Consumers' Choice Of Financial Institutions For Home-Secured Loans

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Using the 1995 and 1998 Survey of Consumer Finances, we provide a profile of households with home-secured loans through finance and loan companies and explore the extent to which these loans reflect risk-based characteristics. We find that risk-related characteristics are major determinants of using a finance and loan company, but that race, marital status, age, education, region, and having a high-cost loan also are significant.
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Risk-based pricing has allowed the expansion of credit markets to people with subprime credit (B, C, and D levels) in addition to those with prime credit ratings (A), which in turn has contributed to the democratization of credit. However, for consumers to take advantage of risk-based pricing in these markets, they need to be fully informed, and this includes knowing how good (or bad) a credit risk they are. There is evidence that consumers may be paying too much for some credit because they fail to shop around or because they use second- or third-tier financial institutions for their loans when, in fact, they may qualify for prime level credit (Lax, Manti, Raca, & Zorn, 2000). Such overpayment is especially costly when it involves a home-secured loan (a mortgage, home equity loan, or home equity line of credit), as these often are for high principal amounts over longer time periods, thus resulting in larger interest payments overall. Even a small decrease in the interest rate on such loans can result in substantial savings for consumers.

Today's financial marketplace has several tiers of financial institutions. The mainstream financial institutions include commercial banks, thrifts and savings banks, and credit unions. These institutions are regulated by state and federal authorities and are subject to regular examinations for safety and soundness and compliance with regulations. While these mainstream institutions used to be the bastions of only "A" credit borrowers, now they are using risk-based pricing to reach more consumers. The secondary tier includes institutions such as finance and loan companies and vehicle finance companies. These institutions are generally not subject to federal safety and soundness and compliance examinations, although they are required to comply with state and federal regulations. These second-tier institutions often target higher risk consumers and usually charge higher rates. The third-tier institutions include those designated as the alternative financial service sector: check cashiers, wire transfer companies, rent-to-own, pawn brokers, and payday lenders. In some states these institutions are regulated, and may be subject to state examination. They are required to comply with federal regulations; so, for example, a payday or pawn lender must disclose the APR of the loan. In general, interest rates increase as one moves down through the tiers, but the perceived level of personalized attention also increases as one moves from the mainstream to the alternative institutions (e.g., Swanson, Hogarth & Segelken, 1993).[a]

In particular, the secondary tier has grown substantially over the last decade, both in response to risk-based pricing and in response to the general expansion of financial markets. For example, lending by finance companies rose from $886 million in 1995 to $1.3 billion in 2000 (in constant dollars), a 47% increase in lending over 5 years (Federal Reserve, 2001a). Many second-tier institutions are classified as subprime lenders (e.g., Scheessele 1999; Canner & Passmore, 1999). Furthermore, there is some anecdotal evidence that these second-tier institutions are more likely to engage in predatory lending practices, especially with respect to home-secured loans, than mainstream institutions (e.g., ABC News Prime Time, April 23, 1997 segment on predatory lending practices).

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Although some researchers have explored the subprime home-secured loan market, little is known about where consumers obtain their loans. The purpose of this study is to explore the evolution of home-secured loans obtained from finance or loan (FL) institutions between 1995 and 1998, to provide a profile of households with loans obtained from these institutions, and to determine whether home-secured loans obtained from FL institutions are higher cost. While exploratory in nature, this study provides some implications for community-based educators and housing counselors.

Background on Subprime Lending

Consumers with "good" credit records are considered to have "A" credit ratings; anything below "A" is considered subprime. Generally, consumers with "B" credit have some 30, 60, or 90-day past-due notices on their credit record, but are now current; expected delinquencies are 2 to 5% and expected losses are between 1 and 3%. Consumers with "C" credit may have some write-offs and judgements, but have made subsequent payments on some or all of the credit lines; expected delinquencies are 5 to 10% and expected losses are between 3 to 10%. Consumers with "D" credit have had chargeoffs and judgements that have not been repaid; expected delinquencies and losses are between 10 and 20 %. Some lenders also count "A?" credit as subprime; these loans may not meet the underwriting standards or have some other characteristic that increases their credit risk (Cocheo, 1999).

Although risk-based lending has been going on for some time, financial institutions began in earnest to move into this subprime market in the early- to mid-1990's (Cocheo, 1999). In one estimate, the size of the subprime mortgage market has grown from $290 billion in 1995 to $415 billion in 1999 (Feldman & Schmidt, 1999). Others estimate that the number of institutions reporting subprime loans has grown from 21 in 1993 to 263 in 1999, and that the loan volume increased from 15,594 loans in 1993 to 220,511 loans in 1998 (Canner & Passmore, 1999; HUD, 2001). According to another report, the subprime market share increased from less than 5% in 1994 to about 13% in 1999 (HUD, 2000).

While many banks have a unit in their corporation dedicated to the subprime market, there are also lenders who specialize in subprime lending to low income, low wealth households (Day, 2000; Poverty Inc., 1998); often these are finance and loan companies. Between 1993 and 1998, these subprime lenders increased their share of applications for conventional home-purchase loans twelve-fold (from 0.8% to 10.4%); they accounted for about 6% of such loans extended (Canner & Passmore, 1999). Among subprime loans, three-fifths were made to consumers with "A-" credit, 26% were made to "B" credit consumers, 10% were made to "C" credit consumers, and less than 2% were made to consumers with "D" credit (B & C Delinquencies Down, 1999).

The Home Ownership Equity Protection Act (HOEPA), part of the Truth in Lending Act, provides special disclosures and rights of recission for certain high cost loans. Specifically, if the interest rate is 8 percentage points higher than the relevant Treasury security rate for first-lien loans or 10 percentage points higher for second-lien loans, or if loan costs and fees are above a set amount ($465 in 2001), then additional disclosures are triggered (Federal Reserve Board, 2001b).[b] While these disclosures are designed to protect unsuspecting consumers from high cost loans, including potentially predatory loans, they are often perceived as part of the blizzard of papers that need to be signed at application and at closing, and their effectiveness is questionable.

Consumers and Subprime Markets

Given that there are no studies that focus on where consumers have obtained their loans, we turned out attention to research in the subprime market. Many of the previous studies on high cost and subprime loans have focused on the industry side of the equation by assessing the risk premium and profitability of these loans (e.g., Avery, Bostic, Calem & Canner, 1996; Canner, Passmore & Surrette, 1996). Other studies of consumer mortgage choice have not separated prime and subprime markets (e.g., Gabriel & Rosenthal, 1991; Linneman & Wachter, 1989; Zorn, 1993).

Lax et al (2000) estimated the probability of being in the subprime market relative to the prime market based on two models. The first model (the "risk-only model") included only explanatory variables related to risk while the second model (the "expanded model") included these risk variables plus demographic and knowledge variables. The analysis estimated the importance of risk factors in obtaining a subprime loan while at the same time the comparison between the two models provided a way to analyze other factors that were determinants of obtaining a subprime loan. In both models, all of the risk variables were significant. In the "expanded model," age, education,

neighborhood income, knowledge, and search behavior were also significant.

Pennington-Cross, Yezer, and Nichols (2000) modeled choosing a subprime loan relative to a conventional prime mortgage or an FHA mortgage. They included variables relating to finances, credit history, demographics, and location of the house. An aggregate credit history variable was included in one model, while a decomposed set of credit history variables was included in a second model. Some individual measures of credit history (having few credit lines and the number of inquiries on the credit report) were insignificant; other individual credit history measures (e.g. the number of delinquencies) were significant, as was the aggregate measure. Some variables that were significant determinants of obtaining an FHA mortgage were not significant predictors of holding a subprime mortgage. For example, marital status, the Gini coefficient for the household, being in an underserved census tract, and living in a high cost area were significant in the FHA choice but not in the subprime choice.

