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Market Channel Segmentation, Its Patterns and Effects:

What Role has the Government Played in Creating a Dual Mortgage Market in the Past and How Likely is One to Emerge in the Future?

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Dual mortgage markets are a direct descendent of key policy responses to the Great Depression. Prior to the Depression, nearly all mortgages were five-year balloons, such that homeowners needed to refinance their mortgage every five years. The capital crisis of the Depression limited the ability of households to find new credit when their mortgages reached maturity, which resulted in massive foreclosures. The policy response was to bolster the housing finance system by creating institutions, including Fannie Mae and the Federal Housing Administration (FHA), to provide access to credit for these populations, who would otherwise be forced into foreclosure and be shut out of the market for the foreseeable future. In so doing, Fannie Mae and FHA helped provide access to mortgage credit and homeownership for millions of families, but at a higher cost. In later years, both institutions, but particularly the FHA, would evolve to play a leading role in providing access to borrowers who would be unable to get a mortgage under prevailing underwriting standards but who could afford and reliably repay a mortgage if they were able to get one. In essence, the creation of Fannie Mae and FHA created a dual mortgage market, and in so doing expanded access to mortgage credit.

Today, however, a Google search on the phrase “dual mortgage market” yields over 1.5 million hits. A casual review of the listing makes clear one thing: there is a broad consensus that a dual mortgage market is a problem. To the extent that a dual market exists, the view is that it needs to be eliminated. For example, in response to a report showing black and Latino borrowers being more likely to receive government-backed loans, Del Rio (2012) writes:

> Moreover, the existence of a dual mortgage market is, in itself problematic and warrants ramped-up enforcement of fair lending laws.

This view, widely held in the advocacy community, arises from the notion that market forces, market discipline, and regulation are less effective in markets serving minority and lower-income communities. As a result, borrowers that rely upon these markets are inherently disadvantaged and subject to abuse, and these abuses can impose costs that exceed any potential benefits of homeownership. This view has been an important voice in discussions on the desired structure of the next generation housing finance system (Mortgage Finance Working Group, 2011).

How should one reconcile these two pictures of dual markets? What should we think about dual markets in the context of housing finance reform efforts as they continue at the beginning of Obama's second term? This paper explores these questions. It first motivates the existence of the dual market and what it has meant for borrowers and neighborhoods, for both good and bad. A particular focus is placed on the role that government played in its creation and persistence. The discussion reveals that there are several dualities in the market, and that these interact in ways that can yield net benefits but can also expose borrowers to abuse and significant risks. The analysis concludes that a dual mortgage market is unavoidable if one believes that broad access to mortgage credit and homeownership is an important policy objective, and argues that policymakers must position the government to limit the risks and abuses that such a market structure can produce.

Mortgage Underwriting and Finance: The Foundation for a Dual Market

Though this chapter focuses on government involvement in the persistence of dual mortgage markets, it is important to recognize that the market has been a large driver in its existence. The issues associated with dual mortgage markets emerge from the basics of banking finance and underwriting, coupled with the dynamics pertaining to how equilibria are achieved.

Lenders make decisions on whether to extend credit to borrowers based on a set of factors, including interest rate risk, liquidity risk, and credit risk, among others.

Interest rate risk exists because market interest rates could increase or decrease in the future. Lenders that have extended loans at prior lower rates are unable to take advantage of a more favorable environment until those loans become due. In U.S. mortgage markets, interest rate risk for lenders is compounded because borrowers generally have the ability to prepay their mortgages without cost when rates fall. The presence of interest rate risk is reflected in the differential pricing for fixed- and adjustable-rate mortgages, with fixed-rate products having a higher price commensurate with the higher exposure to this risk the product represents.

Liquidity risk arises because once a loan is extended a lender is less liquid and thus less able to provide credit in the event that an attractive loan option presents itself in the future. Liquidity risk pricing is observed in the market as differential pricing across loans of different terms, with longer term loans featuring higher interest rates.

