Joint Center for Housing Studies

WORKING PAPER SERIES

Credit Matters: Low-Income Asset Building Challenges in a Dual Financial Service System

Eric Belsky and Allegra Calder

BABC 04-1

February 2004

Graduate School of Design

John F. Kennedy School of Government

HARVARD UNIVERSITY

Joint Center for Housing Studies

Harvard University

Credit Matters: Low-Income Asset Building Challenges in a Dual Financial Service System

Eric Belsky and Allegra Calder

BABC 04-1

February 2004

This paper was produced for *Building Assets, Building Credit: A Symposium on Improving Financial Services in Low-Income Communities*, held at Harvard University on November 18-19, 2003.

Eric Belsky is the Executive Director of the Joint Center for Housing Studies. Allegra Calder is a research analyst at the Joint Center for Housing Studies

Introduction

The importance of assets to well-being and economic security compels an interest by policy makers in low-income asset building (Sherraden 1991, Oliver and Shapiro 1995, Shapiro and Wolff 2001, Retsinas and Belsky 2002a). By one measure of asset poverty, as many as 41 percent of households in 1999 had inadequate savings or other liquid assets to cover three months of expenses at the poverty level (Caner and Wolff 2001).[1] Even if households were to liquidate all their assets and use them to repay all their debts, one-quarter of them still would not have enough to cover three months of basic living expenses. Among those with the lowest incomes, asset poverty is more severe. Fully one-third of all homeowners and two-thirds of all renters in the bottom income quintile, for example, had $500 or less in savings and other liquid assets in 2001 (Chart 1).

Not all assets have equal appeal or priority as targets for policy. Of greatest interest are those with the potential to appreciate in value, such as real estate, or to enhance the income earning capacity of their owners, such as vehicles (under the assumption that they expand the range of locations over which employment can be found) or equity in a business. Among assets with the potential for appreciation, homes, transaction accounts and retirement accounts are the ones that are the most commonly held by low-income households (Chart 2).

Homeownership and savings are especially important to asset building. Savings provide economic security, help households avoid the steep costs of short-term credit, and are stepping stones to investments in other assets. Homes are the most commonly held asset with significant potential for large returns on small amounts of invested capital. Since homeownership is a highly leveraged investment, relatively small amounts of invested capital can earn large gains even if appreciation in the value of the underlying asset is only a few percentage points. Homeownership provides opportunities to later borrow against equity at lower tax-advantaged and secured lending rates. Furthermore, unlike other assets, housing can produce additional intangible

[1]Caner and Wolff (2001) defined a household (made up of two adults and two children) as asset poor if the net worth of the current value of their marketable assets less the current value of their debts was less than $4,151. By this measure, 25.9 percent of families in 1999 were asset poor. Excluding home equity, the share rose to 40.1 percent. The threshold for the reference family was set at $15,998 in 1997 dollars using the Consumer Expenditure Survey and then adjusted for inflation using CPI-U. Calculations of assets and debts were done using the Panel Survey of Income Dynamics.

benefits, such as access to jobs, better schools, and stronger social capital networks.[2] And, relative to renting, homeownership results in enforced savings through loan amortization.

Asset building and credit are closely linked. Few households, especially those with low incomes, can acquire costly assets without credit. But even assets that do not normally require credit to acquire may nevertheless be influenced by past credit behaviors. Access to transaction accounts, for example, may be governed by past credit behavior because banks consider past history when evaluating new account applications (Barr 2001).[3] In addition, the share of income that households devote to paying back short-term credit has a direct bearing on how much they have left over to save and invest.

The importance of credit to the asset building process in turns elevates the importance of the process by which credit risk is assessed and priced. This process determines the allocation and cost of credit. Because of the potential for housing to appreciate in value and the link between residential investment and the health of neighborhoods, mortgage credit has been subject to the longest standing and most thorough disclosure requirements of all credit flows into low-income communities, dating back to the Home Mortgage Disclosure Act of 1975.

This paper examines the nexus between the utilization of basic financial services, ownership of a transaction account, the creation and use of credit records, homeownership, and management of mortgage repayment risks. It begins with a model that captures this nexus and is followed by a section that elaborates on low-income homeownership as an asset building strategy. Broad patterns of asset ownership and credit use are then discussed. These patterns reveal that a large share of low-income households have no formal relationship with a banking institution (bank, thrift or credit union) and that a dual system of credit provision exists in which low-income communities are far more likely than higher income communities to be served by

[2] Assets are generally classified as tangible or intangible. Tangible assets are financial and durable goods such as savings, stocks, bonds, mutual funds, homes, and vehicles. Intangible assets increase access to life chances and contribute to the ability to earn income and thus acquire tangible assets. Education, work experience, and social networks are examples of such assets. Beeferman (2002: 4) provides an expansive definition of assets that holds that they "are what people need to make choices about their lives; what they need to succeed in the choices that they make." Similarly, Oliver and Shapiro (1995:2) emphasize the importance of wealth in providing opportunity: "More often it [wealth] is used to create opportunities, secure a desired stature and standard of living, or pass class status along to one's children. In this sense the command over resources that wealth entails is more encompassing than is income or education, and closer in meaning and theoretical significance to our traditional notions of economic well-being and access to life chances."

[3] The ChexSystem database contains information on individuals who have had accounts closed due to fraud or other problems. Most banks consult ChexSystem to screen account applicants. Unfortunately, there are few details on the reason for the closing and banks generally treat an entry in the system as reason enough to deny an account.

alternative (payday lender, check cashers, pawnshops, rent-to-own stores, and subprime lending specialists and brokers) than mainstream (banking institutions and prime lending specialists) financial service providers. These disparities are even greater among low-income minority households and communities. A review of the literature on what accounts for observed differences in asset ownership and financial service utilization by income, race and ethnicity of borrowers and communities follows. Next, the evolution of the credit risk evaluation and pricing system for consumer and mortgage credit is examined. The paper concludes with a discussion of interventions to reduce the number of unbanked and increase savings rates, improve the allocation and pricing of credit, improve consumer awareness, and expand the risk mitigation tools available to low-income households.

A Model of Influences on Mortgage Credit Terms

Homeownership has long been the cornerstone of wealth among low-income households and in low-income communities. Lacking savings to purchase homes outright, most low-income households borrow money to buy homes. Until the mid 1990s, the creditworthiness of mortgage loan applicants was typically assessed by a manual review of credit records supplied by one or more of the centralized credit repositories. These repositories assembled information, supplied mostly by creditors, on past repayment behavior. The only applicants to receive mortgages were those with no or only modest past repayment problems. Today, the creditworthiness of loan applicants is assessed by statistically modeling credit records and correlating the resulting credit scores with the likelihood and cost of repayment risk. Credit impaired borrowers may still be rejected for lower cost "prime" lending products but may now qualify for higher cost "subprime" products.

Mortgage credit access and pricing therefore depend on the quality of the systems collecting and modeling credit information. And the credit terms a borrower ends up with are now strongly influenced by the marketing strategies and presence of both subprime and prime lenders in their area. In addition to these supply side influences, credit access and pricing also hinge on the ability of low-income households to manage their finances and save in light of their low incomes. Finally, faced with expenses that often equal or exceed their incomes, the capacity of low-income borrowers to repay loans depends to some degree on the availability and cost of

products that help mitigate repayment risk, including incentives to save, financial education, and insurance products.

Chart 3 illustrates the interrelationships among incomes, assets, credit, and basic financial services. Volatility and level of household income (top left) are important drivers of the ability to purchase a home, as well as of the credit terms for home purchase, refinance, and home equity loans (bottom). The pathways through which income influences these outcomes are complex. Refracted through savings incentives, incomes influence savings and other wealth because they shape how much money remains (if any) to save or invest after basic expenses are met.[4]

Credit Use and Demand

Income and savings together shape demand for short and long-term credit. Low-income households with low savings and/or volatile incomes are more likely to need short-term credit to cover monthly expenses or to spread out payments for smaller consumer durable items. Savings are the primary source of funds for downpayment and closing costs and therefore influence whether a household purchases a home and on what terms. Financial literacy also has an affect on these choices and levels.[5]

Credit Information Capture

Types and levels of past credit use also determine what information, if any, has been reported to credit repositories. Some potential reporters have disincentives to report credit payment information if they are trying to conceal customers with good repayment records from competitors or hide information that their competitor's could use to better assess or price risks. Some financial institutions are less likely to report for historical reasons. Different lenders may also report different levels of detail, report more or less accurately, or report more or less frequently. What is or is not captured, however, determines what constitutes the past payment histories that are used to develop statistical measures of repayment risk based upon borrowers observed past behavior.

[4] Though not shown, additional influences on savings and wealth are intergenerational wealth transfers and the cost of outstanding credit.

[5] Whether financial literacy is related to income remains an open question. Studies of bankruptcy suggest that literacy is highly correlated with low incomes, but many who find themselves in bankruptcy may previously have had higher incomes and high levels of educational achievement.

Ability to Repay Credit

Payment histories are directly influenced by an individual's ability to repay credit. Capacity to repay credit is determined by the amount and volatility of income and savings because these determine the ability to withstand income and budget shocks. Shocks include reduction in work hours, job losses, divorces, health problems, and uninsured medical expenditures. Capacity to repay is also influenced by the type of financial institution that supplies the credit and the credit terms. Borrowers that use lenders willing to accept high debt-to-income ratios, for example, will have less room to meet their obligations if their income decreases. Borrowers that use lenders with aggressive servicers that do not attempt to mitigate loan losses are more apt to have impaired credit histories than those that borrow from lenders who employ loan loss mitigation tools. Finally, capacity to repay is refracted through whether borrowers have some form of repayment risk mitigation product, such as debt cancellation or health insurance.

Credit Pricing and Access

Payment histories, especially those that are electronically captured, are the key input to credit score development and quality. Credit scores are then used alone or as part of mortgage scoring models to underwrite applications and price loans. In cases where low-income individuals apply to lenders that do not offer prime loans, lender choice plays a significant role in determining the price and other terms of the subprime credit. Therefore, the financial sophistication of loan applicants and the marketing and outreach tactics of subprime lenders and their agents also influence loan pricing and terms.

Capital Costs and Wealth Building

The importance of loan pricing to wealth building is easily illustrated. A simple simulation assuming a $90,000 home financed with a 30-year fixed rate mortgage which is held to maturity reveals just how costly higher interest rates can be (Chart 4). Failure to refinance when lower interest rates make it advantageous further reduces wealth building. Home equity borrowing, through cash-out refinances or second mortgage loans or lines of credit, also affects accumulation of home equity. Refinance borrowers who have home equity stripped away by predatory lenders can see the value of their home eroded or erased.

Counter-Party Risks

Counter-party risk abounds in this system. Agency risk—the risk that parties will intentionally pursue their own self interest in a manner that conflicts with the interests of another party—enters the system at a number of points. Lenders may intentionally mislead borrowers about loan terms or neglect to inform them that they could receive lower cost credit elsewhere. In the worst case, predatory lenders may use these and other tactics to strip home equity from borrowers. Debtors, for their part, may intentionally withhold or falsify information about themselves to creditors. Brokers may act in ways that conflict with both debtor and creditor interests. And, as noted, purveyors of payment history information may intentionally misrepresent or fail to report information that might benefit their competitors. Many of these agency risks can land a borrower in a risk-based pricing bin that is more expensive than the bin they actually qualify for. This creates market inefficiencies and raises concerns about the equity of the current system.

This simplified model does not cover all the influences that follow from income and savings to asset building through homeownership. These include other influences on the choice of mortgage products, incentives of financial service providers to supply accurate information, and a complex web of regulations and laws intended to ensure fair and equal access to credit. However, it does highlight some of the most important features.

Homeownership as an Asset Building Strategy

Investing in housing involves higher transaction costs, maintenance costs, and capital costs than investing in financial assets; however, the potential payoffs to homeownership are great. A major conference held in 2001 examined the merits of low-income homeownership as a tool for asset building (Retsinas and Belsky 2002a). The conference underscored the considerable risks involved with homeownership and noted that a significant fraction of low-income homeowners would have been better off renting and investing in some other financial asset instead (Belsky and Duda 2002; Goetzmann and Spiegel 2002; Case and Marynchenko 2002). But the conference also catalogued the range of reasons that low income households can benefit from investing scarce savings in homes (Retsinas and Belsky 2002b). Homeownership promotes savings through paying down principal, allows homeowners to tap into home equity to finance other consumption and investment at lower and tax-advantaged rates, and may even

improve their children's educational outcomes (Haurin, Parcel and Haurin 2002; Rohe, Van Zandt and McCarthy 2002).

Potential Homeownership Gains

Relative to investing small sums of money in financial assets, investing in a highly leveraged home can yield far richer rewards. Advances in risk assessment technology have made it both possible and common for homebuyers to put very little money down. According to the American Housing Survey of 2001, fully 51 percent of bottom income quintile homebuyers in 2000 and 2001 put less than 5 percent down, another 8.6 percent put 5 to 9.9 percent down, and 10.4 percent put between 10 and 19.9 percent down. With that kind of leverage, even small rates of home price appreciation generate significant returns on invested capital. For example, home price appreciation of just 3 percent in a given year results in a 60 percent return on a 5 percent downpayment. Thus, while low-income homebuyers place their hard-earned savings at risk, they stand to gain a great deal more than if they had placed the same amount in stocks. This is despite the fact that stocks have much lower transaction costs and may appreciate more in value than homes over longer holding periods.

A recent study using the Panel of Survey and Income Dynamics provided additional evidence that homeownership results in greater wealth accumulation (Di et al. 2003). The authors reported that a typical household that rented as of 1984 had accumulated $42,000 in net wealth by 1999 while a typical household that owned in 1984 had accumulated $167,000 over the same period. After controlling for factors that might have influenced the capability of households to build non-housing wealth over the period, such as marital status, race, ethnicity, education, and household income as of 1984, fully $100,000 of the $125,000 accumulated wealth difference could be attributed to the difference in housing tenure alone.

Portfolio Diversification Issues

Still, housing is only one of many possible investments that a household can make. The risk-return characteristics relative to alternative investments and its contribution to a household's larger investment portfolio influences whether housing is the best investment. Hurst, Luoh and Stafford (1998) found that the share of wealth a household held in home equity in 1984 had a negative relationship with total wealth in 1994 but that the share held in stocks had a positive

relationship. In other words, higher shares of wealth held in stocks in 1984 produced more wealth accumulation than higher shares of wealth in home equity. Similarly, Ambrose and Goetzmann (1998) found that the optimal portfolio for low-income households in Atlanta in the 1980s included no more than 35 percent housing.

Although it may be true that a diversified portfolio is preferable to a concentrated one, for most low-income households the choice is not *how much* to invest in each asset, but instead *whether* to invest in a home, stocks, or some other asset. Low-income savers often fall short of the minimum investment requirements for stocks and bonds. Among those that could meet the minimum requirements, few would have enough left over to invest in a home as well. Furthermore, a portfolio composed primarily or entirely of stocks exposes households to much greater risk than a portfolio consisting only of a home. Finally, financial assets generally do not result in forced savings through amortization the way a mortgage does. Perhaps for these reasons there is no comparable push to increase low-income households' ownership of stocks, bonds, or mutual funds.

Asset Ownership

The differences between the net wealth and asset ownership of low-income and high-income households are stark.[6] At just $7,900 dollars in 2001, the median net wealth of households in the bottom income quintile was less than one-quarter of the $37,200 median net wealth of those in the second lowest quintile. At $141,500, the median net wealth of the second highest quintile was more than 18 times greater than the median net wealth of the bottom quintile. At the extreme, the median net wealth of households in the top ten percent of the income distribution was more than 100 times greater than that of the bottom quintile.

In 2001, the share of households in the bottom quintile with savings was only 30 percent. For those in the second lowest quintile a larger 53 percent had savings, and among those in the

[6] The most comprehensive survey of asset ownership and debt utilization among American households is the Survey of Consumer Finances (SCF) administered by the National Organization for Social Science and Survey Research at the University of Chicago every three years on behalf of the Federal Reserve Board in cooperation with the Department of the Treasury. The Survey of Income Program Participation (SIPP), which is also conducted every three years, provides nearly as much detail on wealth but is not as useful for comparing asset holdings and credit balances of low-income households with others because it is designed to survey those who participate in federal social and welfare programs. The Panel Survey of Income Dynamics (PSID) contains some questions on wealth but they are limited and asked only infrequently of respondents in the panel. Both the PSID and SIPP have the benefit of providing repeated observations on the same households while the SCF does not.

top ten percent of the income distribution fully 84 percent saved. Not only was the share of households with savings much lower in the bottom income quintile, but it was the only quintile to register a decline in that share between 1992 and 2001 (Aizcorbe et al. 2003). Furthermore, savings levels are exceptionally low among low-income households. The median value of transaction accounts among those in the lowest income quintile was only $900 in 2001. Among renters in the same quintile the median amount saved was an even lower $500. Fully 17 percent of households in the bottom income quintile and 11 percent of households in the second lowest income quintile reported savings of $200 or less. At such low levels, it is very hard for households to weather even modest disruptions in incomes or budget shocks.

To examine household asset ownership by income, it is best to evaluate elderly (over age 65) and non-elderly (age 65 and under) households separately because they have distinctly different propensities to own assets and carry debts. Among non-elderly households in the bottom income quintile the most commonly held financial asset is a transaction account (which includes checking, savings, and money market accounts) and the most commonly held non-financial asset is a vehicle (Chart 5). About six in ten in this group had a transaction account and more than half owned vehicles in 2001. While more than one in four non-elderly households in the lowest income quintile owned a home in 2001, only about one in seven had a retirement account of any sort, one in ten an insurance policy, and fewer than one in twenty a certificate of deposit, stock, bond, mutual fund, equity in a business, or equity in nonresidential real estate.

Among the elderly in the bottom income quintile, 61 percent owned homes in 2001, surpassing the 56 percent share who owned vehicles. Ownership of transaction accounts is also greater among the elderly in the bottom quintile (85 percent) than the non-elderly (62 percent). Among the elderly in the second lowest income quintile, 86 percent owned homes in 2001. While further subdividing by age results in very small sample sizes, it is clear that ownership of all assets is even lower for younger adults in the bottom income quintile than for middle aged households.

