

APPENDIX F.

Access to Capital for Business Formation and Success

One of the factors researchers have examined when studying business formation and success is access to capital. If discrimination exists in capital markets, minorities and women may be prevented from acquiring the capital necessary to start or expand a business.¹

Appendix E investigates several other factors that may lead to differences in business ownership. Appendix G explores factors that may explain differences in the success of businesses. Access to capital is a factor that overlaps both these topics and is explored in this Appendix.

BBC begins by studying homeownership and mortgage lending, as home equity is an important source of capital to start and expand businesses. We then examine access to business loans.

Homeownership and Mortgage Lending

BBC analyzed homeownership and the mortgage lending industry to explore differences across race/ethnicity and gender that may lead to disparities in access to capital.

Homeownership. Wealth created through homeownership can be an important source of capital to start or expand a business.² Any barriers to homeownership and home equity growth for minorities or women can affect business opportunities for these groups. Similarly, any barriers to accessing the equity in a home through home mortgages can also affect the capital available for new or expanding businesses. In sum:

- A home is a tangible asset that provides borrowing power;³
- Wealth that accrues from housing equity and tax savings from homeownership contributes to capital formation;⁴
- Mortgage loans have traditionally been the second largest loan type for small businesses behind lines of credit;⁵ and
- Homeownership is associated with an estimated 30 percent reduction in probability of loan denial for small businesses.⁶

¹ For an example, see: Coleman, Susan. *Small Firm Sources of Debt Capital: A Comparison by Gender, Race and Ethnicity*. University of Hartford.

² The recent (beginning in late 2006) housing and mortgage crisis has substantially impacted the ability of small businesses to secure loans through home equity. A discussion of the consequences to small businesses and MBE/WBEs is provided at the end of this section.

³ Nevin, Allen. 2006. "Homeownership in California: A CBIA Economic Treatise." *California Building Industry Association*. 2.

⁴ Jackman, Mary R. and Robert W. Jackman 1980. "Racial Inequalities in Home Ownership." *Social Forces*. 58. 1221-1234.

⁵ Berger, Allen N. and Gregory F. Udell. 1998. "The Economics of Small Business Finance: The Roles of Private Equity and Debt Markets in the Financial Growth Cycle." *Journal of Banking and Finance*. 22.

Home equity as a source of business capital is especially important in California where past house price appreciation has caused home value to be a substantial portion of many households' wealth.⁷ The study team first considered homeownership rates and home prices in San Diego County, Southern California and the U.S. before turning to data on the home mortgage market.

Homeownership rates. Homeownership is the first step toward building home equity that can be tapped for other purposes. Many studies document past discrimination in the United States' housing market. For example, the United States has a history of restrictive real estate covenants and property laws affecting the ownership rights of minorities and women.⁸ In the past, a woman's participation in homeownership was ancillary to that of her husband and parents.⁹

Figure F-1 shows rates of homeownership for minority groups and non-Hispanic whites in San Diego County, Southern California and the nation in 2000 and 2007. About 33 percent of African American households and 39 percent of Hispanic American households in San Diego County were homeowners in 2000, compared with 63 percent of non-Hispanic whites in the county.

Homeownership rates were also lower for Subcontinent Asian Americans, Native Americans and Asian-Pacific Americans in San Diego County than for non-Hispanic whites. Similar disparities for these groups are found in Southern California. These disparities in homeownership rates are also present in the 2007 data, although overall homeownership rates were higher in both San Diego and Southern California. One exception is Asian-Pacific Americans, who had the same home ownership rate as non-Hispanic whites in San Diego in 2007.

Generally, rates of homeownership were lower in San Diego and Southern California than the nation, in part due to the historically high price of homes in the state.¹⁰

⁶ Cavalluzzo, Ken and John Wolken. 2005. "Small Business Loan Turndowns, Personal Wealth and Discrimination." *Journal of Business*. 78:2153-2178.

⁷ Myers, Dowell and Xin Gao. 2004. "Trajectories of Homeownership in California, 1980 to 2000, and 2000 to 2030." *California Housing Futures research program*. Fannie Mae Foundation.

⁸ Ladd, Helen F. 1982. "Equal Credit Opportunity: Women and Mortgage Credit." *The American Economic Review*. 72:166-170.

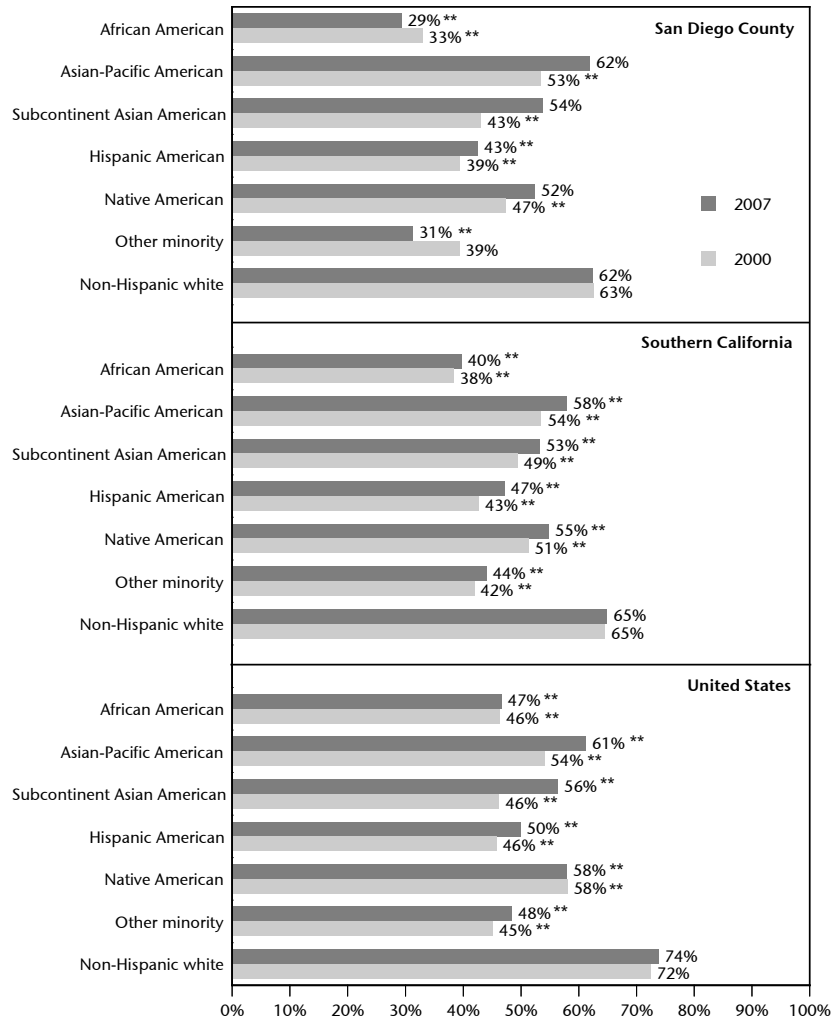
⁹ Card, Emily. 1980. "Women, Housing Access, and Mortgage Credit." *Signs*. 5:215-219.

¹⁰ Quigley, John M. and Steven Raphael. 2004. "Regulation and the High Cost of Housing in California." *University of California, Berkeley*.

Figure F-1.
Homeownership rates,
2000 and 2007

Note:
 The sample universe is all households.
 ** Denotes that the difference in proportions from non-Hispanic white for the given year is statistically significant at the 95% confidence level.

Source:
 BBC Research & Consulting and the 2000 U.S. Census and 2007 American Community Survey data.



BBC also examined homeownership rates for heads of household who worked in the construction and engineering industries. Disparities in homeownership rates found for all San Diego County and Southern California households were also observed for households in which the head of household worked in the construction industry. Differences in homeownership rates also persist for African Americans and Hispanic Americans working in the engineering industry.

Different rates of homeownership in part reflect lower incomes for minorities. This may be self-reinforcing, as low wealth puts individuals at a disadvantage in becoming homeowners, which has historically been an effective path to building wealth. One study found statistically significant results indicating that the probability of homeownership is considerably lower for African Americans than it is for comparable non-Hispanic whites throughout the U.S.¹¹ A study in Los Angeles found different results. Controls for types of income indicated that probabilities of homeownership for African American households in South-Central Los Angeles and San Bernardino County were identical to white households.¹²

¹¹ Jackman. 1980. "Racial Inequalities in Home Ownership."

¹² Gabriel, Stuart and Gary Painter. 2001. "Pathways to Homeownership: An Analysis of the Residential Location and Homeownership Choices of Black Households in Los Angeles." *USC Finance & Business Econ.* Working Paper No. 01-22.

