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**Sought or Sold? Understanding the Linkages between Origination Channel and Consumer Choice  
in the Mortgage Market**

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**Introduction**

*Cesario Gonzalez said he was encouraged to go for his first home last year by a mortgage broker handing out business cards in front of Pancho Villa Farmers Market on El Cajon Boulevard. Gonzalez said through a translator that he still is uncertain what kind of loans he signed up for on the \$565,000 duplex he purchased in May 2007. With monthly mortgage payments of \$4,200 and monthly income of \$3,200, the purchase appeared dubious...He could see his neighbors being owners of houses. He trusted the Realtor and the loan officer. He wanted a home.<sup>2</sup>*

This anecdote, excerpted from an article in the *San Diego Union Tribune*, is one of thousands documenting the real life stories of families affected by the subprime crisis. But it caught my eye; not because it demonstrated the folly of a borrower taking on a mortgage he clearly could not afford, but rather because it suggested how Mr. Gonzalez might have gotten that loan in the first place. He was “encouraged”, not by his wife or his parents, but by a mortgage broker, working the streets in front of a Latino grocery store. And he was swayed by the actions of his neighbors around him.

*Colvin Grannum, an African American who grew up in a black neighborhood in Brooklyn, explained that his father bought several properties in the 1950s and '60s, often without turning to banks. "I don't want to say it's in the cultural DNA, but a lot of us who are older than 30 have some memory of disappointment or humiliation related to banks," Mr. Grannum said. "The white guy in the suit with the same income gets a loan and you don't? So you turn to local brokers, even if they don't offer the best rates."*

Another anecdote, this one from the *New York Times*, also provides insight into the mortgage lending decision. A local broker, “even if they don't offer the best rates,” may appear the better choice for a borrower who has historically been excluded from the financial mainstream, shaped by the intergenerational knowledge passed down from his father's home-buying experiences.<sup>3</sup>

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<sup>1</sup> The views expressed in this paper are solely those of the author and do not represent the views of the Federal Reserve Bank of San Francisco or the Federal Reserve System.

<sup>2</sup> Penni Crabtree (2008). “State's Hispanics, Blacks Hit Especially Hard in Housing Crisis,” *The San Diego Union-Tribune*, June 29, 2008, p. B5. Corrected online on July 2, 2008.

<sup>3</sup> Powell, M. and J. Roberts (2009). “Minorities Affected Most as New York Foreclosures Rise,” *New York Times*, May 16, 2009.

Neither of these anecdotes proves anything, but both point to the idea that mortgage lending is as much a social process as it is an economic decision. And they both highlight the importance of local context in shaping that social transaction. Understanding how local context influences mortgage market outcomes is critical, particularly as policy-makers and regulators revisit issues related to consumer protection and access to credit, particularly as it applies to the Community Reinvestment Act (CRA). When the CRA was passed in 1977, it was premised specifically on a construction of “local” responsibility, the idea that banks with a branch in a specific neighborhood, and which held the deposits of neighborhood residents, should also be required to lend to those same residents. It was no longer permissible to universally deny loans to credit-worthy consumers by virtue of where they lived. Local context was also critical to the lending decision: banks relied on “relationship lending” to determine whether or not to approve or deny the loan, gleaning insights into a borrower’s character from interactions at the local church or grocery store and community gossip (Holmes et al. 2007; Immergluck 2004).

The landscape of financial services has changed considerably since then, and as Chairman Bernanke has said, “for some institutions, the concept of ‘community’ is no longer as clear as it was when the CRA was enacted.”<sup>4</sup> Bank deregulation and consolidation, the emergence of statistically-based credit models, and the growth of the secondary market have all led to the demise of the Main Street banking model. In 1977, fully 54 percent of the nation’s 18,834 banks were unit institutions—that is, they had a single location, with a single office, and no branches. By 2007, however, this share had fallen to 24 percent, and the number of banks had dropped to just 8,605 (Avery, Courchane and Zorn 2009). In addition, banks have increasingly shifted their lending activities away from the neighborhoods in which they have branches—also known as their “assessment areas”, the geographic areas in which their loans receive the greatest scrutiny under the CRA. In addition, federally regulated depositories, governed by the provisions in the CRA, lost significant market share to independent mortgage companies, especially in the subprime mortgage market.

The disappearance of the geographic specificity that once defined mortgage lending has led some to suggest that the whole idea of an “assessment area” has become obsolete. Banks should be evaluated based on their entire lending portfolio, not just those loans originated in their branch markets. While there is strong evidence for re-aligning the CRA to current financial market realities (see essays in Chakrabarti et al. 2009), my research argues that even while financial services have gone global, financial transactions are still very local. During the recent subprime crisis, “local” presence was a strong predictor of loan performance—once a lender is removed from the community (outside of their assessment area) or from the origination decision (wholesale loan), the likelihood of foreclosure increased significantly (Laderman and Reid 2009). For low- and moderate-income borrowers and communities, localized lending may be even more important. Research on lending behavior has suggested that “social relationships and networks affect who gets capital and at what cost” (Uzzi 1999, p. 482; see also Holmes et al. 2007; Pittman 2008). Particularly in communities that have traditionally

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<sup>4</sup> Ben S. Bernanke (2007). “The Community Reinvestment Act: Its Evolution and New Challenges,” speech given at the Community Affairs Research Conference, Board of Governors of the Federal Reserve System, Washington, DC, March 30, 2007.

been denied credit, and where intergenerational wealth and knowledge transfers integral to the homeownership experience may be missing, social networks and local presence may be a vital component of responsible lending.

It is this nexus between local context, mortgage origination channel, and loan performance that is the focus of this paper. It seeks to understand how mortgage origination channels interacted with localized social networks to shape loan outcomes for minority and low-income borrowers. What types of institutions and marketing practices were prevalent in these communities during the “subprime boom”? How did borrowers decide on their choice of lender? What loan products were they offered, and how knowledgeable were they about their loan terms? Were loans in lower-income and minority communities “sold or sought?” What other social networks and local institutions (e.g. governments, churches, nonprofits) shaped mortgage market outcomes? To answer these questions, the paper draws on in-depth interviews, local data on mortgage lending and foreclosures, and analysis of the institutions and marketing practices in two communities that represent the two faces of the mortgage crisis in California: an older, predominantly minority neighborhood with an older housing stock (Oakland), and a fast growing suburban area characterized by new construction (Stockton).

The paper proceeds as follows. First, I provide a brief review of the literature that informs this research. Then, I turn to an analysis of quantitative data on lending in California during the subprime boom. The analysis focuses on two pieces of the mortgage origination channel: a) whether or not a loan was originated by a mortgage broker, and b) whether or not the loan was funded by a federally regulated depository or by an independent mortgage company. In the third section, I present preliminary results from nearly 100 interviews conducted with residents in Stockton and Oakland, California. In the final section, I present some early conclusions and discuss the policy implications of this research.

## **Literature Review**

This paper draws on three bodies of literature, all far too large to do justice here, but all important in shaping the questions that prompted this paper to begin with. The first is the literature access to credit for low-income and minority households. Following the 1989 amendment to the Home Mortgage Disclosure Act, which required lenders to provide information on the race and ethnicity of each loan applicant, researchers sought to understand differences in loan denial rates among different groups of borrowers (Ross and Yinger 2003). In the classic study done by the Federal Reserve Bank of Boston, this research found that even after controlling for financial, employment, and neighborhood characteristics, black and Hispanic applicants were significantly more likely to be turned down for a mortgage than were comparable whites (Munnell et al. 1996).

However, as the share of the subprime market began to grow in the mid-1990s, researchers increasingly focused attention away from “access to credit” toward racial differences in subprime lending and “the cost of credit”. In its original incarnation, subprime lending was seen as an important way to expand access to homeownership for underserved borrowers by reducing barriers to credit such as lower credit scores, fewer assets, and less stable incomes (Pennington-Cross, 2002; Nichols, Pennington-Cross and

Yezer, 2005; Courchane, Surette, and Zorn, 2004).<sup>5</sup> The risks associated with lending to these “subprime” borrowers were offset by charging a higher interest rate for the loan. In the words of former Federal Reserve Chairman Alan Greenspan, “where once marginal applicants would have simply been denied credit, lenders are now able to quite efficiently judge the risk posed by individuals and price that risk appropriately.”<sup>6</sup> This shift towards risk based pricing was accompanied by the rise of subprime mortgage lenders that specialized in subprime products. Subprime lenders—which are not subject to the same federal regulations as are banks—accounted for a large portion of the growth in home purchase financing for low-income and minority borrowers during the mid-1990s (Canner, Passmore, and Laderman 1999). In addition, as house prices began to take a steep climb upwards at the start of this decade, subprime increasingly became a moniker for a much wider range of nontraditional or alternative mortgage products, including interest-only loans, option ARMs, and loans that coupled extended amortization with balloon-payment requirements. In 2004, these new mortgage products accounted for 12.5 percent of loan originations; by 2006, this segment had increased to 32.1 percent (Chambers et al. 2008).