The Lax et al (2000) paper centered on first mortgages (either through purchase or refinance) while the Pennington-Cross study focused on home purchase loans for borrowers that are eligible for an FHA mortgage. However, many of the high cost loans of concern to policy makers are re-financings, home equity loans, and home equity lines of credit. Prior to 1992, most of these loans were used for home improvement; however Consumer Bankers Association data from 1995 indicate that about 35% of home equity lines of credit and 40% of closed end home equity loans were used for debt consolidation, an indication that many borrowers were already experiencing financial difficulties (Nathan, 1999).

Several studies have used data submitted by lenders as part of their Home Mortgage Disclosure Act (HMDA) reporting (Scheessele, 1997; Evanoff & Segal, 1996). However, it is possible for lenders to write refinance and home equity loans without triggering the reporting requirement of HMDA. Thus, studies that rely on lender-based data may understate the level and volume of high cost loans. Furthermore, few studies have included information on the institution from which the consumer obtained the loan. Using consumer-based data may contribute a different perspective on consumers who have home-secured loans and the institutions they use.

Data and Methodology

We used data from the 1995 and 1998 Survey of Consumer Finances (SCF). The SCF is a triennial survey sponsored by the Federal Reserve with the cooperation of the Statistics of Income Division of the Internal Revenue Service (Kennickell, Starr-McCluer & Surette, 2000; Kennickell & Woodburn, 1997). The SCF is designed to provide detailed information on the financial characteristics of U.S. households, particularly families' assets and liabilities. The National Opinion Research Center at the University of Chicago interviewed 4,299 households in 1995 and 4,309 households in 1998. Because of the dual sampling frame employed in the surveys, data were weighted in the descriptive analyses (Kennickell, McManus & Woodburn, 1996; Kennickell & Woodburn, 1997).

Categorizing Institutions

For our analysis, we categorized institutions into three groups. The first tier includes mainstream financial institutions such as commercial banks, savings and loans, and credit unions. The secondary tier is comprised of finance and loan companies. The third category of institutions, described as 'other institution' in the figures and tables, includes brokerage, real estate, mortgage companies, private sources, and government institutions.

Defining a High Cost Loan

Since one of the purposes of this paper is to determine whether loans obtained from finance or loan institutions have a higher cost, we initially analyzed loans issued by FL institutions according to three different definitions of a high cost loan. The first definition of a high cost loan, according to HOEPA and Regulation Z (in effect in 2001), is a loan with an APR of 10 percentage points above the relevant Treasury index. Loans that are classified as high cost according to this definition are subject to additional HOEPA disclosures. Under the current classification, there were 15 households with high cost loans in the 1995 SCF and 24 in the 1998 SCF. Given the small cell size, an analysis of which types of institutions financed these loans was deemed meaningless.

We next used an alternative HOEPA definition of 8 percentage points above the relevant Treasury index (Federal Reserve Board, 2000b). Using this definition, there were 23 households with high cost loans in the 1995 survey and 35 households in the 1998. As in the previous definition, the small cell size tempered our confidence in concluding which institutions financed

these high cost loans.

The tiered rate, which was recently enacted by the Federal Reserve Board, would have resulted in a number of observations between these two definitions. Thus, we still would not have a sufficient number of observations for our analysis.

Given these results, we used a third definition based on the distributions of the annual percentage rate (APR) for the three different types of home-secured loans analyzed in our study. We categorized a high cost loan based on the extent to which the APR of each particular type of loan deviated from its mean. To determine if a loan was a high cost loan, we calculated the mean and the standard deviation of the APR for mortgages, home equity loans, and home equity lines of credit separately by year. Loans with a normalized APR that equaled or exceeded two positive standard deviations from the normalized mean for the particular type of loan and year were considered to be a high cost loan (HCL). Choosing two standard deviations was a judgement call on our part, and we recognize the limitations this places on the resulting measure. However, we reasoned that capturing the upper tail of the distribution was a reasonable definition of a high cost loan for the purposes of this study.

The mean and standard deviation of the APRs for mortgages in 1995 were 8.5 and 1.9, respectively (data not shown), resulting in a cut-off for HCLs of 12.3. The mean and standard deviation for mortgages in 1998 were 8.3 and 1.9, respectively, resulting in a cut-off for HCLs of 12.0. Cut-offs were calculated separately for mortgages, home equity loans, and home equity lines of credit. According to this definition, there were 66 households (4.7%) with an HCL in the 1995 survey and 74 (5.1%) in the 1998 survey.[c]

Under HOEPA, a loan may be classified as high cost if it meets either an APR cut-off or a cut-off based on costs and fees (for example, in 2001, if loan costs and fees are above $465, the additional HOEPA disclosures are triggered). We were not able to include loan costs and fees into our definition of a HCL since the survey did not ask any questions regarding the amount of fees or any other costs incurred.

It is important to note that since some households have more than one loan and more than one type of loan, one or more of these may be a HCL. A household is classified as having a HCL under any of the following scenarios: it has one HCL of any type (thereby one type of HCL loan), it has two or more HCLs of the same type, or it has two or more HCLs of different types.

Variables and Analysis

To explore the profile of households with loans obtained from FL institutions, we looked at the volume of loans by type of institution, characteristics of the loan and characteristics of the borrower. Loan characteristics included the type of loan (mortgage, home equity loan, home equity line of credit), cost of loan (HCL versus non-HCL), number and types of home-secured loans held, payment-to-income ratio, loan-to-value ratio, and purpose of the loan. Borrower characteristics included standard demographic variables (age, education, marital status, race, region, income) and risk-related variables (spending patterns, being on time with payments, and credit history/credit rating variables).

Results

In the 1995 SCF, 1,939 households held some sort of mortgage, home equity loan and/or home equity line of credit. The weighted data show that in 1995 approximately 40.7 million U.S. households (41.1% of all U.S. households) had some type of home-secured loan. Of these, 23.6% held a home-secured loan from an FL institution. The results for the 1998 SCF are quite similar; 1,925 households in the 1998 SCF had a mortgage, home equity loan and/or home equity line of credit. The weighted statistics show that 44.7 million U.S. households (or 43.7% of all U.S. households) had some type of home-secured loan; more than one-third (35.5%) obtained their home-secured loan from an FL institution.

Institution Characteristics

APR Table 1 displays the summary statistics of the APR by type of institution and year. In both 1995 and 1998, loans obtained from FL institutions have the highest mean APR of 8.8% and 8.7%, respectively. In the 1998 SCF, the FL institutions also display the highest overall APR of 24%. Thus, it does appear that loans from FL institutions are higher cost.

Growth of Loans In 1995, households with loans held an average of 1.18 loans while in 1998 this number increased to 1.24. Although this increase may appear negligible, the growth in the volume of loans between 1995 and 1998 is significant. During this period the total number of loans increased by 14% (Figure 1). The weighted data show that this increase corresponds to an additional 7 million loans between 1995 and 1998.

Choice of Financial Institutions

Looking at the growth in the number of loans acquired by households by type of institution shows an interesting story. Relative to the 1995 survey, households in the 1998 survey obtained 73% more loans from FL institutions and 9% more from commercial banks and credit unions. During this same period, however, households decreased the number of loans acquired from other types of institutions by 31%. As can be inferred by these percentage increases, FL institutions played a significant role in the increase in the volume of loans between these two years. Between 1995 and 1998, households obtained an additional 7.3 and 2.6 million loans from FL institutions and commercial banks, respectively. At the same time, households decreased the number of loans obtained by other institutions by 2.9 million.