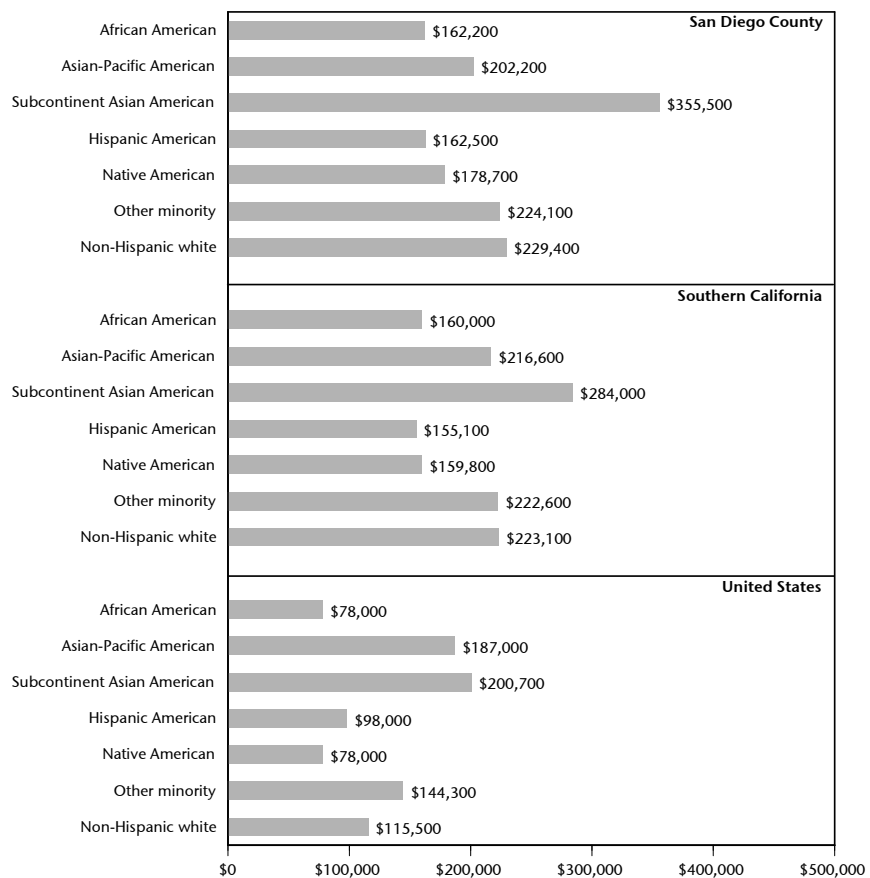
Home values. Recent research has found that homeownership and the value of the home is a direct indicator of capital available to form or expand businesses. For example, using microdata from matched Current Population Surveys (1993-2004), one study found that differences in housing appreciation between metropolitan areas affected entry into self-employment. The study indicated that a 10 percent annual increase in housing equity increases the mean probability of entrepreneurship by approximately 20 percent.¹³

Using U.S. Bureau of the Census data on home values in 2000 and 2007, BBC compared median home values by race and ethnicity. Figure F-2 presents 2000 median home values in San Diego County, Southern California and the United States.

Figure F-2.
Median home value, 2000

Note:
The sample universe is all owner-occupied housing units.

Source:
BBC Research & Consulting from 2000 U.S. Census data.



The median home value of non-Hispanic whites in San Diego County in 2000 was \$229,400, substantially above the median value of homes owned by African Americans, Hispanic Americans and Native Americans. The median home value for Asian-Pacific Americans was closer to the value for non-Hispanic whites. On the other hand, the median home value for Subcontinent Asian Americans was substantially larger than the non-Hispanic white value.

The differences in median home value for minorities compared to non-Hispanic whites in San Diego were similar to the differences seen in Southern California and the United States as a whole.

¹³ Fairlie, Robert W. and Harry A. Krashinsky. 2006. "Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited." *IZA Discussion Paper*. No. 2201.

Figure F-3 presents median home values by race/ethnicity in San Diego County, Southern California and the U.S. based on 2007 ACS data. Similar to the figure for 2000, African Americans, Hispanic Americans and Native Americans had substantially lower median home values than non-Hispanic whites in both San Diego County and Southern California.

In the United States, median home values for African Americans and Native Americans remained well below value for non-Hispanic whites in 2007. The national median value for Hispanic Americans surpassed the value for non-Hispanic whites in 2007.

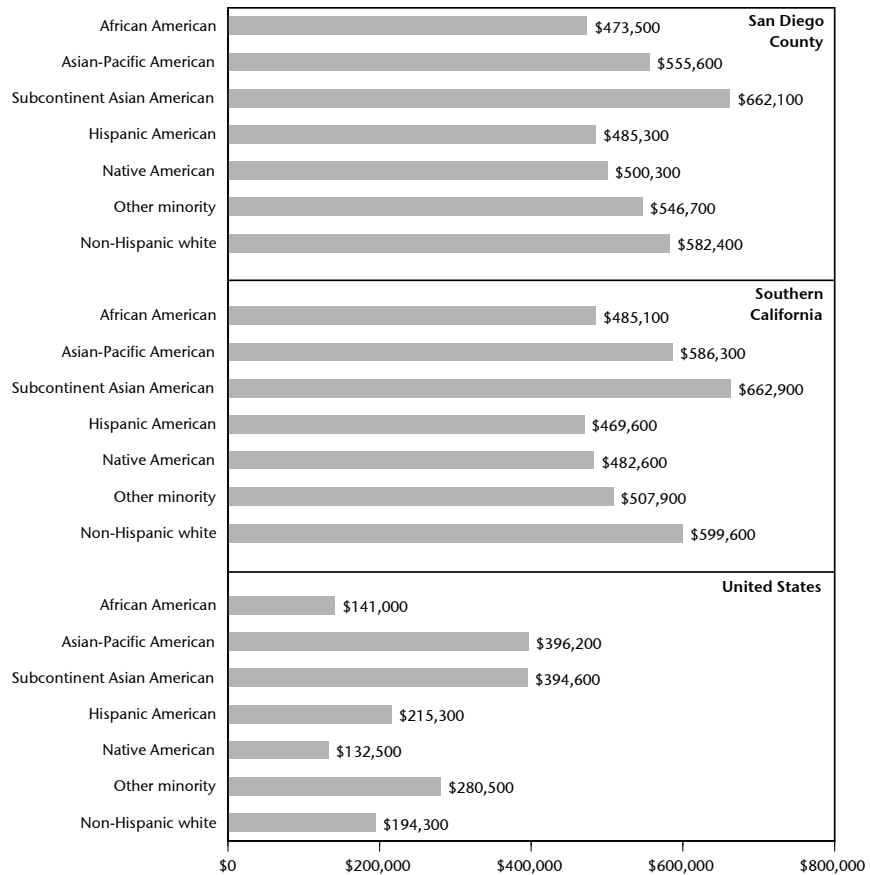
Figure F-3.
Median home value,
2007

Note:

The sample universe is all owner-occupied housing units.

Source:

BBC Research & Consulting from 2007 American Community Survey data.



Mortgage lending. Minorities may be denied opportunities to own homes, to purchase more expensive homes or to access equity in their homes if they are discriminated against when applying for home mortgages. BBC explored this issue.

The best source of information concerning mortgage lending discrimination comes from Home Mortgage Disclosure Act (HMDA) data, which contain information on mortgage loan applications for financial institutions, savings banks, credit unions and some mortgage companies.¹⁴ These data include information about the location, dollar amount, and types of loans made, as well as race and ethnicity, income, and credit characteristics of all loan applicants. The data are available for home purchases, loan refinances, and home improvement loans.

BBC examined statistics provided by KnowledgePlex on conventional loan denial rates for high-income borrowers. Conventional loans are loans not insured by a government program. High-income borrowers are those households with 120 percent or more of the U.S. Department of Housing and Urban Development (HUD) area median family income.¹⁵

Loan denial rates are calculated as a share of mortgage loan applications which is equal to the sum of denied and originated loan applications, but excludes terminations of the application process by the potential borrowers.

Data on loan denial rates for mortgages in San Diego County show higher denial rates for minority high-income households than for non-Hispanic white high-income households. Figure F-4 reports loan denial rates for San Diego County, Southern California and for the nation in 2005, the most recent numbers available from KnowledgePlex. Among high-income households applying for mortgages, 22 percent of African American applicants in San Diego County had their applications denied compared with less than 14 percent of non-Hispanic white households. Loan denial rates were also higher for Native Americans, Hispanic Americans and Asian Americans compared to non-Hispanic whites.

The patterns of loan denial rates by race and ethnicity in San Diego County mirrored those of Southern California and the United States in 2005, although San Diego loan denial rates were slightly lower than Southern California and national rates for all minority groups.

¹⁴ Financial institutions are required to report HMDA data if they have assets of more than \$32 million, have a branch office in a metropolitan area, and originated at least one home purchase or refinance loan in the reporting calendar year. Mortgage companies are required to report HMDA if they are for-profit institutions, had home purchase loan originations exceeding 10 percent of all loan obligations in the past year, are located in an Metropolitan Statistical Area (or originated five or more home purchase loans in an MSA) and either had more than \$10 million in assets or made at least 100 home purchase or refinance loans in the calendar year.

¹⁵ 2005 median family income is \$58,000 for the United States and \$62,500 for California. Based on 2000 census data on family incomes. Data are updated to 2005 using Census P-60 median family income data, Census American Community Survey data on changes in state median family incomes and local Bureau of Labor Statistics wage data.