Research on the subprime market, as it’s related to lending in low- and moderate-income communities, has pretty consistently found that a) the use of subprime loan products varies significantly by race, with Blacks and Hispanics more likely and Asians less likely to hold a subprime loan (Nichols, Pennington-Cross, and Yezer 2005; Avery et al. 2006; Bocian, Ernst and Li 2008; Courchane 2004); b) subprime loans and loans with features such as prepayment penalties, adjustable interest rates, and payment options are much more likely to go into foreclosure (Ding et al. 2008; Reid and Laderman 2009; Ambrose, LaCour-Little, and Huszar 2005; Pennington-Cross and Ho 2010; Quercia et al. 2007; Danis and Pennington-Cross 2005); and c) subprime lending has an important spatial dimension, and that subprime lenders target areas that have historically been underserved by bank lenders. Higher-priced loans are more frequent in low-income neighborhoods than in upper income neighborhoods, and more frequent in predominately Black neighborhoods than white neighborhoods (Calem, Gillen and Wachter 2002; Immergluck and Wiles, 1999; Hershaff, Wachter and Russo, 2005; Calem, Hershaff and Wachter 2004; Scheeselle 2002; Ding et al. 2008). Many of these studies are limited due to data constraints and do not control for all of the factors that likely influence mortgage choice, pricing and outcomes, yet on balance these findings have stood up to significant academic and real life scrutiny.

Understanding why these differences in mortgage market outcomes persist is much more difficult. Some researchers have argued that neighborhoods with a legacy of urban decline are strategic targets within the subprime business model, as they offer concentrations of these borrowers along with low levels of competition from other lenders (Immergluck and Wiles 1999; Immergluck and Smith 2004). In areas of lower competition, borrowers have fewer options to bargain, and the terms of credit may therefore be less advantageous (Ashton 2008). In this interpretation, the failure of prime lenders to

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<sup>5</sup> Researchers have shown that the existence of a subprime market can reduce borrowing constraints and mitigate the effect of credit rationing in the prime market (Chinloy and Macdonald 2005; Cutts and Van Order, 2005).

<sup>6</sup> Alan Greenspan (2005). “Consumer Finance,” Remarks presented at the Federal Reserve System’s Fourth Annual Community Affairs Research Conference, Washington, D.C., April 8, 2005. Available online at <http://www.federalreserve.gov/boarddocs/speeches/2005/20050408/default.htm>.

seek out creditworthy borrowers in lower income and minority communities (despite an affirmative obligation to serve all communities under the Community Reinvestment Act) has resulted in a “dual mortgage market” that steers historically disadvantaged borrowers to the subprime segment, even when they could have qualified for a prime loan. Other researchers have noted that information constraints may also play a role. In a detailed survey, Courchane and her colleagues found that subprime borrowers were less knowledgeable about the mortgage process and were less likely to search “a lot” for the best rates. “Borrowers who do not search for the best interest rates or who do not have the opportunity to make choices about their mortgage options disproportionately end up with subprime loans, as do borrowers whose search emphasized affordable monthly payments.” (Courchane et al. 2004, p. 373)

The second body of literature focuses broadly on how mortgage origination channel and existence/non-existence of consumer protection regulations influence loan underwriting and performance. Several studies demonstrate that loans originated by mortgage brokers<sup>7</sup> are significantly more likely to go into default than those originated by the retail arm of the bank (Ding et al. 2008; Laderman and Reid 2008). Research has raised concerns not only about overtly predatory behavior by mortgage brokers, who may have encouraged borrowers to lie on their mortgage applications or prepared fraudulent document, to the issue of yield spread premiums<sup>8</sup> which provided an incentive for brokers to charge borrowers higher interest rates than what they would have qualified for based on their risk profile. Research has shown that mortgage brokers charged less financially sophisticated borrowers more for their services, and that they were more likely to steer borrowers into more risky loan products (Jackson and Burlingame 2007; Reid and Laderman 2009). Research has also shown that regulations also matter. Loans originated by federally regulated depository agencies (and subject to laws such as the CRA) were significantly less likely to end up in foreclosure (Laderman and Reid 2009), and that state anti-predatory lending laws have a strong and positive effect on reducing both the likelihood of predatory lending and default (Quercia et al 2010).

The third body of literature that informs this paper comes from economic sociology and behavioral economics. In most studies of the mortgage market, the process by which consumers choose mortgage products is viewed as a standard economic transaction. Borrowers try to maximize the amount of the loan, while lenders try to maximize profits and limit risks. Economic sociology presents a different point of view, one that is grounded in the belief that lending transactions take place within a social environment and are shaped by social networks (Uzzi 1999; Uzzi and Lancaster 2003; Mizruchi and Stearns 2001). In this view, lenders and borrowers form relationships (with each other and with others in the local network), and these relationships influence the outcomes of mortgage transactions.

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<sup>7</sup> Brokers provide a number of services including helping customers complete loan application forms and providing other services, such as property appraisals and credit reports, necessary to obtain mortgages.

<sup>8</sup> Yield spread premiums are paid from lending institutions to mortgage brokers. A number of factors influence the setting of yield spread premiums, but the most significant is the rate of interest on the borrower’s loan. The more an interest rate charged on an above par loan exceeds the rate for a comparable par loan, the greater the yield spread premium payment to the mortgage broker.

Moulton (2008) draws on this literature and identifies four locally embedded social mechanisms that influence the mortgage origination process: linking disconnected actors, providing information about exchange, creating reputational controls, and shaping preferences. Behavioral economics in turn draws on insights from psychology to understand why people often make choices that do not align with a rational assessment of the decision's consequences (Foote 2008). Studies have found that hyperbolic discounting—making different decisions based on present versus future benefits (Meier and Sprenger 2008), default bias—choosing to stick with the status quo rather than making a beneficial change (Choi et al. 2002; Madrian and Shea 2001), and framing—how choices and information are presented, all influence consumer decisions about financial products (Collins 2009). These seven elements drawn from economic sociology and behavioral economics were investigated during the qualitative interviews to provide preliminary evidence for how local context might shape outcomes in the mortgage market.

### **Understanding the Landscape of Mortgage Brokers in California**

The first goal of this paper is to understand who was originating loans during the subprime boom, where were they making these loans, and to whom? In particular, were there significant differences in the distribution of loans originated by mortgage brokers, either by neighborhood or borrower?

To answer this question, the paper relies on a unique dataset that joins loan-level data submitted by financial institutions under the Home Mortgage Disclosure Act (HMDA) of 1975 and a proprietary dataset on loan performance collected by LPS Applied Analytics, Inc. (LPS) (Laderman and Reid 2008).<sup>9</sup> As of December 2008, the LPS dataset covered nearly 60 percent of active residential mortgages in the United States, representing about 29 million loans with a total outstanding balance of nearly \$6.5 trillion (Foote et al. 2009).<sup>10</sup> The LPS data include both prime and subprime loans, and include information on borrower risk characteristics (e.g. FICO score), loan characteristics (e.g. LTV, ARM v. FRM, prepayment penalty), as well as loan performance (e.g. delinquency and foreclosure). In addition to the merged data, variables from other datasets, including the U.S. Census, the HMDA Lender file compiled by the Federal Reserve Board, the Federal Housing Finance Agency, and the Bureau of Labor Statistics are also attached to each loan record. Observations with missing data or obvious data-coding errors were excluded from the analysis.

The analysis is limited to conventional, first-lien, owner-occupied loans originated in metropolitan areas in California between January of 2004 and December of 2006, but includes both purchase and refinance loans. This time period represents the height of the subprime lending boom in California. Loan performance outcomes are observed through October of 2008.

### *The Role of Mortgage Brokers*

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<sup>9</sup> This data was originally compiled by McDash Analytics, and is often still referred to as “McDash data” to avoid confusion with LP (or Loan Performance) data.

<sup>10</sup> The LPS dataset has grown over time as new servicers have been added, with a substantial spread in coverage of the market in 2005. Whenever a new servicer is added to the dataset, that servicer's existing portfolio is incorporated into the dataset. In our sample, 38.8 percent of loans were originated in 2004, 35.3 percent in 2005, and 25.9 percent in 2006.

During the subprime boom, one of the principal ways that borrowers obtained home mortgage financing was with the assistance of a mortgage broker. In theory, mortgage brokers are well-placed to help borrowers navigate the complicated process of obtaining a mortgage, as well as “shop around” for the best deal. However, as lenders began to respond to the resale profitability of high-interest loans in the secondary market, yield spread premiums coupled with a push for a greater volume of loan originations provided a financial incentive for brokers to work against the interests of the borrower. In addition, since there is no statutory employer-employee relationship between lending institutions and brokers, there are few legal protections to ensure that brokers act in a borrower’s best interest.

That said, many borrowers do rely on a broker to help them find a mortgage—indeed, in the data for California, fully 56.3 percent of the loans originated between 2004 and 2006 were placed through a broker or correspondent lender. Moreover, the use of mortgage brokers does not vary much by either income or race. As Figures 1 and 2 show, the use of mortgage brokers is pretty even across both the income distribution and across race. Although borrowers at the lower and higher end of the income distribution are slightly less likely to use a mortgage broker, there are few statistically significant differences across income groups. Similarly, Asians are also slightly more likely to use a mortgage broker than are the other racial categories, but not significantly so.