Credit risk represents the likelihood that a borrower will repay a loan. Repayment is a function of two options that borrowers face. One option – the call option – presents the borrower with decision criteria on whether to prepay the mortgage. This option depends largely on prevailing interest rates and the transactions costs of prepayment (refinancing). The put option presents the borrower with decision criteria on whether to stop paying the mortgage and give it back to the lender, otherwise known as default. Pure finance theory suggests the default decision is made exclusively by comparing the value of the home and the value of the mortgage. If the mortgage is worth more (i.e., the put option is "in the money"), then the borrower should default. The purest form of this suggests that a borrower will default if the mortgage is a penny more valuable than the home, though this “ruthless” exercise of the option is not expected due to transactions costs associated with default. A second theory of mortgage performance holds that performance can be influenced by the occurrence of so-called “trigger events.” Trigger events are personal crises that either disrupt income or demand significant financial resources that limit the ability to repay debt. Losing a job, divorce, and sudden illness are typical trigger events. Empirical evidence supports that view that both option theory factors and trigger event factors are associated with loan performance.[1]

Recognizing that the equity position of a property is typically a function of macroeconomic factors that are beyond the control of individual borrowers, most key variables involved in credit risk underwriting are those that indicate a borrower’s historical propensity to repay loans and likelihood of succumbing to a trigger event. These include, among other factors, a potential borrower’s employment and income history, available financial reserves, and credit score, which is a summary measure of an individual’s past performance in repaying debts and other obligations. The major factor used to assess the likelihood that a loan will have negative equity is the downpayment, which establishes a loan-to-value ratio. The interest rate charged for a mortgage loan varies with the estimated probability of repayment: borrowers with lower estimated probabilities of repayment have to accept loans with higher interest rates and more restrictive terms, often referred to as subprime loans.

This underwriting approach establishes a framework through which a dual market can arise, because the characteristics used in credit underwriting decisions are not randomly distributed across the population, with ethnic minorities and lower-income people generally

[1] Quercia and Stegman (1993); Berkovec and others (1994); Deng, Quigley, and Van Order (2000); Van Order, Firestone, and Zorn, (2007).

holding a weaker position along nearly all the key dimensions. Many studies have documented wealth differences among people with different ethnic backgrounds;[2] Table 1 shows the extent of these differences and demonstrates that income and wealth-based differences have been long-standing and continuous. The table shows that median income for non-white and Hispanic families has remained at about 60 percent of the median income for white families for the past 20 years. Regarding liquid assets, the median value of financial holdings for white families has, with one exception, stood at 5 to 8 times that for minority and Hispanic families over the same period. The multiples for net worth over this period are typically between 5 and 7.

There are also major differences by income and ethnicity in individual credit scores, and evidence is clear that minorities are disadvantaged where credit scores are concerned[3]. Moreover, the differences are large. For example, Courchane, Gailey, and Zorn (2007) show that African-American and Hispanic borrowers have credit scores that are on average about 100 points and 50 points lower than the average score for white borrowers (a FICO score of 700). Similar disparities are observed among families grouped by income. Not surprisingly, as seen in Table 2, lower-income families are at distinct disadvantages regarding income (by definition), financial asset wealth, and net worth.

The presence of these differences has significant implications for the allocation of mortgage credit, and lenders can pursue two distinct approaches in response. In one approach, all lenders might implement a unified underwriting scheme – one set of rules for all borrowers. In this scenario, there will necessarily be differential access to mortgage credit and ultimately homeownership. Figure 1 shows this graphically in a stylized way. In the figure, there are two

[2] Gittleman and Wolff (2004); Avery and Rendall, 2002.
[3] Board of Governors (2007).

subgroups in the population, both with uniform credit quality distributions, and one group has a lower credit quality distribution than the other. The top panel shows the effect of using a single threshold for making allocation decisions. In this scenario, a greater proportion of members from Group A will receive a mortgage, and much of Group B will be shut out of the market completely.

Alternatively, the market could evolve and provide different products tailored to serve borrowers with varying credit profiles. This would widen the availability of mortgage credit and leave only the most risky borrowers fully excluded from the market. This is shown in the bottom panel of Figure 1. Here, more members of both groups receive mortgages, but nearly half of the members of group B – rather than only 20 percent as in Panel A – now have access to the credit market. While those receiving the second tier loans may pay a higher rate, they are able to receive a mortgage if they can pay the higher price as opposed to being shut out completely. Thus, we observe an expansion of access to credit with a dual market.