Minorities in the lowest income quintile have much lower rates of asset ownership than whites in the same quintile. For example, among all minority households in the lowest income quintile in 2001 only 55 percent had transaction accounts, 21 percent owned homes, and 8 percent had retirement accounts. Among whites in the lowest income quintile, 80 percent had transaction accounts, 53 percent owned homes, and 15 percent had retirement accounts. Rates of

stock, savings bond, and mutual fund ownership among minorities in 2001 were half that of whites in the same quintile. The higher incidence of asset ownership among whites in the lowest quintile reflects, to a certain extent, their older average age.

By contrast, much larger shares of higher income households own assets of all kinds. Even non-elderly households in the second lowest income quintile held significantly more assets in 2001 than did those in the lowest quintile. Ownership of transaction accounts rises to 86 percent from 62 percent, of vehicles to 87 percent from 56 percent, of retirement accounts to 34 percent from 11 percent, and of homes to 56 percent from 28 percent. Although ownership rates of other financial assets remain low in this quintile, they are still multiples higher than the lowest quintile. Not surprisingly, middle and higher income quintile households have even higher ownership rates of all assets.

Financial Assets

Ownership of financial assets is critical to overall wealth building. Transaction (savings) accounts provide cushions against income volatility and budget shocks. Transaction accounts also provide a secure place to save, modest returns, and a way to document and make payments. Alternative financial service providers, such as check cashers, on other hand, usually do not report to the major credit repositories.[7]

Other financial assets like retirement accounts, stocks, bonds, and mutual funds offer the potential for earnings on invested capital. In most cases, the risks as well as the achievable returns on such investments are far greater than on savings and money market accounts. And like savings accounts they provide a cushion against income and budget shocks in that they can either be liquidated or borrowed against. Finally, they can help build up enough value to cover the costs of buying a home and can reduce the capital costs of ownership by increasing the downpayment amount. Unlike transaction accounts, however, these financial assets usually do not provide a way to settle transactions through check or debit payments.

A much larger share of low-income households have transaction accounts than any other financial asset (Chart 6). Transaction account ownership among non-elderly households in the lowest quintile surged from 45 percent in 1989 to 60 percent in 2001. In the late 1990s, the

[7] However, many payday lenders voluntary report to an alternative credit repository called Teletrack. See www.teletrak.com for more information.

Federal Government expanded the use of electronic payments for welfare and other benefits programs. This may have contributed more to the increase in the numbers of low-income people with transactions accounts than any previous effort (Hogarth and O'Donnell 1999). Though still lagging behind the ownership rates of transaction accounts among whites in the bottom quintile, the ownership rates of minorities grew from 35 percent in 1989 to 55 percent in 2001. This encouraging growth means that a greater share of lowest income households have the opportunity to earn interest on their savings and use mainstream methods to make and receive payments.

Mutual fund, stock, bond, and retirement account ownership among all households has increased as well. The share of all non-elderly households with mutual funds was 17 percent in 2001, up considerably from 6 percent in 1989. Although the share for non-elderly households in the lowest quintile with mutual funds also rose, it increased to only 3 percent by 2001. By contrast, four in ten households in the highest quintile held mutual funds—twice the share that held them in 1989. These shares were not materially different for the elderly. Again, minorities lagged whites at all income levels in ownership of mutual funds.

Direct stock ownership, at 21 percent, surpassed mutual fund ownership in 2001, but was up by only 5 percentage points from 1989. Non-elderly households in the lowest income quintile eked out only a small gain from 2 percent to 4 percent. Elderly households in this quintile had even lower rates of stock ownership. Meanwhile, the share of highest quintile households with stocks increased from 39 percent in 1989 to 49 percent in 2001. While stock ownership is becoming the norm at the upper end of the income distribution, it remains an anomaly at the bottom. The same holds true for bonds and savings bonds, which are as uncommon as stocks for those in the lowest income quintile.

Since retirement accounts[8] are often included as an employment benefit, it is not surprising that a larger share of households of all incomes hold them than stocks, bonds, and mutual funds. Like mutual funds, the share of non-elderly households holding retirement accounts has increased among all income groups since 1989. For example, the share of all non-elderly households with retirement accounts in 2001 was 57 percent, up from 42 percent in 1989. For non-elderly households in the lowest quintile it was 13 percent, up from only 5 percent in

[8] Retirement accounts include IRA, Keogh, 401k and 403b. They do not include any employer sponsored benefit plans which are not portable. Social security and employer-sponsored defined benefit plans are not included.

1989. According to Aizcorbe, Kennickell, and Moore, 26 percent of families who were eligible to participate in a job-related defined contribution pension plan failed to do so. And among families in the lowest income quintile, the failure rate was a significantly higher 46 percent (2003: 14).[9]

In sum, apart from transactions accounts, ownership of financial assets is very limited among low-income households, and even more so among low-income minorities. This is despite the fact that in some cases their ownership rates of stocks, mutual funds, and retirement accounts more than doubled over the 1989 to 2001 period. And since fully four in ten lowest quintile households and nearly half of minorities in that quintile lack even a basic transaction account, opportunities to earn a return on savings, and settle financial transactions with checks are sorely lacking. A remarkably large share of households in the lowest income quintile is operating in a cash economy, which effectively prevents them from accessing mainstream, long-term credit.

Homeownership

Among households in the lowest income quintile, housing is second only to transaction accounts as the most commonly held asset with the potential to appreciate, but it is by far the most valuable. Among all non-elderly households in this quintile, for example, the median value of transaction accounts in 2001 was $1,800 while for home equity it was $60,000. For elderly households in this quintile, the median value of transaction accounts was $590 and of home equity was $73,000. Among the 10 percent of low-income, elderly households who hold retirement accounts, the median value was only $20,000.

Even though homeownership rates in the lowest quintile lag those of the top quintile by about 28 percentage points (Chart 7), home equity is more important to homeowners in the lower reaches of the income distribution. Among owners in the lowest quintile, home equity accounted for 80 percent of net wealth in 2001. This compares to 48 percent for homeowners in the middle quintile and 26 percent for those in the highest quintile. Excluding low-income elderly owners,

[9] These findings are consistent with other literature that suggests that individuals of all incomes are not saving adequately for retirement (Hilgert, Hogarth and Beverly 2003). In 1999, 76 percent of workers earning $1,000 or more per week participated in a pension plan compared to only 6 percent of those earning less than $200 per week. The pension plan participation rate is 47 percent for whites, 41 percent for blacks, 38 percent for Asian and Pacific Islanders and 27 percent for Hispanics. Gruber, Orszag and Orszag demonstrated that among all incomes, tax incentives alone do not seem to spur greater savings outside pensions noting that "only 7 percent of those eligible to contribute to an IRA in 1995 did so" (2002:24).

home equity still accounted for 78 percent of the net wealth of those in the lowest quintile. Similarly, although minority homeownership rates lag those of whites by about 26 percentage points, home equity commands a larger share of minority net wealth. For Hispanics of all incomes home equity accounted for 63 percent of net wealth compared to 51 percent for African Americans of all incomes and 39 percent for whites of all incomes.

Ownership of homes exceeds that of stocks and the value held in homes is more evenly distributed across income quintiles (Chart 8). In 2001, about 68 percent of households owned a home but only 52 percent held stocks directly or indirectly. The top 1 percent of stock holders controlled 33 percent of stock wealth as of 2001 while the top 1 percent of homeowners controlled only 13 percent of home equity. Meanwhile, the bottom half of stock holders controlled only 2 percent of stock wealth while the bottom half of homeowners controlled 13 percent of home equity.

Credit Utilization

Consumer credit is viewed with some ambivalence. While borrowing to buy a home is generally seen as necessary and appropriate, the merits of borrowing to finance other forms of consumption are still debated. Some view buying on credit as undisciplined and risky since people often borrow ahead of their capacity to repay debt. Indeed, concern over the rise in personal bankruptcies has led some to conclude that credit is too widely available. According to the American Bankruptcy Institute, personal bankruptcy filings totaled 1.6 million for fiscal year 2003, up 7.8 percent from fiscal year 2002.[10] In addition, personal bankruptcy filings in the second quarter of 2003 reached their highest levels ever at 440,257. Trends in rising bankruptcy rates and levels of consumer debt have led some to push for regulations to protect people from themselves (Durkin and Staten 2002).

However, as Calder (2002) pointed out, taking on debt and making regular monthly payments does require discipline. Months or years of regular payments tend to impose a restraint that overrides rampant 'buy now, pay later' consumerism. More importantly, debt can be used to smooth consumption expenditures over one's life cycle, especially during a period of

[10]Press Release from the American Bankruptcy Institute, "Personal Bankruptcy Filings Continue to Break Records," November 14, 2003. Available at: http://www.abiworld.org/release/3Q2003.html

unemployment or to cover an unforeseen expense. Since many households can expect their incomes to grow over time, debt can be a way to begin to build assets earlier in life.

There are elements of truth to both viewpoints. Consumer credit can be a fiscally responsible way to finance consumption but it can also lead to credit problems if the cost of debt overwhelms the ability to repay it. Use of consumer credit also impacts credit records. When money is borrowed from banks, thrifts, credit unions, credit card companies and certain other lenders, payments are recorded and individual borrower histories are reported to credit repositories. Documentation of regular repayment of debt facilitates loan approvals and lowers the cost of mortgage and other consumer credit. Documentation of missed payments or defaults, on the other hand, increases the cost of credit. Thus, whether individuals borrow, where they borrow from, and whether they are able to make regular payments have direct bearing on opportunities to finance subsequent consumption and investment.

Consumer Credit

Disparities between highest-income quintile and lowest-income quintiles households in their use of consumer credit though still high, are not as great as the disparities in their financial asset ownership. While that ratio is about 2:1 for consumer credit, it is about 10:1 for mutual funds and stocks, and about 5:1 for retirement accounts.

Low-income households may have a harder time managing consumer debt due to their lower incomes or unstable employment, but they often need to borrow to purchase goods, or even meet basic needs. Installment loans[11] and credit cards are each used by about a third of non-elderly households in the lowest income quintile (Chart 9). Unlike asset ownership, credit utilization is comparable among minority and white households in the lowest income quintile. The use of installment loans and credit cards is actually slightly higher for minorities than whites: 28 percent versus 24 percent in the case of installment loans and 30 percent versus 29 percent for credit cards.

The share of all households in the lowest income quintile with credit card balances has grown from 10 percent in 1989 to 33 percent in 2001. The share with outstanding installment loans in the bottom quintile, however, has edged down from 43 percent to 35 percent. Similar

[11] In the SCF installment loans are defined as consumer loans that typically have fixed payments and terms, such as, automobile loans, student loans, and loans for appliances, furniture and other durable goods.

patterns of rapidly expanding credit card use and modestly declining installment loan use are found among those in the second lowest income quintile as well.

A recent study by Dēmos (Draut and Silva 2003) found that average credit card debt of families in 2001 was $4,126, up from $2,697 (2001 dollars) in 1989. Families earning less than $10,000 experienced a 184 percent increase in average credit card debt. Using data from the 1999 Consumer Expenditure Survey, the authors concluded that the rise in debt is not simply a result of consumptive overspending. They found that families earning less than $10,000 spend on average 70 percent of their budget on food and housing, which often means that credit cards are used to cover life basics such as health care costs, transportation or clothing.[12]

Alternative Credit Providers

The Survey of Consumer Finances measures the use of mainstream sources of consumer credit but does not specifically query respondents about their use of payday lenders, pawn brokers, or rent-to-own shops. These alternative forms of credit are used more often by lower income households than others, and their branches tend to be concentrated in low-income and particularly minority communities (Fishbein and Goldberg 2003; Richter and Tan 2002, Carr and Schuetz 2001). Payday lenders are finance companies that advance credit to borrowers to help them bridge the gap between the time when they need to pay bills or make purchases and the time when they are paid. Though virtually nonexistent ten years ago, there are now estimated to be as many as 14,000 outlets across the country (Stegman and Faris 2003). In a typical payday loan transaction, the borrower writes the lender a check (or agrees to an automatic debit from an existing account) for the amount to be borrowed plus any fees, either a flat fee or a percentage of the total loan. The lender then hands over the cash and holds on to the check for up to a month,

[12] The Dēmos study showed credit card debt for all families declining between 1998 and 2001, which may be consistent with the finding that families have taken on more home secured debt through cash out refinancing and home equity lines of credit. Reports by Fannie Mae (2002) and Canner et al. (2002) found that many consumers use money extracted during the refinance process to pay down other debts. An earlier study on home equity lending by Canner, Durkin and Luckett stated that it "…is frequently used as a substitute for consumer credit, either to finance new consumption expenditures or pay down outstanding consumer debt" (1998: 241). Similarly, in late 2002 the Cambridge Consumer Index polled households that had either refinanced in the last two years or planned to in the coming year. Researchers found that 31 percent planned to put the money towards increasing their savings, 23 percent planned to pay off non-credit card debt, 20 percent planned to put the money toward remodeling or the purchase of a vehicle, and 15 percent planned to pay off credit card debt.

typically until the borrower's next payday. At this point, the borrower can either pay cash and redeem the check, allow the check to be cashed or pay another fee to extend the loan.

The average amount borrowed from payday lenders is only around $300, suggesting that consumers use these loans for very short-term credit needs. However, as with other debt, consumers may find themselves unable to repay the loan on time which can produce chronic borrowing. Caskey (2002a) cited annualized interest rates on payday loans of generally over 100 percent and often as high as 500 percent, while the National Consumer Law Center found rates as high as 7,300 percent (Renuart 2002). Clearly use of payday loans, especially if not repaid promptly, reduces surplus income and inhibits savings and asset building relative to the use of credit cards or bank accounts with overdraft charges.

Relatively little is known about the payday lending industry. There are no national controlled studies of the factors driving the use of payday lenders or of where payday lending establishments are located.[13] However, there have been a few studies that profile payday lending customers, examine the industry, and summarize relevant state laws and regulations. In a review of the existing literature on payday loan customers, Fox found that the typical customer appeared to be "a relatively young person, employed, more likely to be female, married, and a renter" (2003: 5). In most of the studies reviewed by Fox the average income of customers was around $25,000. Elliehausen and Lawrence (2001) found that payday loan customers were almost four times more likely to have filed for bankruptcy than all adults and tended to be employed, credit constrained, have checking accounts and have incomes under $50,000. Stegman and Faris (2003) reported that in North Carolina, African American households were about twice as likely as whites to use a payday lender and that, regardless of race, households who had been involved in the welfare system had a higher propensity to use payday lenders.

Pawnshops also offer short term loans in exchange for personal items which are held as collateral. Carr and Schuetz (2001) reported that monthly interest rates are subject to state law and range from 1.5 percent to as high as 25 percent, which annualized ranges from 30 to 300 percent. The authors estimated that pawnshops generate 42 million transactions a year and gross revenues of $3.3 billion. Hermanson and Gaberlavage (2001) reported that the majority of

[13] Elliehausen and Lawrence (2001) used a nationally representative sample of customers from nineteen member companies of the Community Financial Services Association. However, no information was provided on the geographic distribution of the companies.

pawnshop loans are for $150 or less and the maturity is generally one to three months, with 80 percent of items eventually redeemed.

Rent-to-own stores extend credit to consumers for durables such as appliances, electronics or home furnishings. Consumers make weekly or monthly payments that can be put toward ownership. This form of purchasing typically ends up costing the consumer two to three times as much as retail, and failure to pay at any point before the full purchase can result in repossession. Carr and Schuetz (2001) estimated the annual volume of transactions for rent-to-own shops to be about 3 million, with $4.7 billion in gross revenues and $2.4 billion in fees.

Although payday lenders, pawnshops, and rent-to-own stores give credit constrained consumers easy access to cash, they leave consumers paying much higher rates for credit than is typical of deposit-taking institutions and credit card companies (Gaberlavage and Hermanson 2001). And these types of loans frequently provide no record of timely payments of credit use that could be used to develop credit records.

Mortgage Credit

Most homebuyers require mortgage credit to purchase homes. Among a representative random sample of homebuyers in 2000 and 2001 canvassed in the American Housing Survey of 2001, fully 77 percent of all homebuyers took out a mortgage, as did 65 percent of low-income homebuyers, and 70 percent of first-time low-income homebuyers.[14]

Prior to the mid-1990s, virtually all credit was supplied by prime mortgage lenders. Over the last decade, however, the use of subprime mortgage credit has exploded. Subprime originations increased from around $20 billion in 1993 to $213 billion in 2002. Simultaneously, manufactured home lending and government-insured mortgage lending surged. With these developments, the mortgage market has become increasingly bifurcated (Chart 10). Low-income and minority communities now have much higher shares of subprime loans than higher income white communities (Chart 11). Immergluck and Wiles (1999) characterized the tendency for conventional lenders to serve higher income white areas while others serve lower-income and minority communities as a "dual mortgage market."

[14] Low-income is defined here as an income of 80 percent or less of area median for a family of four, adjusted for household size.

Without question, subprime and alternative lenders have greatly expanded credit to borrowers and neighborhoods that were previously denied.[15] However, the National Community Reinvestment Coalition asserted in its annual publication *America's Best and Worst Lenders: A Consumer's Guide,* "… that a lack of product choice confronts too many women, minorities, and low- and moderate-income communities across America" (2003: 4). Questions about the cost and the terms of the credit extended and whether borrowers could have obtained a prime loan instead demand more complete answers but can only be answered with proprietary data that lenders have not publicly disclosed.

Nevertheless, in contrast to studies of basic financial service provision, which have relied primarily on household surveys with relatively small sample sizes, mortgage credit studies can draw on literally millions of loans reported under the Home Mortgage Disclosure Act (HMDA). Access to HMDA data spawned a host of credit flow studies in the 1980s that suggested that race and income were indeed associated with lower levels of credit than might otherwise be expected given the number of owned homes in the census tract (Bradury, Case and Dunham 1989).[16] With the release of information on the income and minority status of loan applicants in the early 1990s, a second wave of studies to test for discrimination in the mortgage lending process was released (Carr and Megbolube 1993; Immergluck and Wiles 1999; U.S. Department of the Treasury 2000; Bradford 2002).

Debate continues over whether research using HMDA data alone or in combination has proven conclusively that discrimination was or is occurring in mortgage markets, either against individual applicants or whole communities (Turner and Skidmore 1999). However, attention has shifted away from whether adequate levels of credit are supplied to the prices and terms upon which they are supplied and which financial institutions provide them. Although HMDA data currently lack information on the prices and terms of the loans, loans made by subprime lending specialists can be identified.