In contrast, we see significant differences in the use of mortgage brokers by FICO score. Figure 3 shows that as FICO scores go up, the use of a mortgage broker goes down significantly. There are many hypotheses about why this might be the case. Perhaps mortgage brokers are targeting their services to borrowers with lower FICO scores, or perhaps these borrowers know that their credit scores are low and therefore are hoping a broker can help them wade through the paperwork and get a mortgage approved. Or perhaps it’s the case that borrowers with higher FICO scores are more familiar with the financial system and feel comfortable navigating the mortgage process on their own. Nevertheless, this trend does have significant implications for minorities and other historically underserved borrowers. There are significant differences in credit score profiles by race, and Latinos and Blacks tend to have lower credit scores on average than Whites and Asians. (Figure 4). If brokers have more leeway in the pricing of a mortgage, they are more likely to take advantage of borrowers who may be less financially stable (as reflected in lower FICO scores).

This is the picture that emerges in the data. In Figures 5 and 6, I present data on the percent of high-cost loans originated by racial categories, by mortgage brokers in Figure 5 and by the retail division of banks in Figure 6. These figures demonstrate that regardless of their FICO score, Blacks and Hispanics were much more likely to receive a high-cost loan, especially when that loan was facilitated by a mortgage broker. This holds true even when we control for other factors, such as local housing and mortgage market conditions, fico score, and loan to value and debt to income ratio. Indeed, in a multivariate model that controls for the majority of underwriting variables, we find that origination by a mortgage broker has a large statistically significant effect on the likelihood of getting a high cost loan for certain borrowers, and that this effect is greater for Hispanics and Blacks. (Figure 7) The marginal effect of using a broker is 22 percent for Hispanics, and 18 percent for Blacks. While it may not seem like an extremely large effect, it is approximately equivalent to a 200 point decrease in a borrower’s FICO score. In contrast, white borrowers who used the services of a mortgage broker were 4 percent less likely to

get a high cost loan, suggesting that in their case, on average, brokers helped them to navigate a better mortgage product based on their risk characteristics. Although I don't present the results of the analysis here, similar results are obtained when we look at other loan product features: borrowers who used mortgage brokers were more likely to obtain loans with prepayment penalties, payment options, interest only loans, and with limited or no documentation than were borrowers who obtain their loan through the retail division of the bank.

In a final set of regressions, I examine whether or not mortgage broker origination has an independent effect on the likelihood of foreclosure, controlling for traditional predictors of foreclosure such as house value declines, risky loan terms (e.g. adjustable interest rate and prepayment penalty), and borrower risk characteristics. Here again, I find a statistically significant effect for the mortgage broker variable, and again it is stronger for Black and Hispanic borrowers. (Figure 8)

### **Local Voices: Understanding the Process of Mortgage Origination at the Neighborhood Level**

The previous section documents a clear association between the broker origination channel and the likelihood of getting a high-cost loan, and foreclosure, especially for historically disadvantaged borrowers. But it is not clear what mechanisms might be driving these connections. Are borrowers seeking out mortgage brokers, or are they being sold mortgage products through aggressive marketing and/or fraud? Is the sorting of borrowers into different origination channels a reflection of greater borrower risk, or other factors that might not be captured in standard risk models? The second goal of this research project is to better understand the "how" and the "why" of the quantitative trends outlined above. Since this is not possible using the quantitative data currently available, we decided to interview mortgage brokers, housing counselors, housing developers, and borrowers that live and work in Oakland and Stockton, California, to get a better sense of the social processes that govern the mortgage origination decision. These two communities represent the two faces of the foreclosure crisis in California. Oakland's subprime crisis was heavily concentrated in older, predominantly minority parts of the city, with older housing stock and other evidence of community disinvestment. Stockton, in contrast, was characterized by very rapid housing construction during the subprime lending boom, and the foreclosure crisis has hit the whole city, with very few neighborhoods untouched. (Map 1) These communities also represented very different patterns of mortgage broker originations. Maps 2 and 3 show the proportion of loan originations that were made by mortgage brokers, with the areas in orange and red signifying neighborhoods where mortgage brokers originated a disproportionate share of the loans compared to the sample average. In Oakland, most borrowers using mortgage brokers bought homes in the lower-income areas of the city, indicated by the green outlined areas. (Map 2) In Stockton, in contrast, we see a disproportionately high use of mortgage brokers in many of the city's neighborhoods, with less of a stark geographic pattern to concentrations of mortgage broker lending. (Map 3).

For each case study city, the goal is to interview between 15 and 20 people that work in the mortgage industry in some capacity, and between 100 and 150 borrowers, in order to get enough variation in the interview responses. Approximately 60 interviews have been completed and coded, with a slightly greater representation of homeowners in Oakland than in Stockton. The results presented here are

preliminary and will be revised when the interviews are completed. In addition to interviews, I have been collecting other primary sources of data, such as mortgage broker advertisements, court records, and local articles that will help to inform the context in which borrowers made decisions about their mortgage.

To identify borrowers for the interviews, a two stage sampling strategy is being used. First, borrowers are recruited at foreclosure prevention events: these events draw borrowers who are delinquent on their mortgages and who are seeking to speak to a servicer to modify their loan. During the interview, respondents are asked to share their home address. After the event, a letter is sent to all of the houses on that block, requesting that residents contact a phone number if they are interested in participating in an interview about their home-buying experience.<sup>11</sup> This process ensures that we are interviewing people who were buying a home in the same “local” context, and capturing homeowners not only in distress, but also those who are still in their homes. It has also led to interviews in both higher-income and lower-income neighborhoods. Here there is a slight variation between Stockton and Oakland, with most of the interviews in Oakland taking place in lower-income communities. Only owners living in their home are eligible to participate: we did not interview any investor properties. Interviews are conducted in the neighborhood, either at the respondent’s home or at a nearby coffee shop, library or restaurant. Respondents are provided with a \$40 honorarium for their participation in the interview, which often lasts between 1 and 2 hours.

Below, I summarize some of the key findings emerging regarding to local context. Certainly, a lot of other themes emerged in the interviews. Most of the distressed borrowers had significant debt burdens outside of their mortgage and had little understanding of their credit scores. More than 30 percent of those interviewed purchased their homes with more than \$4,000 in outstanding debt. Interestingly, very few of the borrowers we interviewed perceived their mortgage loan as constituting additional “debt”. Instead, they tended to describe their mortgage as an “investment”. Particularly as the interviews extend into early 2010, we are hearing more about the effects of the recession and unemployment on households and their ability to make their mortgage payments. Respondents also raised the issue of “being underwater,” and several raised the question of whether they were making a bad financial decision to try and stay in their home, despite the fact that the house had lost nearly 50 percent of its value since the start of the crisis. Another factor that is becoming apparent as we conduct the interviews is the extent to which California’s housing and mortgage markets were completely overheated during this time period. In that sense, it is worth wondering to what extent the findings here are relevant to areas that are not experiencing run away housing prices and tight markets.

That said, the interviews do reveal how local context and social processes influenced the home buying decision, and especially the role of mortgage brokers during the home buying transaction. I group the responses along the themes raised in economic sociology and behavioral economics reviewed earlier – focusing here on five of the seven that have proven to be most evident in the interviews conducted so far.

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<sup>11</sup> Letter and other qualitative materials are available from author upon request.

### *Social Networks: Linking Borrowers to Mortgage Brokers*

Social networks can serve as important bridges in economic transactions, including mortgage lending. On the positive side, social networks can help to connect otherwise “underserved” borrowers to nonprofits or other community resources (such as homebuyer education or financial assistance) that can help them to navigate the home-buying process. But social networks can also have a negative influence, just think of the phrase “running with the wrong crowd”, and if these social networks are embedded within a community that historically has not had access to credit, they may connect borrowers to intermediary institutions that don’t have the borrowers best interests at heart.

In all of the interviews, social networks proved to be a very important mechanism by which borrowers learned about the home-buying process, and in many cases was determinant of both their choice of a real estate agent and a mortgage broker. In both Oakland and Stockton, recommendations from friends and neighbors were critical in connecting borrowers to specific agents or brokers, and more than half consulted with a friend and/or family member before deciding to buy a home. What was more interesting were the differences that emerged between the interviews conducted in Stockton and Oakland when respondents asked how they chose a broker and/or lender. In Stockton, more than half of those interviewed said that they found their lender/broker through the recommendation of the real estate agent or developer selling the house.

*We went, you know, to an open house here, and we thought the house was beautiful. The agent showing us the house said that there was a broker in the kitchen who could help us figure out the financing.*

*I picked up a brochure at the open house. The agent said he recommends this guy, always gets people into a house, a real “can do” guy.*

*[Translated from Spanish] We looked at the house, and you know, there was a nice guy there who spoke Spanish. Friendly. He said he's helped a lot of Latinos buy houses in the neighborhood. It was nice having someone there who spoke Spanish who could answer our questions. Made it feel like a place we'd like to live.*

In other words, in Stockton, more than half of the borrowers we spoke to connected to a broker at the property itself, rather than through their own social ties. The interviews pointed to how the respondents felt immediately connected to these brokers, “he understood my situation”, “he told me that he understands how difficult the paperwork is, especially when you have lots of jobs,” “I liked his ideas for how to brighten the kitchen,” “she seemed to understand why we wanted to move from SF, buy a house, provide for a yard for the kids, a good school.” One respondent, who decided to become a broker during the boom to supplement her family’s income, explained the strategy this way:

*I heard that the way to get a steady stream of clients was to develop a relationship with one of the developers, because they'd let you spend time at the home during open houses. It was really fun; the message was really positive, there were these beautiful, brand new houses and it was a*

*joy to tell folks coming through that it could be theirs. And it was really gratifying to help make it happen...they'd hug me and we'd all cry.*

In Oakland, the pattern emerging from the interviews is quite different. There, existing social ties seem to play a stronger role in connecting would-be borrowers to the mortgage market. On one block in Oakland, five of the eight houses that were part of the interview sample all used the same mortgage broker. “He came recommended you know, he did well by [my neighbor across the street], and she told me he’d treat me the same. After I got this house, I told my Auntie to talk to him too.” Respondents listed a wide array of ways that these social networks had been established: family, neighbors on the block, the local church, their jobs, the park, and parents at their kids’ school. There was also a very strong door-to-door marketing component, especially for those borrowers who refinanced their homes. On another block, a homeowner who had lived in her home for over 12 years said that in 2005 and 2006, she was regularly disturbed by door-to-door salesmen trying to get her to refinance her home.