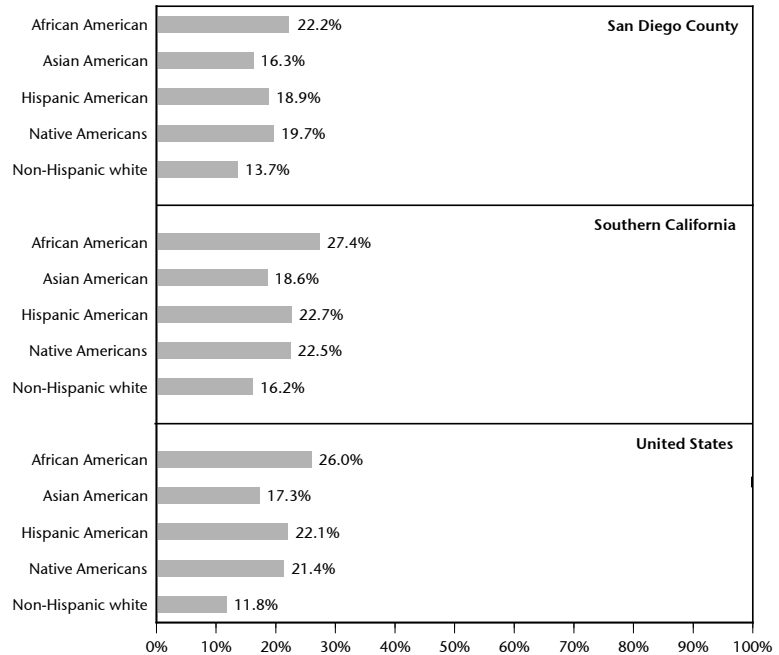
Figure F-4.
Denial rates of conventional purchase loans to high-income households, 2005

Note:

High-income borrowers are those households with 120% or more than the HUD area median family income (MFI).

Source:

FFIEC HMDA data 2005 and KnowledgePlex, an online resource maintained by the Fannie Mae Foundation.



A number of national studies have examined disparities in loan denial rates and loan amounts for minorities in the presence of other influences. Examples include the following:

- A study by the Federal Reserve Bank of Boston is one of the most cited studies of mortgage lending discrimination.¹⁶ It was conducted using the most comprehensive set of credit characteristics ever assembled for a study on mortgage discrimination.¹⁷ The study provided persuasive evidence that lenders in the Boston area discriminated against minorities in 1990.¹⁸
- Using the Federal Reserve Board’s 1983 Survey of Consumer Finances and the 1980 Census of Population and Housing data, logit statistical analysis revealed that minority households were one-third as likely to receive conventional loans as non-Hispanic white households after taking into account financial and demographic controls.¹⁹
- Findings from a Midwest study indicate a significant relationship between race and both the number and size of mortgage loans. Data matched on socioeconomic characteristics revealed that African American borrowers across 13 census tracts received significantly less of both compared to their white counterparts.²⁰

¹⁶ Munnell, Alicia H., Geoffrey Tootell, Lynn Browne and James McEneaney. 1996. “Mortgage Lending in Boston: Interpreting HMDA Data.” *The American Economic Review*. 86: 25-53.

¹⁷ Ladd, Helen F. 1998. “Evidence on Discrimination in Mortgage Lending.” *The Journal of Economic Perspectives*. 12:41-62.

¹⁸ Yinger, John. 1995. *Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination*. New York: Russell Sage Foundation, 71.

¹⁹ Canner, Glenn B., Stuart A. Gabriel and J. Michael Woolley. 1991. “Race, Default Risk and Mortgage Lending: A Study of the FHA and Conventional Loan Markets.” *Southern Economic Journal*. 58:249-262.

²⁰ Leahy, Peter J. 1985. “Are Racial Factors Important for the Allocation of Mortgage Money?: A Quasi-Experimental Approach to an Aspect of Discrimination.” *American Journal of Economics and Sociology*. 44:185-196.

However, other studies have found that differences in preferences for Federal Housing Administration (FHA) loans — mortgage loans that are insured by the government — versus conventional loans among racial and ethnic groups may partly explain disparities found in conventional loan approvals between minorities and non-minorities.²¹ Several studies have found that, historically, minority borrowers are far more likely to receive FHA loans than comparable non-Hispanic white borrowers at all income and wealth levels. The insurance on FHA loans protects the lender, but the borrower can be hurt by higher costs.²²

Studies on mortgage loan discrimination specific to Southern California or the state as a whole are more limited.

- HMDA data revealed disparities in prime and subprime lending for African American, Hispanic American and Native American applicants. Differences extended across all Metropolitan Statistical Areas.^{23, 24}
- An older study using HMDA data and a stepwise regression model accounting for socioeconomic status revealed that measures of ethnicity contribute little explanation to mortgage lending in Sacramento.²⁵
- A recent paired testing approach revealed adverse treatment of African Americans and Hispanics in Los Angeles in specific cases. However, the overall pattern of treatment observed offered little evidence of systemic variation in the treatment of African American and Hispanic American testers relative to non-minority testers in Los Angeles. Although this study did find increased encouragement for minorities to pursue FHA loans.²⁶

Higher fees and interest rates. Denial of loans is only one way minorities might be discriminated against in the home mortgage market; mortgage-lending discrimination can also occur through high fees and interest rates. The housing market provides a unique environment for this type of discrimination through fees associated with various loan types.

Until recently, one of the fastest growing segments of the home mortgage industry was subprime lending. From 1994 through 2003, subprime mortgage activity grew by 25 percent per year and accounted for \$330 billion of U.S. mortgages in 2003, up from \$35 billion a decade earlier.

²¹ Canner. 1991. "Race, Default Risk and Mortgage Lending: A Study of the FHA and Conventional Loan Markets."

²² Yinger. 1995. *Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination*. 80.

²³ Gee, Peter. 2004. *The Price of Credit: Prime and Subprime Lending in California 2004*. The Greenlining Institute.

²⁴ See definition of subprime loans discussed on the following page.

²⁵ Dingemans, Dennis. 1979. "Redlining and Mortgage Lending in Sacramento." *Annals of the Association of American Geographers*. 69:225-239.

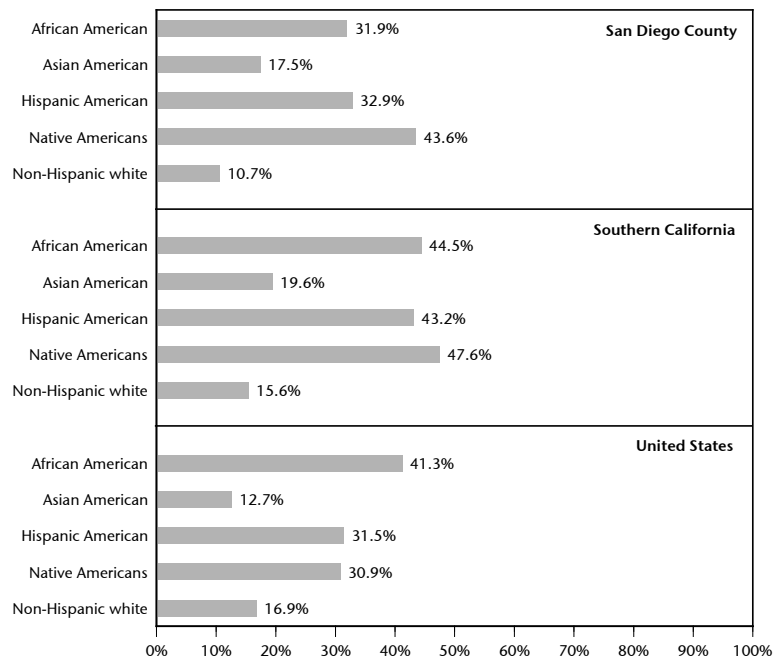
²⁶ Ross, Stephen, Margery Austin Turner, Erin Godfrey and Robin R. Smith. 2005. "Mortgage Lending in Chicago and Los Angeles: A Paired Testing Study of the Pre-Application Process." *University of Connecticut Department of Economics Working Paper Series*.

Subprime loans have higher interest rates than prime loans. These loans are marketed and sold to customers with blemished or limited credit histories who would typically not qualify for prime loans. Over time these loans also became available to homeowners who did not want to make a down payment, disclose or provide proof of income and wealth or wanted to purchase a “high-priced” home and would not be able to qualify under a different instrument.²⁷ Because of higher interest rates and additional costs, subprime loans impacted homeowners’ ability to grow home equity and increased their risks of foreclosure — consequences that have become especially apparent since 2007 and are discussed in greater detail below.

Figure F-5 presents data on the percent of conventional refinancing loans that were from subprime lenders in 2004 in San Diego County, Southern California and the United States. In San Diego County, African American, Asian American, Native American and Hispanic American borrowers are much more likely to have a subprime loan than non-Hispanic whites. For example, in San Diego, about 32 percent of conventional refinancing loans obtained by African Americans in 2004 were from subprime lenders compared with only about 11 percent of refinancing loans obtained by non-Hispanic whites. Similar trends are also seen in both Southern California and the nation.

Figure F-5.
Percent of conventional refinancing loans from subprime lenders, 2004

Source:
 FFIEC HMDA data 2004 and KnowledgePlex, an online resource maintained by the Fannie Mae Foundation.