This dual market approach has been operationalized in the mortgage market through differentiation in product diffusion across population subgroups and neighborhoods segmented by race and income. Two key product categories emerged to serve those with weaker average credit profiles: loans guaranteed by the Federal Housing Administration (FHA) and subprime loans.

The FHA provides a 100% guarantee for loans that fit a specific profile that other sources generally bypass – borrowers with a low minimum downpayment, steady income stream, and low minimum credit quality rating as reflected in a credit score. Thus, the FHA product is attractive for families with little wealth but a steady (and strong) income stream and for those with damaged credit history. FHA loans are priced to account for these borrower characteristics: they have higher interest rates than those of loans serving borrowers with stronger credit profiles and also require borrowers to pay a mortgage insurance premium (that can be rolled into the mortgage payment).

Table 3 provides a snapshot demonstrating the FHA's importance for minority and lower-income communities. It shows that penetration of FHA loans has been and generally continues to be far greater among minority and lower-income communities. The table reports trends several years into the house price run-up, and we observe market shares in decline from the FHA's historical 10 to 15 percent home purchase market share.[4] The erosion in market share was driven by aggressive expansion by lenders offering subprime and alternative mortgage products, which began to outcompete the FHA. Even through this period of shrinking FHA market share, though, FHA had larger shares in minority and lower-income communities, with their share almost double the overall share among African-American borrowers. The pattern of low overall FHA market shares changed only at the depth of the crisis, when the supply of loans lacking a government support dried up.[5] Since then, FHA presence has been strong across the entire home purchase mortgage market and its total market share has consistently exceeded 30 percent. Despite this rise, FHA home purchase market shares still remain higher for minority and lower-income communities.

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[4] For consistency, data are reported only from 2004. HMDA data reporting requirement changes in 2004 allow for the identification of loans by lien status. Comparable figures for earlier years cannot be obtained.

[5] The FHA itself notes that it has become the primary sources of mortgage credit for minorities and lower-income families. The FHA is also critical for first-time homebuyers.

Table 4 reports shares for refinance loans only. FHA shares in this segment of the market were uniformly lower than those in the home purchase market and were low in absolute terms for many years. This makes clear that the FHA presence was strongest for home purchase lending and that refinances, which often led to subsequent problems, were less of an FHA issue.

Subprime loans are the other major product that caters to those with weaker credit profiles. Like FHA loans, subprime loans have features that better accommodate the lower-wealth, lower-credit quality profiles of many minority and lower-income borrowers. First, subprime loans are typically more lenient regarding credit quality requirements. Second, these loans often have repayment structures that vary monthly payments and interest rates in ways that reduce payments significantly in early years. These features also hold appeal for prospective borrowers with limited or little wealth and perhaps weaker credit histories. That noted, subprime loans have other features that could significantly damage borrowers. Monthly payments can jump significantly and leave borrowers with a heavy mortgage burden relative to income. Moreover, these loans often feature prepayment penalties that could prevent already vulnerable borrowers from transitioning to more attractive, lower cost products if they became available.

The evidence is clear that subprime loans are also more prevalent in minority and lower-income communities. A series of HUD reports in 2000 showed the penetration of loans with subprime characteristics into lower-income and minority neighborhoods in six metropolitan areas (HUD, 2000). They found that high cost subprime loans were three times more likely in lower-income neighborhoods than in high income neighborhoods. The pattern was more extreme across neighborhoods grouped by racial composition, with African-American neighborhoods showing subprime prevalence five times higher than predominantly white neighborhoods. In addition, research has found these neighborhood-level relationships for individuals grouped by race or income, and some of it has demonstrated the persistence of these neighborhood and individual relationships even after controlling for other relevant characteristics. For example, Mayer and Pence (2008) find that "even controlling for credit scores and other ZIP code characteristics, race and ethnicity appear to be strongly and statistically significantly related to the proportion of subprime loans" (p. 14). The effects are large: moving from the median ZIP code to the 90^{th} percentile in terms of black or Hispanic population share increases the estimated prevalence of subprime loans by between 30 and 45 percent.