---

[15] Two decades ago, lack of credit was the primary concern of advocates with respect to asset building opportunities in low-income communities. The passage of the Home Mortgage Disclosure Act (1975) was prompted by concern that low-income communities and communities of color were being systematically and unfairly denied access to mortgage credit, while the passage of the Community Reinvestment Act was prompted by that concern as well as restricted access in these communities to consumer credit and basic banking services. The flow of capital for home mortgages began in the 1970s, but accelerated in the 1990s as longstanding interstate banking regulations were relaxed, new technology and business models were introduced, and regulations tightened.

[16] For a good discussion of the earlier studies see Hula, Richard C. 1991. Neighborhood Development and Local Credit Markets. *Urban Affairs Quarterly* 27 (2): 249-267 and Shlay, Anne B., I Goldstein and D. Bartlett. 1992. Racial Barriers to Credit: Comment on Hula. *Urban Affairs Quarterly* 28 (1): 126-140.

Armed with this less than perfect information, numerous studies have offered compelling evidence of a dual mortgage market (U.S. Department of Housing and Urban Development, 2000a, 200b; Fishbein and Bunce 2000; Joint Center for Housing Studies, 2000, 2001; Temkin et al. 2003). The U.S. Department of Housing and Urban Development (2000) studied subprime lending (using HMDA data on almost 1 million mortgages) in five different metropolitan areas[17] and found that subprime loans are three times more likely in low-income neighborhoods than in high-income ones. They also found that subprime loans are five times more likely in African American neighborhoods than white ones. In particular, subprime refinance lending appears to be concentrated in lower-income, predominantly minority communities. According to HMDA data, the subprime share of refinance loans in these communities shot up from 6.8 percent in 1993 to 27.5 percent in 2001.[18]

Bradford (2002) examined subprime lending patterns in 331 metropolitan areas and found that African Americans and Hispanics are over-represented in the subprime market, and that these disparities appear to grow as income increases. For example, lower-income African Americans receive 2.4 times as many subprime loans as lower-income whites, but upper-income African Americans receive 3.0 times as many as comparable whites (2002: vii) Moreover, he pointed out that racial disparities in lending exist in all regions and in cities of all sizes. Indeed, the study suggested that some of the biggest disparities exist in the nation's smallest metropolitan areas.

Explaining Disparities in Financial Service Provision

The apparent differences in the types of financial institutions that supply consumer credit in low-income communities, the higher costs associated with using alternative credit financial services, and the large share of low-income households who are "unbanked" have spawned a search for explanations (Chart 12). Although there are several plausible reasons for the differences, the extent to which one or more reasons plays a defining role has not been gauged.

[17] In addition to a summary study, HUD published separate studies on Atlanta, Baltimore, Chicago, New York and Philadelphia.

[18] Lower-income communities are defined as those with a median income less than 80 percent of the area median as of 1990. Predominantly minority communities have a minority population of 50 percent or greater.

Demand Side Explanations

Faced with choices of providers and products that are shaped at least in part by where they live, the following are some of the reasons why low-income people may choose to remain unbanked or use alternative providers (namely, check cashers, pawnbrokers, rent-to-own stores, subprime lending specialists, and payday lenders) more extensively:[19]

Lower Cost of Alternative Providers – Even though it may appear that mainstream financial service providers could meet low-income demand for certain financial services at a lower cost, the opposite may be true for at least some services and products. Though basic banking accounts exist at mainstream institutions, many banks still structure their fees so that they are only economical for those with large account balances (Gaberlavage and Hermanson 2001). If the services available from mainstream institutions (namely, deposit taking institutions and prime lending finance and credit card specialists) are more expensive because higher costs must be spread over multiple transactions, the cost-minimizing solution for some low-income households with infrequent financial transactions may be to use check cashers and payday lenders (Dunham 2001; Hogarth and O'Donnell 1999). Dunham, for example, looked at the cost to the unbanked of cashing checks and found that 52 percent incurred no costs because many supermarkets and issuing banks charge no fees to cash a check. Another 18 percent paid less than $50 per year to cash checks and the remaining 30 percent paid over $50 annually. Dunham also examined the annual costs of using money orders and found that 12 percent of those who used them had no annual costs, 68 percent paid up to $49, 14 percent spent between $50 and $99 and 4 percent spent over $100. Since banks now charge as much as $35 for a bounced check, households that have trouble managing their budget, may benefit by using money orders to make payments. Meanwhile, of those who reported not having a transaction account in the 2001 SCF, 29 percent cited that they "do not write enough checks to make it worthwhile."

[19] The first five are affirmative reasons to choose alternative financial services or remain unbanked, the sixth and seventh constitute structural constraints associated with having low income that might drive them to make those choices, and the last constitutes a market failure.

Greater Access to and Better Service of Alternative Providers – Though price is a critical factor in selecting financial service providers, convenience and service are also important. Consumers may use higher cost, alternative providers because they are more likely than banks to be open outside of regular business hours, simplify loan approval, have representatives that speak their language, and create an environment that is welcoming in other respects (Fishbein and Goldberg 2003; Carr and Schuetz 2001). These factors appear to be at work in the subprime lending market as well. Subprime lenders offer faster and easier loan approvals than many comparable loan programs that serve low-income borrowers. In this market, access comes in the form of widespread use of direct marketing techniques such as mailings and phone solicitations and even door to door sales pitches. Indeed, a Fannie Mae (2001) survey of credit impaired borrowers found that 29 percent of them were more likely to find their lender through television, print or radio advertising or through a telephone or mail solicitation than through other methods. And an AARP survey found that refinance loans are frequently sold to consumers who were not even in the market for one (Kim-Sung and Hermanson 2003).

Interest in Conducting Only Cash Transactions – Some consumers deal primarily or completely with vendors, service providers or landlords who demand cash as payment, obviating the need for a transaction account. Some individuals, regardless of income, may prefer not to conduct transactions that are electronically captured by third parties. Others may have undocumented income that they want to remain that way. Richter and Tan (2002) pointed out that alternative financial providers have more flexible identification requirements, which appeal to many low-income borrowers, particularly illegal immigrants.

Social and Cultural Norms – Peer influences are often important determinants of financial service choices. A recent survey of consumer credit behavior of those over age 45 by the AARP (2003) found that family and friends were the primary source of financial advice for 45 percent of those surveyed. Similarly, Hilgert, Hogarth and Beverly (2003) found that experience, friends and family, and the media were the main sources for financial knowledge for all households. Peers or family members who have had negative experiences with mainstream financial service providers may discourage their use. Similarly, if there are few available choices

in an area, family or peer referrals may continue to send new borrowers to the same institutions, regardless of their price structure.

Negative Past Experience with Mainstream Providers – Some consumers may view mainstream financial service providers with suspicion because of past patterns of discrimination, or in the case immigrants, experience with and the reputation of banks in their nation of origin (Richter and Tan 2002). Indeed, the number of families citing "do not like dealing with banks" as the reason they do not hold a checking account in the SCF increased from 15 percent in 1992 to 23 percent in 2001 (Aizcorbe, Kennickell and Moore 2003). Negative past experience with mainstream lenders is supported by evidence that nearly twice as many credit impaired borrowers as all homeowners use a mortgage broker (Fannie Mae 2001). Credit impaired borrowers may also be drawn to subprime lenders that promise them a loan approval, regardless of the rate.

Lower Capacity to Save – An obvious reason that some low-income customers do not have a bank account is that they have no savings (Caskey 2002a). Evidence from the SCF showed that in 2001, 14 percent of those without a checking account cited "do not have enough money" as the primary reason (Aizcorbe, Kennickell and Moore 2003). Low incomes and few incentives to save may lead lower-income households to conclude that they have no use for a bank account. In addition, some homeowners that lack savings are motivated to tap into their home equity even if it requires working with a subprime lender in a cash-out refinance or second mortgage loan.

Lower Credit Scores – Although evidence suggests that credit scores are not materially correlated with income, they are correlated with race and ethnicity. And since minorities are over represented among low-income individuals, a larger share of low-income than higher income households has lower credit scores. Lower credit scores matter because they govern access to certain financial services and providers. As noted, many banks and thrifts use credit scores to qualify customers for savings and checking accounts. Caskey (2002c) pointed out that households with credit history or past payment problems often have few options for small (up to $500) loans to cover immediate cash needs and consequently turn to check cashers, payday

lenders, rent-to-own shops, and pawnbrokers. Lower credit scores also leave some potential homebuyers or home equity borrowers without access to a prime conventional loan.

Imperfect Information – Some low-income consumers may not realize that they can qualify for lower cost products. This can result from consumers being misinformed, from more aggressive marketing by subprime and alternative consumer credit providers, or the failure of mainstream financial institutions to promote the basic products they do offer (Goldstein 1999; Hogarth and O'Donnell 1999). In the case of mortgage lending, it can be difficult for even the most financially savvy borrower to compare costs across different products and providers and evaluate the best combination of points and fees. Even seemingly simple financial products, like savings accounts, can have complicated fee arrangements. Fishbein and Bunce (2001) found that a portion of borrowers whose credit would allow them to qualify for lower cost conventional prime mortgage loans were nonetheless receiving subprime loans. They also found that the higher interest rates charged by subprime lenders could not be fully explained by neighborhood and/or borrower risk factors. Similarly, Freddie Mac (1996) found that anywhere from 10 to 35 percent of subprime borrowers in a pool of loans they examined had credit scores that should have qualified them for prime credit. Even more worrisome is evidence that some financial servicers intentionally obfuscate fees and costs and some engage in predatory practices such as fraudulent or high pressure marketing, or packing unnecessary fees into loans (Goldstein 1999; Renuart 2002). They may be easy prey: a Fannie Mae survey of credit impaired borrowers found that nearly one-third "of credit impaired homeowners said that when they were negotiating their mortgage they did not care whether they received the lowest cost loan for which they were qualified" (2001:12). This suggests that, while it may not be rational, getting a yes is often the most important consideration.

Supply Side Explanations

There are also a variety of reasons why mainstream financial service providers might not serve lower-income customers or communities to the degree that they serve other customer bases:

Response to Consumer Demand – One reason mainstream service providers may not serve low-income markets as much as other markets is that the demand for their products is lower. For example, the larger presence of subprime lenders and loans in low-income communities may simply reflect higher concentrations of households with low credit scores. However, few studies have actually tested this theory. After controlling for credit history, demographics and location of borrowers, Pennington-Cross, Yezer and Nichols (2000) found that subprime home purchase lending was *less* concentrated in underserved areas or areas with low-income borrowers. Immergluck and Wiles (1999), however, concluded that the racial disparities in mortgage lending in Chicago were too great to be explained by differences in the credit quality of the borrowers. Calem, Gillen and Wachter (2002) found that only about half of the increase in subprime lending in Chicago and Philadelphia could be explained by the spatial distribution of individual credit quality. After inclusion of a fuller set of explanatory variables a strong geographic concentration of subprime loans in African American neighborhoods and a concentration of loans among African American borrowers regardless of where they were located remained, suggesting that borrower and neighborhood race do matter. All these authors, however, acknowledged deficiencies in the underlying data available for modeling.

Disentangling whether lower levels of mainstream financial service provision in low-income communities merely reflects demand is difficult because providers choose what types of products they offer and where, while consumers are limited to the choices offered. Because supply and demand are simultaneously determined, it is difficult to judge whether providers do not offer certain products because they know there is insufficient demand, it is simply not profitable, they have imperfect information, or other reasons.

Lower Profitability – Serving low-income markets may not be the highest and best use of capital for deposit-taking institutions and prime lenders. Caskey (2002a) pointed out that some banks only keep unprofitable branches located in lower-income communities open to receive CRA credit. Faced with alternative uses of deposit, deposit-taking institutions may focus on more profitable customers and businesses. Barr (2003) suggested that institutions may be reluctant to put resources towards the research, development, training, marketing and education that are necessary to introduce products and services for low-income customers that they doubt

will be profitable. However, he also pointed out that technological advances in the area of payments and automated teller machines have lowered per-transaction costs of banking.

Imperfect Information **–** Although lower profitability may be behind the lower utilization of many basic banking products among low-income individuals, it may also be the case that lenders are operating with faulty or incomplete information. Indeed, the basic banking demands of low-income customers and the segmentation of the low-income market are both poorly understood (Dunham 2001). Lenders may respond to miscues that, in the absence of good information, cause them to be overly cautious in reaching out to low-income consumers. The smaller size of transactions and account balances of lower income customers may also lead mainstream providers to overlook profitable opportunities. The fixed costs of attracting and servicing customers may also discourage lenders from reaching out to low-income and low wealth customers who have fewer transactions and fewer relationships (hence opportunities to cross market products) with the bank, thrift, or credit union.

Competitive Disadvantages **–** If low-income customers are unprofitable for deposit-taking institutions yet profitable for alternative providers, the question arises as to whether mainstream providers are at some disadvantage relative to alternative providers. Indeed, one reason cited for the recent interest of mainstream financial institutions and their holding companies in alternative products and relationships with alternative providers is that they perceive attractive margins do exist (Fishbein and Goldberg 2003; CFA and NCLC 2003). Yet, the authors of this paper were unable to identify any literature that seriously evaluates whether alternative providers have some form of competitive advantage. For example, differences in the state regulations for non-deposit taking institutions and the federal regulations for deposit taking institutions might produce a more favorable business environment for the former. This is plausible because deposit-taking institutions must conform to internationally established standards for credit adequacy and fulfill CRA obligations. Yet, this is only a partial explanation since banks and the like can and do affiliate with non-banks.

Discrimination – Discrimination is a final possible explanation for observed patterns. Despite theoretical arguments as to whether discrimination should exist in a perfectly

competitive market, evidence suggests that it does (Turner and Skidmore 1999). A recent study of mortgage discrimination by the Urban Institute demonstrated different treatment of white and minority testers (Turner et al. 2002). Many researchers are increasingly concerned with the apparent targeting of low-income, and especially low-income minority, communities by subprime lenders using aggressive and sometimes predatory lending practices (Goldstein 1999; Hermanson and Gaberlavage 2001; Renuart 2002; Fishbein and Goldberg 2003).

Accurate Explanations Matter

Greater clarity as to which of the explanations for dual markets are valid is precondition for the development of sound public and business policy. Incentives may be required to overcome structural impediments to savings or to serving low-income customers profitably. Other explanations if valid suggest increased regulation is an important part of any solution. If, for example, imperfect information is a problem, regulations to encourage collective action by mainstream financial service providers to improve information make sense. Indeed, this was one of the rationales for the CRA (Litan et al. 2000). If imperfect information on the part of consumers is a problem, expanded disclosure regulations may be warranted. If competitive disadvantages result from variation in regulation across financial service providers, then greater uniformity of regulation may be a desirable goal. Discrimination and predatory lending suggest expanded enforcement and/or stiffer penalties may be in order.

Some explanations argue for increased literacy and education efforts, and others suggest technological solutions are in order. The credit score explanation suggests the need for more concerted efforts to improve the risk assessment capability of credit scores for serving low-income borrowers and to help low-income applicants improve their credit management before applying for a loan.

The Credit Risk Evaluation and Pricing System

Information technology has transformed the credit risk evaluation process. In the 1960s and 1970s, loan underwriters manually reviewed information on loan activity and repayment histories. Occasionally even subjective information on the borrower was collected and transmitted to credit bureaus. If any of the information suggested that an applicant's past behavior fell below a lender's standards, the loan was denied. Compensating factors, such as the

size of the downpayment or stability of employment, were considered at the discretion of individual underwriters.

Today, expanded information on loan activity and repayment history is statistically modeled to predict probabilities and severities of loan losses. Variables on race, ethnicity, religion, gender, and national origin are expressly prohibited from such models. That said many of the variables in scoring models are correlated with race and ethnicity. Therefore the application of these models has disparate effects. Loan applicants are assigned credit scores that reflect the predicted risk of delinquencies and defaults. In some cases, the score alone is reason to accept or reject a loan applicant. In other cases, the score is one of several inputs in a statistical model tailored to correlate credit scores with loss probabilities and severities in a particular application, such as mortgage lending. Finally, the scores themselves can be customized to specific loan types or borrower populations so that they reflect what matters most to repayment behavior in specific contexts.

In 1956, Bill Fair, an engineer, and Earl Isaac, a mathematician, founded Fair Isaac and Company to develop computer generated scoring systems. Both were convinced that computers could do a better job than judgmental human underwriters. Fair Isaac produced their first credit score in 1958 for American Investment Company, a St. Louis finance company. With the rise of general purpose credit cards during the 1960s and 1970s the use of scores greatly expanded. In 1987 credit scoring based solely on credit bureau data was introduced. The predictive power of these scores led to refinements that allowed lenders to predict the price needed to cover a variety of different levels of risk with greater reliability. This allowed lenders to expand the pool of eligible credit card applicants to include applicants who would have previously been denied credit by charging them higher rates to cover the higher risk.

Despite the widespread use of credit scores to evaluate credit card applications, credit scores were rarely used in the mortgage lending industry before 1995. After Fannie Mae and Freddie Mac began requiring their sellers to submit a credit score, the use of credit scores expanded rapidly.[20] As in the credit card industry, access to past credit payment histories on literally millions of individuals allowed mortgage lenders to begin to price for risk rather than

[20] McCorkell (2002) has posited that the late adoption of credit scores in the mortgage industry reflects the secured nature of home lending. Unlike with credit card debt, mortgage debt can be recovered by foreclosing and selling the homes that back it. Assessment and pricing mortgage for collateral risk was therefore more central to the disposition of mortgage applications.

simply reject loan applicants that did not meet very high credit standards. In less than a decade, mortgage underwriting was transformed from a highly rule-based, manual system to a largely automated risk assessment and pricing system. Many lenders used the new technology to make more sensitive and statistically informed accept/reject decisions within the traditional "prime" market of low credit risk borrowers. Other lenders have used the models to specialize in extending subprime credit, others to affiliate with subprime institutions, and others to extend credit across a range of risk grades. The capital markets have also been quick to adopt credit scores. Reliant on the information supplied by lenders, those that pool and price mortgage pools often use credit scores to set minimum standards for loans they will accept into a pool or to establish concentration guidelines by risk levels.

