

# **Industry Structure Perpetuates Dual Market**

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Today, thousands of mortgage banking operations compete to offer products to millions of potential borrowers. Indeed, by several measures, the market is more competitive today than it was two decades ago, at least as measured by the number of firms originating loans in any given market area or community. While many smaller thrifts and savings institutions have shut down their mortgage lending operations, they have been replaced by well-capitalized financial services giants with access to low-cost mortgage funds through an increasingly sophisticated secondary mortgage market. Aided by the outreach efforts of thousands of mortgage brokers and correspondent lenders, these giants have reached every corner of the market, including lower-income and minority communities. Yet despite substantial competition on the “supply-side” of the marketplace, a dual market persists.

Some borrowers pay more for mortgage credit or receive less favorable treatment (or even abusive treatment) than other, similarly situated and equally creditworthy borrowers. As a result, borrowers with the ability to understand and shop the mortgage marketplace benefit from a range of product choices and the speed and efficiency of the current mortgage delivery system. At the same time, borrowers that lack the information, capacity, or willingness to shop for mortgage credit, particularly those with real or perceived lower credit quality or those attempting to purchase homes in neighborhoods with less stable or lower property values, remain vulnerable to overpaying for mortgages or not receiving the best terms for which they could qualify.

Racial and ethnic minorities appear to be particularly vulnerable to the mispricing and “push marketing” that all too frequently occurs outside the mainstream market. Survey data suggest that for a variety of reasons – including historical mistrust of banking institutions – these individuals are least likely to comparison shop for mortgage credit. Moreover, lacking basic information about mortgage terms and rates, they are more likely to succumb to “push marketing” tactics. Whatever the case may be, it is disturbing that more than three decades after the enactment of fair lending legislation, fundamental disparities in minority access to mortgage capital remain.

## **Misaligned Incentives Inefficiently Allocate Credit**

An efficient mortgage market allocates capital according to the risk profile of the loan and the ability and willingness of the potential borrower to pay for mortgage credit. Though efficient in many ways, today's dual mortgage market fails to achieve what economists term "allocational efficiency" because similarly situated borrowers pay different prices to obtain a mortgage of given characteristics and terms. Central to the emergence and persistence of this allocational inefficiency is a market failure linked to "principal agent risk" that arises from the growing importance and presence of mortgage brokers and correspondent lenders in the market.

Brokers and loan correspondents, also called third-party originators, have different incentives in the market than retail lenders. Third-party originators work neither on behalf of the borrower nor the wholesale lender or investor who funds the loan. Instead, they are compensated by the borrower in the form of origination fees and points and are frequently compensated by the wholesale lender in the form of an origination fee at the time the loan application is funded. If borrowers are aware of prevailing mortgage rates and terms, competitive pressures will force individual brokers and correspondents to offer the best product available or lose out on the business. Yet to the extent that mortgages are complex and consumers lack basic information, this competitive market check may be missing. In addition, regulation of brokers and correspondent lenders generally occurs at the state level and consequently involves a patchwork of laws and regulations.<sup>1</sup> Subject to whatever regulatory constraints are effectively operating in their market, a broker's incentive is to close the loan while charging the highest combination of fees and mortgage interest rates the market will bear.

A mortgage delivery system where third-party originators are compensated for making loans but have no long-term interest in loan performance is subject to the aforementioned "principal agent risk." The interests of the lender/investor (principal) and the broker (agent) are misaligned in the case of broker-originated loans. The broker has little incentive to worry about whether the information presented in the mortgage application is accurate, so long as it is sufficient to cause the lender to fund the loan and trigger the payment of the broker's fees. Lacking a long-term

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<sup>1</sup> According to Kim-Sung and Hermanson (2003), four states (Alaska, Colorado, Montana, and Wyoming) do not require licensure, while more than two thirds do not have examination requirements.

interest in the performance of the loan, the broker is immune from many of the adverse consequences of failing to match the borrower with the best available mortgage or not providing accurate data needed to underwrite and assess the probability that the loan will default or otherwise prepay faster than anticipated.

At the same time, the broker has substantial incentive to provide less than accurate information, even though it is often not in the best interest of the borrower and may not reflect the interests of the investor. This could result in the broker's neglecting to check the accuracy of information presented on the borrower's loan application or falsifying income or other measures of creditworthiness or the value of the mortgaged property. Armed with inaccurate information, the lender (and the ultimate investor) may not fully understand the default risk associated with a particular loan. A prime quality borrower inappropriately placed into a subprime loan may eventually add to investor risk, since borrowers saddled with an "excessive" monthly mortgage payment may be more likely to prepay than otherwise similarly situated borrowers with lower payments.