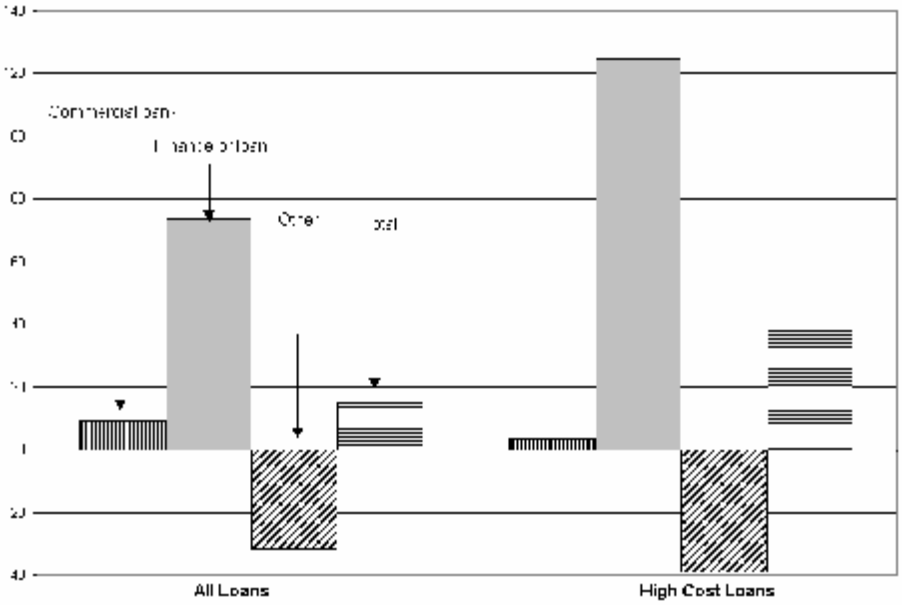
Table 1.
Summary Statistics of the APR, by Type of Institution

	1995			1998		
	Mean	**Min.**	**Max.**	**Mean**	**Min.**	**Max.**
Commercial bank & credit union	8.7	2.0	21.0	8.4	2.5	22.0
Finance or loan (FL)	8.8	3.2	20.0	8.7	2.5	24.0
Other institution	8.1	2.5	14.0	8.1	3.0	19.0
Any Institution	8.6	2.0	21.0	8.4	2.6	24.0

Separating the change in the total number of high cost loans that households acquired by type of institution reveals even greater disparities (Figure 1). Between 1995 and 1998, the overall volume of HCLs increased by 1.1 million (or 40%). During this same period, the total number of HCLs obtained from FL institutions increased by 124% (or an additional 1.24 million loans) while the number of high cost loans that households obtained from commercial banks and credit unions increased by 3%. Households drastically decreased borrowing high cost loans from other institutions by 39%.

Distribution of Loans Figure 2 displays the distribution of all home-secured loans by year. Of all loans held in both 1995 and 1998, more than half were from a commercial bank or a credit union. As might be expected, FL companies played a greater role in the latter year. More than 30% of all loans in the 1998 survey were from an FL institution in comparison to 20% of the 1995 loans. We also analyzed the distribution of loans by type of institution and cost. Separating loans by their cost reveals the expansion of FL institutions in the high cost market (Figure 2). In 1995, 40% of all high cost loans were obtained through an FL institution while more than 60 % of all HCLs in 1998 were from this type of institution.

Figure 1.
Change in Total Number of Loans and Total Number of High Cost Loans (HCL) between 1995 and 1998, by Institution



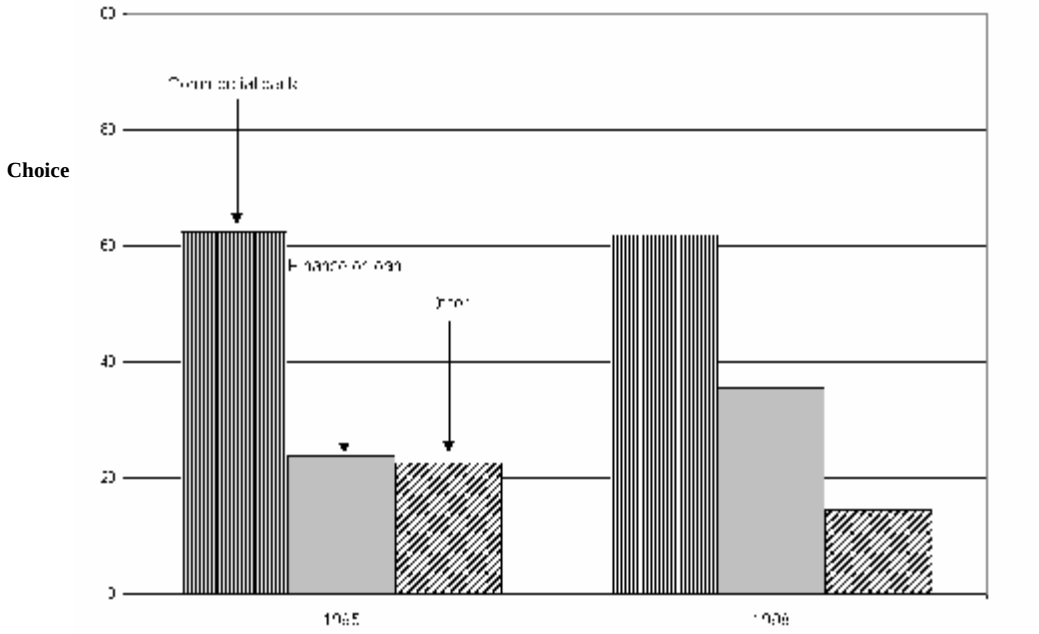


Figure 2.
Distribution of Total Number of Loans and Total Number of High Cost Loans (HCL), by Year

Figure 3.
Institution from which Households Obtained Any Loan, by Year

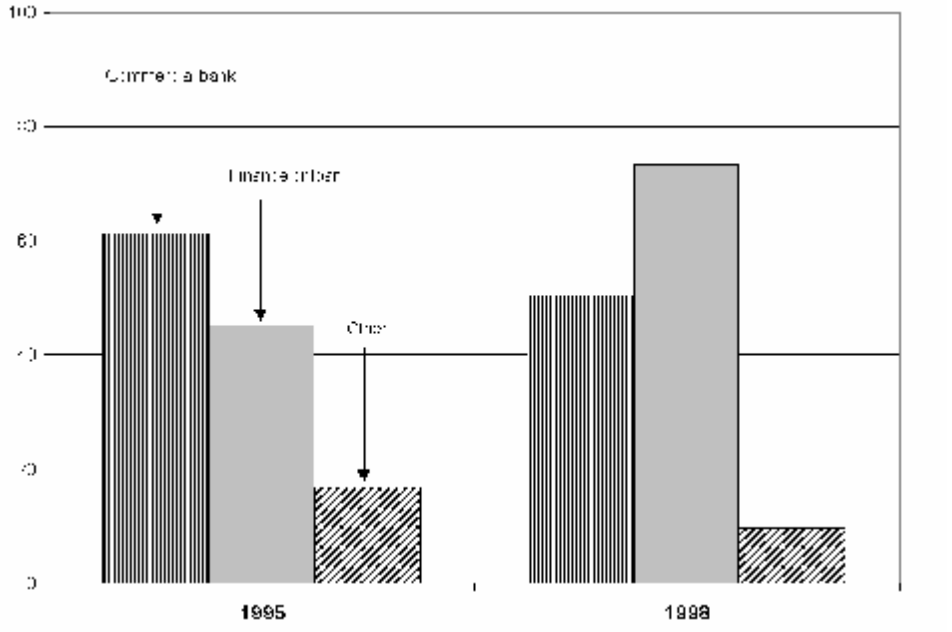


Figure 4.
Institution from which Households Obtained Any Loan, for those with at least one High Cost Loan (HCL)

Use of First-Tier vs. Second-Tier Institutions It is also important to know if there is a difference in the proportion of households using the three types of institutions by year (Figure 3). In both 1995 and 1998, roughly 62% of all households with a loan had obtained a loan from a first-tier institution. During this same period households increased their use of second-tier institutions. While less than a quarter (23%) of 1995 households used an FL institution to finance a loan, more than a third (35%) used this type of institution in 1998. Households were less likely, however, to have obtained a loan from other institutions in 1998.