*They'd knock and say that [Miss Angela] down the street just took \$40,000 out of her home and wouldn't I like to benefit from my good decision to buy a house when I did. I can't say I wasn't tempted, but now I'm glad I didn't invite them in for a cup of coffee.*

In both Stockton and Oakland, respondents said that they saw their mortgage broker as a “trusted advisor,” someone who could understand the complicated financial documents associated with the mortgage transaction. While some of that trust has been eroded since the crisis, very few of the respondents were willing to openly criticize their mortgage broker, even when they were in the process of renegotiating loan terms with their lenders. “The broker just sold me what the bank was offering. He couldn’t change the terms.” One of the more interesting findings that is starting to emerge in the interviews is the number of people who themselves became real estate agents and mortgage brokers during the subprime boom, and who helped family members and friends buy homes. One respondent said he didn’t think the yield spread premiums worked to the disadvantage of his clients, since they expected him to make money off the deal, and they were happy that he was in a position to help them buy a home.

For borrowers who did not use a mortgage broker, respondents were evenly split between those who did their own research (often over the internet), or those who sought more informal advice from friends or family members who were in the financial services industry. In the Oakland interviews, four of the respondents bought their homes with the help of a nonprofit specializing in affordable housing and/or through a downpayment assistance program. So far, none of the Stockton interviews have revealed a connection to a nonprofit intermediary, although there are a couple of excellent homeownership counseling/purchase programs in the city.

#### *Creating Reputational Controls: What’s a “Good” Reputation?*

A second way local context may shape mortgage market outcomes is through reputational controls. These controls, in theory, reduce the probability that sellers will exploit consumers, either because of

their fear of reputational consequences, or because of a sense of duty to the local community. Research has found that borrowers do make decisions based “on the reputation of the lenders, their trust in the loan originators, or the recommendations of friends, rather than carefully reading and understanding their loan disclosures themselves to learn the cost and terms of their loans, and to ensure that the features of the loans fit their needs and circumstances” (Lacko and Pappalardo 2007). A nationally representative survey of borrowers conducted by Fannie Mae similarly found that “[a] trusted advisor is extremely important to African Americans” and that “trusted advisors are more important than other factors such as the lowest APR (annual percentage rate) available for a home mortgage” (Hill 2005).

In the interviews, local reputation emerged as an important factor, but not necessarily always in the ways I expected. Interviewees discussed reputation with almost no reference to mortgage product or pricing. Instead, they focused on whether or not the institution had a reputation of “extending credit” to the community. In other words, did they regularly deny loans, or did they have a reputation for always saying yes and “making things happen.”

*[Translated from Spanish] I didn't think I'd be able to afford a house, maybe a condo. I had a pretty good salary in construction, but no downpayment. But my friends at the site said that [their broker] could help me. I went to him, and he explained that he's got this relationship with lenders who want to help first-time homebuyers like me. I have to pay a little more, he said, but I can buy a house.*

*When I first got married eight years ago, we tried to buy a house, but the bank denied us the loan. Said we had too much debt and bad credit. Then when I got divorced, I gave up all chances of buying a house. But my sister bought a house, and she doesn't have any more money than me, so I went to her broker to see if I could get a loan.*

Interviewer: *Why do you think you got a loan this time? Did you pay off your debts? No, I think I might have more debts now, just living off of one income. I'm not sure what changed. I think [the broker] wanted to help me, saw that it wasn't fair that I couldn't buy a house when everyone else can.*

As in the opening quote, several respondents who had lived in the community for more than 10 years expressed their distrust of mainstream financial institutions and indicated that they would rather “give my money to someone in the community.” One interviewee, who had owned his home for 20 years before refinancing in 2006 noted:

*You got all those shiny new banks over in Fruitvale. But where were they when we were trying to have a go at things, you know, trying to start up a little business or buy a house? They were nowhere to be found. And as a black man there was no way you'd be welcome in that door...they don't provide for me, I'm not giving my money to them.*

Banks' reputations have not fared much better since the foreclosure crisis. Even where respondents were able to identify who held their loan, their ire tended to be focused on the larger banking industry and they did not distinguish between different types of lenders. In other words, respondents did not distinguish between the mortgage lending activities of Long Beach Mortgage Company and New Century and those of Wells Fargo, Bank of America, or Citibank. There also doesn't seem to be a positive feedback loop in these communities for lenders who were trying to stick to more prudent underwriting guidelines. One local official in Stockton noted that "we just haven't seen a strong presence of big banks working in the community in the Central Valley, like maybe exists in San Francisco or LA. CRA activities here are limited. They missed the market opportunity here, and instead these other lenders stepped in."

#### *Shaping Preferences: Replicating the Bad Decisions of Others*

Local contextual factors also help to shape consumer preferences, perhaps explaining why borrowers in Oakland flocked to 2-bedroom, 1-bathroom Craftsman cottages and those in Stockton turned to 4-bedroom, 2-bath homes with a two-car garage. While not driven as much by personal taste, mortgage markets similarly fail the neoclassical economic assumption that consumer preferences are exogenous. As Essene and Apgar (2007, p. 27) point out, "consumers lack perfect information on prices and product features, have preferences that are malleable and subject to influence by marketing and the framing of choices, and must make decisions under uncertainty that involve judging the probability of future events."

Interestingly, beyond connecting respondents to brokers and agents, social networks also conveyed huge amounts of information about mortgage pricing and house values during this time period, even though much of that information was incomplete or skewed. Everyone wanted to talk about their home-buying experience: how much they paid, how much they had to overbid to win, and how little they were paying in monthly costs. As one respondent shared, "It became a game; who could get the biggest house for the least upfront money." Unlike Pittman (2008), who found that increased social capital improved the information that African American borrowers received, during the subprime crisis it appeared to have the opposite effect for borrowers in Stockton and Oakland, where the conventional wisdom wasn't "live within your means" but rather "buy a house by any means." One couple in Oakland, who did end up going against the advice of their real estate agent and dropped out of a price war on a house, said "It was hard not to wonder if we were making a mistake, since so many of our friends were buying houses with little money down and at crazy terms. It was hard not to feel jealous, and just throw caution to the wind."

#### *Hyperbolic Discounting: Buy Now or You'll Never Get in!*

Perhaps nothing comes across as strongly in the interviews as the problem of hyperbolic discounting, which occurs when consumers "undervalue" the future economic rewards (for example, of saving) and "overvalue" the current gratification of spending (Benton, Meier and Sprenger 2007). Over and over again, borrowers indicated that they felt pressure from their friends, family, brokers, and the media to purchase a house "now", or else they might miss the opportunity to become a homeowner in the future.

“Everyone was telling me prices don’t go down in California,” “I just kept thinking that if I had bought in 2003, I would have doubled my money. My neighbor did. I didn’t want to miss out,” “the broker showed me how much it would cost if I waited six months to build some savings. I’d never be able to save as much as the house prices were going up.”

Borrowers who refinanced their homes and cashed out some of their equity expressed sentiments that were similarly expressive of hyperbolic discounting, but in a slightly different way. About half of those who took a cash-out refinance did so for purely consumption reasons. “I might die tomorrow, I might as well spend it now.” Others, however, said they used the money to cover shortfalls in their household budget, such as making payments on their credit cards, paying for unexpected car and medical expenses, and helping to defray educational costs. In some cases, homeowners with short-term financial needs suspected that it wasn’t a sound long-term decision to refinance their home, but felt like it was the most “risk free” option available to them.

*It was so hard to know what to do. We needed to come up with an extra \$20,000 to cover our expenses while my husband was out of work, and we were getting calls on our credit card bills. So you’ve got the other credit card at 18 percent interest, and then there’s this broker telling you that you can refinance and pay yourself back, plus the interest is just 5 or 6 percent, and it just sounded like a good idea...with house prices going up the way they were, we felt pretty confident we’d be in better financial shape in a couple of years.*

While it is easy in hindsight to see the mistakes both lenders and borrowers made in these situations, and to assume that better financial knowledge or tightened credit standards could have avoided the large number of borrowers who ended up in loans they couldn’t afford. But it is hard to correctly value a financial decision when there is so much evidence of money being made hand over foot all around you. As one housing counselor noted, “If all these families had just had access to loans four years earlier. They’d still be swimming in equity. And we don’t really know what happened to all the equity that was cashed out. For the borrowers we’re trying to help now, a lot of it was just rotten timing.”