Because of these risks, the lender/investor (principal) does have a long-term interest in the loan performance and has every incentive to monitor the third-party originators as best they can. Typically, lenders establish clear guidelines for third-party originators concerning acceptable underwriting standards and reject broker loans that fail to meet these standards. They may also require correspondents to buy back loans should a post-purchase loan review identify a problem. In addition, some wholesale lenders base broker compensation on the actual loan performance, rather than compensating on a simple "fee for service" basis. Of course, these actions are time consuming and legally complex and hence can be difficult to implement in practice. Lenders/investors, however, do have one powerful tool to hold brokers accountable: they can always terminate affiliation with any third-party originator that consistently fails to meet underwriting guidelines.

While in theory these efforts should work to bring brokers' actions back into alignment with those of the lender/investor, in practice they often fall short of the mark. As noted earlier, the broker has much more knowledge about the borrower's financial situation than the

investor/lender and hence has ample opportunity to “cheat” without getting caught. In addition, brokers work with various lenders and can therefore send their best customers to one lender and divert marginal clients to lenders with looser underwriting standards or less capacity to hold the broker accountable.

Clearly all brokers are not out to “cheat” the system at the expense of borrowers, lenders, and investors. Like wholesale lenders, brokers have incentive to protect their reputation in the market. Moreover, brokers frequently play the role of a trusted advisor and in doing so can provide useful guidance to customers concerning the loan process. Even so, with a growing number of originations coming from brokers, and with mounting evidence of both the potential for and the reality of broker abuse, the broker segment of the mortgage market clearly merits further scrutiny.

Unfortunately the current regulatory structure is not well suited to monitoring and holding mortgage brokers and other third-party originators accountable for their actions. Federal regulations of mortgage lending, so-called “regulation from above,” focus most intensely on depository institutions subject to detailed regulation under the Community Reinvestment Act and Fair Lending Act reviews.<sup>2</sup> At the same time, the routine activities of mortgage brokers are largely regulated, if at all, by a patchwork of often ineffective state regulations. With the number of mortgage brokers numbering in the hundreds of thousands, state regulators often lack the resources to conduct simple licensing reviews, let alone engage in detailed monitoring of broker behavior.

What advocates term “regulation from below” is equally hard-pressed to identify abusive broker behavior. Back when local retail banks dominated mortgage lending, community-based organizations played a key role in advocating for expanded lending to low- and moderate-income communities. Unlike many mortgage brokers, retail banks have both a visible institutional presence and concerns about their reputation in the community. While larger mortgage banking and mortgage brokerage operations share these concerns, many smaller firms and individual brokers can “fly beneath the radar screen.” Operating with a phone, fax, and computer, brokers

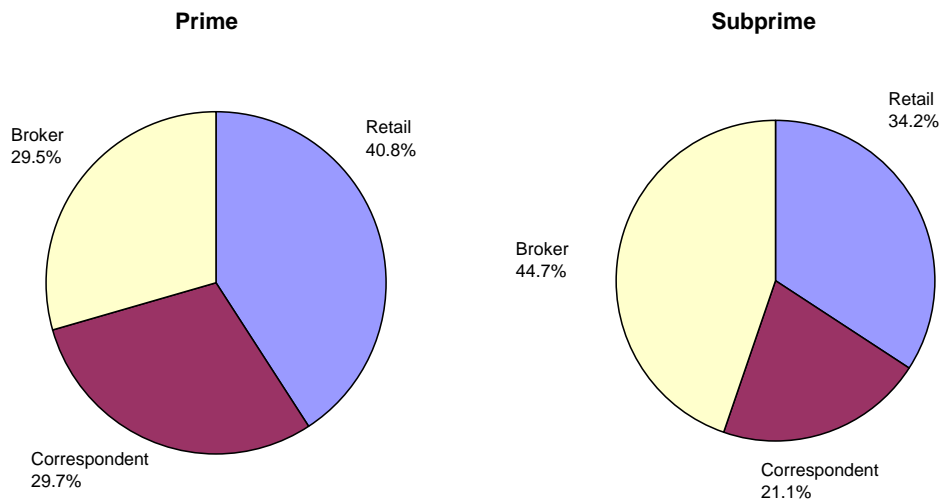
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<sup>2</sup> For further discussion of the concepts “regulation from above” and “regulation from below,” see Fishbein, 1992.

can enter a market undetected, yet still capture significant market share if they are skilled at working with national scale wholesale lenders or at selling their product directly into the secondary market. While this ease of entry represents a significant business advantage of the new mortgage origination system, it can be abused by brokers who “push” overpriced products into low-income and low-wealth communities, leaving behind problems associated with these mispriced or even abusive mortgages.

The behavior of mortgage brokers holds special significance for subprime markets. Both prime and subprime mortgages are originated by each of three channels: retail, broker, and correspondent, but the broker channel plays a dominant role in subprime lending. In 2002, some 44.7 percent of all subprime originations flowed through a mortgage broker channel, compared with only 29.5 percent for prime mortgages (Exhibit 7). In contrast, both the retail and correspondent lending channels account for a relatively smaller share of subprime loans than is true for prime loans.