As an interesting sidebar, evidence on the performance of these loans through the housing crisis suggests that all loans in the higher risk portion of the dual market are not created equal. While default and foreclosure rates rose among both FHA and subprime loans, the performance of subprime loans was much worse. According to data from the Mortgage Bankers Association, subprime mortgage delinquencies and foreclosures from the middle of 2008 through 2012 exceeded 30 percent and were over 40 percent for much of 2009 and 2010, whereas the FHA loans show combined delinquency and foreclosure rates of between 15 and 18 percent during the same period (Mortgage Bankers Association, 2012). Thus, there may be a compelling interest in regulating this segment of the market or, at a minimum, ensuring that information is available on the varying qualities of the products that serve it.

Other Dualities: Institutions and Compensation Practices

In addition to product differences across the segments of the dual market, we also observed differences in the players. These differences became acute in the 1990s as the market evolved. As noted by Apgar and Calder (2005), the United States housing market underwent a major transformation starting in the 1990s. The market originally was dominated by large financial institutions that provided retail delivery of services through loan officers resident in bank branches. The repeal of the depression-era Glass-Steagall Act, which established firewalls that limited the potential scope of banking institutions, re-introduced interstate banking and opportunities for financial institutions to achieve scale economies. The market responded strongly, and in just over ten years the mortgage origination market share of the largest banks grew from about 28.4 percent in 1990 to more than 75 percent in 2003. This concentration has increased even more since 2003; indeed, in the first quarter of 2012, one bank was responsible for more than one-third of all mortgage originations.[6] These large banks have increasingly relied upon secondary markets to provide the long-term funding and carry the long-term risk associated with markets.

These two trends – consolidation of lenders and the rise of the secondary market – helped spark the rise of the correspondent sector of the market. Banks became willing to accept loans that could be funded through the secondary market from (virtually) any source that could reliably generate volume, allowing brokers to establish more extensive networks of banks to serve and giving their business model increased viability. The business model for

[6] Campbell and Son (2012).

independent mortgage companies also relied on securitization, and the increased prevalence of secondary mortgage markets allowed these institutions to expand their scale and scope as well.

In the evolution of the dual market, these correspondent players played a more significant role as mortgage-related intermediaries in minority and lower-income communities. Some have argued that this is due in part to lenders not adequately providing banking services to residents of these neighborhoods that would allow them to establish familiarity and relationships with bankers who would provide them with mortgage credit, perhaps due to discrimination or because bankers in concentrated markets are not ruthlessly maximizing profits.[7] Some have pointed to regulatory disincentives for serving customers with somewhat higher risk profiles on safety and soundness grounds. Others argue that a key element of a lack of engagement with banks is the fact that the demographics of bank staff do not match the demographics of residents of underserved neighborhoods (Kim and Squires, 1995). Finally, some argue that banks have been less creative in developing attractive products and reaching out to potential borrowers in these neighborhoods and point to the prevalence of check cashing institutions in minority and lower-income neighborhoods as evidence of this.[8] Their presence, the argument goes, arises because banks do not offer products that appeal to people living in such communities.In the 1970s, these concerns, among others, led to a set of legislative responses to promote increased bank engagement in minority and lower-income neighborhoods. The Home Mortgage Disclosure Act of 1975 mandated the public reporting of data on mortgage lending activity, so that the extent to which banks were serving communities could be verified independently. The data that resulted from this Act has become a powerful

[7] Munnell and others (1996); Berger and Hannan (1998).
[8] Rhine, Greene and Toussaint-Comeau (2006); Caskey (1994);

tool for regulators and activists alike in monitoring and providing discipline to banks (Bostic and Robinson, 2005). The Community Reinvestment Act of 1977 was motivated by a desire for banks to invest local deposits more intensively in the neighborhoods from which the deposits originated. It resulted in the creation of a periodic bank examination scheme that assesses how banks are responding to local community needs. The Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (also known as the 1992 GSE Act) engaged the secondary market in this area by mandating that secondary market institutions provide liquidity to historically underserved minority and lower-income mortgage markets. This was put into practice through the establishment of annual affordable housing goals, such that the main government-sponsored mortgage enterprises, Fannie Mae and Freddie Mac, had to meet purchase volume and transaction targets in specified minority and lower-income communities. Research has shown that these pieces of legislation have been associated with increased lending and the origination of loans with positive profits.[9]