Another way to examine a household's use of institutions is by the cost of the loan. Although we know that households with HCLs in 1998 were less likely to finance their high cost loan, it is of interest to examine whether or not these households used a first-tier institution on any of their loans (that is, did they have access to first-tier institutions). Between 1995 and 1998, households with high cost loans decreased their use of first-tier institutions while they increased their use of FL institutions (Figure 4). In 1995, 45% of households with a HCL had obtained a loan from an FL institution. By 1998, 73% of households with a HCL had some type of loan issued by an FL institution. It is interesting to note that HCL households in 1995 used first-tier institutions with the same frequency as the overall trend of households in 1995 and 1998, while their use of these mainstream institutions fell in 1998.

Access to Multiple Institutions It is important to know not only the frequency with which households used the different tiers of institutions, but also if households with multiple loans had access to the other types of institutions. Specifically, it is important to know whether households were substituting their use of first-tier institutions for FL institutions. Figure 5 shows that households that obtained a loan from an FL institution were more likely to also use a first-tier institution in 1998. In 1995, 16% of households with loans from an FL institution also had a loan from a commercial bank. By 1998, the proportion had increased to 20%. Therefore, the increase in the use of FL institutions did not decrease these household's access to first-tier institutions. However, given that only one in five FL households in 1998 also had a loan from a first-tier institution, access to mainstream financial institutions may be an issue for some of these households. Similarly, households that used another institution were also more likely to have access to a commercial bank in 1998 (17% in 1995 versus 22% in 1998) albeit the proportions are again relatively small.

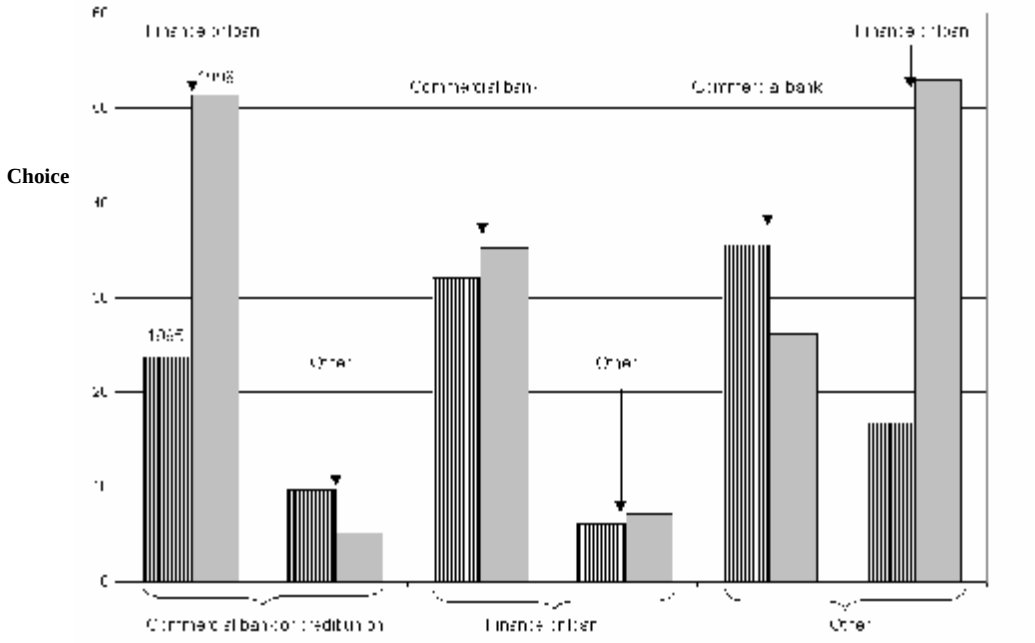


Figure 5.
Access to Institution

Figure 6.
Access to Institution, for those with at least one High Cost Loan (HCL)

Table 2.
Type of Loan for All Loans, by Year and Type of Institution (percentages except where noted)

	1995				1998			
Type of Loan	**Commercial**	**Finance**	**Other**	**Any**	**Commercial**	**Finance**	**Other**	**Any**
First mortgage	72.3	87.2	92.4	79.3	68.5	82.5	90.5	75.4
Second mortgage	8.0	7.1	4.1	7.1	8.5	8.6	4.5	8.1
Home equity	4.2	1.9	2.7	3.4	4.7	2.0	1.6	3.5
Line of credit	15.5	3.9	0.8	10.2	18.3	6.8	3.3	13.0
Total	100	100	100	100	100	100	100	100
# of observations	1,194	368	375	1,937	1,166	521	237	1,924

Table 3.
Purpose of Loan, by Year and Type of Institution (percentages)

	1995			1998		
Purpose of loan	**Commercial**	**Finance**	**Other**	**Commercial**	**Finance**	**Other**
Own home purchase	75.5	89.1	94.4	70.5	83.0	92.9
Home improvement or repairs	9.5	5.0	2.0	10.6	6.6	2.8
Medical or education	2.8	0.2	0.6	2.4	1.0	0.7
Purchase car	2.8	0.6	--	4.0	1.0	--
Invest in business	0.4	--	--	0.7	--	--
Personal loan, tax & insur., bill cons., vehicle repair	0.8	0.6	--	0.8	0.4	0.5
Other	8.2	4.5	3.0	11.1	8.0	3.1
Total	100.0	100.0	100.9	100.0	100.0	100.0

As might be expected from previous results, households that used either a commercial bank or an other institution also increased their use of FL institutions. In 1995, 6% of households with a loan from a first-tier institution also had a loan from an FL institution. By 1998, the proportion had increased to almost 12%. Similarly, 3.5% of households with a loan from an other institution in 1995 also had access to an FL institution while in 1998 the proportion had increased to 8.8%. As mentioned previously, the only type of institution that reduced its loan volume was the other institutions. In Figure 5 we see that the households that decreased their use of these types of institutions were those that had a loan from a commercial bank; households that used FL institutions did not decrease their use of other institutions.

We also examined a household's access to multiple institutions for households with HCLs. Although the HCL households follow the same trend as the general population, the magnitudes are much greater (Figure 6). HCL households that had obtained a loan from an FL institution were slightly more likely to also have access to a mainstream institution in 1998 (32% in 1995 versus 35% in 1998). Another interesting observation is the increase in access to FL institutions. In 1995, 23% of HCL households that used a commercial bank also used an FL institution. By 1998 more than one half of all HCL households that used a commercial bank also used an FL institution. Similarly, 16% of HCL households that used other institutions also used an FL institution to finance a loan in 1995; by 1998 53% did.

Type of Loan and Purpose In both 1995 and 1998, the majority of all loans issued by the 3 different tiers of institutions were for first mortgages (Table 2). However, in comparison to 1995, these institutions in 1998 were less likely to have issued first mortgages and were more likely to have financed second mortgages or home equity lines of credit. Furthermore, commercial banks and FL institutions were slightly

more likely to have financed a home equity loan in 1998 than in 1995, while other institutions were less likely to finance this type of loan. It is interesting to note that within each survey, the first-tier institutions were the most likely to have issued home equity loans (roughly 4% in both 1995 and 1998) or home equity lines of credit (15% in 1995 and 18% in 1998).