**Exhibit 7: Brokers Dominate Subprime Lending**



Source: Inside Mortgage Finance, *The 2003 Mortgage Market Statistical Annual*

## **Many Borrowers Have Limited Capacity to Shop**

The fact that the allocational inefficiency and potential for abuse is not easily monitored by government regulators, community-based watchdogs, or even supportive private-sector lenders and investors, places a substantial burden on individual consumers to fend for themselves in the marketplace. As envisioned in simple economic theory, the ability of consumers to shop for the best available price and terms can provide a high degree of consumer protection. For example, in a market where people have the ability to comparison shop, a broker may lose business if he or she pushes costs too high.

Unfortunately, given the bewildering array of mortgage products available, even the most sophisticated borrower will find it difficult to evaluate the details of a mortgage, since the essence of mortgage pricing reflects decisions concerning repayment of debt over time. And there is a growing body of “behavioral economics” literature that suggests that consumers have differing and often inconsistent time preferences, depending on how the choices regarding payment over time are framed.<sup>3</sup> For example, in a recent paper, Shu (2002) argued that the complexity of discounting mathematics and an inability to estimate this function in their head leads people to turn to alternative “short-cut methods,” such as heuristics or simplified linear models. For example, one short-cut method might be for the consumer to estimate the total loan payments (number of payments times the payment size) and look for a loan that minimizes this total. If the loan terms being compared were held constant, this heuristic would be equivalent to finding the loan with the lowest interest rate. Yet over loans of various terms, the loan with the lowest total payments may not be the loan with the lowest annual percentage rate (APR).<sup>4</sup> Aside from APR, others focused on minimizing the length of the loan term, while for others, minimizing monthly payments was given priority.

Given that consumers use short-cut methods, some brokers may actively promote mortgages that exploit the tendency of some borrowers to focus on monthly payments and not the APR or

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<sup>3</sup> For a good summary of this strand of literature, see Thaler and Sunstein, 2003.

<sup>4</sup> Shu (2002) presented evidence that the problems associated with deciding what is the best way to borrow money and repay over time is not limited to “unsophisticated borrowers.” Using a panel of students enrolled in the MBA program at the University of Chicago, she found that even financially sophisticated individuals have trouble determining cost-minimizing alternatives for a stream of future payments.

some other, more useful measure to evaluate the costs of various mortgage products. For example, a recent AARP study (Kim-Sung and Hermanson 2003) examined subprime lending patterns using a random sample of 1008 individuals aged 65 and older who refinanced their homes between January 1999 and December 2000. Kim-Sung and Hermanson noted that broker-originated refinance loans were nearly twice as likely to be subprime as lender-originated loans (33 versus 17 percent). They also showed that nearly half (49 percent) of the surveyed borrowers obtained a loan originated by a retail lender and 39 percent a broker-originated loan, while 12 percent reported receiving their loan from a home improvement contractor or some other source. A higher share of broker-originated loans went to African American borrowers (64 percent) than white borrowers (38 percent) and broker-originated loans were also more common among borrowers who were divorced or female.

What is perhaps most striking is the way homeowners in the sample searched (or in many instances did not search) for the best loan available. The AARP study supports the notion that in many instances subprime refinance loans are “sold, not sought” in that they result from the extensive and often unsolicited outreach by brokers. Kim-Sung and Hermanson found that some 56 percent of borrowers with broker-originated loans reported that brokers initiated contact with them, compared with only 24 percent of borrowers with lender originated loans. Since they did not initiate the search activity, it is not surprising that a larger share of borrowers with broker-originated loans (70 versus 52 percent) “counted on lenders or brokers to find them the best mortgage.” Unfortunately, this confidence was often misplaced.

Borrowers with broker-originated loans were more likely to pay points (25 versus 15 percent) and more likely to have a loan with a prepayment penalty (26 versus 12 percent). A greater share of borrowers with broker-originated loans also believed that they did not get a loan that was “best for them” (21 versus 9 percent), received a loan with mortgage rates and terms that were “not fair” (23 versus 8 percent), and did not receive “accurate and honest information” (19 versus 7 percent). Many borrowers, especially elderly borrowers and borrowers in lower-income and/or minority areas, succumb to the marketing tactics of aggressive brokers, in effect becoming unwitting accomplices in the dual mortgage market.



These findings are echoed in a number of other studies. Survey data presented in a study by Courchane, Surrette, and Zorn (2004) painted a similar picture. This study suggested that subprime borrowers are less knowledgeable about the mortgage process, are less likely to search for the best mortgage rates, and are less likely to be offered a choice among alternative mortgage terms and instruments. Similarly, another AARP survey conducted in 2003 examined consumer knowledge of the mortgage lending process.<sup>5</sup> While AARP reported that most survey respondents aged 45 and older understood the basic loan application process, including the Truth in Lending Act (TILA) disclosure requirements, many did not. For example, more than 10 percent of all respondents were unaware that the lender is required to disclose fees before loan closing, while more than 20 percent were unaware that the lender is required to disclose the annual percentage rate (APR) of the loan prior to closing. Moreover, AARP noted that African Americans were slightly less likely than the general population to correctly answer the TILA-related questions included in the survey.