The transformation of the credit risk assessment and pricing system has been profound. Walters and Hermanson (2001) estimated that credit scores are now used in 90 percent of consumer credit decisions. Lebowitz (2001) estimated the percentage of mortgage lenders using automated underwriting systems increased from 25 percent in 1996 to approximately 90 percent by 2000. And credit score usage is expanding to include tenant selection, pricing for insurance, cell phone approvals, and employee verification checks. Now that credit scores influence so many aspects of consumer life, attention to the system by which credit information is collected, reported, scored, and used in underwriting and pricing decisions has increased.

Credit Reporting and Quality

Credit scores are based on information that is reported on a voluntary basis with limited regulatory proscription and oversight. Currently 190 to 200 million consumers have credit reports on file at one of the three major repositories: Experian, Equifax and Trans Union. Because reporting is voluntary, many firms do not report at all. For example, small scale retailers, mortgage and finance companies, and smaller government agencies frequently do not report. Loans from employers, insurance companies and individuals are not captured, nor are transactions conducted through foreign entities. Rent payments, insurance payments, and hospital payments are also seldom reported. Nevertheless, both positive and negative credit information is increasingly captured and used to make decisions about credit worthiness for new and existing consumer credit accounts, mortgage lending, employment and housing. As Holstine (2004) pointed out, in many other countries shared credit data is limited to negative information

on past payment problems. Failure to report positive information deprives scoring models of information that can distinguish between borrowers with derogatory information that are more likely to repay loans in the future from those less likely to do so.

In addition to incomplete coverage of firms, the quality, completeness, and timeliness of information supplied to credit bureaus is uneven. In part, this reflects inevitable errors in electronically recording and transferring literally billions of bits of information on hundreds of millions of individuals. But in some instances it may reflect the fact that some lenders have a disincentive to report information that they think gives them a competitive advantage (positive payment histories of individuals with low credit scores for example) and because many errors are impossible to detect unless a consumer challenges them. In this volume, Staten and Cate (2004) argued that the system nevertheless creates a host of competitive pressures and incentives for accurate, if not fully complete, credit reporting.

Whatever the reasons for underreporting and misreporting, it is clear that both occur. The Consumer Federation of America (CFA) recently conducted a survey of 1,704 credit files generated by the three repositories (2002). CFA found that more files were missing positive information than negative information, but omissions of both kinds were common. This implies that reporters are more likely to report negative behavior such as missed payments than they are to report good behavior such as timely payments. CFA also determined that the credit scores and information at the three repositories varied significantly. They estimated that one in ten consumers is at risk of being excluded from the credit marketplace altogether due to incomplete records, duplicate records or mixed files. A study done by researchers with the Board of Governors of the Federal Reserve System corroborated that incomplete and inconsistent information are common (Avery et al. 2003). For example, credit limits for at least one account were missing from the majority of consumer reports and codes to distinguish between a borrower shopping around for one loan and one applying for multiple loans were missing in 98 percent of the inquiry records. What makes these studies even more compelling is that these findings are based only on checks of internal consistencies. Undoubtedly many additional errors would have been uncovered by checking with consumers. An Arthur Andersen study from 1991, however, estimated that the share of errors in records, even among those who disputed their credit records, was in the single digits.

Fair Issac acknowledged that the information they receive from credit repositories is deficient in some respects and advocated for better reporting. However, they also emphasized that they have adapted their models to handle conflicting and duplicate information and avoid placing weight on data they know to be unreliable. They stated that scores are continually tested and retested to improve their predictability (St. John 2003). Indeed, Canner, Avery and Calem (2004) found that many of the data quality issues have been recognized and accounted for by score card developers. The authors performed several simulations to approximate the effect of correcting the data on their defined "at risk" sample and find little material change in the credit scores. However, examining the failure of some creditors to report credit limit on revolving accounts, the authors found that 55 percent of their sample was affected by their simulations and almost 30 percent would experience a more than 10 point increase of their score.

Credit Scoring and Automated Underwriting

Despite data inaccuracies and incomplete reporting, credit scores have proven highly predictive of loan performance, and this has accelerated their diffusion throughout the financial services industry. Feschbach and Schwinn, for example, examined 7 million loans and concluded that "30-plus-day delinquencies in the lowest score bucket were more than 40 times higher than in the highest score bucket" (1999:46). While it is entirely possible, and in fact likely, that improved data and better models could make scores even more accurate, they represent a major advance over manual review of credit histories.

In addition to the fact that credit scores are based on observed outcomes for millions of debtors while manual underwriting must rely on intuition, automated mortgage underwriting models use credit scores as just one variable, albeit an important one, in a statistical model of credit risk. Models include information on debt-to-income ratios, loan-to-value ratio, employment histories, and often individual credit bureau lines to allow other variables to offset unfavorable credit scores. Loans that are rejected from automated systems are sometimes referred to manual underwriters as a final check. Thus, expanded use of credit scores and automated underwriting has been welcomed by many as a way to extend more credit more reliably to more customers.

Credit scores and automated underwriting have greatly increased the efficiency and speed of mortgage and other lending. The Information Policy Institute (2003) estimated that 75 percent

of all mortgage loan applications originated in 2002 were approved in two to three minutes. Automated underwriting also allowed lenders to process a record number of refinances in 2002 and 2003. This helped millions of households to lower their mortgage payments or allowed them to take cash out to pay off other debts or pay for consumer goods. Advances in information technology have also lowered the costs of compiling data used in underwriting decisions and allowed that information to be electronically captured and then recycled to make better future lending decisions. Lower costs have also come through increased competition as more lenders are confident they can accurately price risk. The Information Policy Institute estimated that consumer savings from increased competition in the credit card industry alone was around $30 billion per year from 1998 to 2002 (2002: 5).[21]

The distribution of benefits from the use of credit scores and automated underwriting models, however, is much more complex and uncertain. The introduction of risk-based pricing means that some borrowers who would have received a cross-subsidy under the old system by being pooled with less risky borrowers no longer receive that subsidy (Cutts and Van Order 2003). Instead, they are charged a rate that reflects the higher risk category to which they are now assigned. At the same time, prime quality borrowers may inadvertently end up working through a lender that only offers higher cost credit. Finally, building credit scores and prices off of behaviors before the widespread use of credit scores and automated systems can lock in past inequities and cause future borrowers to suffer higher costs because of lenders who poorly underwrote subprime loans in the past.

On the other hand, more borrowers can now access credit. The novelty of the use of risk-based pricing tools means that lenders are inferring future behavior from an unusually favorable seven-year period (the limit on how long data resides in a credit record unless there is a bankruptcy) of strong home price appreciation in most areas and, for much of the period, strong income growth and declining interest rates. This may, however, lead to under pricing risk and an overextension of credit as occurred in the late 1990s when a large share of manufactured home loans defaulted because investors did not fully appreciate the risk they had assumed. Subprime lending may produce some positive externalities in that additional flows of credit lift effective demand for housing thereby strengthening neighborhood property values.

[21] Researchers assumed constant prices for credit cards since 1997.

A major concern related to credit scores and automated underwriting systems is how their use affects protected classes, especially racial and ethnic minorities (Stanton 1999). These concerns are well founded. Stegman, Quercia and Lobenhofer (2001) analyzed thousands of CRA loans and found that 22 percent of Hispanics had no credit score compared to 3 percent of African Americans and 4 percent of whites. Even though the lower incidence of credit scores among Hispanics reflects the large share of immigrants who do not have credit scores, it still means that a fraction of the minority population cannot even be processed through systems that require a credit score. Equally troubling, the authors found that fully 33 percent of African Americans had scores below 620[22] compared to only 15 percent of whites. Using data from the SCF and statistical methods used by most credit granting institutions, Bostic, Calem and Wachter (2004) examined credit quality and found that 60 to 70 percent of minority renters have credit scores below the 660 threshold generally required to obtain prime credit. They suggested that this group is unlikely to attain homeownership without accessing more costly credit from the subprime market.

At a minimum, automated underwriting results in disparate treatment of minorities. The law dictates the basis for treatment must meet a business necessity test to avoid being judged discriminatory. Credit scores pass this test because they are so closely correlated with observed default behavior and losses. However, the current trend toward risk-based pricing opens up possibilities for price discrimination (Ross and Yinger 2002). In a system that either accepts or rejects borrowers and does not offer a range of prices, discrimination can only enter into the accept/reject decision. In a risk-based pricing system, lenders can discriminate either by offering minorities higher priced credit than whites with comparable risk profiles or by targeting minority communities and offering everyone the same high rate regardless of their credit score. The former practice is relatively easy to detect because it involves treating minority applicants differently than whites. The latter is unfortunately more difficult to detect because the mortgage industry lacks both transparency and consistency in pricing by risk grade (Stanton 1999, Ross and Yinger 2002). For example, a lender that charges a higher interest rate may be intentionally overcharging or he or she may have better information than other lenders who are not pricing

[22] This is out of a possible 850 points.

adequately to cover the risk.[23] Fears that the geographic segmentation of markets is a form of price discrimination are fueled by evidence that some subprime lenders target low-income and minority neighborhoods (Goldstein 2004).

The implications of automated underwriting systems for underserved borrowers and areas remain unclear. Gates, Perry and Zorn (2002) compared accuracy and approval rates of applicants under Freddie Mac's automated underwriting system, Loan Prospector, to those underwritten manually. The authors found that, not only do automated systems more accurately predict default than manual underwriters, but this increased accuracy results in higher borrower approval rates, *especially* for underserved applicants. While they note that some of the rejected applicants would have been approved under a manual underwriting system, on average more underserved applicants were approved through the automated system.

Although evidence strongly suggests that Loan Prospector has improved access to prime credit among low and moderate income borrowers, it is not clear that this is true for all systems. Collins Harvey and Nigro (2002), for example, reached a different conclusion. Studying loan level data and underwriting decisions of a bank that uses a custom credit score model, they found that since some models neglect factors that are particularly important to approvals of non-traditional borrowers, these scoring systems produce larger disparities than a machine-replicated judgmental system.

Clearly, then, questions remain regarding how best to score non-traditional borrowers and the implications of the shift toward automated underwriting, risk based pricing and reliance on credit scoring.

Improving Credit for Low-Income Asset Building

Progress in building assets among low-income households was made during the 1990s. Expanded access to mortgage credit helped lift low-income homeownership rates and expanded access to banks helped lift transaction account ownership rates. In both cases, regulation and technology played a role. In the case of homeownership, technology lowered mortgage origination and servicing costs and increased the accuracy of risk assessment, while in the case of banking it lowered the costs to serve small accounts. The Debt Collection Improvement Act

[23] Indeed, many lenders suffered heavy losses on their subprime lending portfolios in the 1990s because they under priced their credit.

passed in 1996 pushed federal payments towards direct deposits, while goals established by Congress for the government sponsored housing enterprises together with expanded enforcement and amendments to CRA and HMDA and continued community activism stimulated mortgage lending to low-income and minority borrowers and areas.

Despite gains, however, low-income individuals remain far less likely to have bank accounts or own homes than higher-income individuals. The same holds true for minorities compared to whites of comparable incomes. In addition, the dual mortgage and financial services systems have intensified, with low-income, and especially low-income, minority, communities served to a much greater degree by alternative financial service providers, subprime mortgage lending specialists, and mortgage brokers hawking subprime loans. And despite significant advances in credit scoring models, there are ample reasons to believe that credit risk evaluation and pricing systems can be improved.

There are many ways in which the credit needs of low-income and minority communities could be met in a more complete, fair, and cost-effective fashion. Broadly writ, these include interventions to further reduce the number of the unbanked and increase savings rates, improve the accuracy and fairness of credit risk evaluation and pricing systems, improve consumer awareness, and expand the risk mitigation tools available to low-income households.

Reducing the Number of Unbanked and Increasing Incentives to Save

The value of moving more low-income households into the banking sector comes from opportunities to:

- lower the costs of their basic banking services (thereby boosting surplus income),
- provide a secure place for savings and the possibility to earn a return,
- create opportunities to educate and cross-market other products,
- transmit, remit, and capture payment histories electronically.

As Seidman and Tescher (2004) noted, a bank account allows customers to receive a paycheck quickly and safely and to access funds using checks, ATMs and debit cards. Moreover, establishing a banking relationship can increase financial literacy, create opportunities to establish a credit history, and culminate in access to high quality credit products. Providing

incentives for low-income households to save can allow them to leverage their savings to buy homes, help them steer clear of expensive short-term credit, and help them manage repayment risks by providing a cushion against economic hardships.

Opportunities are currently being explored to blend mainstream and alternative products in a single institution. For example, Bethex Federal Credit Union has partnered with RiteCheck, a check casher, in an effort to promote savings opportunities and loans to check cashing customers (Richter and Tan 2002). In addition, ownership of individual development accounts (IDA) is expanding thanks to the passage of the Assets for Independence Act in 1998. IDAs are subsidized savings accounts that allow eligible low-income individuals to make deposits that are matched, usually at a rate of 2:1 or 3:1. Withdrawals must be for approved uses, which include home purchase and education. At present there about 40,000 participants (Sherraden, Schreiner and Beverly 2003). Monthly net deposits per participant have been averaging $19.07 resulting in accumulation of an average of about $700/year after matches (Schreiner, Clancy and Sherraden 2002). While IDAs have bipartisan support, there is debate as to whether they will be funded to reach a scale adequate to affect change. While the current level of participation is a start, it will not likely lead to the sort of structural change that would materially reduce economic inequality. However, the IDA program has demonstrated that given the right sort of incentives, lower-income households are capable of saving money.

Meanwhile, as an additional way to stimulate savings, Orszag and Greenstein (2004) recommended that the pension system be reformed to help encourage low- and moderate-income households to save for retirement, increase the national savings rates, and reduce elderly poverty. Households of all incomes do not save enough for retirement, but the authors point out that the current system provides disproportionate tax benefits to upper income households that are more likely to save adequately without benefits. The authors cite evidence that tax preferred savings targeted to low-income households are more likely to generate new savings than those targeted to higher income households. They also find evidence that financial education in the workplace had a greater impact on low-income households than higher-income households who tend to be more financially sophisticated in the first place.

Improving the Credit Risk Evaluation and Pricing System

While credit scores appear to be powerful predictors of default risk, there is clearly scope to improve several aspects of the current credit risk evaluation and pricing system. One important step is to try to capture nontraditional measures of willingness to pay. This is important for two reasons. First, a small fraction of individuals in the U.S. appear to have no credit record or score whatsoever. A larger fraction have records with thinly populated fields because they have not used credit or banking accounts much in the past or because they have obtained credit from sources that do not report information to credit bureaus. Furthermore, among those with credit scores, Bostic, Calem and Wachter (2004) reported that 20 percent likely had credit scores of 620 or less (poor) in 2001. Second, nontraditional information could improve the accuracy of models even for those with an established credit record. For example, it is possible that while nonpayment of a credit card (which is reported to credit bureaus), may be predictive of willingness to repay a mortgage, the timely payment of rent (which is not reported to credit bureaus) might be equally predictive. Thus, an important compensating fact—that some people do not repay credit card debt but nevertheless manage to make housing payments on time—could be lost from models.

In response to these concerns, new programs have been designed to allow applicants with minimal or no credit histories to substitute a history of rent, utility, telephone, insurance or health care payments for traditional measures of credit worthiness. For example, GMAC's Settle America program allows up to 30 percent of an applicant's qualifying income to come from other resident members of the household. Pooled income is typical among immigrant households, yet most underwriting systems do not currently allow it to be taken into account. Fannie Mae and Freddie Mac have both introduced mortgage products that reward credit impaired borrowers by lowering their mortgage interest rate by as much as 2 percent after 24 months of timely payments as they establish a history of repayment.

Pay Rent, Build Credit, Inc. (PRBC) is a new consumer-directed credit bureau that will enable renters to demonstrate timely payments of rent and other recurring bill payments to build a credit history.[24] The organization has developed a patent-pending data collection methodology and software that enables renters to enter up to 36 months of prior rental, utility, insurance, student loan, and other bill payments to build an historical credit file, provided they have a

[24] More information is available at http://www.payrentbuildcredit.com

"paper trail" such as a signed lease, bills, cancelled checks, money order receipts, or bank statements that can be verified by a third party such as a realtor, tax preparation service, or credit counselor. Renters can also build credit with future bill payments by using their bank to send either a paper check or an electronic payment directly to their landlord and other billers. The renter's financial institution would record the payment and send it directly to PRBC. This novel approach is qualified by the Federal Reserve Board and by the New York State Banking Department as an innovative and responsive "community development service" for banks under the Community Reinvestment Act, and eliminates the potential roadblock for renters who live in a unit owned by a landlord that might not want to help their residents build credit with their rent payments. PRBC hopes to improve data accuracy by obtaining its data from financial institutions and electronic bill payment systems, thus greatly reducing the potential for errors that could negatively impact consumers. PRBC will also allow consumers to view their personal information and resolve disputes for free before their information is shared with other credit bureaus. PRBC will sell credit reports for "permissible purposes" under the fair Credit Reporting Act like other credit bureaus but will not charge consumers for its service nor will it sell mailing lists.

Holstine (2004) argued that there are two additional pieces of information that could be used to improve the predictive power of credit scores. The first is a "letter of explanation" for past credit problems. The second is information on whether or not the borrower has completed an education or counseling program. However, while there are demonstrated benefits to counseling, most studies suggest that the type of counseling matters and that telephone counseling, for example, has little to no impact (Hirad and Zorn 2002). Additional information on the quality of the counseling therefore would increase the predictive power of such a measure.

There is also room to improve the accuracy and coverage of information that is currently transmitted to credit bureaus under the voluntary reporting system. The Federal Credit Reform Act does not require creditors to report, and even if they do report the law requires only that they supply information they know to be accurate. Thus, not only can some creditors simply not engage with the system, those that do can selectively report so long as it is accurate. Any attempt to introduce additional reporting requirements, however, would go against the grain of more than 30 years of regulations aimed at regulating a voluntary reporting system.

Increased consumer vigilance might help to fix some of the problems with the current system, but it is unlikely that consumers are equipped to detect an error in their credit score or know for certain that they are being unfairly treated by a lender. Legislation that provides consumers with one free credit report per year now makes it easier for consumers to examine their credit record but most consumers are unaware that they have this right or how to exercise it. In addition, there is some evidence that consumers frequently underestimate their credit score, which can make it difficult for them to detect a problem (Ards et.al. 2003). Holstine (2004) cited a survey of the myFICO® website that found that in general, site users were well educated, higher income homeowners, already actively engaged with financial institutions. Holstine also listed current consumer fallacies around credit scoring such as: checking my score will lower it; my score will drop if I apply for new credit, and a poor score will haunt me forever. Clearly, more education and outreach will be needed before consumers can be expected to police the system.