#### *Default Bias: What Mortgage Terms and Disclosures?*

Among respondents who used mortgage brokers, only a few reported that they had done any research on their own in regards to mortgage products and pricing. Instead, most said that they took the mortgage broker’s information at face value, even when it conflicted with other advice received from family or friends.

*He’s the expert, right? I figured if he found me a loan that worked, that was the loan I should take.*

*I was so relieved when she told me I qualified for the loan. I wasn’t about to try again somewhere else. What if the terms changed while I was shopping around?*

*I didn't realize the implications of the loan terms. We were so focused on whether or not we could afford the monthly payments, and once that seemed to be worked out, I was ready to sign on the dotted line.*

*A friend told me that it's a good idea to research different mortgage interest rates, but the broker said that if I didn't decide right away, I'd probably lose my chance...other friends had lost out in the market, and I really really loved this house.*

In addition, few borrowers reported having read the disclosures or mortgage documents at closing. This held true for borrowers who were delinquent on their mortgage as well as those who were comfortable with their choice of a home and their loan. A few interviewees said they “looked over the figures” or checked to see if the details were right, such as the address of the property and the spelling of the lien holder. But very few took the time to read them in detail, or to ask questions as they were signing the various forms.

*I didn't read them carefully. I just pretended to look over them and then asked for the pen.*

*Interviewer: Why didn't you feel like you need to read the documents?*

*They were going to give me my keys. I wasn't going to raise any kind of concern at that point.*

The lack of attention to official documents held true for borrowers who used a mortgage broker and those who didn't, although those who didn't were more likely to report paying attention to at least the basics in the loan documents. However, the lack of borrower attention to disclosures—coupled with the fact that very few borrowers shopped around for different rates or products—suggest that the current practice of consumer protection through complicated disclosures deserves to be rethought.

## **Conclusion**

Although the findings presented this far are still preliminary, they do raise significant implications for consumer protection and access to credit going forward. The interviews point out how much of the mortgage origination decision is driven by local contextual factors, and that many consumers—especially those that have historically not had access to credit—are not well equipped to navigate all the information and institutions that are associated with the mortgage market.

If our goal is to continue to provide access to credit to underserved borrowers, multiple interventions are necessary to ensure that this credit helps to build assets rather than strip them. At the borrower level, there is certainly more room for financial education and counseling that can improve mortgage outcomes. While some of this should include standard homeownership counseling curricula, it seems that consumers might also be well served by a better understanding of the political economy of the mortgage market. In most aspects of the home-buying transaction, incentives are not aligned in the interest of the borrower. The borrower's real estate agent earns more if the house sells for more rather than less; the mortgage broker earns more if the loan is priced above par. Being aware of incentive structures can help borrowers be more aware of the context of the advice they are receiving, and may encourage them to do their own research on mortgage products and prices.

There should also be a real effort to address the continued racial disparities in credit scores. As the quantitative analysis shows, credit scores vary significantly across different racial and ethnic groups, and that these greatly affect the cost of credit. (While they don't explain all of the differences in high cost lending, they do help to define the parameters of the dual mortgage market.) While some of this could include credit repair and credit counseling, there also needs to be greater transparency about how credit scores are calculated, and how other systematic inequalities may lead to different credit score outcomes that do not reflect actual individual borrower risk. Research by Jonathan Spader (2010) has shown that the pathways through which borrowers learn about and select credit products may also influence credit scores, creating a feedback loop by which credit scores impact future credit options and thus also the individual's future credit characteristics and score. This feedback loop speaks directly to concerns over whether borrowers get "stuck" in higher-cost credit markets and also raises the potential for credit scores to prolong the consequences of the current foreclosure crisis.

The implications of this research for the overall mortgage market are much more difficult to tease out. Certainly, re-aligning broker incentives by banning yield spread premiums would be a good start, as would stricter broker licensing requirements. Leveling the regulatory playing field is also critical: had it not been for poor and uneven regulation of independent mortgage companies and federally regulated lenders, mortgage brokers would not have been allowed to sell such unsustainable mortgage products, nor get away with such poorly underwritten loans. Consumer protection will also entail developing a better understanding of anti-predatory lending laws (to ensure broad protections without unduly limiting or raising the cost of credit), and ensuring that those laws are enforced at both the state and federal level.

What is less clear is how to ensure equal and fair access to affordable credit, especially when local context so fundamentally shapes how borrowers learn about and obtain a mortgage. The combination of information asymmetries, the legacy of historical discrimination in both housing and mortgage markets, intergenerational inequalities in wealth and knowledge, and the uneven landscape of financial services seems to preclude the possibility of ever eliminating disparities in the mortgage market. Even the CRA, with its affirmative obligation to extend credit to the communities that they serve, failed to work in areas like the Central Valley.

What I think is needed is a better system of third-party intermediaries, that can operate at a larger scale than most nonprofits, and that can help to bridge individuals and communities with financial markets. Community development financial institutions (CDFIs), for example, already serve that function in some neighborhoods; the combination of responsible loan products and financial education have led to very positive outcomes, even among borrowers with subprime credit profiles (Ding et al. 2008). Providing CDFIs with additional capital to play an expanded role in mortgage lending and reach more borrowers could be one way to create a network of local intermediaries who could respond to local conditions and social processes (e.g., developing different interventions in communities comprised largely of immigrants than in communities with historically African American residents). Alternatively, it might entail expanding and strengthening the CRA in a way that encourages banks and other financial services institutions to reach out to underserved areas in new ways, and that emphasizes the community aspect

of lending even as the officially defined assessment area becomes obsolete. While of these options would entail public costs, these costs seem to be justified when weighed against the very real price we are paying as a result of the existing dual mortgage market.