²⁷ Gerardi, Shapiro, and P. Willen. 2008. “Subprime Outcomes: Risky Mortgages, Homeownership Experiences, and Foreclosure. *Federal Reserve Bank of Boston*.

There is evidence of lenders seeking out and offering these loans to individuals who often will not be able to pay off the loan,²⁸ a form of “predatory lending.” Furthermore, some research has found that many recipients of subprime loans — including homeowners in California — could have qualified for prime loans.²⁹

Research has found evidence that predatory lenders have disproportionately targeted minorities. A 2001 HUD study using 1998 HMDA data found that subprime loans were disproportionately concentrated in black neighborhoods compared to white neighborhoods even after controlling for income.³⁰ For example, borrowers in upper-income black neighborhoods were six times more likely to refinance with a subprime loan than borrowers in upper-income white neighborhoods.

Historically, differences in types of loans awarded to minorities have also been attributed to steering by real estate agents, who serve as an information filter between buyers and sellers.³¹ Some studies claim that real estate brokers provide different levels of assistance and different information on loans to minorities and non-minorities.³² This “steering” can shape the perceived availability of loans to minority borrowers.

Lessons from the current mortgage lending crisis. Beginning in early 2007, the U.S. economy weakened, home values declined and mortgage rates rose. The turmoil in the housing market has been far-reaching including the loss of home equity, decreased demand for housing and increased rates of foreclosure.³³ Much of the blame has been placed on risky practices in the mortgage industry including the substantial increase in subprime lending.

As discussed above, subprime mortgages increased at an extraordinary rate between the mid-1990s and mid-2000s. These high-cost loans increased from 8 percent of originations in 2003 to 20 percent in both 2005 and 2006.³⁴ Households holding subprime loans have a higher likelihood of delinquency or foreclosure. A study released from the Federal Reserve Bank of Boston found “homeownerships that begin with a subprime purchase mortgage end up in foreclosure almost 20 percent of the time, or more than 6 times as often as experiences that begin with prime purchase mortgages.”³⁵

²⁸ Department of Housing and Urban Development (HUD) and the Department of Treasury. 2001. HUD-Treasury National Predatory Lending Task Force Report. *HUD*; Carr, J. and L. Kolluri. 2001. *Predatory Lending: An Overview. Fannie Mae Foundation*; and California Reinvestment Coalition, Community Reinvestment Association of North Carolina, Empire Justice Center, Massachusetts Affordable Housing Alliance, Neighborhood Economic Development Advocacy Project, Ohio Fair Lending Coalition and Woodstock Institute, 2008. “Paying More for the American Dream.”

²⁹ Freddie Mac. 1996, September. “Automated Underwriting: Making Mortgage Lending Simpler and Fairer for America’s Families.” *Freddie Mac*. (accessed February 5, 2007); and Lanzerotti. 2006. “Homeownership at High Cost: Foreclosure Risk and High Cost Loans in California.” *Federal Reserve Bank of San Francisco*.

³⁰ Department of Housing and Urban Development (HUD) and the Department of Treasury. 2001.

³¹ Kantor, Amy C. and John D. Nystuen. 1982. “De Facto Redlining a Geographic View.” *Economic Geography*. 4:309-328.

³² Yinger. 1995. *Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination*. 78–79.

³³ Joint Center for Housing Studies of Harvard University. 2008. “The State of the Nation’s Housing.”

³⁴ Joint Center for Housing Studies of Harvard University. 2008. “The State of the Nation’s Housing.”

³⁵ Gerardi, Shapiro, and P. Willen. 2008. “Subprime Outcomes: Risky Mortgages, Homeownership Experiences, and Foreclosure.” *Federal Reserve Bank of Boston*.

In California, homeowners with 60 or more delinquencies rose from about 52,500 in the first quarter of 2007 to about 171,000 in the first quarter of 2008.³⁶ Furthermore, many homeowners, especially those with subprime loans, lost equity in their homes. As of September 2008, the proportion of residential properties in California with negative equity (a mortgage worth more than the value of the home) was 27 percent, one of the highest rates in the country.³⁷ In the last quarter of 2008, California led the country with a monthly average of 43,000 borrowers going into negative equity. In total, California lost over \$1.2 trillion in residential property values in 2008 which accounts for more than half of the national decline in housing values from 2007 to 2008.³⁸ Due to the higher rate of subprime mortgages among minority homeowners, these homeowners have reportedly been disproportionately affected in terms of foreclosures and loss of home equity.³⁹

These problems facing the housing industry substantially impact the ability to secure capital through home mortgages to start or expand a small business. This issue has been highlighted in statements made by members of the Board of Governors of the Federal Reserve System to the U.S. Senate and U.S. House of Representatives:

- On April 16, 2008, Frederic Mishkin informed the U.S. Senate Committee on Small Business and Entrepreneurship that “one of the most important concerns about the future prospects for small business access to credit is that many small businesses use real estate assets to secure their loans. Looking forward, continuing declines in the value of their real estate assets clearly have the potential to substantially affect the ability of those small businesses to borrow. Indeed, anecdotal stories to this effect have already appeared in the press.”⁴⁰
- On November 20, 2008, Randall Kroszner told the U.S. House of Representatives Committee on Small Business that “small business and household finances are, in practice, very closely intertwined. [T]he most recent Survey of Small Business Finances (SSBF) indicated that about 15 percent of the total value of small business loans in 2003 was collateralized by ‘personal’ real estate. Because the condition of household balance sheets can be relevant to the ability of some small businesses to obtain credit, the fact that declining house prices have weakened household balance-sheet positions suggests that the housing market crisis has likely had an adverse impact on the volume and price of credit that small businesses are able to raise over and above the effects of the broader credit market turmoil.”⁴¹

While, as yet, there is limited academic research related to these issues, many news outlets have reported on the lack of credit available to small businesses.⁴²

³⁶ Olson, John. 2008. Understanding the Foreclosure Crisis in California. *Federal Reserve Bank of San Francisco*.

³⁷ First American CoreLogic. 2008. First American CoreLogic’s Negative Equity Data Report.

³⁸ First American CoreLogic. 2008. First American CoreLogic and LoanPerformance Home Price Index Analytics.

³⁹ California Reinvestment Coalition, Community Reinvestment Association of North Carolina, Empire Justice Center, Massachusetts Affordable Housing Alliance, Neighborhood Economic Development Advocacy Project, Ohio Fair Lending Coalition and Woodstock Institute, 2008. “Paying More for the American Dream.”

⁴⁰ Mishkin, Frederic. 2008. “Statement of Frederic S. Mishkin, Member, Board of Governors of the Federal Reserve System before the Committee on Small Business and Entrepreneurship, U.S. Senate on April 16.”

⁴¹ Kroszner, Randall. 2008. “Effects of the financial crisis on small business.” *Testimony before the Committee on Small Business, U.S. House of Representative on November 20*.

⁴² Mount, Ian. 2007. “The credit crunch and small business.” *CNNMoney*. August 30; Bernard, Tara. 2008. “A Rush Into Refinancing as Mortgage Rates Fall.” *The New York Times*. December 4; Timiraos, N. and R. Simon. 2008. “Self-Employed

Current opportunities to obtain business capital through home mortgages appear to be limited especially for homeowners with little home equity. Furthermore, the increasing rates of default and foreclosure, especially for homeowners with subprime loans, reflect shrinking capital that was initially available through these loans. These consequences are likely to have a disproportionate impact on minorities in terms of both homeownership and the ability to secure capital for business start-up and growth.

Redlining. Redlining refers to mortgage lending discrimination against geographic areas associated with high lender risk. These areas are often racially determined, such as African American or mixed race neighborhoods.⁴³ This practice can perpetuate problems in already poor neighborhoods.⁴⁴

For example, the City of East Palo Alto sued a California lender for redlining and having loan practices that discriminated against people in low income or minority communities. Evidence included loan officers telling applicants that the bank simply did not lend in East Palo Alto or in specific minority neighborhoods.⁴⁵ The bank provided cash and a revolving loan fund in order to settle the lawsuit.

Most quantitative studies have failed to find strong evidence in support of geographic dimensions of lender decisions. Studies in Columbus, Ohio; Boston, Massachusetts; and Houston, Texas found that racial differences in loan denial had little to do with the racial composition of a neighborhood, but rather the individual characteristics of the borrower.⁴⁶ Some studies found the race of an applicant to be a factor in loan denials, but not the racial makeup of the neighborhood.

Studies of redlining have primarily focused on the geographic aspect of lender decisions; however, redlining can also include the practice of restricting credit flows to minority neighborhoods through procedures that are not observable in actual loan decisions. Examples include branch placement, advertising and other pre-application procedures.⁴⁷ These practices can deter minorities from starting businesses. Locations of financial institutions are important to small business start up because local banking sectors often finance local business.⁴⁸ Redlining practices would deny this capital resource to minorities.

Are Frozen Out of Mortgages." *The Wall Street Journal*. December 2; and Zwahlen, Cyndia. 2008. "Restoring the flow of credit to entrepreneurs." *Los Angeles Times*. December 1.

⁴³ Holloway, Steven R. 1998. "Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio." *Annals of the Association of American Geographers*. 88:252-276.