Another way to improve credit evaluation and pricing is to require more disclosure of information. Recent amendments to the Home Mortgage Disclosure Act slated to go into effect in 2004 require reporters to include the spread between the APR and the yield on Treasury securities if the difference is more than 3 percentage points for the first lien and more than 5 percentage points for subordinate liens. Like the release of information on loan applications and their disposition in the early 1990s, the release of this information will stop short of enabling outside observers to prove discrimination even when they suspect it. Without credit scores and information on debt-to-income and other factors, key variables needed to prove discrimination will remain unavailable. However, it is likely to stimulate a lively public debate and could alter the actions of lenders as they try to manage the reputational risks associated with the appearance of discrimination. Community-based organizations may also be able to use the information to focus investigative attention on lenders that appear to be targeting certain areas or borrowers with subprime mortgage loans.

With the growing importance of credit scores to so many business decisions, a public debate over whether or not the current regulatory system is fair to consumers and whether it produces satisfactory results is warranted. Regulations governing credit reporting, for example, have consistently tried to steer clear of mandatory and proscriptive approaches to ensure the quality, completeness, and accuracy of credit information (Staten and Cate 2004). Instead,

regulations have aimed to establish an effective error detection and correction system that is initiated through consumer challenges to faulty credit reports and decisions. But with evidence that many consumers have an unrealistically low assessment of their credit quality, it is possible that poor underwriting may go unchallenged. The Center for Community Change and the Consumer Federation of America therefore want to see significant steps taken to improve credit report accuracy. They proposed that credit score providers share responsibility for the accuracy of the underlying data, for correcting that data, and for disseminating the correct information if requested by the consumer.

Regulations governing credit decisions also deserve a careful review. For example, there is no requirement for lenders that specialize in subprime lending to refer customers with higher credit scores to prime lenders, even if the subprime lender is an affiliate of a prime lending company. Thus, it is both legal, and in their interest, for subprime lenders to charge subprime rates to prime borrowers. Some lenders do refer customers up on a voluntary basis, but it is not a requirement. In addition, lenders can treat their automated underwriting models as proprietary, which has reduced some of the transparency that accompanied the rule-based system where rules were codified in underwriting guidelines. Instead, we have a system that weights variables in a variety of different ways within credit scoring models and allows interactions of variables to drive pricing decisions. While this enhances the predictive power of models and allows favorable scores on one variable to compensate for unfavorable ones on another, it produces a black box approach to credit decisions. At present, these models remain closed to the public and can only be opened by investigators if a lawsuit is brought that charges that a model violates a law.

While full disclosure about the statistical models would mean little to the general public, at a minimum it seems reasonable to provide borrowers with more information related to their risk. At present lenders and investors have information on the borrower's behavior and the probability of default, yet the borrower is left in the dark. Even state lotteries generally require the odds of winning to be posted. Lenders therefore could be required to disclose how their model assigns the probability of default, which would allow borrowers to compare their rating across lenders.

Improving Consumer Awareness and Promoting Optimal Credit Selection

The current credit evaluation and pricing system places a great deal of the burden for detecting and correcting errors in credit decisions, including pricing decisions, on the consumer. Absent significant changes in the laws that regulate credit reporting and underwriting, consumers must serve as their own watchdogs and remain the principal defense against unfair practices and inadvertent errors. This places the onus on credit counselors and community groups to help consumers select the right credit products and challenge decisions that consumers believe were made in error.

The most logical tool for promoting consumer awareness is counseling. However, Mallach's (2001) extensive review of the pre- and post-home purchase education and counseling research unearthed little substantive evidence on the effectiveness of counseling. However, there have been a few recent studies that strongly suggested homebuyer education programs have both accelerated homeownership and resulted in lower delinquencies and defaults (McCarthy and Quercia 2000; Mallach 2001; Hirad and Zorn 2002). Perhaps the most compelling study was done by Zorn and Hirad (2002). They found that homebuyer education programs result in lower delinquencies, all else equal, but only if they are in-depth programs. Indeed, Hilgert, Hogarth and Beverly (2003) have argued that there is an important policy distinction between providing information and providing education. Only the latter is likely to produce a behavioral change. Unfortunately, no studies to date have examined whether counseling programs help borrowers steer clear of over priced mortgage products or help them challenge unfair credit decisions.

There is clearly a role for community groups to continue their work with consumers to link them to the best products they qualify for. Some groups already use or are piloting decision-making software to help them evaluate the wide range of products available. More education on the long-term effects of higher priced credit, however, may be needed to try and change the behavior of those potential borrowers who are eager for an accept decision, at any price.

Even if a compelling case can be made for the value of counseling programs, Gwatkin and McCarthy (2004) argued that financial literacy education will remain under funded because each lender receives only a small share of the benefits and this produces a free rider problem, where each lender waits for someone else to provide the funding.

Certainly, education and counseling help, but in the case of mortgage lending, even the most financially savvy borrowers may be overwhelmed due to the complexity of the system, the

wide range of products and various combinations of points and fees, and the lack of transparent pricing. These can be especially daunting in the subprime market, which Mansfield characterizes as one where "consumers get false or inadequate information at the marketing stage, bogus and hard to comprehend information at the pre-loan stage, and deals that represent neither marketing nor early disclosures" (2003: 16). Wider availability of the rate sheets that are faxed daily to mortgage brokers would help counselors and borrowers better understand the loan terms and prices that borrowers should qualify for given their credit score and give them a way to evaluate products. More tools are needed to help connect borrowers to the best products for which they qualify. And research suggests that community groups and counselors may need to take a more active role in the loan selection process. A recent Fannie Mae survey emphasized the importance to borrowers of a trusted advisor. Borrowers are looking for guidance and advice, yet many counselors and community groups are reluctant to fill that role even as other untrustworthy agents are only too eager to help.

Expanding and Improving Risk Mitigation Tools for Consumers

Borrowers with weak or no credit history typically pay more for credit than borrowers with a strong credit history. Lenders insure against repayment risk through the interest rates and fees they charge or the third-party credit enhancements they purchase. Low-income borrowers would also benefit from some form of insurance. Low-income households, because of their low incomes, have a harder time saving, are more likely to experience job losses and other reductions in income, are less likely to have health insurance, and are more likely to take on credit to cover basic expenses or small discretionary purchases. They are also more likely to buy homes that soon require significant repairs or replacements of major home systems.

Asset building policies have evolved to include strategies to help low-income people repay their debts and manage and maintain their assets post purchase. A nascent literature suggests that it is not so much negative net equity (value of the home falls below the value of the mortgage) that causes people to default on their mortgage loans (though it may be a necessary condition). Instead, it is "trigger events," such as unemployment, divorce, unforeseen medical expenses or a death in the family that increase the probability of default (Elmer and Seelig 1999). At the same time, behavioral economists have found that people in crisis are more likely to take

risks.[25] For example, facing foreclosure, arguably a time for financial conservatism, many borrowers may max out their credit cards or borrow money at rates they can not possibly service.

New products and debt protection services are currently being introduced to the mortgage market to protect borrowers should a trigger event occur.[26] In 1964, the Office of the Comptroller of the Currency (OCC) ruled that "…debt cancellation contracts are a lawful exercise of the powers of a national bank and necessary to the business of banking." Despite this early ruling there was very little use of debt cancellation until the credit card industry began experimenting with it in the late 1980s. Since then, more than 200 lenders have launched debt protection products.

Because debt protection is not regulated as an insurance product,[27] lenders have a great deal of flexibility and can tailor program offerings to their own portfolio and its needs. Typically, debt protection for credit card holders is offered in the form of an addendum to the lenders agreement with the customer. The addendum basically states that if any of these X trigger events should occur, Y payments will be waived. A monthly fee is charged according to the incidence and severity of the covered event. In addition to the standard negative trigger events such as death or accidental death, divorce, unemployment, hospitalization and disability, many programs now cover positive events such as the birth of a child, wedding expenses, or purchasing a new home.

Debt protection started with the credit card companies and has spread to consumer loan products, such as home equity loans and auto loans, and is now being tested with mortgages. It is too soon to tell who will purchase mortgage protection, how much adverse selection might occur, and how those covered will perform, which makes it difficult to price.

In 2001, Bank of America launched the Borrower's Protection Plan©, which offers debt protection for mortgages, credit cards and other consumer loans. Three major events are covered at different monthly premiums: disability, involuntary unemployment and accidental death. Similarly, Fannie Mae is piloting a program called Home Stay© that would cancel mortgage payments in the event of a trigger event such as death, unemployment or temporary disability. A

[25] Engel and McCoy (2002) cite the work of Amos Tversky and Daniel Kahneman, Advances in Prospect Theory: Cumulative Representation of Uncertainty, 5 J. Risk & Uncertainty 297 (1992); Amos Tversky and Daniel Kahneman, Rational Choice and the Framing of Decisions, 59 J. Bus S251 (1986); Roger G. Noll and James E. Krier, Some Implications of Cognitive Psychology for Risk Regulation, 19 J. Legal Studies 747 (1990).

[26] These are also called debt cancellation or debt suspension.

[27] On September 17, 2002 the OCC issued the Final Rules on Debt Cancellation and Debt Suspension codifying that federal banking authorities and not state insurance departments regulate these products.

percentage of the monthly mortgage payment is charged to pay for the coverage.[28] Fannie Mae is also piloting Home Manager© which is similar to a home warranty, but more proactive in that there is an annual systems inspection during which the homeowner receives information on home maintenance. For about $35 per month customers receive the annual inspection, and gain access to a home repair hotline, a licensed network of contractors and protection against major systems failure. The home inspection could provide an opportunity for further education efforts related to predatory lending or refinancing, for example.

These products do not address area wide home price declines. Yet, Elmer and Seelig found that "income and real estate shocks, along with insolvency, can be expected to play central roles in mortgage default" (1999: 23). Home equity assurance programs have been piloted to stimulate housing markets and secure real estate investment by protecting homeowners from financial loss in the event of an area wide house price decline between the time of purchase and the time of sale. The first program started in Oak Park, Illinois[29] in 1977 during an intense period of block-busting[30] and high racial turnover. Local governments and nonprofit organizations have since initiated other programs, but to date there remain only a handful. Currently, the Neighborhood Reinvestment Corporation is piloting the Home Equity Protection program in Syracuse, New York.[31] Protection is paid for with a one time fee - 1.5 percent of the protected value – and owners typically protect their house for the value of the purchase price. If at the time the owner sells their home prices have dropped, the program pays down the mortgage or pays the owner directly, depending on the situation, for the amount of the protected value, regardless of what the home sells for. In order to be eligible, the homeowner must maintain the property and remain in the home for a specified amount of time, typically three to five years.

None of the programs described above is technically an insurance program. However, Schiller and Weiss have argued that the risk of home price decline is probably greater than that of fire or other physical disasters routinely covered by insurance (1994). Insurance companies are unwilling to cover borrowers because of the moral hazards associated with doing so. The

[28]Home Stay is considered an add-on and is held by a third party not a servicer so it doesn't affect the interest rate during the period the borrower is in trouble.
[29]Illinois is the only state with a law, the Home Equity Assurance Act of 1988, that outlines how home equity assurance programs operate. Illinois funds programs through a property tax levy. Other places have used gambling revenue, foundation money or general government funds.
[30] Block-busting occurred through efforts to persuade property owners to sell or rent their property, by making written or oral statements that racial minorities were moving into the neighborhood.
[31] See Caplin et al. 2003 for a full description.

argument is that borrowers can intentionally withhold maintenance or purchase in areas with higher probabilities of price declines because they do not bear the costs of these declines. These hazards can be tempered but not eliminated by covering only price declines in an entire neighborhood using a home price index such as the Freddie Mac Conventional Home Price Index or the Fiserv Case, Shiller and Weiss index.

Financial literacy and homebuyer counseling programs can also be an effective risk mitigation strategy. The homeowner insurance industry recently started promoting home maintenance programs in an effort to reduce claims. Finally, purchasing homes through community groups that ensure a home will not require the replacement of any major systems in the first few years of homeownership can also reduce risks of expenditure shocks after move in.

Conclusions

Despite progress in reducing the number of unbanked and improving access to credit for asset building in low-income and minority communities, a large share of low-income (and especially low-income minority) individuals remain unbanked, the gaps in asset ownership by income level and race/ethnicity remain wide, and the cost of credit to borrowers in low-income communities and minorities is on average higher.

Much of the progress to date stems from advances in technology that have lowered the costs of serving credit impaired borrowers and improved credit risk assessment and pricing. Some of the progress is also a result of federal regulations such as the Community Reinvestment and Home Mortgage Disclosure Acts, as well as the advocacy that surrounded them. However, the fact remains that a two tiered system is in place where lower-income and minority borrowers are often served by different lenders with a different product mix.

What can be done to improve the system? To begin with more research is needed and more original data needs to be collected and analyzed. The various financial services industries continue to rapidly evolve as new technologies are refined and new products are introduced. The current regulatory and market environment creates many incentives to press for continual improvements in reaching out to markets alternatively labeled underserved, minority, low-income, or emerging.

But potential market failures, new policy challenges, and the existence of unscrupulous lenders in the new risk-based pricing environment all point to the need for new policies. For

example, the credit information collected should be as complete and accurate as possible and the statistical models should be as sensitive as possible to the most predictive factors by including the proper variables and selecting the proper subgroups upon which to fit models. Efforts to improve credit information collection by adding so-called nontraditional information, such as utility and rent payments, tailoring credit scores and evaluations to particular credit applications such as mortgage lending or auto lending, and ensuring that models constructed on larger populations apply equally well to important subgroups are all interventions that accomplish this goal.

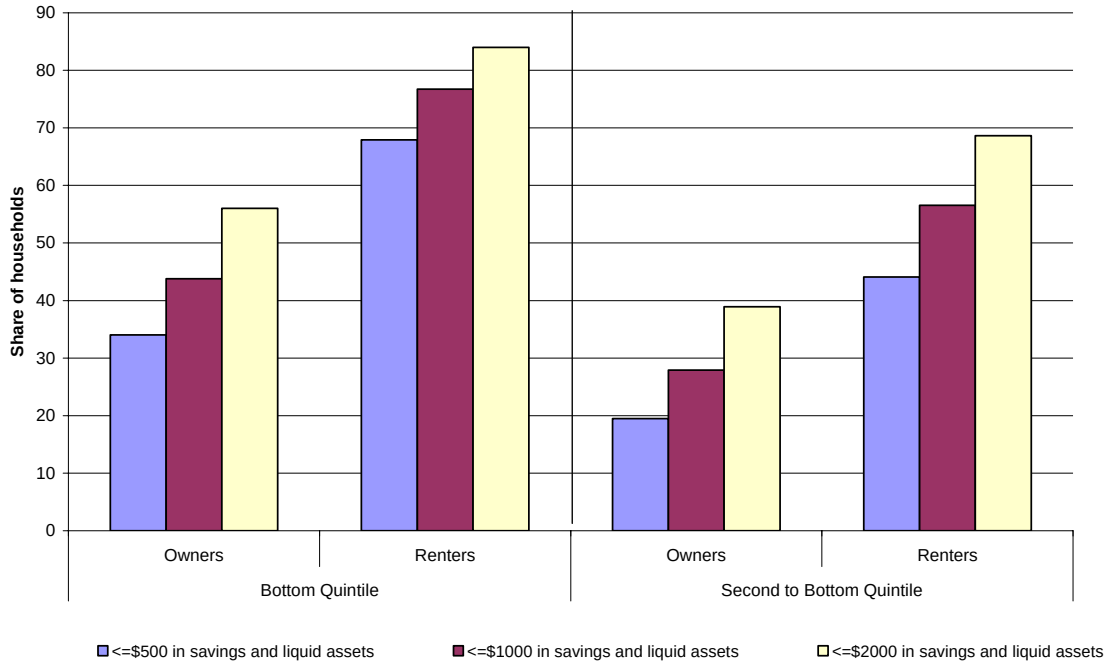
Ensuring that all borrowers end up with the lowest priced credit for which they qualify should be a priority. This can be accomplished through voluntary efforts or regulations that require loan applicants with higher quality credit to be referred up to lenders that offer lower cost credit, voluntary efforts or regulations that require or encourage, through an affirmative obligation, transparency and some uniformity in pricing grids by risk grade, financial literacy campaigns that improve consumer performance under a system that is at present and may remain rooted in *caveat emptor*—let the buyer beware.

Providing incentives and opportunities to save are central to mitigate the risks associated with job loss, family dissolution, income declines, and budget shocks. In addition, as electronically captured information becomes more and more important to credit rationing and pricing, it will be even more important for low-income households to have transaction accounts so that they enter the mainstream financial system.