The AARP survey also asked respondents about the steps they took to shop for a home equity lender. Most respondents made multiple inquiries concerning alternative home equity loan products; however, there were notable exceptions. For example, African Americans were significantly less likely than the general population (36 versus 77 percent) to shop for a home equity loan at their bank, savings and loan, or credit union. AARP posited that this might be related to the fact that the African Americans surveyed were significantly less likely (72 versus 88 percent) than the general population to have a savings or checking account at one of these same institutions. Lacking access to banking services, African Americans were more likely (29 versus 10 percent) than the general population to go to a lender recommended by their contractors and more likely (21 versus 9 percent) to respond to advertisements received in the mail or over the phone.

While the studies by Courchane, Surrette, and Zorn and the AARP showed that many subprime borrowers *do not* shop, Guttentag (2001) went further to claim that because of the complexity of mortgage products, consumers are, in many ways, incapable of being effective shoppers. According to Guttentag, “the core reason for market failure is that effective shopping for a

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<sup>5</sup> AARP, 2003.

mortgage is extraordinarily difficult for even sophisticated borrowers (2001: 3).” To support this claim, Guttentag documented substantial variation in broker compensation, a situation that should not exist if consumers have the capacity to shop for the best available terms. He examined a sample of conventional prime loans and found that broker profits ranged from \$1,077 to \$2,748 and had no apparent relationship to the level of the effort required to process the loan application.<sup>6</sup>

Guttentag emphasized the fact that pricing variability is not a prime or subprime issue but rather a product of the way mortgage markets function. This was followed by a detailed discussion of the characteristics of the current mortgage market, such as product complexity and the tendency for loan terms to change daily, that undermine the ability of borrowers to effectively comparison shop. For example, the difference between a 30-year fixed rate mortgage with an interest rate of 6.5 percent and 3 points and one at 7.25 percent with no points, while substantial if the loan is held to term, is negligible over a five-year horizon. Most borrowers, however, are unaware that the length of time the loan is actually held has a tremendous influence on the effective interest rate generated by the point and rate combination.

"Rebate pricing," in which lenders compensate brokers by allowing them to keep some portion of the margin above the wholesale mortgage price, also serves to obscure the best price available from prospective borrowers. A borrower can tell from the settlement statement how much he or she will pay the broker but not how much the broker will receive from the lender for completing the deal (widely referred to as the yield spread premium, or YSP). In theory, some of this fee could offset the borrower's payment to the broker and the borrower's bargaining position would be greatly enhanced if this information were known to him or her. Guttentag observed that these and other structural features of the current mortgage market make it difficult to imagine that simple consumer education will correct the tendency for some brokers to overcharge unsuspecting borrowers.

Shopping for the best price is made even more difficult by the fact that mortgage borrowing involves many participants, including loan officers, underwriters and processors, property

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<sup>6</sup> In a recent paper, Susan Woodward (2003) came to similar conclusion.

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appraisers and insurers, title insurers, credit reporting agencies, mortgage insurers, abstract companies, pest inspectors, and flood insurers to name a few. In addition to the complexity of the product, the complexity of the process provides an opportunity for brokers to collude with some of these participants to skim extra cash from the borrower. Moreover, the sheer number of documents associated with a mortgage loan provides ample opportunity for a broker to introduce unfavorable provisions into the loan without the borrower's knowledge.

The above discussion is a reminder that the potential for abuse associated with "push marketing" and the surprising tendency for many borrowers not to shop for mortgages is reinforced by a mortgage delivery system that actually provides incentives for brokers and other third-party originators to exploit the situation. This suggests that rooting out "push marketing" or other abusive practices requires not simply borrower education but efforts to expand the dissemination of mortgage pricing information to facilitate comparison shopping and provides hands-on assistance to help consumers select the mortgage product that is best for them. Moreover, mortgage lenders who rely on brokers to reach out to borrowers and market their products have a special responsibility to monitor the actions of their agents and to work with federal and local authorities to craft legislative and regulatory reform to end the abusive practices that continue to mar the mortgage industry.

### **Racial Disparities in Mortgage Lending Persist**

Numerous studies document the low shares of conventional prime lending to minority borrowers and/or neighborhoods with high concentrations of minority households. In addition to the variation by race/ethnicity of individual borrowers, there also appears to be a gap between the share of conventional prime loans made in neighborhoods of differing income, racial, and ethnic makeup. For example, Joint Center assessment of HMDA data suggests that overall conventional prime lending in 2001 accounted for 89.4 percent of all home purchase lending to higher-income white borrowers living in higher-income and largely white neighborhoods. In contrast, the prime loan share for higher-income African Americans living in these same areas was only 73.5 percent. For Hispanics, the share was a higher 81.6 percent (Exhibit 8). In lower-income and largely (more than 50 percent) African American and Hispanic communities, the prime loan gap was even greater still. For example, the prime loan share for lower-income African American

borrowers living in lower-income, largely African American communities fell to 31.8 percent. For white borrowers living in these same communities the prime loan share was over 20 points higher (54.5 percent).