Research has also shown that these Acts have reshaped the distribution of loans and the character of the two parts of the dual mortgage market. For example, in a pair of articles in which An and Bostic (2008, 2009) examine the impact of the government-sponsored enterprise mortgage affordable housing goals on market structure, they find that the goals have been effective in increasing the competition among lenders for borrowers at the margin between the two parts of the dual market. The evidence shows that the GSEs promote prime market competition against the FHA and subprime lenders in places where goal activity is higher, resulting in an increased relative presence of less expensive prime loans and a reduction in the

[9] See, for example, Bostic and Robinson (2003), (2005), and Avery, Bostic, and Canner (2000).

relative prevalence of pricier FHA and subprime loans. The research shows that these relationships are strongest in high-minority neighborhoods. Simulations suggest the substitutions resulted in aggregate savings in excess of $2 billion.

One can thus think of the activity spurred by these legislative responses as a mechanism for establishing the boundaries of the dual market. Loans associated with compliance with the CRA, the GSE affordable goals, and other similar requirements lie in the margin between the underwriting standards of the two markets. Experiences with these loan products can in principle cause lenders to assess their underwriting guidelines and, to the extent that these loans exceed profitability thresholds, adjust them to incorporate more loan products to serve borrowers with stronger credit profiles. In the framework of Figure 1, this is the equivalent of shifting the higher threshold slightly to the left. This was an initial rationale for these Acts. The open question is whether the post-experience showed these loans to be sufficiently profitable and, if so, whether underwriting guidelines are adjusted to reflect this market reality. Considerable debate exists on both issues.[10]

Another important duality in the implementation of the market arose because of differences in pricing and compensation practices across origination channels (i.e., between banks and non-bank correspondent institutions). It had been common practice for agents working on behalf of lenders to receive higher compensation if they were able to get a borrower to agree to a mortgage with an interest rate higher than the benchmark rate for that

[10] Research on CRA-related lending conducted by the Federal Reserve showed these loans to be profitable, though less profitable than other loans in lender portfolios (Board of Governors of the Federal Reserve System, 2000). Others have noted that CRA-related and affordable housing goal loans have performed better than projected in general. These suggest that underwriting should be adjusted to accommodate this. However, others have argued that the incentives established by the CRA and other acts have been, on balance, and detriment to housing markets, families and communities.

mortgage product. For brokers and correspondent agents, the difference between the loan interest rate and the benchmark rate is called a yield spread premium; for bank loan officers, the spread is known as an overage.

Rose (2012) summarizes the logic and evidence in support of the view that yield spread premiums are more significant in broker compensation than overages are for bank loan officers. Briefly, because banks more often incur costs if a loan defaults, they have an incentive to limit overage size to constrain default risk. Because correspondents typically lack this concern, fewer constraints are applied. Moreover, bank loan officers often have additional volume-based compensation incentives, further reducing the overage incentive effect. In addition, there is evidence showing that the amount of profit from yield spread premiums and overages varies by origination channel, with potential profitability being higher for a given-sized spread at non-bank lenders compared to bank lenders.[11]

Taken together, these suggest that the non-bank correspondent channel has greater incentive to put borrowers in more expensive mortgage products. The many subsequent lawsuits and settlements associated with non-bank institutions' steering of borrowers to less advantageous (read: more expensive) products, which some call "push marketing," bears this out.[12]

Problems with the Dual Mortgage Market

While a dual mortgage market offers clear benefits by expanding access to mortgage credit and homeownership, it can have inherent problems that could induce inequities in access

[11] Woodward (2008).
[12] See, for example, Savage (2011).

to mortgage credit and could even leave those most disadvantaged worse off than if they had not pursued homeownership at all. Imperfect information in the higher-risk portion of the market may create information asymmetries that leave prospective borrowers at risk of exploitation. Such asymmetries may arise for several reasons. Primary among these is the fact that lower-income and lower-wealth borrowers often have less direct experience with mortgage markets, and their unfamiliarity with how their application is likely to be perceived and with the process generally can leave them vulnerable. Borrowers could accept terms and conditions that are worse than they otherwise might have been able to obtain. Furthermore, to the extent riskier borrowers are more likely to be served in the risk-based price proportion of the market, the interest rate offer they receive comes only after application is made or at least after information like the credit score retrieved. Thus, the costs of comparison-shopping are higher than in the prime market and the risk of price discrimination higher.