Finally, all involved in extending financial services to low-income households must be cognizant of the practical realities of having a low income and scant savings. Almost by definition, these households are more vulnerable to fluctuations in income and expenses and they often struggle from paycheck to paycheck. Budgeting skills and financial literacy can help these households to get by without getting into trouble as well as help them eke out savings to cushion them against economic difficulties. Education can also help them avoid the costly forms of credit that are more available in the communities in which many of them live. But low-income households deserve greater incentives to save and better products to help them, not their lenders, mitigate repayment risks. They deserve to benefit from rapidly evolving loan loss mitigation tools that help cure loans, from enforcement of anti-predatory lending and equal credit opportunity laws, and from mainstream financial services providers that compete for their

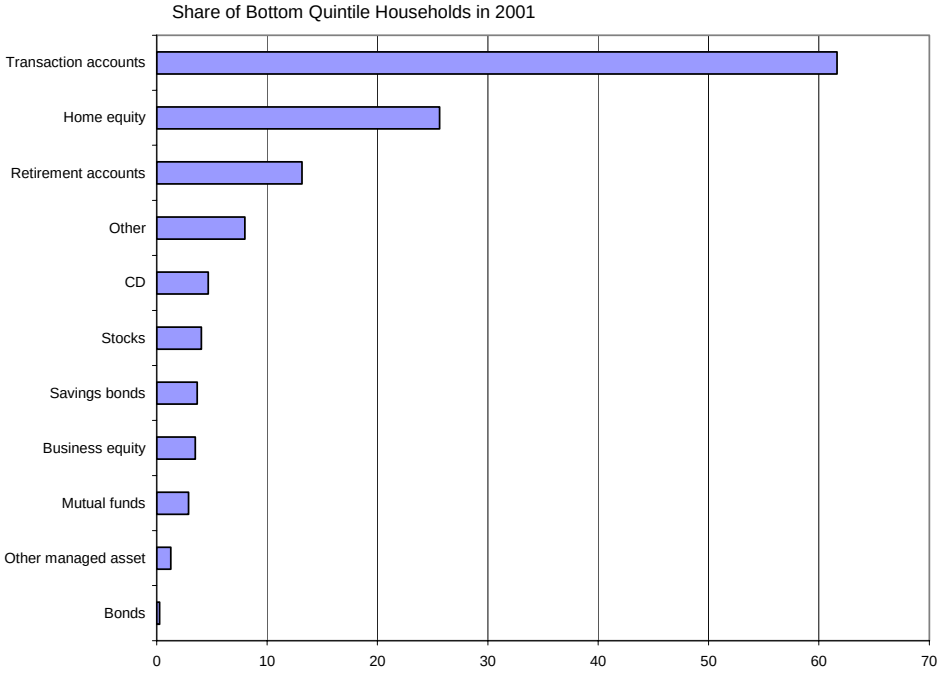
business. To do less, will make it harder for low-income households to build assets through homeownership and other investments, result in threats to their capacity to sustain their investments and repay their loans, and force some to pay higher credit costs that reduce their wealth accumulation over time. In short, without action on a number of fronts simultaneously, economic insecurity will continue to prevail among low-income households and they will remain at a distinct disadvantage in their wealth building potential.

Chart 1: Large Shares of Low-Income Households Have Scant Savings



Note: Liquid assets include transactions accounts, CDs, stocks, mutual funds, bonds and savings bonds.
Source: Survey of Consumer Finances, 2001

Chart 2: Low-Income Ownership Rates of Most Assets with Potential for Appreciation are Low



Note: Other assets include oil and gas leases, futures contracts, royalties, proceeds from lawsuits or estates in settlment and loans made to others.
Source: Survey of Consumer Finances, 2001

Chart 3: Influences on Low-Income Asset Building through Homeownership

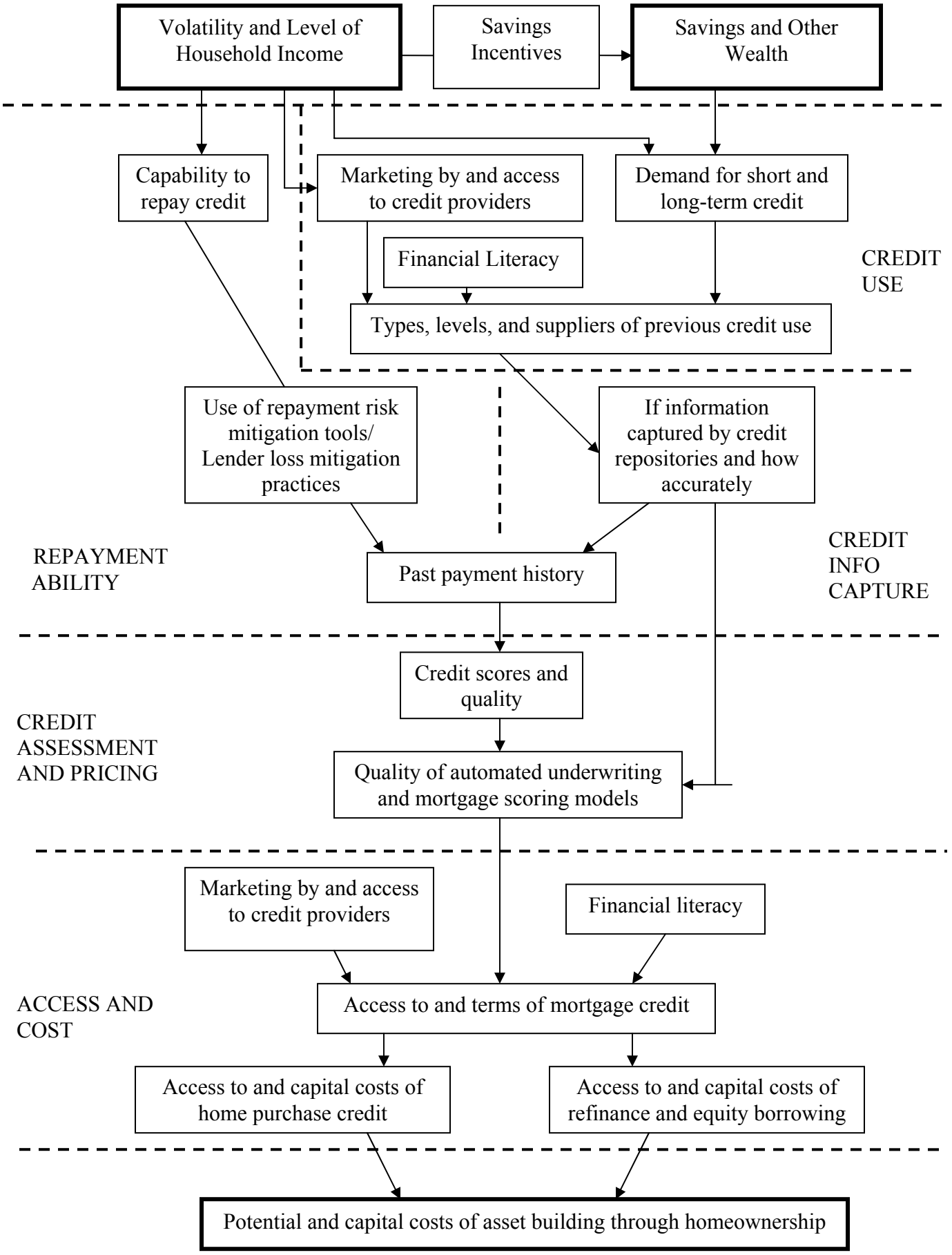
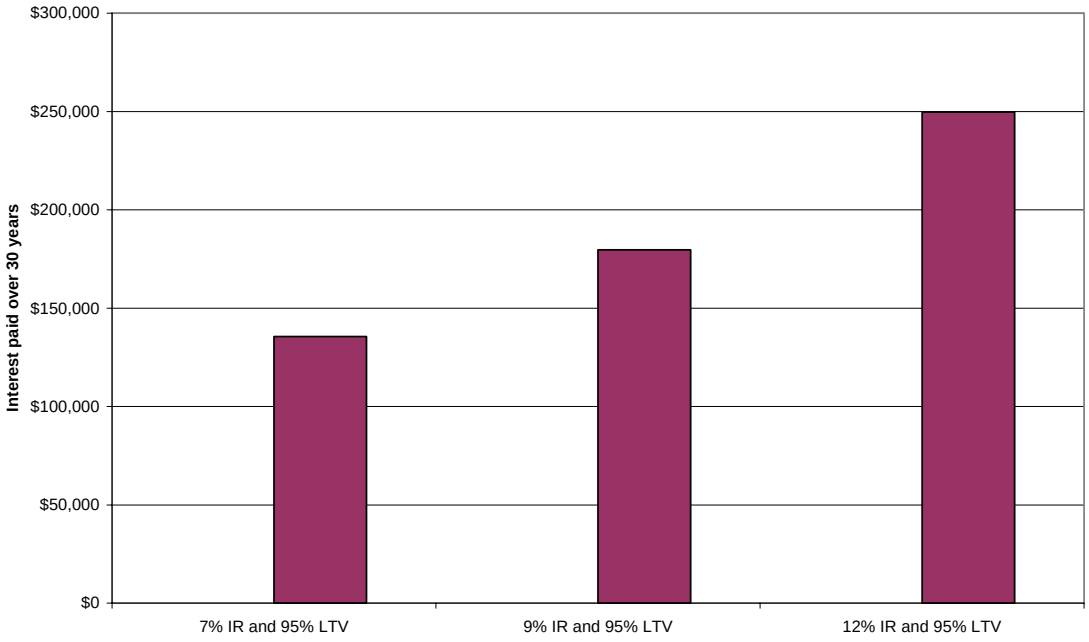


Chart 4: Higher Rates and Loan-to-Value Ratios Increase Capital Costs and Suppress Equity Accumulation



Note: Simulations assumed a fixed rate mortgage and a mortgage premium of .78. A 33 percent debt to income ratio for a $90,000 home (the median price for low-income borrowers aged 25-44) was assumed.

Chart 5: Ownership of Non-Financial Assets

(Share of Households Holding the Asset)

Households <65	Vehicles		Primary residence		Other residential property		Equity in nonresidential property		Business equity		Other		Any nonfinancial asset		Any asset	
	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001
Quintile 1	53.13	55.67	22.07	27.79	3.4	2.22	2.5	2.1	3.34	3.5	5.5	3.47	60.01	63.57	72.04	79.87
Quintile 2	79.71	87.18	40.89	54.6	4.93	3.29	5.87	5.1	10.31	8.45	6.51	5.58	82.05	91.2	92.3	97.62
Quintile 3	94.96	91.4	59.76	61.09	7.38	5.89	8.56	4.78	9.42	9.11	12.19	4.39	97.1	95.21	99.93	99.9
Quintile 4	96.37	95.22	74.72	79.94	14.3	12.77	12.3	6.09	12.67	12.25	15.4	8.08	97.51	97.58	99.4	100
Quintile 5	96.01	94.37	90.1	92.06	25.98	24.26	22.12	16.88	25.08	27.83	19.21	12.14	99.08	99.48	99.99	100

Households >65	Vehicles		Primary residence		Other residential property		Equity in nonresidential property		Business equity		Other		Any nonfinancial asset		Any asset	
	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001
Quintile 1	47.19	56.27	53.28	60.74	4.62	4.88	1.98	4.24	0.37	0.45	4.42	1.32	72.97	72.75	90.49	93
Quintile 2	83.08	83.61	79.1	86	9.55	10.72	11.1	9.92	3.27	3.47	10.69	5.98	96.55	95.63	99.65	99.54
Quintile 3	93.68	89.08	90.1	84.4	29.5	14.8	15.04	14.26	8.54	7.35	7.93	8.7	97.83	95.91	100	99
Quintile 4	81.85	92.51	86.33	94.47	27.28	22.96	20.39	10.46	10.81	9.03	16	13.46	94.89	99.05	100	100
Quintile 5	97.93	90.48	87.76	93	47.51	40.53	31.82	25.27	31.94	32.46	29.07	20.98	99.35	98.69	100	100

Whites	Vehicles		Primary residence		Other residential property		Equity in nonresidential property		Business equity		Other		Any nonfinancial asset		Any asset	
	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001
Quintile 1	61.83	66.25	41.77	52.39	5.54	4.94	2.66	3.89	4.03	2.96	7.35	4.23	75.77	80.22	91.16	93.8
Quintile 2	85.88	90.37	60.72	62.12	6.97	6.5	8.64	7.9	8.27	9.11	9.77	6.61	92.2	95.24	97.78	99.28
Quintile 3	95.63	92.43	66.57	69.27	11.78	8.57	10.93	7.3	9.59	10.05	13.55	5.98	97.53	95.96	100	100
Quintile 4	94.71	94.81	77.11	83.63	16.15	14.14	12.9	7.04	13.29	12.54	14.79	9.51	97.6	97.81	99.79	100
Quintile 5	95.99	94.2	90.96	92.92	27.89	26.19	23.15	18.44	27.04	29.67	21.72	14.23	98.99	99.44	99.99	100

Minorities	Vehicles		Primary residence		Other residential property		Equity in nonresidential property		Business equity		Other		Any nonfinancial asset		Any asset	
	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001
Quintile 1	40.57	40.78	23.57	21.04	2.11	0.61	2	1.38	0.66	1.59	2.95	0.46	53.15	47.4	65.55	71.16
Quintile 2	67.4	75.25	37.63	56	5.51	2.66	5.28	2.82	6.53	1.62	3.2	3.33	73.68	85.32	87.16	95.3
Quintile 3	91.33	85.5	59.59	49.55	9.4	3.18	5.05	3.18	8.05	4	3.42	1.98	96.11	92.93	99.73	98.77
Quintile 4	95.59	95.05	70.46	74.15	13.36	14.17	14.27	5.04	8.71	8.59	18.57	5.62	95.59	97.67	97.91	100
Quintile 5	97.89	92.06	81.13	87.07	29.83	25.56	22.52	13.76	15.58	19.54	7.94	5.84	100	99.04	100	100

Note: Other includes artwork, jewelry, precious metal, antiques, hobby equipment and collectibles.
Source: JCHS tabulations of the 1989 and 2001 Surveys of Consumer Finances

Chart 6: Ownership of Financial Assets

(Share of Households Holding the Asset)

Households <65	Transaction accounts		CD		Savings bonds		Bonds		Stocks		Mutual funds		Retirement accounts		Life insurance		Any financial asset	
	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001
Quintile 1	45.2	61.63	4.69	4.66	4.6	3.68	0.05	0.26	2.1	4.06	0.61	2.88	5.08	13.17	10.03	11.86	51.84	67.04
Quintile 2	74.48	85.87	9.39	6.04	13.37	9.78	0.82	0.28	5.66	8.47	1.01	6.11	15.8	33.96	17.23	18.59	82.51	90.38
Quintile 3	91.62	95.17	15.38	10.07	24.01	14.15	2.98	1.04	10.79	13.64	4.99	12.84	40.56	53.67	34.42	24.05	95.43	97.87
Quintile 4	97.21	98.64	17.25	12.95	35.29	24.26	2.68	2.27	15.65	22.91	4.51	18.64	52.27	75.74	48.11	31.35	98.53	99.67
Quintile 5	98.7	99.68	25.76	18.03	42.05	31.33	12.71	7.28	39.43	48.64	17.45	37.62	75.93	88.1	56.08	38.18	99.77	99.72

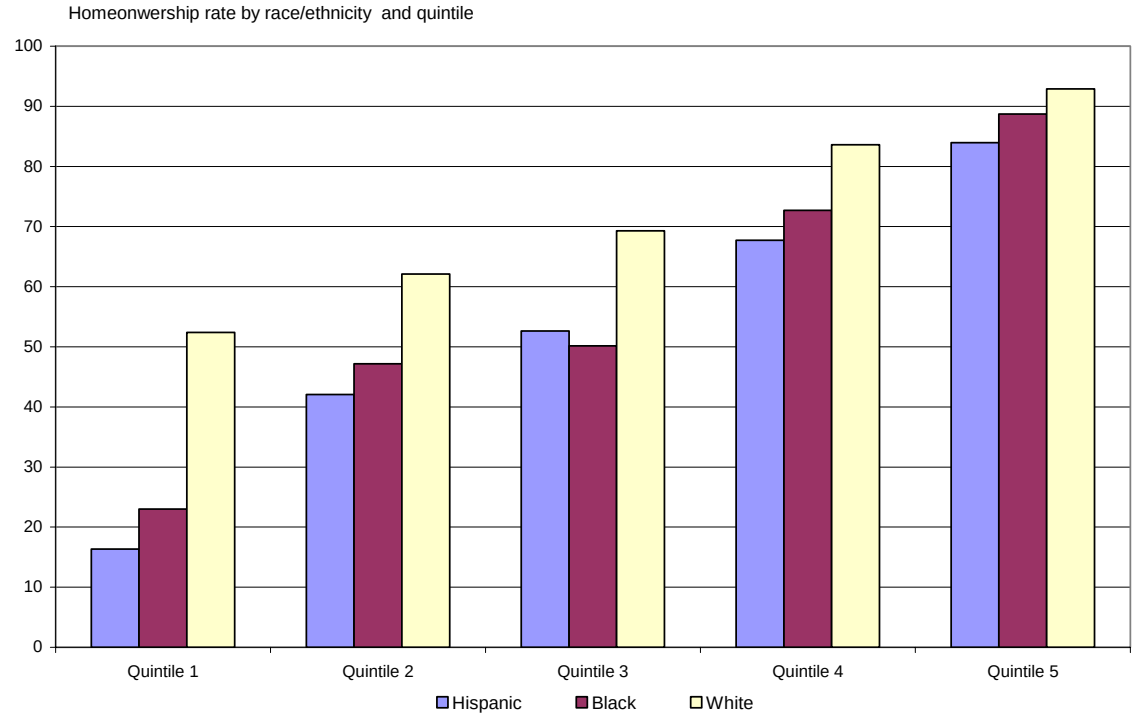
Households >65	Transaction accounts		CD		Savings bonds		Bonds		Stocks		Mutual funds		Retirement accounts		Life insurance		Any financial asset	
	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001
Quintile 1	73.51	84.84	12.05	17.85	4.01	3.79	0.31	0.41	1.26	2.75	1.29	4.63	2.42	11.46	19.26	15.02	77.97	86.37
Quintile 2	95.83	96.92	42.2	38.22	15.04	12.95	4.41	3.06	15.95	16.15	5.36	14.53	15.35	28.38	41.78	39.24	96.83	98.22
Quintile 3	97.36	98.59	53.97	50.72	28.91	12.4	8.07	2.97	19.99	28.35	13.14	29.33	26.04	43.01	34.16	35.51	97.36	98.82
Quintile 4	100	99.17	49.08	35.47	35.97	22.56	30.45	11.16	45.67	44.07	31.92	33.17	48.45	66.31	45.32	59.59	100	99.47
Quintile 5	100	98.02	46.28	34.34	24.4	19.56	50.63	17.59	56.46	48.27	31.25	44.75	57.18	69.95	48.33	54.04	100	100

Whites	Transaction accounts		CD		Savings bonds		Bonds		Stocks		Mutual funds		Retirement accounts		Life insurance		Any financial asset	
	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001
Quintile 1	74.52	80.27	13.99	13.98	7.58	4.62	0.07	0.42	3.26	4.45	1.61	5.09	5.1	15.6	17.13	13.23	78.91	83.14
Quintile 2	88.06	93.03	26.95	19.32	16.41	13.2	2.83	1.45	12.12	13.4	3.5	10.88	19.23	34.3	30.98	25.58	93.24	96.01
Quintile 3	93.53	97.01	27.06	19.78	26.14	15.85	4.41	1.74	13.99	18.08	7.96	17.67	40.5	52.72	35.74	25.6	96.39	98.85
Quintile 4	98.49	99.43	22.73	17.89	37.62	25.73	6.51	3.93	20.97	26.85	8.95	21.66	55.03	75.98	47.9	36.74	99.47	99.91
Quintile 5	99.08	99.52	29.41	19.92	41.51	31.27	17.74	9.5	43.8	49.76	20.03	41.05	75.65	86.66	55.95	40.89	99.76	99.82