### Exhibit 8: Racial and Income Composition Further Expands Prime Lending Gap

Conventional prime loans as a share of all loans

HOME PURCHASE								
BORROWER CHARACTERISTICS								
	Lower Income <80% AMI				Higher Income >120% AMI			
Neighborhood Characteristics	White	African American	Hispanic	Asian/ Other	White	African American	Hispanic	Asian/ Other
<b>LESS THAN 10% MINORITY</b>								
Lower income	54.9%	29.1%	42.0%	51.2%	85.1%	67.8%	75.0%	80.3%
Higher income	65.4%	36.3%	48.4%	65.3%	89.4%	73.5%	81.6%	89.0%
<b>MORE THAN 50% BLACK</b>								
Lower income	54.5%	31.8%	44.5%	48.3%	85.9%	59.5%	64.3%	72.4%
Higher income	48.0%	27.7%	39.0%	48.4%	81.1%	55.0%	56.8%	68.4%
<b>MORE THAN 50% HISPANIC</b>								
Lower income	52.7%	32.1%	40.4%	61.0%	79.1%	48.2%	56.4%	74.0%
Higher income	48.3%	32.0%	42.6%	56.3%	73.4%	51.1%	65.5%	69.7%
HOME REFINANCE								
BORROWER CHARACTERISTICS								
	Lower Income <80% AMI				Higher Income >120% AMI			
Neighborhood Characteristics	White	African American	Hispanic	Asian/ Other	White	African American	Hispanic	Asian/ Other
<b>LESS THAN 10% MINORITY</b>								
Lower income	83.1%	65.9%	71.4%	72.8%	93.2%	79.1%	79.4%	90.6%
Higher income	89.4%	67.8%	81.0%	85.0%	95.7%	86.3%	90.2%	94.6%
<b>MORE THAN 50% BLACK</b>								
Lower income	71.0%	51.1%	68.8%	52.9%	89.7%	70.3%	76.5%	79.2%
Higher income	75.8%	57.1%	69.6%	65.0%	89.1%	72.7%	77.3%	80.3%
<b>MORE THAN 50% HISPANIC</b>								
Lower income	76.9%	54.3%	74.0%	81.8%	88.0%	67.0%	78.4%	86.3%
Higher income	79.3%	60.4%	77.3%	83.4%	88.0%	70.8%	82.1%	87.3%

Source: Joint Center for Housing Studies enhanced HMDA database.

Compared to home purchase lending, the conventional prime lending share of home refinance loans is generally higher in all market segments but especially in lower-income markets. This is in part a reflection of the fact that the FHA has a substantially smaller presence in the refinance market. Even so, there remains significant variation in access to conventional prime home refinance loans across neighborhoods of different racial/ethnic and income mix. For example, Exhibit 8 documents that prime conventional refinance loans accounted for 95.7 percent of all refinancing done by higher-income whites living in higher-income white areas. For Hispanics living in these same neighborhoods, the prime refinance share was five percentage points less, while for African Americans the prime share was 10 percentage points less.

The racial gap in lending persists in a variety of neighborhood settings. Even in areas with income growth and/or home price appreciation in excess of 75 percent over the decade, the share of higher-income African Americans with conventional prime loans trails that of white borrowers by 20 percentage points. Examining tracts with different historical mortgage denial rates reveals a similar trend. In areas with the lowest mortgage denial rates historically (and arguably containing households with the highest average household credit quality), the share of higher-income, African Americans obtaining prime loans still trails whites (Exhibit 9).

### Exhibit 9: Racial Gap in Prime Lending Persists in a Variety of Neighborhood

BORROWER CHARACTERISTICS						
Neighborhood Characteristics	Income < 80% AMI		Income 80-120 AMI		Income > 120% AMI	
	White	African American	White	African American	White	African American
<b>Change in tract median housing value</b>						
<10%	64.2	35.8	69.7	42.3	84.2	61.5
10 to 25%	60.1	29.0	68.8	37.3	85.7	59.9
25 to 50%	58.2	28.9	66.3	36.0	85.3	59.8
50 to 75%	60.9	32.1	69.0	38.5	86.9	63.2
>75%	60.7	32.6	69.5	42.4	87.4	65.9
<b>Change in tract median household income</b>						
<10%	58.6	33.1	65.9	41.5	82.7	57.7
10 to 25%	58.5	29.6	65.4	36.9	83.6	57.2
25 to 50%	60.4	30.5	68.3	38.0	85.6	61.5
50 to 75%	61.2	31.4	69.8	39.0	87.3	64.8
>75%	64.3	36.7	72.1	46.5	88.7	69.8
<b>Tract level mortgage denial rates</b>						
<5%	77.6	44.5	81.6	52.1	92.6	79.1
5 to 14%	65.2	33.6	71.8	41.7	87.9	67.9
15 to 25%	54.1	31.1	61.9	37.7	81.3	58.2
26 to 30%	48.6	28.5	56.3	33.8	77.5	51.7
>30%	43.6	28.9	52.8	36.8	75.4	52.7

Source: Joint Center for Housing Studies enhanced HMDA database.