⁴⁴ Ladd, Helen F. 1998. "Evidence on Discrimination in Mortgage Lending." *The Journal of Economic Perspectives*. 12:41-62.

⁴⁵ "California bank pays \$206,000 and establishes \$7 million credit line for city to settle redlining suit." *National Fair Housing Advocate Online*. http://www.fairhousing.com/index.cfm?method=page.display&pagename=advocate_october02_page5 (accessed February 8,2007).

⁴⁶ See Holloway. 1998. "Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio."; Tootell. 1996. "Redlining in Boston: Do Mortgage Lenders Discriminate Against Neighborhoods?"; and Holmes, Andrew and Paul Horvitz. 1994. "Mortgage Redlining: Race, Risk, and Demand." *The Journal of Finance*. 49:81-99.

⁴⁷ Yinger, John. 1995. "Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination." Russell Sage Foundation. New York. 78-79.

⁴⁸ Holloway. 1998. "Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio."

Steering by real estate agents. A number of researchers have found that discrimination by real estate agents contributes to residential segregation of minorities. One such practice is “steering” of prospective homebuyers toward particular neighborhoods and away from others because of their race or ethnicity (a practice that has been prohibited by law for many decades). A recent study found such practices in Los Angeles and other cities throughout the country.⁴⁹

Gender discrimination in mortgage lending. Relatively little information is available on sex-based discrimination in mortgage lending markets. Historically, lending practices overtly discriminated against women by requiring information on marital and childbearing status. Risk associated with women of childbearing age and unmarried women resulted in “income discounting,” limiting the availability of loans to women.⁵⁰

The Equal Credit Opportunity Act (ECOA) in 1973 suspended these discriminatory lending practices. A study in California that used regression analysis explored discrimination against married and single women in 16 metropolitan areas from 1977 to 1978 revealed little evidence of sex discrimination in the state. Certain barriers have continued after 1973, however. For example, there is some evidence that lenders under-appraised property for female borrowers.⁵¹

Access to Business Capital

Barriers to capital markets can have significant impacts on small business formation and expansion. For example, during Caltrans public hearings held in spring 2006, “discrimination in obtaining loans due to race and gender,” was identified as an issue for businesses.⁵² In addition, several studies have found evidence that start-up capital is important for business profits, longevity and other outcomes.⁵³

- The amount of start-up capital is positively associated with small business sales and other outcomes;⁵⁴
- Limited access to capital has limited the size of African American-owned businesses;⁵⁵ and
- Weak financial capital was identified as a significant reason that more African American-owned firms than non-Hispanic white-owned firms closed over a four-year period.⁵⁶

⁴⁹ Galster, George and Erin Godfrey. 2005. “Racial Steering by Real Estate Agents in the U.S. in 2000.” *Journal of the American Planning Association*. 71:251-268.

⁵⁰ Card. 1980. “Women, Housing Access, and Mortgage Credit.”

⁵¹ Ladd, Helen F. 1982. “Equal Credit Opportunity: Women and Mortgage Credit.” *The American Economic Review*. 72:166-170.

⁵² Caltrans Public Hearing Testimony and Related Documents. Examined and summarized by GCAP Services.

⁵³ For examples see Fairlie. 2006. “Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited;” and Grown, Caren and Timothy Bates. 1991. “Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies.” Center for Economic Studies, U.S. Bureau of the Census.

⁵⁴ See Fairlie, Robert W. and Harry A. Krashinsky. 2006. “Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited”; and Grown. 1991. “Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies.”

⁵⁵ Grown. 1991. “Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies.”

⁵⁶ Grown. 1991. “Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies.”

Bank loans are one of the largest sources of debt capital for small businesses.⁵⁷ Discrimination in the application and approval processes of these loans and other credit resources could be detrimental to the success of minority- and women-owned businesses. Previous studies have addressed race/ethnicity and gender discrimination in capital markets by evaluating:

- Loan denial rates;
- Loan values;
- Interest rates;
- Individual assumptions that loan applications will be rejected;
- Sources of capital; and
- The relationship between start-up capital and business survival.

To examine the role of race/ethnicity and gender in capital markets, the study team analyzed data from the Federal Reserve Board's 1998 and 2003 Survey of Small Business Finances (SSBF) conducted by the Board of Governors, which is the most comprehensive national source of credit characteristics of firms with fewer than 500 employees. Sample weights are applied to provide representative estimates. The survey contains information on loan denial and interest rates, as well as anecdotal information from firms. The samples from 1998 and 2003 contain records for 3,521 and 4,240 firms, respectively.

The SSBF records the geographic location of the firm by Census Division, not city, county or state. The Pacific Census Division (referred to below as the Pacific region) contains California.⁵⁸

Loan denial rates. Figure F-6 shows loan denial rates from the 1998 and 2003 SSBFs for the Pacific region and the United States. In 1998, about 33 percent of minority- and women-owned firms in the Pacific region reported being denied a loan, compared to 21 percent of non-Hispanic white male-owned businesses. However, in 2003, loan denial rates for minority- and female-owned firms were lower than those for non-Hispanic white male-owned firms in the Pacific Region.

Loan denial statistics on individual minority groups in the Pacific region are not reported in Figure F-6 due to limited sample sizes. Data for the U.S. for 1998 reveal the following:

- African American-owned businesses experienced higher rates of denial than all other groups;
- Hispanic American-owned firms had a loan denial rate considerably above those of non-Hispanic white male-owned firms; and
- Asian American- and white women-owned firms had higher rates of loan denial compared to non-Hispanic white male-owned firms, although the difference is not statistically significant.

In 2003, loan denial rates were substantially higher for African American-owned firms than other firms.

⁵⁷ Data from the 1998 SSBF indicates that 70 percent of loans to small business are from commercial banks. This result is present across all gender, race and ethnic groups with the exception of African Americans, whose rate of lending from commercial banks is even greater than other minorities. See Blanchard, Lloyd, Bo Zhao and John Yinger. 2005. "Do Credit Market Barriers Exist for Minority and Woman Entrepreneurs." *Center for Policy Research, Syracuse University*.

⁵⁸ The Pacific Census Division includes Alaska, California, Hawaii, Oregon and Washington.

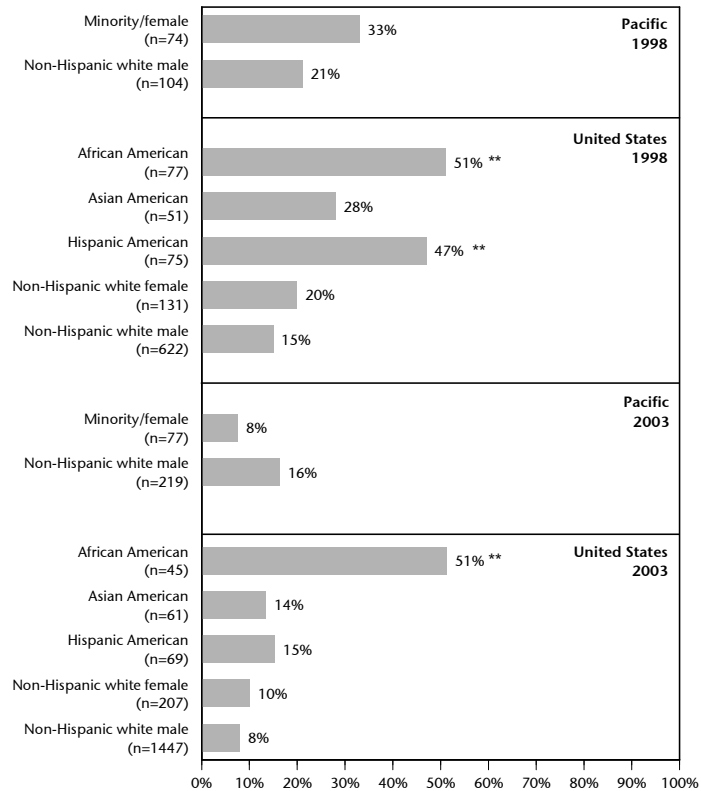
Figure F-6.
Business loan denial rates,
1998 and 2003

Note:

** Denotes that the difference in proportions from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 1998 and 2003 Survey of Small Business Finances.



Regression analyses of loan denial rates. A number of studies have investigated whether disparities in loan denial rates for different race/ethnicity and gender groups exist after controlling for other factors that affect loan approvals. Findings from these studies include:

- Commercial banks are less likely to loan to African American-owned firms than to non-Hispanic white-owned firms after controlling for other factors.⁵⁹
- African American, Hispanic American and Asian American men are more likely to be denied a loan than non-Hispanic white men. However, African American borrowers are more likely to apply for a loan.⁶⁰
- Disparities in loan denial rates between African American-owned and non-Hispanic white-owned firms tend to decrease with increasing competitiveness of lender markets. A similar phenomenon is observed when considering differences in loan denial rates between male- and female-owned firms.⁶¹
- The probability of loan denial decreases with greater personal wealth. However, controlling for personal wealth does not resolve the large differences in denial rates across African American-, Hispanic American-, Asian American-, and non-Hispanic

⁵⁹ Cavalluzzo, Ken, Linda Cavalluzzo and John Wolken. 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey." *Journal of Business*. 75: 641-679.