Another question that arises is whether the purpose of loans obtained from FL institutions has changed overtime. Relative to 1995, households that had acquired a home-secured loan through an FL institution in 1998 were less likely to use it to purchase their home and were slightly more likely to use it for home improvement or repairs or for another purpose that was not specified (Table 3).

Who Borrows From an FL Institution?

Relative to 1995, households who borrowed from an Finance or Loan (FL) Institution in 1998 were slightly more likely to be Black or Hispanic, but they were less likely to be single females (Table 4). Looking at demographic characteristics within the 1998 survey, single females as well as Blacks were more likely to borrow from an FL institution than from either a commercial bank or an other institution. The 1998 FL households also tended to be older, with more education, and to live in the South although they were less likely to live in the West. Roughly 63% of all FL households in 1998 had at least some college compared with about 57% of the FL households in 1995.

Socioeconomic characteristics also differed across the survey years. FL households in 1995 had an average annual income of approximately $61,000 (median of $47,800, in 1998 dollars) while their 1998 counterparts earned $74,500 (median of $58,400).[d] The 1998 FL households also had greater net worth. The average net worth of the 1998 FL households was almost $80,000 more than their 1995 counterparts. It is interesting to note that within each survey, households that obtained their loan from an FL institution had the lowest net worth although not the lowest income. Since the sample includes only homeowners, the lower net worth of the FL households may be an indication that FL households have tapped more of their equity.

Another interesting comparison between the two groups is in terms of their income relative to the median income.[e] According to this income status measurement, the 1998 FL households are slightly poorer. Approximately 21.5% of all FL households in 1998 earned less than or equal to 80% of their regional median income compared with 19.5% of all 1995 FL households. However, the FL households in 1998 were slightly more likely than the 1995 FL households to earn 121% or more of their regional median income.

We were also able to obtain information regarding a borrower's search behavior when making decisions about credit or borrowing. In comparison to FL households in the 1995 survey, FL households in the 1998 survey were less likely to shop around. Almost 20% of the 1998 FL households reported "little or no" shopping compared with 14% of the 1995 FL households. Households in the 1995 survey, were more likely to respond that they did either "moderate" or "a great deal of" shopping. It is interesting to note that within each survey, the FL households were the least likely to report that they did "a great deal" of shopping. Furthermore, within the 1998 survey, FL households were the most likely to respond "little or no" shopping.

Are FL Institution Borrowers Riskier?

Given that FL institutions have been playing a greater role in issuing HCLs, the question arises as to whether these types of institutions are serving higher-risk borrowers. To answer this question, we analyzed the differences between the two surveys according to some risk-based characteristics (Table 5). We first calculated two traditional benchmarks used by lenders to estimate risk: the monthly payment to income ratio (PTI) and the loan to value ratio (LTV). Borrowers with a high PTI ratio are perceived to have greater risk since they need a larger proportion of monthly income to meet their loan payment. Similarly, borrowers with a high LTV ratio are presumed to be riskier since they have less equity stake in their property (Lax et al, 2000). Although the FL households in both surveys had almost identical PTI ratios, the 1998 FL households appear to be riskier due to their higher LTV ratios. It is interesting to note that within each survey the FL households did not have the highest PTI ratios although they did have the highest LTV ratios.

A household's spending and borrowing behavior could also explain why some households are considered to be riskier. While more than half of all FL households in both years spent all of their income each month, the 1995 FL households were slightly more likely to spend all of their income and to borrow to cover their expenses in comparison to their 1998 counterparts. However, there was no difference between the two years in terms of borrowing behavior when controlling for spending. The 1995 FL households were also more likely to be behind in their payment schedule although

the majority were behind by less than two months. For both years, more than one third of FL households had applied for a loan in the past 5 years and were either turned down or not given as much credit. Of those that were denied or not given as much credit, the 1995 FL households were almost twice as likely to not reapply and were less likely to obtain the full amount when reapplying than their 1998 counterparts.

FL households may have been turned down or not given as much credit due to the credit records of the borrower. In both years, the principal reason that FL households responded that they were denied credit was because of their credit records or history from another institution. FL households in 1995 were more likely to report problematic information given by credit rating services or credit bureau reports while FL households in 1998 were more likely to report that they were turned down because of their financial characteristics.

Another interesting comparison is to examine the type of credit that households applied for. More than a quarter of both the 1995 and 1998 FL households (46.9 and 31.9%, respectively) said that they were turned down or not given as much credit on a credit card. The FL households in 1998, however, were more likely to be turned down on mortgages, car loans, and lines of credit. While almost the same proportion of FL households in both years were denied credit, FL households in 1995 were more likely to have perceived in the last 5 years that they would be turned down. Both years, however, gave similar reasons for why they thought they would be turned down. The most important perceived reason given by both the 1995 and 1998 FL households was because of their credit records or history from another institution (46.7 and 37.8%, respectively). The second perceived reason for being denied credit for FL households in both surveys was because of their financial characteristics (29% and 28.6%, respectively). Although the cell size tempers our confidence, it is important to note that in 1995 no household reported their personal characteristics as the reason that they were turned down while in 1998, 7% of FL households and 4% of commercial bank households did.

Multivariate Analysis

Although our descriptive analysis separates institutions into three categories (commercial bank or credit union, FL institution, and other institution), for purposes of the multivariate analysis we divided institutions into two categories and included 'other' institutions with the FL institution category.[f] We then modeled the probability of using an FL institution based on credit risk measures, socioeconomic and demographic variables, search behavior, and loan characteristics. Among the risk-based characteristics we included the LTV and PTI ratios as well as variables related to a household's spending behavior, payment schedule, and credit history. We included the LTV and PTI ratios as categorical dummy variables for two reasons. First, since many lenders have in fact established cut-off points to determine the riskiness of a loan, including these variables as categorical dummy variables allowed us to look for possible differences in these thresholds. Moreover, we chose to emulate previous studies such as Lax et al (2000) that also included these risk measures as categorical dummy variables, enabling us to compare our results with theirs.

We estimated three separate logit models. We first ran the same model separately for 1995 and 1998 (Appendix). We next pooled the data from the 1995 and 1998 surveys and incorporated a 1998 time dummy to indicate the survey year (Table 6). We report both the logit regression coefficients and the odds ratios. Risk-based characteristics, loan characteristics, demographic characteristics, and year of survey were all significant; holding all else constant, however, socioeconomic characteristics were not significant in the choice of institution.

Both of the LTV ratio dummies were statistically significant and had coefficients that were consistent in explaining risk - households with higher loan to value ratios were 1.5 times more likely to use an FL institution. Similarly, households with higher payment to income ratios were 1.2 or 1.3 times more likely to use an FL institution. Households who were behind in their payments less than 2 months were 1.2 times more likely to use an FL institution, while households more than 2 months behind on their payments were 1.7 times as likely to use an FL institution.

Turning to the credit history variable, households who did not apply for a loan in the last several years but who did not think they would be turned down were less likely to use an FL institution. However, households who had been rejected or who thought they might be rejected were 1.5 to 1.6 times as likely to use an FL institution.

Having a high cost loan was associated with being 2.5 times more likely to use an FL institution. Interestingly, households with both a first and second mortgage were only 30% as likely to have a loan with an FL. The implication here is that households with

only a primary mortgage were more likely to use an FL institution.

Minority households were 1.2 to 1.6 times more likely to use an FL institution. Single males were less likely than married couples to use an FL institution, while single females were 1.3 times as likely as married couples to use an FL institution. Households with 12 years or less of education were more likely to use FL institutions. Compared with households living in the Northeast, households in other regions of the country were 1.2 to 2.4 times more likely to use an FL institution.