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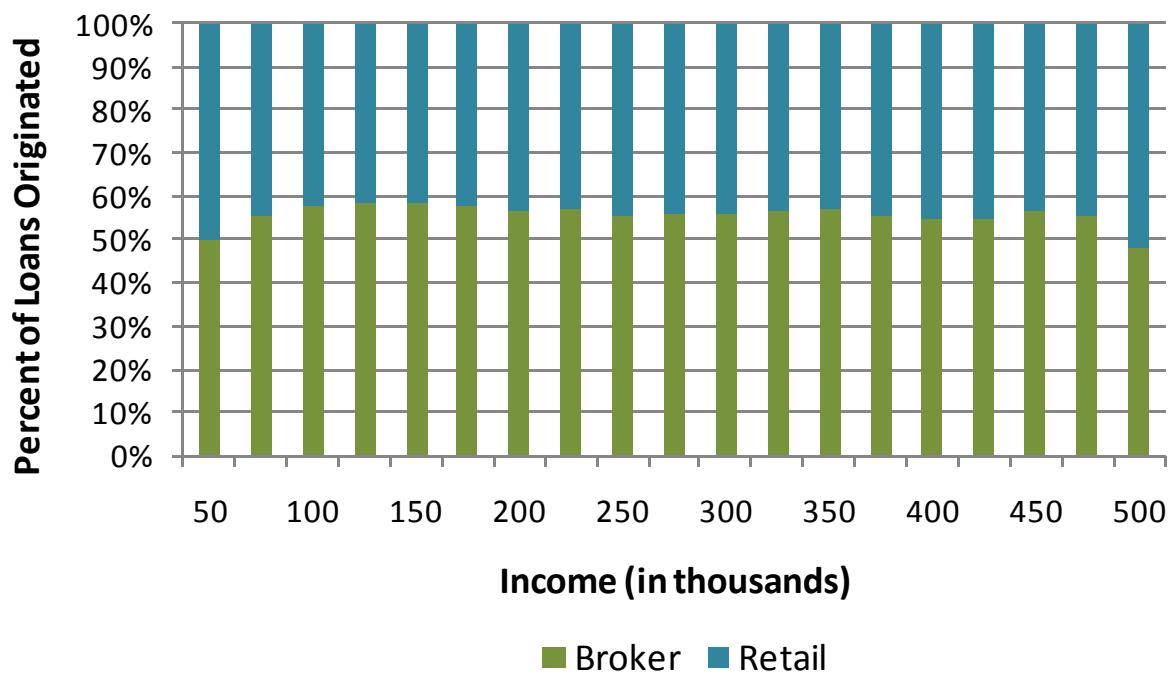
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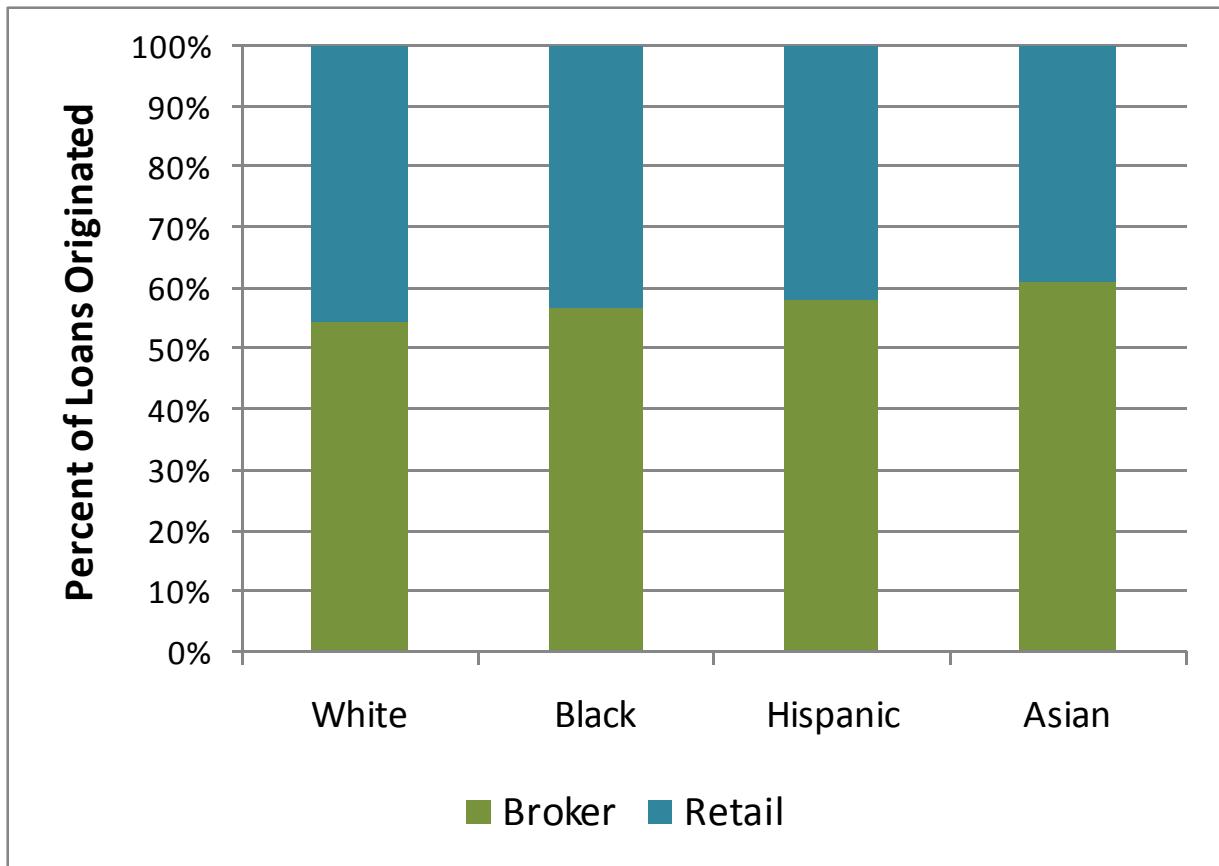
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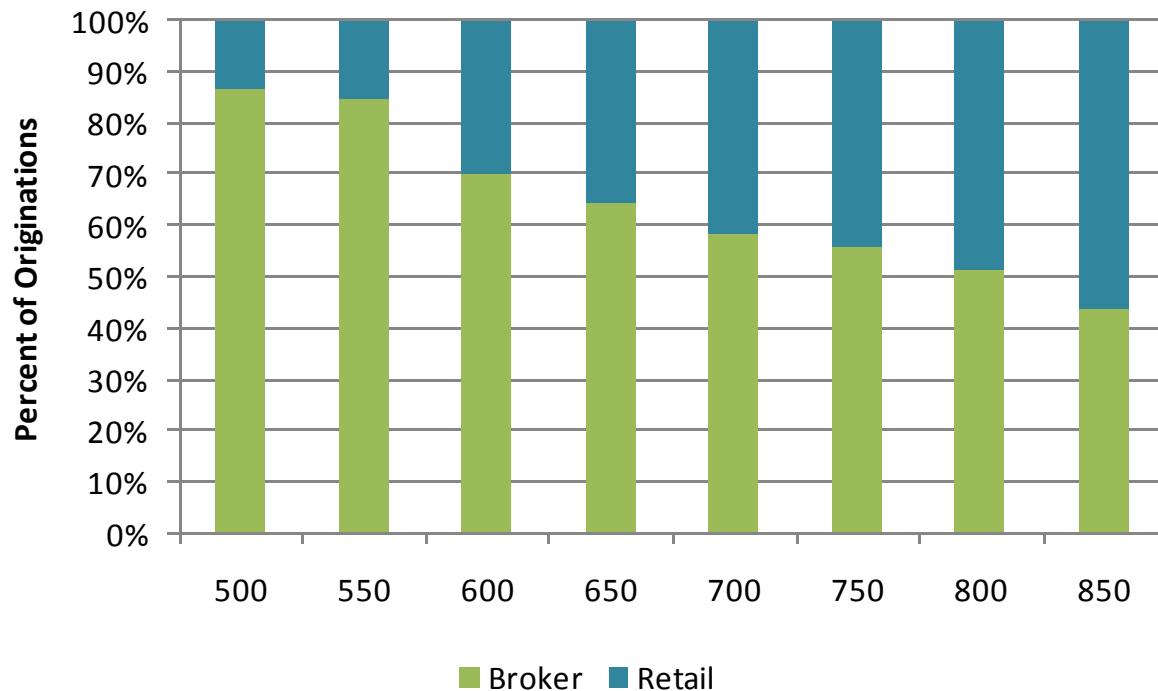
**Figure 1: Distribution of Mortgage Origination Channel by Income**



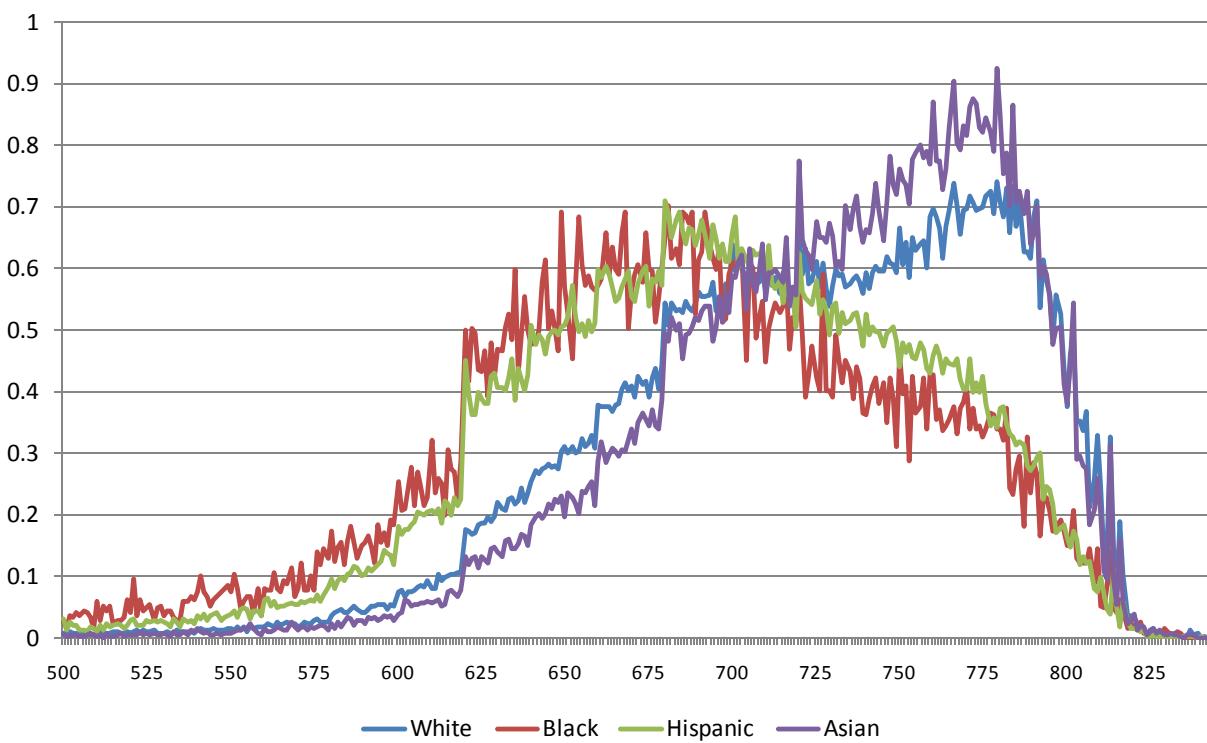
**Figure 2: Distribution of Mortgage Origination Channel by Race**