⁶⁰ Coleman, Susan. 2002. "Characteristics and Borrowing Behavior of Small, Women-owned Firms: Evidence from the 1998 National Survey of Small Business Finances." *The Journal of Business and Entrepreneurship*. 151-166.

⁶¹ Cavalluzzo, 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

white-owned firms. Specifically, information on personal wealth explained some differences for Hispanic- and Asian American-owned firms compared to non-Hispanic whites, but almost none for African American-owned firms.⁶²

- Loan denial rates are significantly higher for African American-owned firms than non-Hispanic white-owned firms in the presence of several other factors such as creditworthiness and other characteristics. This result is largely insensitive to specification of the model. Consistent evidence on loan denial rates and other indicators of discrimination in credit markets was not found for other minorities and women.⁶³
- Women-owned businesses are no less likely to apply for or to be approved for loans in comparison to firms owned by men.⁶⁴

BBC regression model for the 1998 SSBF. The study team conducted its own analysis of the 1998 SSBF by developing a model to explore the relationships between loan denial and race/ethnicity and gender of firm ownership while controlling for other factors. As discussed above, there is extensive literature on business loan denials that provides the theoretical basis for the regression models. Other studies typically use probit econometric models to investigate the effects of various owner, firm and loan characteristics, including the race and gender of the ownership, on the likelihood of being denied a loan. The standard model includes three general categories of variables including:

- The owner's demographic characteristics (including race and gender), credit and resources;
- The firm's characteristics, credit and financial health; and
- The environment in which the firm and lender operate and characteristics of the loan.⁶⁵

After excluding a small number of observations where the loan outcome was imputed, the national sample included 932 firms that had applied for a loan during the three years preceding the survey. The Pacific region included 172 such firms.

⁶² Cavalluzzo, Ken and John Wolken. 2002. "Small Business Turndowns, Personal Wealth and Discrimination." *FEDS Working Paper No. 2002-35*.

⁶³ Blanchflower, David G., Phillip B. Levine and David J. Zimmerman. 2003. "Discrimination in the Small Business Credit Market." *The Review of Economics and Statistics*. 85:930-943.

⁶⁴ Coleman. 2002. "Characteristics and Borrowing Behavior of Small, Women-owned Firms: Evidence from the 1998 National Survey of Small Business Finances."

⁶⁵ See, for example, Blanchard, Lloyd; Zao, Bo and John Yinger. 2005. "Do Credit Barriers Exist for Minority and Women Entrepreneurs?" *Center for Policy Research, Syracuse University*.

A large number of variables are used to control for differences in the neutral factors described above. A total of 58 variables are included to represent the owner's credit and resources (10 variables); the firm's characteristics, credit and financial health (29 variables); and the environment in which the firm and lender operate including the nature of the loan applied for (19 variables). Given the relatively small sample size and the large number of variables, the study team did not develop a model based on firms located in the Pacific region. Instead, all U.S. firms are included in the model and any Pacific region effects are estimated by including regional control variables — an approach commonly used in other studies that analyze these data.⁶⁶ The regional variables include an indicator variable for firms located in the Pacific region and interaction variables that represent firms owned by minorities or women and are located in the Pacific region.

Figure F-7 presents the coefficients and t-statistics from the probit model of loan denials.

The results from the model indicate that a number of neutral factors affect the probability of loan denial with statistical significance:

- Business owners who have been personally bankrupt or have had a judgment against them are more likely to be denied a loan. Alternatively, business owners with at least a four-year college degree are less likely to be denied.
- Businesses with existing lines of credit and/or existing collateralized loans (such as business mortgages, vehicle loans and equipment loan) are less likely to be denied a loan, however, firms with outstanding loans from stockholders are more likely to be denied. Firm delinquency in business transactions increases the probability of a firm being denied a loan. Family-owned firms are more likely to be denied, while firms that are purchased are less likely to be denied.
- Firms in the construction industry are more likely to have their loan applications denied than other firms. Firms in highly concentrated industry segments (as measured by the Herfindahl Index) are more likely to be denied.
- Business mortgage, vehicle loan and equipment loan applications are less likely to be denied than other types of business loan.

Even after controlling for potentially neutral influences, firms owned by African Americans and Hispanic Americans remain more likely to have their loans denied than other firms (both statistically significant differences). The indicator variable for the Pacific region and the interaction terms for Pacific region and minority- and women-ownership are not statistically significant. This result implies that the probabilities of loan denials for minority- and women-owned firms within the Pacific region are not statistically different from the U.S. as a whole.

⁶⁶ Blanchflower, David G.; Levine, Phillip B. and David J. Zimmerman. 2003. "Discrimination in the Small-Business Credit Market." *The Review of Economics and Statistics*. 85(4): 930-943; National Economic Research Associates, Inc., 2008. "Race, Sex, and Business Enterprise: Evidence from the City of Austin." *Prepared for the City of Austin, Texas*; and CRA International. 2007. "Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization." *Prepared for Santa Clara Valley Transportation Authority*.

Figure F-7.
Likelihood of business loan denial (probit regression) in the U.S. in the 1998 SSBF,
Dependent variable: loan denial

Variable	Coefficient	t-statistic	Variable	Coefficient	t-statistic	Variable	Coefficient	t-statistic
Race/ethnicity and gender			Firm's characteristics, credit and financial health			Firm and lender environment and loan characteristics		
Constant	-5.901834	-4.59 **	D&B credit score = moderate risk	0.751698	1.50	Partnership	0.065837	0.19
African American	1.147015	4.41 **	D&B credit score = average risk	0.776498	1.55	S corporation	-0.275278	-1.17
Asian American	0.342745	0.80	D&B credit score = significant risk	0.511792	1.00	C corporation	-0.298310	-1.07
Hispanic American	1.086194	4.68 **	D&B credit score = high risk	0.469423	0.85	Construction industry	0.552832	2.01 **
Female	-0.047219	-0.24	Total employees	-0.001487	-0.48	Manufacturing industry	0.293527	1.11
Pacific region	0.157391	0.63	Percent of business owned by principal	-0.003396	-0.74	Transportation, communications and utilities industry	0.418079	0.93
African American in Pacific region	-0.665632	-1.10	Family-owned business	0.806781	2.63 **	Finance, insurance and real estate industries	-0.047970	-0.13
Asian American in Pacific region	0.016462	0.03	Firm purchased	-0.296028	-1.47 *	Engineering industry	0.656266	1.82 *
Hispanic American in Pacific region	0.119294	0.25	Firm inherited	-0.045901	-0.13	Other industry	0.310062	1.58
Female in Pacific region	0.218200	0.56	Firm age	-0.013492	-1.23	Herfindahl index = .10 to .18	2.366303	4.52 **
Owner's characteristics, credit and resources			Firm has checking account	0.291959	0.88	Herfindahl index = .18 or above	2.667912	5.05 **
Age	0.007337	0.92	Firm has savings account	-0.268816	-1.53	Located in MSA	0.190705	1.04
Owner experience	0.010275	0.93	Firm has line of credit	-0.935108	-4.95 **	Sales market local only	0.191879	1.20
Less than high school education	0.090054	0.25	Existing capital leases	-0.089363	-0.46	Loan amount	0.000000	0.00
Some college	-0.147203	-0.71	Existing mortgage for business	-0.334783	-1.57 *	Capital lease application	-0.171244	-0.49
Four-year degree	-0.554377	-2.52 **	Existing vehicle loans	-0.540121	-2.91 **	Business mortgage application	-0.846545	-2.97 **
Advanced degree	-0.436286	-1.75 *	Existing equipment loans	-0.600107	-2.82 **	Vehicle loan application	-1.112551	-3.72 **
Bankruptcy in past 7 years	1.496524	2.66 **	Existing loans from stockholders	0.587765	2.89 **	Equipment loan application	-0.768501	-2.68 **
Judgement against in past 3 years	1.057841	3.27 **	Other existing loans	-0.108275	-0.54	Loan for other purposes	-0.304385	-1.51
Log of net worth excluding home	-0.027334	-0.48	Firm used trade credit in past year	-0.230761	-1.41			
Owner has negative net worth	-0.451254	-0.64	Log of total sales in prior year	-0.013200	-0.20			
			Negative sales in prior year	0.190337	0.23			
			Log of cost of doing business in prior year	0.019601	0.37			
			Log of total assets	0.029251	0.41			
			Negative total assets	-0.193784	-0.22			
			Log of total equity	0.095306	1.27			
			Negative total equity	0.959581	1.24			
			Firm bankruptcy in past 7 years	0.744926	1.39			
			Firm delinquency in business transactions	1.218895	6.65 **			

Note: * Statistically significant at 90% confidence level.
 ** Statistically significant at 95% confidence level.

Source: BBC Research & Consulting analysis of 1998 SSBF data.

The study team simulated loan approval rates for those minority groups with statistically significant disparities (African Americans and Hispanic Americans) by comparing observed approval rates with simulated rates. The study team simulated the rates by inputting observed variables for those minorities into a probit model developed for non-Hispanic white male-owned firms that includes the affects of a business being in the Pacific region.⁶⁷ Figure F-8 shows these simulated loan approval rates in comparison to the actual approval rates observed in the 1998 SSBF.