Table 4.
Characteristics of Households with Loans, by Year and Type of Institution (in percentages, except where noted as dollars)

	1995			1998		
Characteristic	**Commercial Bank**	**Finance or loan**	**Other**	**Commercial Bank**	**Finance or loan**	**Other**
Marital Status & Gender						
Married	77.2	75.2	70.6	76.3	77.5	74.3
Single male	8.4	6.7	10.1	10.2	6.7	12.8
Single female	14.4	18.1	19.3	13.5	15.8	12.9
Race or Ethnicity						
White	85.9	79.0	80.7	86.9	78.7	80.8
Black	6.3	11.8	8.7	5.7	12.4	11.8
Hispanic	4.0	4.9	7.3	4.7	5.2	5.2
Other	3.9	4.3	3.3	2.7	3.7	2.2
Education						
Less than high school	10.6	13.5	14.3	8.0	12.5	12.0
High school graduates	28.3	29.5	30.2	29.6	24.6	23.9
Some college	23.3	28.0	24.2	24.0	28.6	31.1
BS or more	37.8	29.0	31.3	38.4	34.3	33.0
Region						
Northeast	21.4	14.4	13.7	24.8	15.3	13.3
North Central	28.3	20.9	22.9	29.6	20.5	18.7
South	32.0	34.6	38.2	28.0	39.0	43.7
West	18.3	30.1	25.2	17.6	25.2	24.4
Mean Family Income (1998 $)	69,407	60,997	58,861	80,536	74,554	74,109
Median Family Income (1998 $)	49,923	47,799	42,488	55,234	58,421	54,172
Mean Family Net worth (1998 $)	343,710	211,142	241,371	392,678	290,464	316,515
Median Family Net worth (1998 $)	119,617	66,296	81,638	143,200	90,000	96,250

Poverty Rates Using Median Regional Income						
<=80% of Median Regional Income	20.5	19.5	25.9	21.4	21.5	20.9
81 -120% of Median Regional Income	17.8	20.5	21.5	19.8	16.5	21.1
>120% of Median Regional Income	61.7	60.0	52.6	58.8	62.1	58.0
Search Behavior						
Little or no shopping	16.7	14.0	21.4	17.7	19.7	17.7
Moderate shopping	58.1	62.0	51.3	56.5	58.6	53.8
A great deal of shopping	25.2	24.0	27.3	25.8	21.6	28.4

Consistent with the bi-variate data, households who were in the 1998 survey were more likely than those in the 1995 survey to use an FL institution. Although in the descriptive statistics consumers that had obtained loans from FL institutions were the least likely to have reported to have searched "a great deal," their search behavior when making decisions about credit or borrowing was not found to be significant in either survey.

Discussion and Conclusions

Between 1995 and 1998, lending by finance and loan companies grew 16%, from $886 million to $1.03 billion (in constant 2000 dollars). As evidenced by data from the 1995 and 1998 Surveys of Consumer Finances, the proportion of households with home-secured loans from these second-tier institutions grew from 23% to 35%. Furthermore, in 1998 only about one in five households that used an FL institution also used a commercial bank for a loan; thus, access to mainstream financial services may be an issue for the remaining households.

Table 5.
Risk-Based Characteristics of Households with Loans, by Year and Type of Institution (in percentages)

	1995			1998		
Characteristic	**Commercial bank**	**Finance or loan**	**Other**	**Commercial bank**	**Finance or loan**	**Other**
Mean Payment to Income ratio	0.20	0.22	0.25	0.19	0.22	0.25
Median Payment to Income ratio	0.15	0.18	0.17	0.15	0.18	0.16
Mean Loan to Value ratio	0.50	0.62	0.60	0.51	0.66	0.60
Mean Loan to Value ratio	0.49	0.67	0.62	0.50	0.69	0.65
Spending Income						
Spend all income	54.5	62.6	52.5	54.4	56.9	47.3
Save some income	45.5	37.4	47.5	45.6	43.1	52.7
Spend all income & borrow to cover expenses						
Borrow	26.4	25.6	25.4	24.6	26.2	21.5
Do not borrow	75.4	74.4	74.6	75.4	73.8	78.5
Payment schedule on all loans						

Choice of Financial Institutions						
On or ahead of schedule	84.4	73.6	81.9	86.4	82.4	80.7
Behind schedule <2 months	11.4	18.6	11.6	9.1	9.9	9.9
Behind schedule, =>2 months	4.2	7.8	6.5	4.5	7.6	9.4
Applied for loan in last 5 years	84.3	87.2	85.9	84.5	86.8	85.7
Applied for and turned down for loan in last 5 years						
Turned down	18.1	31.7	18.8	19.4	31.3	33.0
Not given as much credit	2.6	3.9	3.1	2.4	3.8	4.4
Turned down & able to obtain full amount by reapplying						
Yes	54.8	45.9	53.5	53.0	53.6	29.4
No	25.0	23.2	35.3	30.7	30.7	45.9
Did not reapply	20.3	31.0	14.2	16.3	15.7	24.7
Thought would be turned down in last 5 years	9.5	20.0	12.2	7.8	12.3	15.4

† Significant at 5 percent level
‡ Significant at 10 percent level

Table 6.
Probability of Using a Finance or Loan (FL) or Other Institution (1995/1998)

Variable	Coef-ficients	Odds Ratio
Intercept	-1.19*	
Risk-based characteristics		
Loan to value ratio (relative to ltv<=.79)		
Loan to value ratio .80-.89	0.41*	1.50
Loan to value ratio >.89	0.47*	1.59
Payment to income ratio (relative to pti<=.18)		
Payment to income ratio .19-.22	0.27*	1.32
Payment to income ratio >.22	0.20*	1.22
Spend income (relative to save income)		
Spend all income and do not borrow	-0.03	0.97
Spend all income and borrow	-0.04	0.97
Payment schedule (relative to on or ahead of schedule)		
Behind in payments less than 2 months	0.16*	1.17
Behind in payments 2 months or more	0.53*	1.69
Credit history (relative to full amount of credit approved)		
Applied and given reduced amount	-0.03	0.97
Applied and rejected	0.39*	1.48
Didn't apply/no fear of rejection	-0.09‡	0.91
Didn't apply/feared rejection	0.48*	1.62
Loan characteristics		
Have a high-cost loan	0.91*	2.49
2nd mortgage, home equity or line of credit	-1.18*	0.31
Demographic characteristics		
Race/ethnicity (relative to white)		
Black	0.49*	1.64
Hispanic	0.20†	1.22
Other race or ethnicity	0.03	1.03
Marital status and gender (relative to married couples)		
Single male	-0.12†	0.89
Single female	0.28*	1.33
Age	0.00	1.01
Age squared	0.00‡	1.00
Education less than or equal to 12 years	0.12*	1.12
Geographic region (relative to Northeast)		
North Central	0.23*	1.26
West	0.89*	2.43
South	0.76*	2.14
Socioeconomic characteristics		
Income ratio (relative to <=80% of median regional income)		
Income ratio 81-120% of median	0.01	1.01
Income ratio >=121% of median	0.07	1.08
Other characteristics		
Shop around for best terms (relative to those who do a great deal)		
Little or no shopping	0.03	1.03
Moderate shopping	0.02	1.02
Year 1998	0.11*	1.12
Log likelihood Ratio		1933.
R-Square		.095
Max-rescaled R-Square		.129
Percent Concordant		67.9

* Significant at 1 percent level

It was somewhat disturbing to note the prevalence of first mortgages held by finance companies. Consistent with findings from Lax et al (2000), consumers may be self-selecting by going to second-tier lenders when they might qualify for a lower-cost mortgage with a bank, thrift, or credit union. For many of these consumers, perception is reality, even if the perception is false. Of the consumers who used an FL, one out of five in 1995 and one out of eight in 1998 thought they would be turned down for credit, and about two-fifths thought it was due to their credit history with another institution. While there is no way to know if these consumers really did have poor credit records, they behaved as if they did by using a higher-cost lender from the second tier. Understanding the components of credit reports and what creditors look for may help give consumers the confidence to shop for less expensive loans at lower-cost institutions. For those that really do have poor credit records, they can be counseled to work on improving their credit records so they can apply to refinance their mortgage with a lower-cost institution.