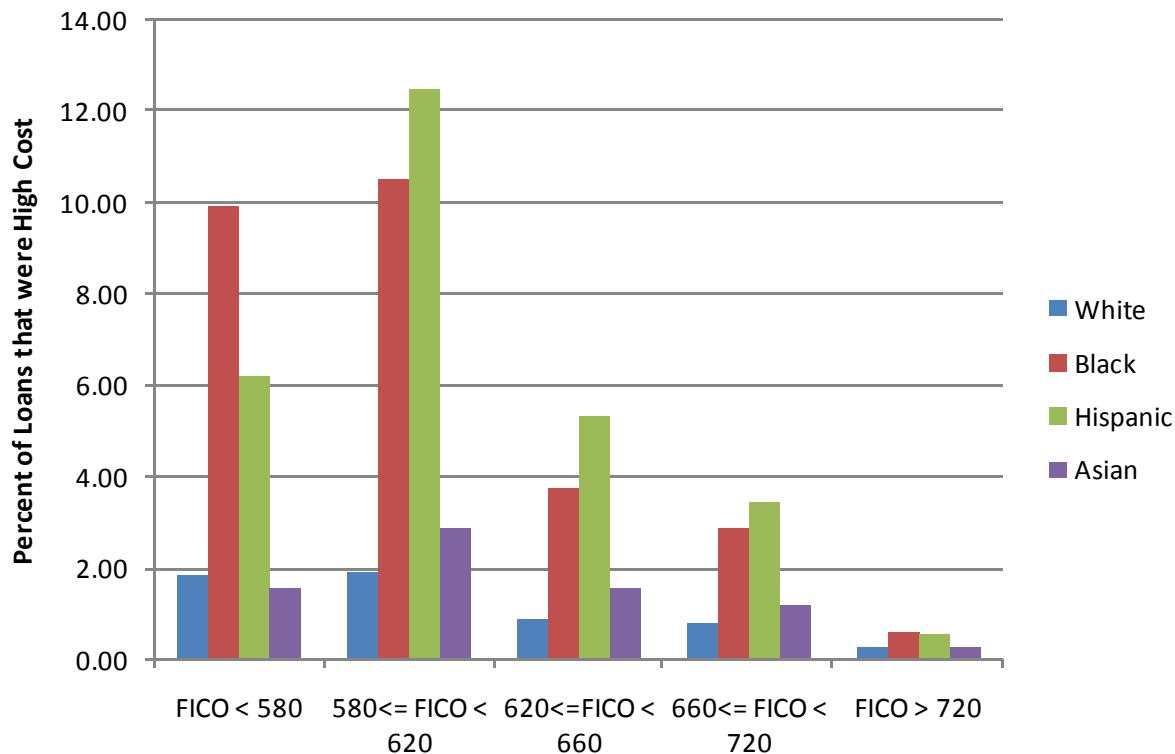
**Figure 3: Distribution of Mortgage Origination Channel by FICO Score**



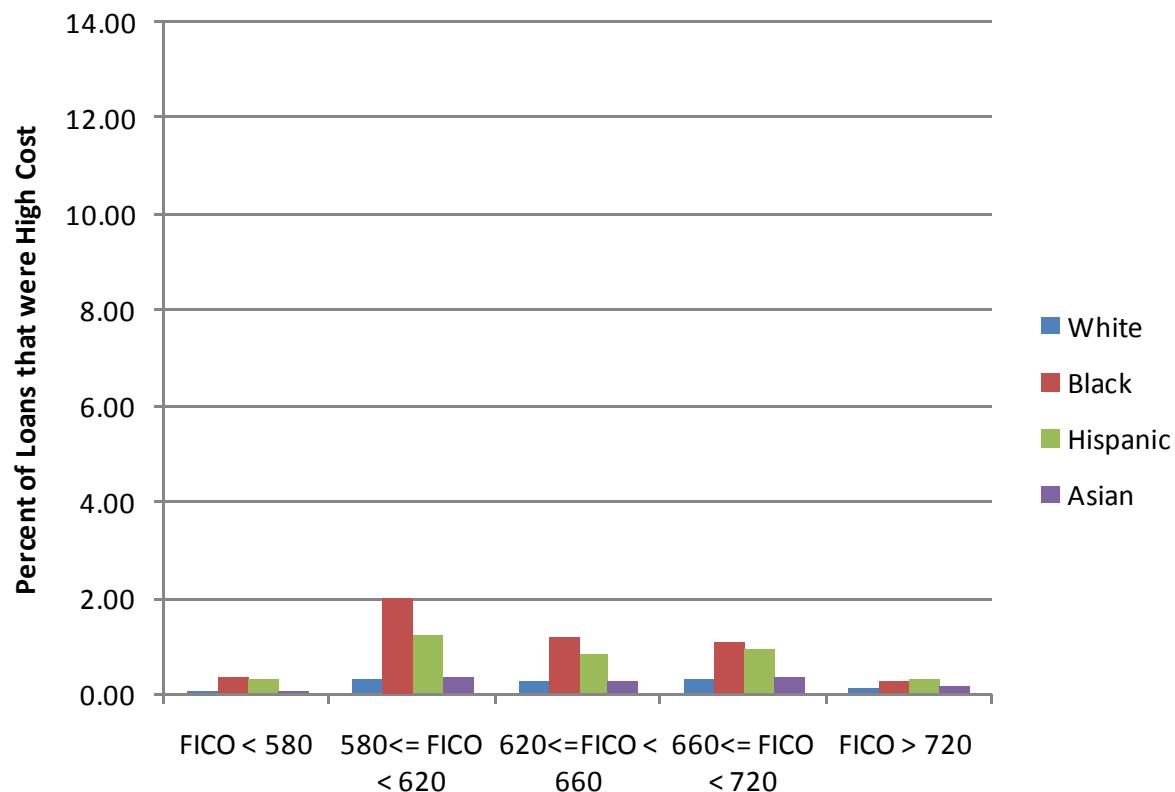
**Figure 4: Distribution of FICO Scores by Race**



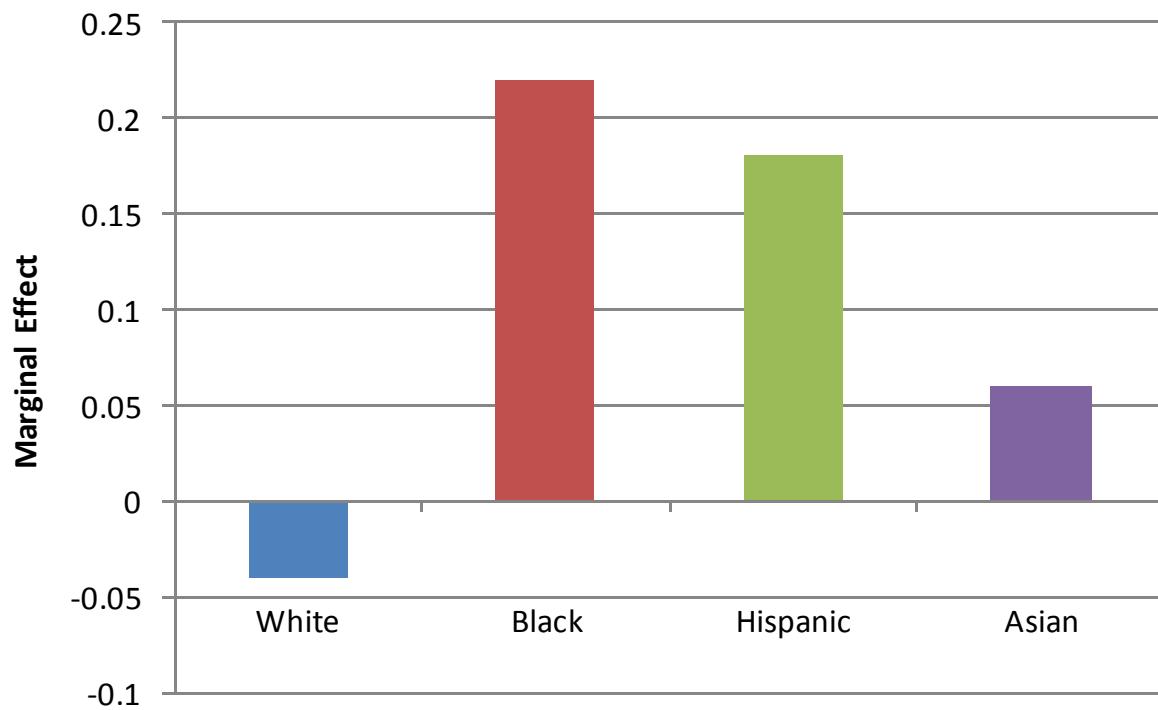
**Figure 5: Prevalence of High Cost Loans Originated by Mortgage Brokers by Race and FICO Score**



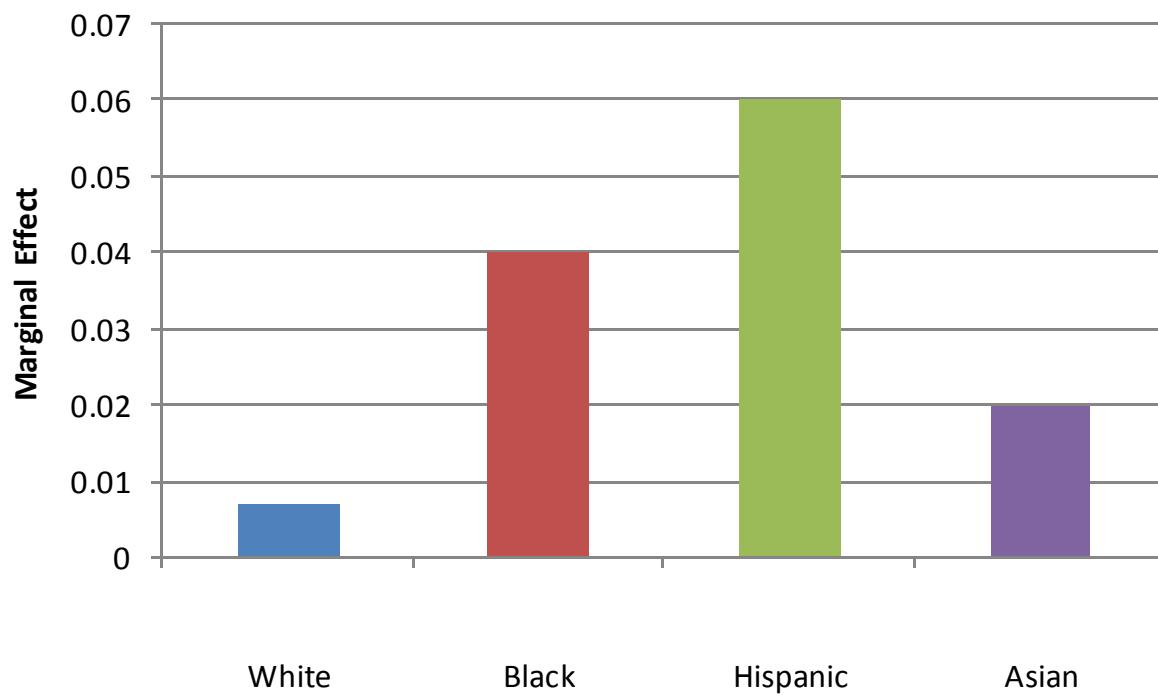
**Figure 6: Prevalence of High Cost Loans Originated by a Bank's Retail Division by Race and FICO Score**