### Racial Disparities Are Particularly Pronounced in the Subprime Market

Though there are undoubtedly different risks associated with lending to individuals with varied income and credit histories or living in different neighborhood settings, the difference across race and ethnicity with respect to the share of lending that is conventional prime, subprime, government-backed or manufactured home lending can be substantial. For example, review of HMDA data on the spatial variation of prime lending has led many advocates to focus on what they call the “risk or race question,” arguing that it is “race” not “risk” that explains the persistent

prime lending gap.<sup>7</sup> For example, in a comprehensive review of neighborhood lending patterns in Chicago in the late 1990s, Immergluck and Wiles (1999) observed that conventional prime lenders served higher-income white areas, while FHA and subprime lending was concentrated in lower-income and minority communities. Characterizing this as a “dual mortgage market,” they noted that the racial disparities were too great to be explained by differences in the credit quality of the borrowers. Instead, they argued that the observed patterns resulted from the failure of “mainstream lenders” to seek out creditworthy borrowers in lower-income and minority communities.

Researchers at the U.S. Department of Housing and Urban Development (HUD) similarly concluded that a lack of competition from prime lenders has enabled subprime lenders to gain a growing share of mortgage lending activity in lower-income and minority communities. In addition, they noted that racial discrepancies in lending patterns existed at the borrower level and that upper-income African American borrowers were twice as likely as lower-income white borrowers to hold subprime refinance loans.<sup>8</sup> Combining HMDA data with data from the 2000 census, Bradford (2002) found that African Americans and Hispanics were also disproportionately represented in the subprime refinance market. Moreover, he pointed out that racial disparities in lending exist in all regions and in cities of all sizes. Indeed, the study suggested that among the 331 metropolitan areas examined, some of the biggest disparities exist in the nation’s smallest metropolitan areas.

Finally, based on their summary of several HUD-funded studies, Fishbein and Bunce (2000) concluded that a portion of borrowers whose credit would allow them to qualify for lower cost conventional prime loans were nonetheless receiving subprime loans. They also found that the higher interest rates charged by subprime lenders could not be fully explained by neighborhood and/or borrower risk factors.

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<sup>7</sup> The phrase “risk or race” was suggested by a study of subprime lending patterns prepared for the Center for Community Change. See Bradford, 2002.

<sup>8</sup>U.S. Department of Treasury and U.S. Department of Housing and Urban Development. 2000. Hearings for this report were held in Baltimore, Chicago, Los Angeles, and New York.

## Detailed Studies Confirm Simple HMDA Findings

Each of the studies discussed in the previous section acknowledged that part of the disparity in lending patterns undoubtedly resulted from differences in borrower- and property-related risk factors. To address this, several studies have gone to considerable lengths to develop data that more fully evaluate the “risk or race” question. Pennington-Cross, Yezer, and Nichols (2000) examined issues related to credit risk and mortgage lending and estimated the probability that an individual borrower selected a conventional prime, subprime, or FHA insured mortgage. The study analyzed a database of home purchase loans that combined HMDA data with data from FHA administrative files, a sample of real estate transactions, and a measure of borrower credit quality. While the study confirmed that borrower income, debt, credit history, and neighborhood factors significantly influence the pattern of mortgage lending, race and ethnicity still appeared to be key determinants in explaining why African Americans, Native Americans, and Hispanics are less likely to have access to lower-cost, prime home purchase loans than whites.

Similarly, Calem, Gillen, and Wachter (2002) examined spatial variation in subprime lending across census tracts in Chicago and Philadelphia. In addition to detailed borrower data, this study incorporated a variety of tract-level measures drawn from the 2000 census.<sup>9</sup> Of note was their use of tract-level risk measures, including the share of properties in foreclosure, as well as the share of individuals within the tract with low (or no) credit scores (obtained from a major national credit bureau).

While the authors conceded that more could be done to control for individual borrower risk, they asserted that race, both at the neighborhood and borrower levels, remains a strong factor in explaining the distribution of subprime lending. In particular, they found that “even after inclusion of the full set of explanatory variables, in both cities we find a strong geographic concentration of subprime lending in neighborhoods where there is a large population of African American homeowners” (2002: 14). In addition, they noted that African American borrowers, regardless of their neighborhood location, have a high likelihood of obtaining a subprime loan compared to a prime loan, concluding that both borrower race and neighborhood race matter.

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<sup>9</sup>Census variables provided detail on income, education, and race/ethnicity.