Research strongly suggests that conditions are ripe for these negative outcomes. Evidence shows that higher-risk borrowers often have an inaccurate perception of their credit quality, and that minority borrowers often believe their quality is worse than it actually is[13]. Evidence also clearly demonstrates the efficacy of housing counseling that increases familiarity with the mortgage process and basic underwriting and finance rules of thumb. Borrowers who receive counseling before entering the home-buying process have better outcomes in terms of obtaining a lower cost and more sustainable mortgage product, performing better once they have their mortgage, and curing when they face mortgage difficulties.[14]

[13] Courchane, Gailey and Zorn (2007).
[14] Hirad and Zorn (2002); Collins (2007); Abt Associates (2012a, 2012b).

There is ample evidence these negative outcomes do occur, and that they are more prevalent in minority and lower-income communities. The HUD (2000) report, cited above, offers clear evidence of this. Additional evidence shows that loan officers who are given discretion often seek additional rents from minority, lower-income, and other "disadvantaged" borrowers[15] and are rewarded with risk-spread premiums. Moreover, there is reason to believe that these abuses increase in frequency as the marketplace becomes more complex and a broader set of products is available in these neighborhoods.

This information problem, and the fact that it was concentrated geographically and in some segments of the population, meant that the issues associated with the three dualities identified in the previous section – product, institutions, and practices – were exacerbated in lower-income and minority communities. Borrowers in these areas were left especially vulnerable because the agents they were most likely to interact with were precisely those for whom the incentive to push market and engage in other abuses was highest. Few effective protections existed for these borrowers.

This problem was further amplified by the prevailing market dynamics. The rise of the housing market in the early and mid-2000s featured opposing trends for the two main product types of the higher risk portion of the dual market: subprime share grew dramatically during the period, while FHA shares fell sharply. This highlights institutional differences in the response to changing market conditions. Subprime lenders aggressively innovated, finding new outlets for their products and new customers to engage. By contrast, the FHA did not significantly change its product mix or business strategy during this time. Indeed, even in the

[15] Ayers and Siegelman (1995).

face of mounting evidence that some product offerings, such as loans featuring seller-financed down payments,were producing large losses, Congressional action, via the FHA Seller-Financed Downpayment Reform Act of 2009, was required to eliminate the product. Nimble responses were not possible.

One might draw a conclusion that this higher risk portion of the dual market might simultaneously, and perhaps paradoxically, have had too much and not enough innovation. Rapid innovation can create conditions that increase the likelihood that the individual treatment and problematic outcomes described above will occur. As new products and pitches flood the market, a premium will be placed on knowledge and understanding of the mortgage process. This is a clear stress point.

At the same time, our understanding of the nature of credit risk and loan performance evolves over time. As this knowledge base changes, one would like to see corresponding changes in products and practices. It is therefore desirable to have institutions and a legislative environment that are able to incorporate such changes seamlessly and without long time lags. Otherwise, those who rely upon the higher-risk portion of the dual market for access to mortgage credit could be stuck in products that cause them to fall further and further behind the mainstream. Ultimately, they might find themselves unable to leverage their initial access into a more favorable financial position.

Next steps: Government's Role in Shaping the Dual Market

This discussion makes clear that the government played an explicit role in the creation and perpetuation of a dual market. Legislative and regulatory actions as well as policy decisions that shaped the mix of available products and their character all contributed to the creation of this market structure. The result was an expansion of access to mortgage credit and the benefits such an expansion generated. However, this expansion did not come without a corresponding set of problems, as discussed in the preceding section.

The basics of underwriting and finance suggest that, if maintaining broad access to mortgage credit is to remain a key objective of policy, a dual mortgage market of some form, embodied in the presence of a range of product options, will be necessary. Assuming this goal is preserved during deliberations on the next generation of housing policy, a position I believe is desirable, the issue therefore is not if there should be a dual market but rather how to have a dual market that features adequate protections to prevent or at least limit abuse.

In this regard, government will clearly play a central role. There are at least three areas in which the government must take major steps in order to achieve a successful dual market that reaps its potential benefits while minimizing its costs and risks. These areas can be broadly thought of as products, players, and preparation. Significant steps have been taken already.