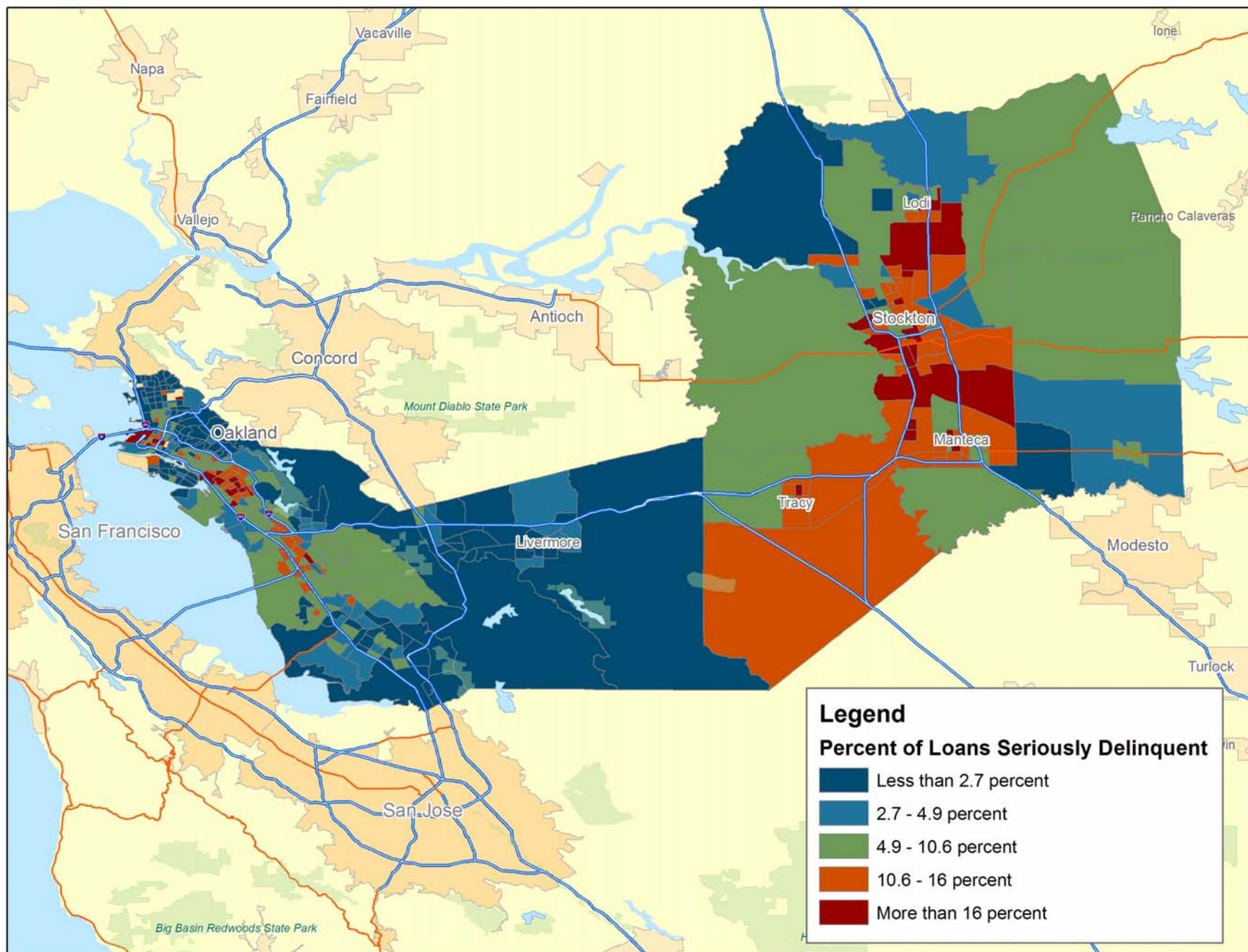
**Figure 7: Marginal Effect of Broker Origination Channel on Likelihood of Receiving a High Cost Loan**



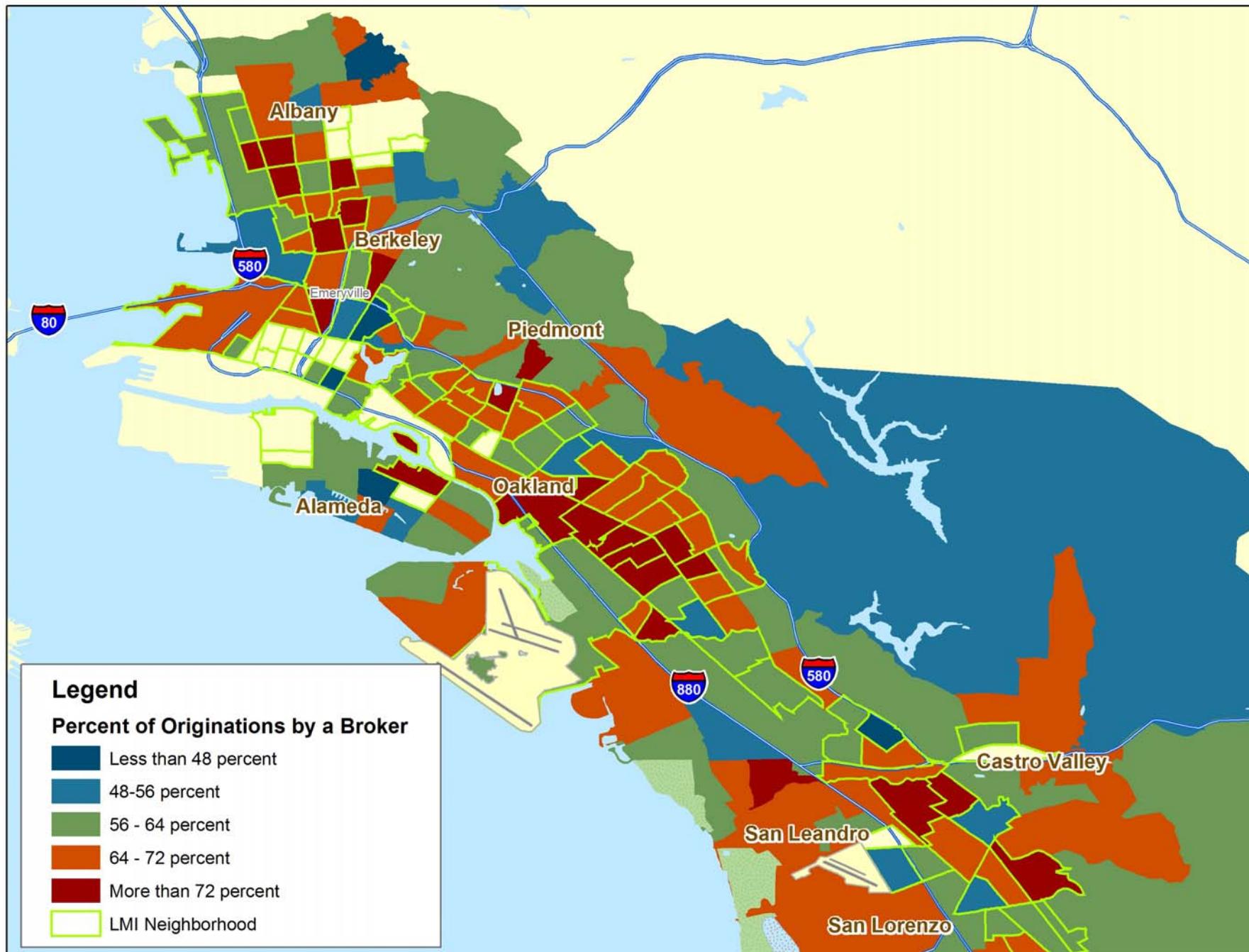
**Figure 8: Marginal Effect of Broker Origination Channel on Likelihood of Foreclosure**



**Map 1: Distribution of Foreclosures in Oakland and Stockton**



**Map 2: Distribution of Mortgage Broker Loan Originations in Oakland**



Map 3: Distribution of Mortgage Broker Loan Originations in Stockton