In a recent paper, Courchane, Surette, and Zorn (2004) examined whether borrowers were “inappropriately” channeled into the subprime segment. The study explored mortgage lending patterns using FICO scores and other traditional measures of risk as well as what the authors described as “borrower self-assessed credit risk factors”<sup>10</sup> gathered from a survey of mortgage borrowers. The paper confirmed that whether borrowers obtain subprime or prime mortgages depends in large measure on risk-related mortgage underwriting variables (including FICO score, loan to value, front end ratio) and other factors, including mortgage type, market channel, shopping behaviors, opportunity to make choice, age, and ethnicity.

The addition of measures of market knowledge, search behavior, and choices available contributed significantly to explaining borrower outcomes. The authors concluded that the superior performance of the “full” model in explaining whether a borrower obtained a prime or subprime loan implies that credit risk alone may not fully explain why borrowers end up in the subprime market. Rather, their paper supported the alternative view that the current mortgage delivery system produces an allocational inefficiency wherein households of similar economic, demographic, and credit risk characteristics do not pay the same price for mortgage credit.

### **Capital Markets Fail to Correct Pricing Disparity**

The finding that an allocational inefficiency exists in the mortgage market is reinforced by a series of econometric studies that demonstrate how “principal agent risk” associated with third-party originations can result in borrowers with similar characteristics obtaining different pricing, depending on the process or channel through which they received their loan.<sup>11</sup> Building on an earlier study by Lacour-Little and Chun (1999) that demonstrated that broker-originated loans are likely to prepay faster, Alexander et al. (2003) showed that they are also more likely to default than loans originated through a retail channel, even after controlling for credit and ability-to-pay factors. Alexander et al. further demonstrated that prior to 1997 the different

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<sup>10</sup> For example, the survey gathers data on whether the borrower believes that they “have good credit,” “pay bills on time,” and are “in control of their finances,” as well as information on search behavior and adverse life events such as loss of job.

<sup>11</sup> For example, Passmore and Sparks (1996) showed how asymmetric information and adverse selection can negate the benefits of government-sponsored mortgage securitization programs; Shiller and Weiss (2000) examined moral hazard in home-equity conversions; Brickman and Hendershott (2000) investigated adverse selection in the refinancing of FHA loans; Brueckner (2000) studied the impact of asymmetric information on mortgage default, and Lacour-Little and Chun (1999) assessed prepayment risk of mortgages originated by third parties.

default characteristics of broker-originated loans were not recognized in the marketplace and were consequently not priced accordingly. They argued that owing to growing capital market awareness of the “principal agent risk” associated with broker-originated loans, borrowers who receive funding via the broker channel are charged a premium over apparently similar borrowers who receive their loans through retail channels. This is a result of the need to compensate investors for the higher default and prepayment risk associated with these loans.

This discussion is a reminder that investors care primarily about being compensated for the risks they bear. The fact that a pool of mortgages includes individual mortgages with “excessive” fees or rates or contains inaccurate information is not of interest so long as the investor is able to assess prepayment rates and/or foreclosure rates associated with these transactions. Recognizing that misrepresentation and mispricing exists, some lenders/investors simply protect their interests by buying loans from less reliable brokers at a discount rather than working to weed out “bad loans.”

Of course, some lenders and investors are deeply concerned about receiving misleading information from brokers, particularly related to the appraised value of the mortgage property or the capacity of the borrower to repay the loan. As a result, there is aggressive and now technologically sophisticated monitoring on the part of lenders and investors, as well as the Wall Street rating agencies, that is designed to root out fraud.<sup>12</sup> However, these systems are costly to acquire and not universally implemented.

Given the fact that investment returns depend on the accuracy of the assumptions concerning the underlying mortgage assets and the performance of the mortgage pool, mortgage investors must decide how to manage that risk. In an extreme example, an investor could present relatively strict rules governing the process of loan originations and through a system of “representations and warranties” hold the mortgage banker accountable for any deviation from these rules. Mortgage bankers, in turn, could seek to hold their brokers accountable to these standards and, in effect, push this risk back downstream. Since there are reputational risk considerations associated

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<sup>12</sup> See July 2003 issue of *Inside Mortgage Technology* for a discussion of the growth of automated fraud detection systems.

with loans that go into foreclosure, such actions could pressure brokers to more closely align their practices with general industry standards.

Undoubtedly some of this is happening, but Alexander et al. (2003) demonstrated that in the current subprime market, the tendency of brokers to charge excessive fees or present misleading information is not “corrected” but rather priced in the market. Indeed, such practices are no secret, since the details concerning the expected performance of a pool of loans are carefully disclosed for prospective investors to review. A recent assessment of financial disclosure documents for a large sample of subprime mortgage-backed securities confirmed that investors focus less on whether specific loans are likely to default or prepay and more on whether the risk-adjusted rate of return is sufficient to cover any expected losses.<sup>13</sup> This review demonstrated that it is standard practice for disclosure documents to first predict that a given pool of subprime loans has a very high likelihood of experiencing significant losses due to default and foreclosure – in many instances 10 times as high as prime quality loans – only to then demonstrate that the mortgages have sufficiently high interest rates to protect individual investors from realizing these losses.