Perhaps the most important innovation has been the Dodd-Frank Act of 2010. Among other things, Dodd-Frank created the Consumer Financial Protection Bureau (CFPB), an agency with responsibility for pursuing an explicitly consumer-oriented regulatory agenda. A major problem with the regulatory regime that prevailed prior to the passage of the Act was that conflicts between industry and consumer interests played out behind closed doors, in the halls of regulatory agencies whose primary charge was preserving the safety and soundness of financial institutions and minimizing systemic risk. This limited the extent of vigorous public debate, and prevented consumer safety and soundness from having as strong an influence on policy as it might otherwise have. The creation of the CFPB changes this, which is a very welcome change.

Beyond internal institutional dynamics, the creation of the CFPB established important market-level reform. Importantly, it unifies a previously distributed regulatory structure, removing many aspects of the institution-based duality that allowed excesses and abuses to proliferate. CFPB's authority to write and enforce regulations that apply to both banks and non-banks offering financial products represents an opportunity to remove differences in regulatory rules that made conditions ripe for confusion and abuse. Moreover, this structure places clear regulatory responsibility in a single agency, which clarifies accountability. Taken together, these are important steps to promote the expansion of access to credit in ways that are not associated with significant increases in risk or the potential for abuse.

Regarding products, consistent with the approach taken in the Dodd-Frank Act of 2010, the government's primary role will be regulatory, with an approach of using pricing to signal relative safety rather than banning products outright. Such an approach recognizes that every product can be appropriate in the right circumstance; indeed, no documentation loans existed and were used long before the troubles experienced in the 2000s. However, every product is not necessarily the best for every borrower. Dodd-Frank takes key steps in this direction through its call for the creation of a regulatory scheme that signals to consumers a set of products that are relatively safe and more sustainable than many of the products that were promulgated during the housing run-up in the early 2000s. In addition, the Act moves regulators to provide incentives for borrowers to use such products.

The housing crisis revealed a fundamental flaw in the prevailing system of housing finance – the dominance of a transactions-based compensation scheme that had at best weak connections to subsequent loan performance coupled with a reliance on a secondary market that limited the risk exposure of most parties. This structure left no interest in the origination of a loan (save the consumer, sometimes) with an incentive to stop a deal if its details suggested excessive risk or imprudence. This "no skin in the game" feature helped accelerate some of the worst trends during the early 2000s, and resulted in a deeper crisis. Dodd-Frank addressed this to some extent with its realignment of incentives to give financial institutions more accountability for loan performance by requiring they hold a loss position in the event of poor future performance and by changing regulations concerning loan officer compensation. Furthermore, mortgage brokers and correspondents had an incentive to sell borrowers on an interest rate higher than demanded by the lender because they could earn the difference back in the form of a yield spread premium.

However, in the context of dual markets, there are players other than large lenders who are particularly significant and warrant direct attention. For example, independent mortgage companies and similar institutions lacking bank charters historically have received less regulatory scrutiny than other financial institutions that are important for mortgage markets. The development of a robust examination framework that permits the identification of problems and potential abuses in a timely manner must be a high priority for policy makers and regulators.

Credit rating agencies were another key player in the crisis. These agencies failed to accurately assess the risks represented by pools of subprime and other dual market loan products, which resulted in outsized unexpected losses to investors, banking institutions, and ultimately the entire financial system. Moving forward, one must consider whether the structure that prevailed at the time of the crisis, with ratings agencies acting on behalf of the issuers of securities, is prudent. One might expect agency problems, such that risks are underemphasized, to emerge through such an arrangement, and it could be that this structure exacerbated underlying market problems. Perhaps one should explore a return to the historic role of ratings agencies being agents for buyers, either through individual investors establishing policies whereby they will only rely on ratings generated via a buyer-based set of rules or by regulatory fiat.

Finally, as noted earlier, mortgage brokers emerged as an important conduit for families seeking mortgage finance during the 1990s and 2000s. If they remain so, , then the regulation of brokers will help determine access to mortgage credit and homeownership for minority and lower-income families. As was the case for lenders, broker compensation was tied to the completion of a transaction and not linked to the performance of the loan that emerged from that transaction. This incentive structure allowed brokers to have little concern about the viability of a mortgage arrangement and undoubtedly contributed to the widespread prevalence of the unsustainable loans that were at the heart of the mortgage crisis in many markets.