Figure F-8.
Comparison of actual loan approval rates to simulated loan approval rates under non-Hispanic white male business environment for groups experiencing significant disparities, 1998

Group	Loan approval rates		Disparity index (100 = parity)
	Actual	Benchmark	
African Americans	50.1%	78.3%	64
Hispanic Americans	51.6%	83.9%	62

Source: BBC Research & Consulting analysis of 1998 NSSBF data.

Based on 1998 SSBF data, the loan approval rate was 50 percent for African American-owned firms that applied for loans. Model results show that African American-owned firms would have an approval rate of about 78 percent if they were approved at the same rate as similarly situated firms owned by non-Hispanic white males. Hispanic American-owned firms would be approved for loans about 84 percent of the time. The actual loan approval rate for Hispanic American-owned firms was 52 percent.

Other researchers’ analyses of the 2003 SSBF. Summary statistics from the 2003 SSBF of loan denial rates by race and ethnicity are presented at the beginning of this section. While these data are the most recent information collected from small businesses, the study team selected the data from the 1998 SSBF to conduct the econometric analysis to capitalize on the over-sampling of minority-owned business in the 1998 SSBF (not done in the 2003 SSBF).⁶⁸

Other recent studies elected to incorporate the 2003 SSBF into the analysis. In a study prepared for the City of Austin, Texas, NERA Economic Consulting (NERA) compared results from models using the 1993, 1998 and 2003 SSBFs, while focusing the analysis on the 1993 data. The study recognizes the drawbacks of the 2003 SSBF. NERA investigated factors influencing loan denial rates using a probit econometric model. At a national level, their results using the 1998 SSBF are consistent with BBC’s findings. However, when using the 2003 SSBF, they find that loan denial rates for Hispanic-owned firms are not significantly different from non-Hispanic whites.⁶⁹

⁶⁷ The approval rate is equal to one minus the denial rate.

⁶⁸ In the 1998 data, 7.3 percent of the firms surveyed were owned by Hispanic Americans, however in 2003 that number dropped to 4.0 percent. Numbers dropped from 7.7 percent to 2.8 percent and 5.7 percent to 4.2 percent for African American-owned and Asian American-owned firms, respectively. This decrease in minority samples impacts the precision of econometric analysis used to investigate disparities in loan denial rates for minority groups.

⁶⁹ National Economic Research Associates, Inc., 2008. “Race, Sex, and Business Enterprise: Evidence from the City of Austin.” *Prepared for the City of Austin, Texas.*

CRA International (CRA) also incorporated the 2003 SSBF in a study prepared for the Santa Clara Valley Transportation Authority. Their approach was to “combine the 1998 and 2003 SSBFs to increase precision of estimates.” Figure F-9 shows a summary of their findings of possible disparities in loan denial by race/ethnicity and gender using a probit econometric model and controlling for other factors.

Figure F-9.
Likelihood of loan denial:
Findings from 2007 CRA study
using 1998 and 2003 SSBF data

	Statistical significance	Likelihood of loan denial
African American	Yes	Higher
Asian American	Yes	Higher
Hispanic American	Yes	Higher
Female	No	N/A

Note:

N/A: not applicable.

The model specification included controls for owner characteristics, business characteristics, geographic characteristics, business performance, personal financial history, business financial history, use of financial services and loan application characteristics.

While the study does not find differences in the likelihood of loan denial for female-owned business at a national level, the results indicate that female-owned firms have a lower likelihood of denial in the Pacific region.

Source:

CRA International. 2007. “Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization.” Prepared for Santa Clara Valley Transportation Authority.

Consistent with BBC’s findings, CRA’s results indicate that African American- and Hispanic-owned firms have higher probabilities of loan denial. However, they also find that Asian-owned firms are more likely to be denied loans. CRA’s results indicate that female-owned firms in the Pacific region are less likely to be denied loans.⁷⁰

Applying for loans. Fear of loan denial is a barrier to capital markets because it prevents small businesses from applying for loans and thus can help explain differences in business outcomes. In addition, it provides insight into minority business owners’ perceptions of the small business lending market. Figure F-10 shows results from the 1998 and 2003 SSBFs on firms that reported needing credit but did not apply because they feared denial. Minority- and women-owned firms were more likely to decline to apply for loans due to fear of denial than non-Hispanic white male-owned firms. In 1998, 31 percent of minority- and women-owned firms in the Pacific region indicated that they had not applied for loans due to fear of denial, compared to 26 percent of non-Hispanic white male-owned firms.

BBC was unable to report robust statistics on individual minority groups in the Pacific region from the 1998 or 2003 SSBFs due to limited sample sizes. However, results for African American- and Hispanic American-owned firms in the Pacific region appeared to be similar to national results that showed lower rates of loan applications for these groups due to fear of denial.

⁷⁰ CRA International. 2007. “Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization.” Prepared for Santa Clara Valley Transportation Authority.

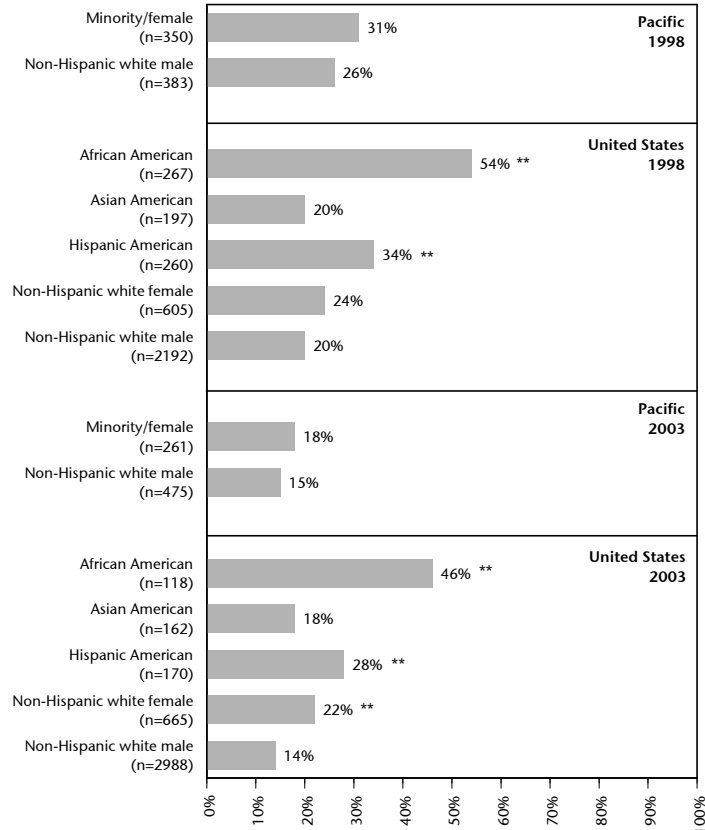
Figure F-10.
Firms that needed loans but did not apply due to fear of denial, 1998 and 2003

Note:

** Denotes that the difference in proportions from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 1998 and 2003 Survey of Small Business Finances.



CRA’s study for the Santa Clara Valley Transportation Authority also included an econometric model to investigate firms that have not applied for loans due to fear of denial. The model explored whether differences between race/ethnicity and gender groups exist after controlling for other factors. As explained above, in their analysis they combined data from the 1998 and 2003 SSBFs. Figure F-11 presents a summary of their findings.

Figure F-11.
Fear of loan denial:
Findings from 2007 CRA study using 1998 and 2003 SSBF data

Note:

N/A: not applicable.

The model specification included controls for owner characteristics, business characteristics, geographic characteristics, personal financial history, business financial history and use of financial services.

Source:

CRA International. 2007. “Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization. Prepared for Santa Clara Valley Transportation Authority.

	Statistical significance	Likelihood of not applying for a loan due to fear of denial
African American	Yes	Higher
Asian American	No	N/A
Hispanic American	Yes	Higher
Female	No	N/A

CRA's results indicate that African American- and Hispanic American-owned businesses are more likely to not apply for a loan because of fear of denial. They do not find any differences in results for firms located in the Pacific region compared to the national results.⁷¹

Other research has identified multiple factors that influence the decision to apply for a loan, such as firm size, firm age, owner age and educational attainment. Controlling for these factors can help to determine whether race and ethnicity explain fear of loan denial. Findings indicate:

- African American- and Hispanic American-owners are significantly less likely to apply for loans.⁷²
- After controlling for educational attainment, there were no significant differences in loan application rates between non-Hispanic white, African American, Hispanic American and Asian American men.⁷³
- African American-owned firms are more likely than other firms to report being seriously concerned with credit markets and are less likely to apply for credit in fear of denial.⁷⁴

Loan values. Beyond loan denial rates, the study team considered the loan values for firms receiving loans. Results from the 1998 and 2003 SSBFs for loan values awarded by ethnicity and race are given in Figure F-12. Comparing loan amounts for non-Hispanic white male-owned firms to minority- and women-owned firms indicates the following:

- In 1998, minority- and women-owned firms in the Pacific region received loan amounts that averaged less than half of the loan amounts awarded to non-Hispanic white male-owned firms. In 2003, however, minority- and women-owned firms in the Pacific region received loans that were greater on average than those made to non-Hispanic white male-owned firms. However, these differences were not statistically significant in either year.
- In 2003, national results show that minority- and women-owned firms received loans that were on average less than two-thirds the average loan amount received by non-Hispanic white male-owned firms, a greater disparity than in the 1998 national results.