Minorities	Transaction accounts		CD		Savings bonds		Bonds		Stocks		Mutual funds		Retirement accounts		Life insurance		Any financial asset	
	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001
Quintile 1	35.27	54.96	0.46	2.74	1.26	2.42	0.21	0.15	0.39	2.32	0.08	1.21	3.28	8.13	9.22	12.65	42.68	60.67
Quintile 2	65.84	78.73	5.17	4.88	7.32	4.21	0.12	0.11	1.72	3.65	0	2.46	5.85	27.33	12.4	21.79	72.31	83.91
Quintile 3	89.23	91.02	3.72	7.38	20.07	6.16	1.86	0	6.43	9.14	0.58	8.35	28.49	48.26	29.22	27.83	93.39	94.89
Quintile 4	92.87	95.49	10.5	7.5	24.85	16.44	1.22	1.4	8.58	20.92	0	15.85	37.21	67.69	47.42	28.08	95.04	98.43
Quintile 5	96.8	99.28	14.85	19.64	30.71	21.36	6.21	1.39	19.72	40.74	9.08	20.7	61.57	81.78	50.25	33.84	100	99.28

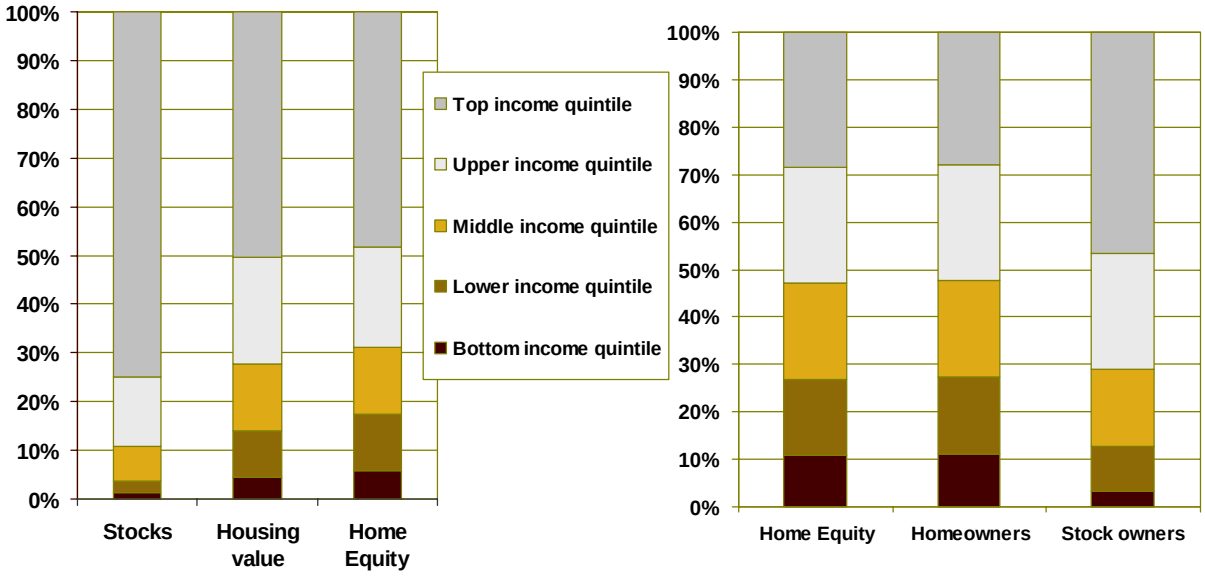
Note: Any financial asset includes other managed and other.
Source: JCHS tabulations of the 1989 and 2001 Surveys of Consumer Finances

Chart 7: Low-Income and Minority Homeownership Rates Lag



Source: JCHS tabulations of the March Current Population Surveys.

Chart 8: Home Ownership and Home Equity More Broadly Distributed Than Stocks



Source: JCHS tabulations of the 2001 SCF data.

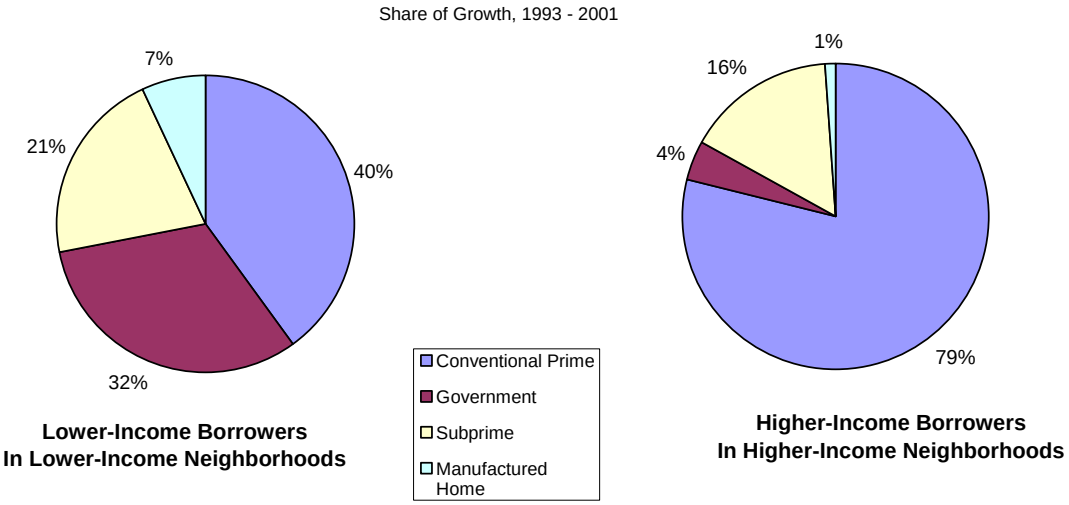
Chart 9: Debt Utilization by Quintile

(Share of Households Holding Debt)

Households <65	Home-secured		Other residential property		Installment loans		Credit card balance		Other lines of credit		Other		Any debt	
	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001
Quintile 1	7.79	14.28	1.17	0.3	42.83	35.44	10.36	33.51	1.07	2	9.08	7.38	52.97	57.04
Quintile 2	26.75	28.93	1.65	1.9	52.45	50.38	32.23	51.8	2.9	2.36	6.34	6.14	71.91	80.36
Quintile 3	41.35	47.74	3.28	2.89	60.38	57.67	54.04	56.98	1.98	1.32	5.15	8.29	85.59	88.35
Quintile 4	59.52	66.29	5.45	5.63	69.16	63.34	61.89	56.49	4.8	1.84	6.26	7.98	92.26	90.86
Quintile 5	77.45	80.55	15.31	12.45	61.01	53.09	54.04	45.63	7.4	2.06	11.53	9.5	94.94	92.56
Households >65	Home-secured		Other residential property		Installment loans		Credit card balance		Other lines of credit		Other		Any debt	
	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001
Quintile 1	7.23	10.86	0	0.7	13.33	8.43	24.41	22.76	0.52	0	0.1	3.24	35.76	33.59
Quintile 2	15.72	18.59	0.15	1.28	18	22	19.36	25.42	0	0	2.19	4.88	35.73	43.37
Quintile 3	21.46	22.42	4.51	3.86	23.8	17.93	24.17	29.69	0	0.94	3.47	3.69	42.61	46.51
Quintile 4	19.56	32.34	8.01	2.71	10.51	14.9	6.2	24.78	0.34	0.03	3.01	4.31	28.5	50.95
Quintile 5	25.87	40.23	12.25	10.2	15.85	16.35	15.05	16.62	3	0.98	11.3	6.95	52.69	56.77
Whites	Home-secured		Other residential property		Installment loans		Credit card balance		Other lines of credit		Other		Any debt	
	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001
Quintile 1	10.81	14.39	1.57	0.74	32.01	23.67	16.96	29.32	0.6	1.47	5.86	5.46	48.61	46.96
Quintile 2	22.32	26	1.21	1.97	37.68	42.47	28.71	44.21	1.65	2.13	6.19	6.48	56.2	69.68
Quintile 3	36.03	44.1	3.54	3.76	53.59	51.97	45.06	50.2	1.79	1.4	5.34	7.04	74.66	79.8
Quintile 4	54.52	61.41	5.95	5.13	59.72	53.97	55.91	49.98	4.36	1.65	6.11	8.05	83.12	83.79
Quintile 5	72.74	75.88	13.91	12.33	54.85	47.25	48.76	38.81	5.38	1.78	11.21	9.2	90.05	87.72
Minorities	Home-secured		Other residential property		Installment loans		Credit card balance		Other lines of credit		Other		Any debt	
	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001	1989	2001
Quintile 1	4.43	11.09	0	0	33.72	28.72	13.28	30.12	1.16	1.01	6.23	6.51	45.72	51
Quintile 2	24.16	25.85	0.83	1.08	46.92	41.56	24.72	44.24	2.44	0.53	1.24	3.97	66.63	69.83
Quintile 3	44.72	40.18	3.34	0.38	55.22	45.77	62.84	59.8	1.04	0.67	2.98	9.16	90.73	85.57
Quintile 4	59.25	63.02	4.64	5.73	78.53	69.47	56.94	62.2	4.22	1.36	5.04	4.94	97.25	93.02
Quintile 5	69.26	76.49	23.74	11.29	70.12	60.17	61.59	66.14	19.59	3	13.83	9.28	96.44	93.63

Note: Other debts include loans on insurance policies, loans against pension accounts, borrowing on margin accounts and a residual category for all loans not explicitly referenced elsewhere.
Source: JCHS tabulatons of the Survey of Consumer Finances

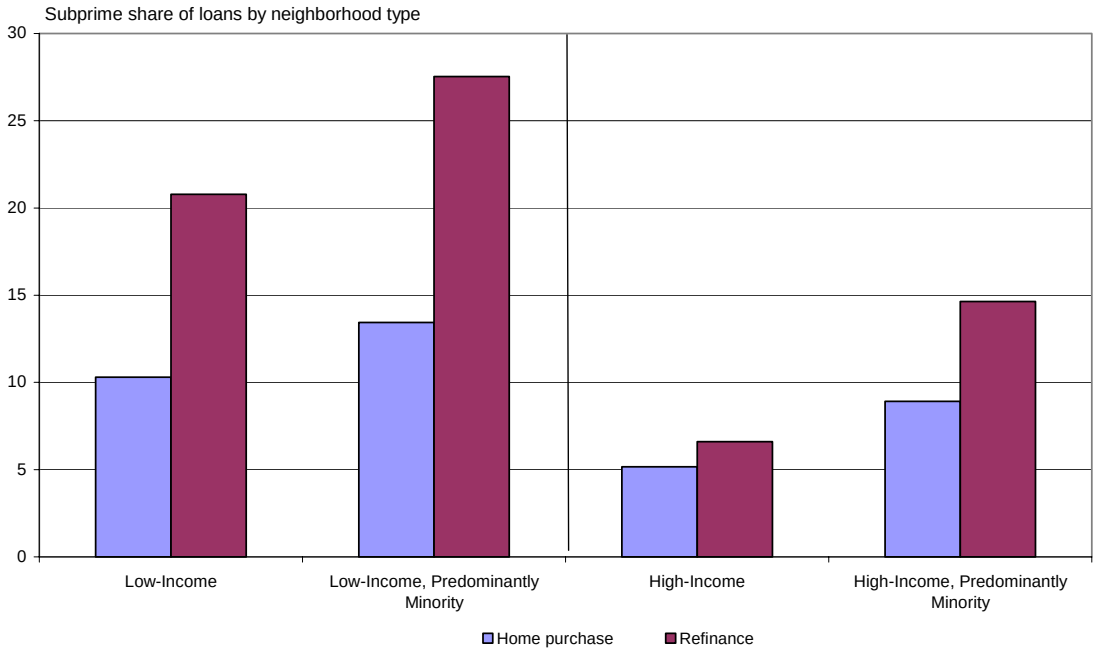
Chart 10: Expanded Lending to Lower-Income Borrowers Has Fostered a Dual Mortgage Market



Note: Lower (higher) income borrowers have income of less than (at least) 80 percent of area median in that year. Lower (higher) income neighborhoods have income of less than (at least) 80 percent of area median as of 1990.

Source: Joint Center for Housing Studies, *The 25th Anniversary of the Community Reinvestment Act: Access To Capital In An Evolving Financial Services System,* March 2002.

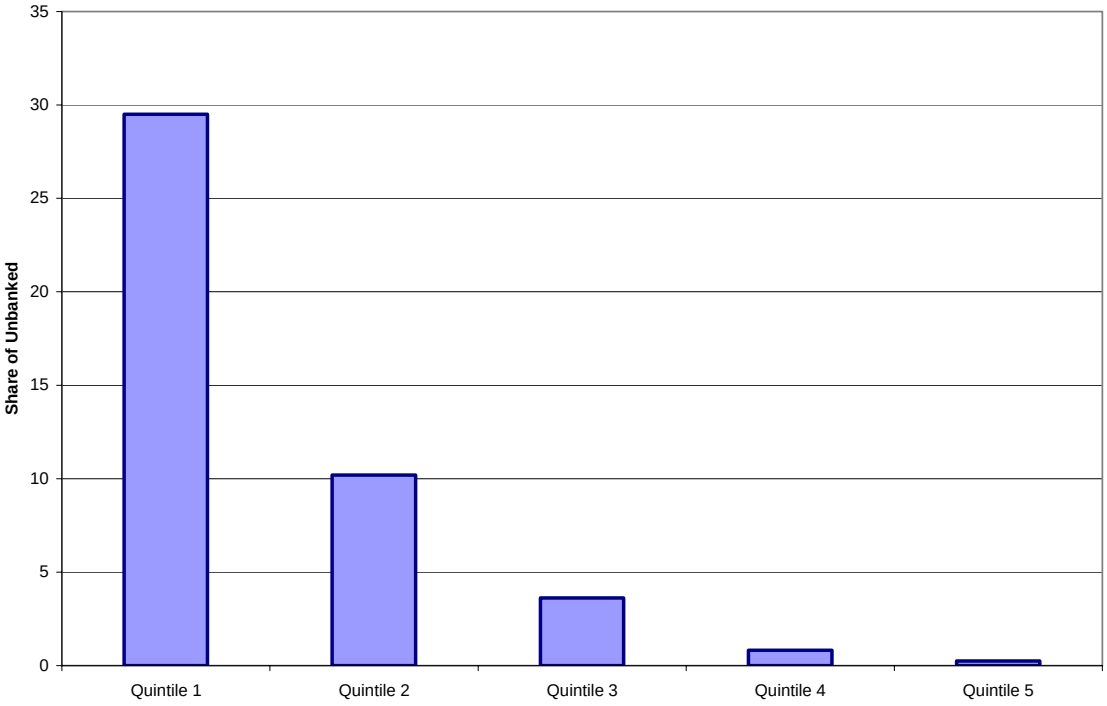
Chart 11: Subprime Lending Shares Are Far Higher for Low-Income and Predominantly Minority Communities



Notes: Low-income (high-income) neighborhoods had tract median income of less than 80 percent (more than 120 percent) area median in 1990. Predominantly minority neighborhoods are 50 percent or more minority.

Source: JCHS tabulations of enhanced HMDA database.

Chart 12: Large Shares of Low-Income Households Have No Formal Banking Relationship



Source: Survey of Consumer Finances, 2001

References

AARP. 2003. *2003 Consumer Experience Survey: Insights on Consumer Credit Behavior, Fraud and Financial Planning.* Washington DC: AARP.

Aizcorbe, Ana M., Arthur B. Kennickell and Kevin B. Moore. 2003. Recent Changes in U.S. Family Finances: Evidence from the 1998 and 2001 Survey of Consumer Finances. *Federal Reserve Bulletin,* January: 1-32.

Ambrose, Brent W. and William N. Goetzmann. 1998. Risk and Incentives in Underserved Mortgage Markets. *Journal of Housing Economics* 7 (3)September: 274-285.

Ards, Sheila D., Inhyuck Steve Ha, Jose-Luis Mazas and Samuel L. Myers, Jr. 2003. The Effect of Bad Credit on Loan Denial Rates. Paper presented at the Southern Economic Association Meetings, San Antonio, Texas, November 21-23.

Avery, Robert B., Paul S. Calem, Glenn B. Canner and Raphael W. Bostic. 2003. An Overview of Consumer Data and Credit Reporting. *Federal Reserve Bulletin,* February: 47-73.

Avery, Robert B., Raphael W. Bostic, Paul S. Calem and Glenn B. Canner. 1997. Changes in the Distribution of Banking Offices. *Federal Reserve Bulletin,* September: 707-725.

Barr, Michael S. 2003. *Banking the Poor.* Report for the Brookings Institution.

Barr, Michael S. 2001. *Access to Financial Services in the 21st Century: Five Opportunities for the Bush Administration and the 107th Congress.* A Capital XChange Journal article prepared for The Brookings Institution and the Joint Center for Housing Studies of Harvard University.

Belsky Eric S. and Mark Duda. 2002. Asset Appreciation, Timing of Purchases and Sales, and Returns to Low-Income Homeownership. In Nicolas P. Retsinas and Eric S. Belsky, eds. *Low Income Homeownership: Examining the Unexamined Goal.* Washington DC: Brookings Institution Press.

Bennett, Paul, Richard Peach and Stavros Peristiani. 1998. Structural Change in the Mortgage Market and the Propensity to Refinance. *Federal Reserve Bank of New York Staff Reports* 45, September.

Bernstein, Jared. 2003. Savings Incentives for the Poor. *The American Prospect,* 14(5): A14-A15.

Bostic, Raphael, Paul Calem and Susan Wachter. 2004. Hitting the Wall: Credit as an Impediment to Homeownership. Joint Center for Housing Studies Working Paper BABC 04-05.

Bradbury, Katherine L., Karl E. Case and Constance R. Dunham. 1989. Geographic Patterns of Mortgage Lending in Boston, 1982-1987. *New England Economic Review* (September/October): 3-30.

Bradford, Calvin. 2002. *Risk or Race? Racial Disparities and the Subprime Refinance Market*. Washington DC: Center for Community Change.

