number of home loans originated by these organizations rose 42 percent.

Consolidation among home refinance lenders was also strong as the impact of technological advances and related developments that have reduced the costs of home purchase lending had an equally strong impact on the costs of providing a refinance loan. For example, lending institutions making more than 10,000 refinance loans in 2000 accounted for 57 percent of all home refinance loans, compared with only 51 percent in 1993, with much of the growth again concentrated among large banking institutions.

It remains an open question whether the dominance of larger organizations helps or hinders the provision of affordable home loans. Many housing advocates argue that smaller, locally-based institutions have an enhanced capacity to better understand and to address the credit needs of the people and businesses they serve (Immergluck and Smith, 2001). Others argue that the efficiencies associated with large-scale operations, as well as the ability of larger organizations to offer a wider and more diverse product mix and to access low-cost funds on the world capital market, are advantages that more than neutralize these disadvantages. In any case, there seems to be little doubt that the trends of consolidation of the mortgage industry and the declining importance of deposits as a source of mortgage capital have yet to run their course.

Continued technological change should serve to further enhance the competitive advantage of larger players. New automated systems require substantial initial investments and smaller companies unable to afford such investments are finding it increasingly difficult to remain competitive in the mortgage lending arena. At the same time, since these technologies operate at low marginal or incremental costs, they foster fierce competition among those firms continuing to operate in the market. Going forward, the result will likely be both continued consolidation of mortgage lending activities, a growing reliance on mortgage brokers to take loan applications, as well as continued evolution of better products, services and pricing, as large firms seek to identify

and exploit competitive advantage in their pursuit of customers in an increasingly competitive marketplace.

C. The Effect of Changing Industry Structure on Small Business and Multi-Family Lending

The changing structure of the banking industry is also having a noticeable impact on multi-family lending, and is just now beginning to influence small business lending as well. As was true in the single-family mortgage market, the past two decades have seen shifts in the financing of multi-family apartments. Until the mid-1980s, local thrifts and savings banks were the largest providers of multi-family mortgages, followed by insurance companies and commercial banks. Since that time, secondary market entities, including the GSEs, have played an increasingly prominent role, as the standardization of multi-family underwriting criteria and the application of new pricing and risk management technologies have helped the multi-family sector access funding from the broader capital markets. Today, nearly as large a share of multi-family mortgages (58 percent) as single-family mortgages (61 percent) are securitized (U.S. Department of Housing and Urban Development, 2000).

In contrast to the declining role of thrifts, the market share of commercial banks has risen in the 1990s, accounting for 30 percent of the net overall growth of mortgage debt for multi-family apartment buildings in the second half of the decade (Schnare, 2001). Smaller banks and thrifts still participate in multi-family mortgage lending, but increasingly their role is confined to specific market niches, such as 5 to 50 unit apartment buildings. The relatively high costs of underwriting mortgages on small multi-family properties has to some extent kept larger institutions out of this niche but improving data quality and availability on project characteristics and loan performance is enabling larger institutions to enter these markets as well (Herbert, 2000).

Smaller banking institutions continue to be relatively more active in small business lending than larger institutions. In 1996, banks with less than \$100 million in assets made loans worth 9 percent of their assets to small business, while banks with over \$5 billion in assets lent only 3.4 percent of their assets to these businesses (Strahan and Weston, 1998, as reported in Immergluck and Smith, 2001). Safety and soundness regulations limiting the share of total assets that a bank can commit to a single borrower keep smaller banks focused on the small business market. In addition, a small bank may lack the capacity to meet the diverse needs of larger business customers. Yet by capitalizing on their local market knowledge and by working to cultivate relationships with small business owners, small business lending continues as an important niche market for smaller banks, even as larger banks are coming to dominate residential mortgage lending.

SUMMARY

Growth of lower-income and minority mortgage lending is one of the most notable banking stories of the past decade. Decoupling of the mortgage banking and deposit-taking activities of financial services organizations, combined with technologically-driven reductions in the cost of originating mortgage loans, have helped to support the rise of large mortgage banking operations. Enhanced capacity to evaluate risk has expanded the diversity of available loan products and fostered the growth of subprime lending operations. Each of these forces has worked to expand lending to lower-income and minority households. Yet, the dramatic restructuring of the mortgage industry presents new challenges, as well as opportunities, for lower-income and

minority lending in the future. This concern stems, for example, from observations such as the apparent decline in the importance of prime conventional lending in meeting the credit needs of traditionally underserved groups that were highlighted earlier. These concerns are heightened by the fact that the information necessary to accurately assess the extent to which non-standard lending products serve the interests of lower-income and minority borrowers is not currently available.