⁷¹ CRA International. 2007. "Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization. *Prepared for Santa Clara Valley Transportation Authority.*

⁷² Cavalluzzo, 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

⁷³ Coleman, Susan. 2004. "Access to Debt Capital for Small Women- and Minority-Owned Firms: Does Educational Attainment Have an Impact?" *Journal of Developmental Entrepreneurship*, 9:127-144.

⁷⁴ Blanchflower et al., 2003. *Discrimination in the Small Business Credit Market.*

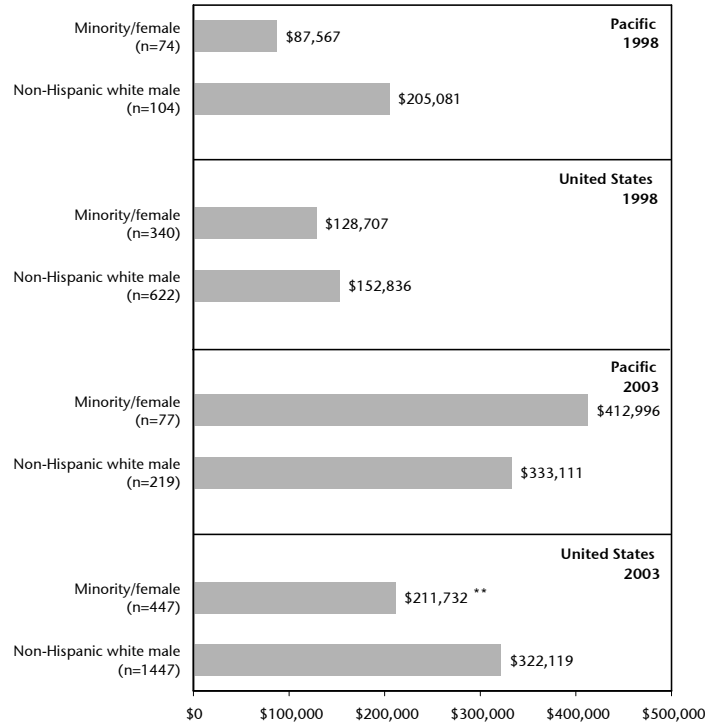
Figure F-12.
Mean value of approved
business loans, 1998
and 2003

Note:

** Denotes that the difference in means from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 1998 and 2003 Survey of Small Business Finances.



Previous national studies have found that African American-owned firms received substantially lower loan amounts than their non-Hispanic white counterparts with similar characteristics. Examination of construction companies in the United States revealed that African American-owned firms received smaller loans than firms with otherwise identical traits.⁷⁵

⁷⁵ Grown. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies."

Interest rates. Figure F-13 shows the average interest rate on commercial loans from the 1998 and 2003 SSBFs. In 1998, the mean interest rate for minority- and women-owned firms in the Pacific region was similar to the mean interest rate for non-Hispanic white male-owned firms. The same was true at the national level. However, in 2003, the interest rate on loans to minority- and women-owned firms was 1 percent more on average than that for non-Hispanic white male-owned firms.

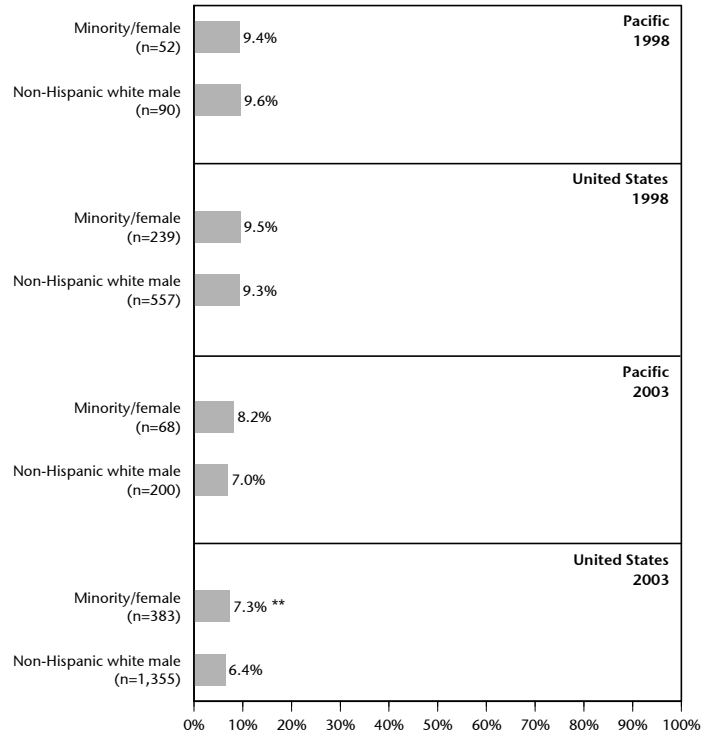
Figure F-13.
Mean interest rate for business loans, 1998 and 2003

Note:

** Denotes that the difference in means from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 1998 and 2003 Survey of Small Business Finances.



Other studies have investigated differences in interest rates across race/ethnicity and gender while controlling for factors such as individual credit history, firm credit history and Dun and Bradstreet credit scores. Findings from these studies include:

- Hispanic-owned firms had significantly higher interest rates for lines of credit in places with less credit market competition. However, no evidence was found that African American- or female-owned firms received different rates.⁷⁶
- Among a sample of firms with no past credit problems, African American-owned firms paid significantly higher interest rates on approved loans.⁷⁷

⁷⁶ Cavalluzzo. 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

⁷⁷ Blanchflower. 2003. "Discrimination in the Small Business Credit Market."

CRA’s study also investigated differences in interest rates by race/ethnicity and gender using a linear econometric model and controlling for other factors that may impact interest rates. A summary of the results are shown in Figure F-14.

Figure F-14.
Differences in interest rates:
Findings from 2007 CRA study using
1998 and 2003 SSBF data

	Statistical significance	Comparison of interest rates
African American	Yes	Higher
Asian American	No	N/A
Hispanic American	Yes	Higher
Female	No	N/A

Note:

N/A: not applicable.

The model specification included controls for owner characteristics, business characteristics, geographic characteristics, business performance, personal financial history, business financial history and use of financial services.

Source:

CRA International. 2007. “Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization. Prepared for Santa Clara Valley Transportation Authority.

Results indicated that on a national level, African American- and Hispanic American-owned firms pay a higher interest rate than non-minority-owned firms even after controlling for other factors. CRA did not find any additional differences for firms located in the Pacific region.⁷⁸

Other factors affecting capital markets. Ethnic banking sectors may also affect the availability of loans to different minority groups. For example, one study found strength in the ethnic banking sector influences credit accessibility in ethnic communities in Los Angeles. A strong Asian American bank sector helped Asian American communities transition to successful business environments, and a lack of strong banking sectors in African American communities could hinder development of African American businesses.⁷⁹

Bonding

Bonding is closely related to access to capital. Although little quantitative information exists regarding MBE/WBEs and access to surety bonds for public construction projects, there is anecdotal evidence that suggests such problems persist.⁸⁰ The in-depth interviews with Southern California businesses completed as part of this disparity study and other recent BBC studies, as well as public hearing testimony, identified bonding as a major barrier for smaller construction firms. (See Appendix J).

⁷⁸ CRA International. 2007. “Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization. Prepared for Santa Clara Valley Transportation Authority.

⁷⁹ Dymski, Gary and Lisa Mohanty. 1999. “Credit and Banking Structure: Asian and African-American Experience in Los Angeles.” *The American Economic Review*. 89:362-366.

⁸⁰ Enchautegui, Maria E. et al. 1997. “Do Minority-Owned Businesses Get a Fair Share of Government Contracts?” *The Urban Institute*: 1-117, p. 56.

Summary of Analysis of Access to Capital for Business Formation and Success

There is evidence based upon analysis of 2000 and 2007 U.S. Census Bureau data and results from the 1998 and 2003 SSBFs that minorities and women continue to face certain disadvantages in accessing capital necessary to start and expand businesses.

- Relatively fewer African Americans, Hispanic Americans and Native Americans in San Diego County and Southern California own homes than non-Hispanic whites, and those who do own homes tend to have lower home values. Home equity is an important source of capital for business start-up and growth.
- African Americans, Asian Americans, Hispanic Americans and Native Americans applying for home mortgages are more likely than non-minorities to have their applications denied.
- African American, Hispanic American and Native American mortgage borrowers are more likely to have subprime loans.
- Although business loan denial rates may have narrowed between minority- and non-minority-owned firms in the Pacific region, one recent study found that African American-, Asian American- and Hispanic American-owned businesses have higher denial rates when applying for business loans after controlling for other factors. When they receive loans, African American- and Hispanic-owned firms appear to pay higher interest rates, after controlling for other factors.
- Relatively more African American- and Hispanic American-owned firms that need credit do not apply for loans because they fear being denied the loan.