Consumers who used an FL institution did less shopping around for their mortgages, although this bi-variate relationship did not hold up in the multivariate analysis. If consumers only shopped within the set of finance and loan companies, they may not be finding the full range of loan prices in the market place. Consumer educators and housing counselors can help reinforce not only the need to shop around but also the need to shop at a variety of types of institutions. Educators may also want to consider using some of the same marketing tactics as lenders to reach consumers with information; door-hangers and one-page flyers with simple messages may be just as effective as lengthy brochures or class sessions.

To some extent, consumers who use finance and loan companies tend to have a higher risk profile. Consumers who had certain risk-based characteristics were 1.1 to 1.7 times more likely to use an FL institution. Households with loans from second tier institutions had higher loan to value ratios, higher payment to income ratios, were behind on some of their payments, and were turned down or thought they would be turned down for credit in the past 5 years. Beyond our risk measures, we found minorities, single females, consumers with lower levels of education and

consumers living outside the Northeast were more likely to use finance and loan companies for home-secured loans.

Several interesting implications arise from this finding. First, consumers need to know how their payment history relates to their credit record and, as a corollary, the importance of managing their finances to pay their bills on time. Second, consumers need to understand that they can improve their credit records and eventually refinance higher-cost loans into lower-cost loans, thus saving substantial money over the term of their mortgage.

The fact that over one-third of consumers in 1998 used an FL institution for their home-secured loans may mean that consumers don't understand how good their credit rating really is, so there are some prime consumers in the subprime market (Lax et al, 2000). FL institutions tend to serve higher-risk consumers, but there is probably some self-selection going on, with consumers who don't know that they might qualify for an A or A- loan applying for loans with B and C lenders. Most of these finance companies have no incentive to steer these A-level customers to commercial banks, thrifts, or credit unions, so consumers end up paying higher prices than necessary for their loans. The best defense against this situation may be to teach consumers to shop around for their loans.

We also found that households in the 1998 survey were more likely than those in the 1995 survey to have acquired a loan from an FL institution. One possible explanation for this may be that in light of the booming economy of the late nineties, borrowers were more willing to take out loans in 1998 than in 1995. Moreover, relative to households in the 1995 survey who had obtained a loan from an FL institution, households in the 1998 survey were more likely to use their loan for a purpose that was not specified (Table 3). Consumers need to be aware that loans acquired during periods of economic prosperity may constrain their household income during periods of economic weakness. Therefore, consumer educators and housing counselors need to emphasize to consumers the importance of not only borrowing within their means but also of taking out loans for fundamental reasons.

Finally, consumers with high-cost loans - loans that are at least two standard deviations above the mean APR - were more likely to use finance and loan companies. The causal relationship here may run in either direction - that is, finance and loan companies may charge higher interest rates, increasing the likelihood of having a high cost loan. Or, higher risk consumers who face higher loan prices may gravitate toward finance and loan companies. However, we did find that in both surveys loans issued by FL institutions had on average a higher APR than those from first-tier or other institutions.

Our data did not include any information on fees and other up-front costs associated with these home-secured loans. Evidence at hearings on predatory lending show that these up-front fees, often rolled into the principal of the loan, can be extraordinarily high (e.g., HUD, 2000 and Federal Reserve Board, 2000a). Thus, for example, our measure of having a high-cost loan (HCL) may understate the number of consumers with such loans. It would also be of interest to look at fee structures within the different tiers of institutions, but we need to leave that for another study with more appropriate data.

It is also important to address the increasing role of FL institutions particularly in light of current economic conditions. While roughly 23% of households in the 1995 survey had obtained a loan from an FL institution, more than one third of households in the 1998 survey had used these same institutions. This increase may present potential problems to borrowers for two reasons. First, while many of these loans were acquired during a booming economy, in a more constrained economy, households may find it more difficult to pay off these loans. This, together with our finding that loans obtained from FL institutions are on average more expensive, could further induce a household to miss loan payments. At the same time, however, the continued reduction in interest rates in the marketplace could lower the borrowing costs for households and thereby mitigate the effects of a slumping economy and of the higher rates charged by FL institutions. In addition to the direct effects of an economic slowdown, continuous changes in the subprime market, including the entry and exit of firms, may lead to greater instability in this market and present other problems to borrowers of FL institutions.
In summary, we do find that finance and loan companies tend to have higher cost loans, as measured by APR, than other institutions. The profile of consumers who use a finance or loan institution for their home secured loans is of young, single female, minority consumers with lower education. These households have less equity in the homes (as evidenced by higher loan to value ratios) and spend more of their

income on mortgage payments. These households may be able to benefit from knowing more about their own credit record, working to improve their record if necessary, and shopping around a variety of types of institutions for their loans.

Appendix.

Probability of Using a Finance or Loan (FL) or Other Institution (1995 & 1998 separately)

	1995		1998	
Variable	**Coefficients**	**Odds Ratios**	**Coefficients**	**Odds Ratios**
Intercept	-1.10*		-1.41*	
Risk-based characteristics				
Loan to value ratio (relative to ltv<=.79)				
Loan to value ratio .80-.89	0.34*	1.40	0.55*	1.74
Loan to value ratio >.89	0.37*	1.45	0.57*	1.77
Payment to income ratio (relative to pti<=.18)				
Payment to income ratio .19-.22	0.36	1.43	0.16	1.17
Payment to income ratio >.22	-0.03	0.97	0.44	1.56
Spend income (relative to save income)				
Spend all income and do not borrow	-0.07	0.94	-0.01	0.99
Spend all income and borrow	-0.21	0.81	0.14‡	1.15
Payment schedule (relative to on or ahead of schedule)				
Behind in payments less than 2 months	0.22	1.25	0.05	1.06
Behind in payments 2 months or more	0.65	1.91	0.40	1.49
Credit history (relative to full amount of credit approved)				
Applied and given reduced amount	-0.10	0.90	0.05	1.06
Applied and rejected	0.41*	1.51	0.43*	1.54
Did not apply and did not think would be rejected	-0.25*	0.78	0.08	1.08
Did not apply and thought would be rejected	0.62*	1.86	0.44	1.55
Loan characteristics				
Have a high-cost loan	0.39*	1.48	1.47*	4.36
Second mortgage, home equity or line of credit	-1.22*	0.29	-1.25*	0.29
Demographic characteristics				
Race/ethnicity (relative to white)				
Black	0.32*	1.38	0.64*	1.91
Hispanic	0.06	1.06	0.37*	1.45
Other race or ethnicity	-0.03	0.97	0.19	1.20
Marital status and gender (relative to married couples)				
Single male	-0.06	0.94	-0.16†	0.86
Single female	0.18†	1.2	0.40*	1.49
Age	0.02	1.02	0.00	1.00
Age squared	0.00*	1.00	0.00	1.00
Education less than or equal to 12 years	0.14*	1.15	0.08	1.09
Geographic region (relative to Northeast)				
North Central	0.18†	1.19	0.28*	1.32
West	0.83*	2.3	0.96*	2.62
South	0.59*	1.81	0.94*	2.57
Socioeconomic characteristics				
Income ratio (relative to <=80% of median regional income)				
Income ratio 81-120% of median	0.07	1.07	-0.07	0.93
Income ratio >=121% of median	-0.11	0.90	0.27*	1.31
Other characteristics				
Shop around for best terms (relative to those who do a great deal of shopping)				
Little or no shopping	-0.02	0.98	0.08	1.08
Moderate shopping	0.04	1.05	0.01	1.01
Year 1998	na	na	na	na
Summary statistics				
Log likelihood Ratio		892.8		1229.8
R-Square		.088		.120
Max-rescaled R-Square		.120		.163