In a world in which the broker is detached from the lender and the lender is detached from the investor, market feedback loops are broken or at best are slow to operate. Rather than work to root out abuse, under the current industry structure, some buyers pay more, brokers earn a premium return, and investors are compensated. Yet despite the fact that such high foreclosure rates, if realized, would have potentially devastating consequences for individual borrowers and communities, the disclosure documents simply state that the pools were priced to compensate investors for bearing the risks. The result is that the impact of foreclosures to borrowers and communities is ignored by the capital markets.

### **Is There an Effective Demand Side Check?**

As long as the mortgage-backed securities market prices the tendency of brokers to overcharge borrowers or present misleading information into its securities, the task of ensuring nondiscriminatory pricing in the marketplace falls to regulators and to consumers themselves.

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<sup>13</sup> See Mansfield, 2003.

Unfortunately, the current regulatory setup is not well structured to address the problems associated with mispriced mortgage credit. Indeed, while there could and should be more aggressive enforcement of laws and regulations governing deceptive marketing practices or failure to accurately disclose the terms to the borrower prior to closing, there is limited recourse for a borrower who simply overpays. Consumer protection regulations generally focus on ensuring that the loan information provided by the mortgage broker to the borrower was “fair and accurate,” that the appraised value of the home was a fair representation of current market value, and that the terms and cost of the loan were provided in advance of closing for the borrower to review. Under the doctrine of “let the buyer beware,” apart from Federal Trade Commission regulations that prohibit false advertising by brokers, there are no requirements that a broker offer the best price available in the marketplace.

Nor are potential borrowers necessarily up to the challenge of protecting their own interests. As previously discussed, many consumers do not shop around for mortgages but instead rely on brokers to provide them with information. Indeed, many consumers falsely believe that approval of their mortgage application is somehow a validation that they can handle the mortgage payments. *Nothing could be further from the truth.* At the time of closing, each of the parties in the transaction (other than the borrower) is fully aware of the probability that the loan will move to default and foreclosure. Lacking this knowledge, many borrowers willingly enter into a transaction that may impose serious financial and emotional costs on themselves *and* their neighbors.

Moreover, given the complexity of current mortgage products, even the most sophisticated borrower will find it difficult to evaluate the details of the mortgage. Yet to the extent that these more sophisticated borrowers have financial or legal advisors to guide them, they may have access to better mortgage information. At a minimum, higher-income and higher-wealth borrowers have more extensive financial resources to draw upon and hence have greater capacity to bear any excessive costs and avoid mortgage default.

The mortgage market often falls short of the competitive ideal where buyers and sellers have ready access to information about product terms and pricing. Simple economics suggests that

markets work best when consumers make informed choices concerning the goods and services they consume. Recognizing the complexity of the mortgage product and the inherent difficulty many consumers have in shopping for the "best mortgage product," all too often the ideals of the competitive market are not realized. In the language of economics, there exists an "asymmetry of information" between buyers and sellers, particularly with respect to the price of mortgage credit. Mortgage industry professionals participate in numerous transactions over the course of weeks and months and have ready access to information on the set of fees, rates, and terms that comprise the overall "pricing of mortgage credit" in the marketplace. In contrast, consumers only occasionally search for a loan to purchase or refinance a home and hence begin loan shopping with limited prior experience and equally limited access to the information needed to make an educated choice.

Consumers could spend more time and money to better educate themselves about the price and terms of alternative mortgage products, but from the perspective of the efficient use of societal resources, it makes little sense for individual consumers to devote considerable resources to ferret out information that could be readily provided by mortgage brokers and originators. Yet, as previously noted, mortgage brokers and originators have limited incentive to provide detailed pricing information, particularly information that would enable a consumer to compare prices of alternative products to determine whether, given the details of their income and credit history, they were getting a loan at the best price available in the marketplace.

These comments suggest that mortgage pricing information is in effect a "public good" and there is a role for government in providing the pricing information needed to support the efficient operation of the mortgage market. While improved disclosure of the terms of a particular loan offered to a consumer would help, as would continued consumer education efforts, these steps are not sufficient to achieve desired results because of the complexity of the mortgage lending process. Federal regulators operating under applicable fair lending and fair trade authorities must expand their efforts to ensure that consumers obtain the pricing information needed to make informed choices. This could take the form of a national registry of best available mortgage products or other efforts to assist local government and community-based organizations to help families better understand the pricing of mortgage products as they relate to borrower income,

credit score, and ability to meet down payment and closing cost requirements. Such readily available information – equivalent to the “blue books” or consumer reports that have successfully guided shoppers for automobiles and other consumer durables – would help consumers find the best available deal and help better protect them from the adverse consequences of aggressive and often deceptive marketing practices. Working to enable borrowers or their trusted advisors to be better shoppers and resist such marketing practices would go a long way to not only reduce the incidence of predatory lending but also stem the growth of foreclosures that inevitably follow in the wake of these same predatory lending practices.

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