Calder, Lendol. 2002. The Evolution of Consumer Credit in the United States. In Thomas A. Durkin and Michael E. Staten (eds.) *The Impact of Public Policy on Consumer Credit.* Boston: Kluwer Academic Press.

Calem, Paul S., Kevin Gillen and Susan Wachter. 2002. The Neighborhood Distribution of Subprime Mortgage Lending. Paper prepared for the Credit Research Center's Subprime Lending Symposium, September 17.

Canner, Glenn B., Robert Avery and Paul Calem. 2004. Credit Information Reporting and the Practical Implications of Inaccurate or Missing Information in Underwriting Decisions. Joint Center for Housing Studies Working Paper BABC 04-11.

Canner, Glenn B., Karen Dynan, and Wayne Passmore. 2002. Mortgage Refinancing in 2001 and Early 2002*, Federal Reserve Bulletin,* December: 469-481.

Canner, Glenn B., Thomas A. Durkin and Charles A. Luckett. 1998. Recent Developments in Home Equity Lending. *Federal Reserve Bulletin,* April: 241-251.

Caplin, Andrew, William Goetzmann, Eric Hangen, Barry Nalebuff, Elisabeth Prentice, John Rodkin, Matthew Spiegel and Tom Skinner. 2003. *Home Equity Insurance: A Pilot Project*. unpublished Preliminary Report.

Carr, James H. and Jenny Schuetz. 2001. *Financial Services in Distressed Communities: Issues and Answers.* Washington DC: Fannie Mae Foundation.

Carr, James H. and Isaac F. Megbolube. 1993. The Federal Reserve Bank of Boston Study on Mortgage Lending Revisited. *Journal of Housing Research* 4 (2): 277-314.

Case, Karl E. and Maryna Marynchenko. 2002. Home Price Appreciation in Low- and Moderate-Income Markets. In Nicolas P. Retsinas and Eric S. Belsky, eds. *Low Income Homeownership: Examining the Unexamined Goal.* Washington DC: Brookings Institution Press.

Caskey, John P. 2002a. *Bringing Unbanked Households into the Banking System.* Report for the Brookings Institution.

Caskey, John P. 2002b. *The Future of Commercial Check-Cashing.* Paper in Progress.

Caskey, John P. 2002c. *The Economics of Payday Lending.* Unpublished manuscript.

Caskey, John P. 1994. *Fringe Banking: Check-Cashing Outlets, Pawnshops, and the Poor.* New York: Russell Sage Foundation.

Collins, M. Cary, Keith D. Harvey, and Peter J. Nigro. 2002. *The Influence of Bureau Scores, Customized Scores and Judgmental Review on the Bank Underwriting Decision-Making Process.* Journal of Real Estate Research 24 (2): 129-152.

Collins, Michael. 2003. Chicago's Homeownership Preservation Challenge. Presentation to the Federal Reserve Bank of Chicago.

Consumer Federation of America and the National Consumer Law Center. 2003. *Bounce Protection: How Banks Turn Rubber into Gold by Enticing Consumers to Write Bad Checks.*

Consumer Federation of America. 2002. *Credit Score Accuracy and Implications for Consumers.* Washington, DC: CFA.

Creditre.net. 2003. Debt Protection Products: A Better World. Presentation available online at: http://www.creditre.net/DPPresource_center.html

Cutts, Amy Crews, Robert A. Van Order. 2003. *On the Economics of Subprime Lending.* McLean, VA: Freddie Mac.Available at: http://www.freddiemac.com/corporate/reports/

Di, Zhu Xiao, Yi Yang and Xiaodong Liu. 2003. *The Importance of Housing to the Accumulation of Household Net Wealth.* JCHS Working Paper. Cambridge, MA: JCHS, Harvard University.

Draut, Tamara and Javier Silva. 2003. *Borrowing to Make Ends Meet: The Growth of Credit Card Debt in the '90s.* New York, NY: Dēmos.

Dunham, Constance R. 2001. The Role of Banks and Nonbanks in Serving Low- and Moderate-Income Communities, in J.L. Blanton, S.L. Rhine, and A. Williams, eds., *Changing Financial Markets and Community Development: A Federal Reserve System Research Conference* Federal Reserve Bank of Richmond, pp. 31-58.

Durkin, Thomas A. and Michael E. Staten (eds.) 2002. *The Impact of Public Policy on Consumer Credit.* Boston: Kluwer Academic Press.

Elmer, Peter J. and Steven A. Seelig. 1999. Insolvency, Trigger Events, and Consumer Risk Posture in the Theory of Single-Family Mortgage Default, *Journal of Housing Research,* 10 (1): 1-25.

Elliehausen, Gregory and Edward C. Lawrence. 2001. *Payday Advance Credit in America: An Analysis of Customer Demand.* Monograph 35. Washington DC: Credit Research Center, Georgetown University.

Fannie Mae. 2002. *The Growing Demand for Housing: 2002 National Housing Survey.* Washington DC: Fannie Mae.

Fannie Mae. 2001. *Examining the Credit Impaired Borrower: 2001 National Housing Survey*. Washington DC: Fannie Mae.

Feschbach, Dan and Pat Schwinn. 1999. A tactical approach to credit scores. *Mortgage Banking* 59 (5): 46-52.

Figlio, David N., and Joseph W. Genshlea. 1999. Bank Consolidations and Minority Neighborhoods. *Journal of Urban Economics,* 45(3):474-489.

Fishbein, Allen and Debby Goldberg. 2003. Land Sharks Circling: The Changing Financial Services System and its Implications for Low-Income Families and Communities. Background paper prepared for a meeting of the Annie E. Casey Foundation, June 5-6, 2002.

Fishbein, Allen and Harold Bunce. 2000. Subprime Market Growth and Predatory Lending, in Susan M. Wachter and R. Leo Penne, eds. *Housing Policy in the New Millennium.* Washington, DC: U.S. Department of Housing and Urban Development.

Freddie Mac. 1996. Automated Underwriting Report: Making Mortgage Lending Simpler and Fairer for America's Families. McLean, VA: Freddie Mac.

Frumkin, Samuel, William Reeves and Barry Wides. 2003. *Payroll Card: An Innovative Product for Reaching the Unbanked and the Underbanked.* OCC Community Developments Analysis. Available at: http://www.occ.treas.gov/cdd/payrollcards.pdf

Gaberlavage, George and Sharon Hermanson. 2001. *The Alternative Financial Services Industry.* Washington DC: AARP Public Policy Institute.

Gates, Susan Wharton, Vanessa Gail Perry, and Peter M. Zorn. 2002. Automated Underwriting in Mortgage Lending: Good News for the Underserved? *Housing Policy Debate* 13(2): 369-392.

Goetzmann, William N and Matthew Spiegel. 2002. Policy Implications of Portfolio Choice in Underserved Mortgage Markets. In Nicolas P. Retsinas and Eric S. Belsky, eds. *Low Income Homeownership: Examining the Unexamined Goal.* Washington DC: Brookings Institution Press.

Goldstein, Deborah. 1999. *Understanding Predatory Lending: Moving Towards a Common Definition and Workable Solutions.* Working paper for Joint Center for Housing Studies and Neighborhood Reinvestment Corporation Emerging Leaders in Community and Economic Development Fellowship.

Goldstein, Ira. 2004. Bringing Subprime Mortgages to Market and the Effects on Lower-income Borrowers. Joint Center for Housing Studies Working Paper BABC 04-07.

Gruber, Jonathan, Jonathan Orszag and Peter Orszag. 2002. *Aging in America: A Policy Perspective.* Paper commissioned by Pew Charitable Trusts.

Gwatkin, Kathryn and George McCarthy. 2004. A Critical Examination of Financial Literacy Education. Joint Center for Housing Studies Working Paper BABC 04-17.

Haurin, Donald R., Toby L. Parcel and R. Jean Haurin. 2002. Impact of Homeownership on Child Outcomes. In Nicolas P. Retsinas and Eric S. Belsky, eds. *Low Income Homeownership: Examining the Unexamined Goal.* Washington DC: Brookings Institution Press.

Haveman, Robert and Edward N. Wolff. 2000. *Who are the Asset Poor? Levels, Trends and Composition, 1983-1998.* Working Paper 00-12 for Center for Social Development, Washington University in St. Louis.

Hermanson, Sharon. 2000. *An Analysis of Pay Day Loan Business Locations in California,* Washington DC: AARP.

Hersh, Liz. 2001. *Summary Report on Home Equity Assurance*. 10,000 Friends of Pennsylvania. Available at: http://www.10000friends.org/Web_Pages/Resources/HomeEquityAssuranceReport10-01.doc

Hilgert, Marianne A., Jeanne M. Hogarth and Sondra G. Beverly. 2003. Household Financial Management: The Connection between Knowledge and Behavior, *Federal Reserve Bulletin,* July: 309-322.

Hirad, Abdighani and Peter Zorn. 2002. Prepurchase Homeonwership Counseling: A Little Knowledge Is a Good Thing. In Nicolas P. Retsinas and Eric S. Belsky, eds. *Low Income Homeownership: Examining the Unexamined Goal.* Washington DC: Brookings Institution Press.

Holstine, Hollis Fishelson. 2004. The Role of Credit Scoring in Increasing Home Ownership for Underserved Populations. Joint Center for Housing Studies Working Paper BABC 04-12.

Hurst, Erik and Frank Stafford. 2002. Home is Where the Equity Is: Mortgage Refinancing and Household Consumption*. Journal of Money, Credit and Banking* forthcoming.

Hurst, Erik, Ming Ching Luoh and Frank Stafford. 1998. Wealth Dynamics of American Families: 1984-1994, *Brookings Papers on Economic Activity,* 98 (1): 267-338.

Immergluck, Daniel and Marti Wiles. 1999. *Two Steps Back: The Dual Mortgage Market, Predatory Lending, and the Undoing of Community Development*. Chicago, IL: The Woodstock Institute.

Information Policy Institute. 2003. *The Fair Credit Reporting Act: Access, Efficiency and Opportunity*. Washington, DC: The Information Policy Institute.

Jacobs, Katy, Malcolm Bush and Dan Immergluck. 2002. *Rhetoric and Reality: An Analysis of Mainstream Credit Unions' Record of Serving Low-Income People*. Chicago: Woodstock Institute. Report available at: http://www.woodstockinst.org/rhetoricandreality.pdf

Joint Center for Housing Studies. 2001. *The State of the Nation's Housing*. Cambridge, MA: Harvard University.

Joint Center for Housing Studies. 2000. *The State of the Nation's Housing*. Cambridge, MA: Harvard University.

Kim-Sung, Kellie K. and Sharon Hermanson. 2003. "Experience of Older Refinance Mortgage Loan Borrowers: Broker- and Lender-Originated Loans," *AARP Public Policy Institute, Data Digest*, January.

Lax, Howard, Michael Manti, Paul Raca, Peter Zorn. 2000. Subprime Lending: An Investigation of Economic Efficiency. Unpublished paper.

Lebowitz, Jeff. 2001. An Industry of Slow Adopters. *Mortgage Banking*, April:73-79.

Litan, Robert E., Nicolas P. Retsinas, Eric S. Belsky, and Susan White Haag. 2000. *The Community Reinvestment Act After Financial Modernization: A Baseline Report.* Washington DC: U.S. Department of the Treasury.

Mallach, Allan. 2001 Home Ownership Education and Counseling: Issues in Research and Definition. Discussion Paper. Federal Reserve Bank of Philadelphia.

Mansfield, Cathy Lesser. 2003. Consumer Choice and Risk in Society. Paper prepared for the 9th International Consumer Law Conference, Athens, Greece, April 10-12.

McCarthy, George and Roberto Quercia. 2000. *Bridging the Gap between Supply and Demand: The Evolution of the Homeownership Education and Counseling Industry.* Institute Report Number 00-01. Arlington, VA: Research Institute for Housing America.

McCorkell, Peter L. 2002. The Impact of Credit Scoring and Automated Underwriting on Credit Availability. In *The Impact of Public Policy on Consumer Credit* Thomas A. Durkin and Michael E. Staten (eds), Boston: Kluwer Academic Publishers.

Nagazumi, Toshiko, Rose, David, NietoGomez, Amalia, Kiely, Jason, Kotelchuck, Shana. 1999. *Preying on Neighborhoods: Subprime Mortgage Lending and Chicagoland Foreclosures.* Chicago: National Training and Information Center

National Community Reinvestment Coalition. 2003. *America's Best and Worst Lenders: A Consumer's Guide.* Washington DC: NCRC.

Office of Thrift Supervision, 2000. What About Subprime Mortgages. *Mortgage Market Trends* 4 (1).

Orszag, Peter and Robert Greenstein. 2004. Progressivity and Government Incentives to Save. Joint Center for Housing Studies Working Paper BABC 04-16.

Pennington-Cross, Anthony, Anthony Yezer and Joseph Nichols. 2000. *Credit Risk and Mortgage Lending: Who Uses Subprime and Why?* Arlington, VA: Research Institute for Housing America.

Renuart, Elizabeth. 2002. *Stop Predatory Lending: A Guide for Legal Advocates.* Boston, MA: National Consumer Law Center.

Retsinas, Nicolas P. and Eric S. Belsky, eds. 2002a. *Low Income Homeownership: Examining the Unexamined Goal.* Washington DC: Brookings Institution Press.

Retsinas, Nicolas P. and Eric S. Belsky. 2002b. Examining the Unexamined Goal. In Nicolas P. Retsinas and Eric S. Belsky, eds. *Low Income Homeownership: Examining the Unexamined Goal.* Washington DC: Brookings Institution Press.

Rhine, Sherrie L.W., Maude Toussaint-Comeau, Jeanne M. Hogarth and William H. Greene. 2001. *The Role of Alternate Financial Service Providers in Serving LMI Neighborhoods.* Consumer Issues Research Series, Federal Reserve Bank of Chicago.

Richter, Lisa and Christopher Tan. 2002. *Retail Financial Services Initiative: A Report on Innovative Products and Services for Low Income and Unbanked Customers.* Chicago, IL: National Community Investment Fund.

Rohe, William M., Shannon Van Zandt and George McCarthy. 2002. Social Benefits and Costs of Homeownership. In Nicolas P. Retsinas and Eric S. Belsky, eds. *Low Income Homeownership: Examining the Unexamined Goal.* Washington DC: Brookings Institution Press.

Ross, Stephen and John Yinger. 2002. *The Color of Credit.* Cambridge, MA: MIT Press.

Seidman, Ellen and Jennifer Tescher. 2004. From Unbanked to Homeowner: Improving the Supply of Financial Services for Low-Income, Low-Asset Customers. Joint Center for Housing Studies Working Paper BABC 04-04.

Schreiner, Mark, Margaret Clancy and Michael Sherraden. 2002. *Final Report: Saving Performance in the American Dream Demonstration.* Center for Social Development.

Shapiro, Thomas M. and Edward N. Wolff (eds.). 2001. *Assets for the Poor.* New York: Russell Sage Foundation.

Sherraden, Michael, Mark Schreiner and Sondra Beverly. 2003. Income, Institutions, and Saving Performance in Individual Development Accounts. *Economic Development Quarterly*, 17(1):95-112.

Sherraden, Michael. 2001. Asset-Building Policy and Programs for the Poor in Thomas M. Shapiro and Edward N. Wolff (eds.). *Assets for the Poor.* New York: Russell Sage Foundation.

Sherraden, Michael. 1991. *Assets and the Poor: A New American Welfare Policy.* Armonk, NY: M.E. Sharpe.

Shiller, Robert J. and Allan N. Weiss. 1994. *Home Equity Insurance*. National Bureau of Economic Research Working Paper 4830.

Stanton, Thomas H. 1999. *Credit Scoring and Loan Scoring: Tools for Improved Management of Federal Credit Programs.* Arlington Virginia: Price Waterhouse Coopers Endowment for the Business of Government.

Staten, Michael and Fred Cate. 2004 Does the Fair Credit Reporting Act Promote Accurate Credit Reporting? Joint Center for Housing Studies Working Paper BABC 04-14.

Stegman, Michael and Robert Faris. 2001. *Welfare, Work, and Banking: The North Carolina Financial Services Survey* (Center for Community Capitalism, University of North Carolina: Chapel Hill, NC)

Stegman, Michael A., Robert G. Quercia and Jennifer S. Lobenhofer. 2001. Automated Underwriting: Getting to 'Yes' for More Low-Income Applicants. Presentation to Research Institute for Housing America Conference on Housing Opportunity. Available at: http://www.housingamerica.org/downloads/web5.ppt

St. John, Cheri. 2003. What the CFA got right – and wrong – about credit score accuracy. *Viewpoints,* February. Available at: http://www.fairisaac.com

Temkin, Kenneth, Jennifer Johnson, and Diane Levy. 2002. *Subprime Market, The Role of GSEs, and Risk Based Pricing.* Paper prepared for U.S. Department of Housing and Urban Development. Available at: http://www.mbaa.org/industry/reports/02/hud_subprime.pdf

Turner, Margery Austin, Fred Freiberg, Erin B. Godfrey, Carla Herbig, Diane Levy, Robin E. Smith. 2002. *All Other Things Being Equal.* Washington DC: Urban Institute.

Turner, Margery Austin and Felicity Skidmore, eds. 1999. *Mortgage Lending Discrimination: A Review of the Existing Evidence.* Washington DC: Urban Institute.

U.S. Department of Housing and Urban Development. 2000a. *Unequal Burden: Income and Racial Disparities in Subprime Lending in America*. Washington, DC: U.S. Department of Housing and Urban Development.

U.S. Department of Housing and Urban Development. 2000b. *Unequal Burden in Baltimore: Income and Racial Disparities in Subprime Lending*. Washington, DC: U.S. Department of Housing and Urban Development.

U.S. Department of Treasury and U.S. Department of Housing and Urban Development. 2000. *Curbing Predatory Home Lending: A Joint Report.* Washington, DC: U.S. Department of Housing and Urban Development.

Vermilyea, Todd and James A. Wilcox. 2002. Who is Unbanked and Why: Results from a Large, New Survey of Low- and Moderate-Income Adults. Unpublished paper prepared for the Federal Reserve Board of Chicago Conference on Bank Structure and Competition.

Walters, Neal and Sharon Hermanson. 2001. *Credit Scores and Mortgage Lending.* Wahsington DC: AARP.