Choice of Financial Institutions		
Percent Concordant	67.2	70.2

* Significant at 1 percent level
† Significant at 5 percent level
‡ Significant at 10 percent level

Endnotes

a. These other markets, such as subprime auto loans, payday lending, car title pawn, and rent-to-own have also grown substantially since the early 1990's. However, a discussion of these financial institutions as part of the high cost loan industry is outside the scope of this paper, which focuses on home-secured loans

b. The Federal Reserve Board recently changed these limits. Previously, the limit was set at 10 percentage points higher than the relevant Treasury security for both first- and second-lien loans. The limits cited go into effect in October of 2002.

c. Our figures are based on the percentage of households, rather than the more commonly-used percentage of number of loans or percentage of dollar volume of loans. According to an Office of Thrift Supervision (2000) report, subprime loans made up about 6.3 % of the number of loans and about 4.1 % of the dollar volume of loans in 1999. Our definition is not the same as subprime in this OTS report, but our proportions are consistent with the volumes reported there.

d. To adjust family income and net worth to 1998 dollars, we used the Consumer Price Indices described in Kennickell, Starr-McCluer & Surette, 2000. For the 1995 survey, we applied 1.0622 to net worth and 1.0904 to family income. For the 1998 survey, we applied 1.0135 to income, since figures were reported for 1997.

e. The break-points of 80% and 120% of regional median income come from designations under the Community Reinvestment Act for low-to-moderate income (<=80%), middle income (81% to 120%) and upper income (>120%) neighborhoods. As such, these are the categories often used in policy analysis and home lending research.

f. Our intuition is that mortgage companies, mortgage brokers, and private sources behave more like finance and loan companies than they do banks. Less than 2% of the sample used a government source for their primary loan.

References

ABC News Prime Time (1997). April 23 segment on predatory lending practices. Videotape from Community Reinvestment Association of North Carolina (CRA-NC), 14 W. Parrish St, Second Floor, PO Box 1929, Durham, NC 27702-1929.

Avery, R.B., Bostic, R.W., Calem, P.S. & Canner, G.B. (1996, July). Credit risk, credit scoring, and the performance of home mortgages. *Federal Reserve Bulletin, 82*, p. 621-48.

B & C delinquencies down in March 1999, MIC data reveal (1999,May 31). *Inside B & C Lending.*

Canner, G.B. & Passmore, W. (1999,November). The role of specialized lenders in extending mortgages to lower-income and minority homebuyers. *Federal Reserve Bulletin, 85*, p. 709-723.

Canner, G.B., Passmore, W. & Surette, B.J. (1996). Distribution of credit risk among providers of mortgages to lower-income and minority homebuyers. *Federal Reserve Bulletin*, Vol. 82 (December), p. 1077-1102.

Cocheo, S. (1999). Give me your delinquents, your former bankrupts, yearning to borrow... *ABA Banking Journal*, vol. 88, no. 8, p. 31-35.

Day, K. (2000) Citigroup to alter 'subprime' terms. *Washington Post*, November 8 p. E3.

Evanoff, D.D. & Segal, L.M. (1996). CRA and fair lending regulations: Resulting trends in mortgage lending. *Federal Reserve Bank of Chicago Economic Perspectives*, November/December, p. 19-46.

Federal Reserve Board (2000a) Public hearings on home equity lending. Retrieved from web on November 1, 2000: http://www.federalreserve.gov/Events/PublicHearings/ on

Federal Reserve Board (2000b). Press release on proposed amendments to the provisions of its Regulation Z (Truth in Lending) that implement the Home Ownership and Equity Protection Act. Retrieved from web on March 15, 2001: http://www.federalreserve.gov/boarddocs/press/boardacts/2000/20001219/default.htm

Federal Reserve Board (2001a). Historical data on finance companies (G. 20). Retrieved from web on May 29, 2001: http://www.federalreserve.gov/releases/G20/hist/fc_hist_q.html

Federal Reserve Board (2001b). Ammendments to Regulation Z addressing concerns related to predatory practices in mortgage lending. Memo to the Board of Governors of the Federal Reserve System, November 27, 2001.

Feldman, R. & Schmidt, J. (1999). Why all concerns about subprime lending are not created equal. Fedgazette of the Federal Reserve Bank of Minneapolis, July. Retrieved from the web on November 14, 2000: http://minneapolisfed.org/pubs/fedgaz/00-07/banking.html

Gabriel, S. & Rosenthal S. (1991). Credit rationing, race, and the mortgage market. *Journal of Urban Economics*, Vol. 29, No. 3, p. 317-379.

Housing and Urban Development (2001). Manufactured home and subprime lender list. Retrieved from web on November 1, 2001: http://www.huduser.org:80/datasets/manu.html

Housing and Urban Development (2000). Proceedings of the HUD-Treasury joint task force on predatory lending. Washington DC: Department of Housing and Urban Development.

Kennickell, A. B., McManus, D. A. & Woodburn, R. L. (1996). Weighting design for the 1992 Survey of Consumer Finances, Working Paper on Survey Methodology of Survey of Consumer Finances, Federal Reserve Board, Washington, D.C.

Kennickell, A.B. & Woodburn, R. L. (1997). Consistent weight design for the 1989, 1992, and 1995 SCFs, and the distribution of wealth, Working Paper on Survey Methodology of Survey of Consumer Finances, Federal Reserve Board, Washington, D.C.

Kennickell, A.B., Starr-McCluer, M. & Surette, B.J. (2000). Recent changes in U.S. family finances: Results from the 1998 Survey of Consumer Finances, *Federal Reserve Bulletin, 86* (January), 1-29.

Lax, H., Manti, M., Raca, P. & Zorn, P. (2000). Subprime lending: An investigation of economic efficiency. Working Paper, Federal Home Loan Mortgage Corporation.

Linneman, P. & Wachter, S. (1989). The impacts of borrowing constraints on homeownership. *AREUEA Journal*, Vol. 17 no. 4, p. 389-402.

Nathan, L. (1999). Borrower beware: Equity strippers are preying on elderly homeowners. Communities and Banking, Federal Reserve Bank of Boston, p. 6-18. Retrieved from web on November 8, 2000: http://www.bos.frb.org/comaff/pdf/spring99.pdf

Pennington-Cross, A., Yezer, A. & Nichols, J. (2000). Credit risk and mortgage lending: Who uses subprime and why? Washington DC: Research Institute for Housing America, Working Paper No. 00-03 (September).

Poverty Inc. (1998, July). It's boomtime for businesses that target people strapped for case and credit. *Consumer Reports*, Vol 63, No. 7, p.28-33.

Scheessele, R. M. (1997). The impact of manufactured home and subprime loans on HMDA rejection and origination rates. Housing Finance Working Paper Series, U.S. Department of Housing and Urban Development, November.

Scheessele, R. M. (1999, October). 1998 HMDA highlights. Housing Finance Working Paper Series, U.S. Department of Housing and Urban Development.

Swanson, J.A., Hogarth, J.M. & Segelken, J.B. (1993). Voices of experience: Limited resource families and financial management. Proceedings of the Family Economics and Management Conference (American Association of Family & Consumer Sciences annual meeting), p. 13-28.

Zorn, P.M. (1993). The impact of mortgage qualification criteria on households' housing decisions: An empirical analysis using microeconomic data. *Journal of Housing Economics*, Vol. 3, No 1, p. 51-75.