There are at least two possible approaches to changing broker incentives. One would be to create a structure that parallels that for lenders and require them to have “skin in the game,” perhaps through a bonding requirement tied to loan volume, an origination fee schedule where the fee is paid over time based on continued loan performance, or by establishing some broker liability in the event that a loan's performance fell outside of some predetermined range and was identified to be a clear outlier. Alternatively, one might use information as a market discipline. In this approach, the performance of all loans in a broker's portfolio would be tracked and assessed relative to a performance benchmark, and this assessment could be made public, perhaps in the form of a letter grade. This information-based system would be similar to the reporting system used for restaurant inspections in California, which has been shown to positively impact restaurant adherence to inspection guidelines (Simon, et al, 2005).

Considering brokers points to an important reality: the government role in managing the dual mortgage market must extend beyond the federal government. Brokers are regulated at the state level. Effective closure of broker "holes" that allow for the possibility of abuse will require 50 distinct regulatory actions. Coordination of this effort will be a significant challenge. Policymakers must find methods for overcoming it.

Ultimately, though, one should have serious doubts about the ability of a rule- and regulation-based system to consistently prevent abuses from arising in markets, especially as time passes. There is a long history of market players finding the weak spot or spots in a regulatory system and devising schemes to exploit them. Moreover, there are few examples of "foolproof" regulatory regimes if market forces are allowed to freely operate in some fashion. This truth is reflected in the fact that laws require virtually every regulation to be evaluated and assessed over time for efficacy and effectiveness (and all are ultimately reviewed at some point); experience always uncovers problems and loopholes.

This agility of markets suggests that an important, and perhaps more enduring, approach is to work to reduce the asymmetries that create the conditions that allow abuses to occur. Much of the abuse we observed during the housing crisis resulted from minority and lower-income borrowers' unfamiliarity with the mortgage process or with their own credit quality coupled with misaligned incentives that generated significant financial gains for those who put borrowers in expensive higher risk mortgages. Evidence on mortgage counseling has shown that strategies can be effective in increasing familiarity and thereby reducing the potential for abuse. Clearly, the recent past has shown that a system in which mortgage counseling is optional or passively made available to borrowers will not be adequate to counter rapidly evolving markets where product offerings can change significantly. New strategies are needed to prepare people for homeownership.

One possible approach here is to diffuse knowledge on the home-buying process, mortgage underwriting, and credit quality more thoroughly through society. An obvious vehicle for this is the education system, particularly at the secondary school level. Since nearly all Americans pass through some sort of secondary school education, introducing a curriculum requirement on home buying financial literacy would ensure a minimum level of knowledge and awareness for all. With an increased knowledge base among borrowers, we should observe a squeezing out of the least sophisticated exploitation techniques. In an optimal world, we will create a wary population of homebuyers that understands the basics of underwriting and has an intuitive feel for when abusive behavior might be in the air.

Another government role: Creating a bridge between markets

One further role that government should play in the context of dual markets is the promotion of responsible and sustainable innovation. As noted, the higher risk portion of the dual market can have both too much and too little innovation as market conditions change. This can leave borrowers either vulnerable to serious abuses or stuck in products far less beneficial than others that could be accessible in an appropriately evolved market. The government will be needed to mediate this dynamic.

The government historically has played this role through its support of community-based institutions such as the Community Development Financial Institution fund as well as through enforcement of the Community Reinvestment Act and the affordable housing goals for Fannie Mae and Freddie Mac. The government should continue to play this role in a future housing finance system. One interesting proposal is to establish a mortgage transactions fee and use the proceeds to create a fund, called a Market Access Fund, providing competitive grants to test innovative products that lie in the space between the two portions of the dual market (Mortgage Finance Group, 2011). This type of proposal merits serious consideration. Perhaps the FHA could be a "locus of innovation" regarding products to serve these margins.

Concluding Thoughts

The 2006 housing crisis and subsequent collapse of the institutional foundations of the housing finance system has sparked a vigorous debate about the shape and nature of the next generation system of housing finance. In August 2010, then-Treasury Secretary Timothy Geithner, in his remarks opening a major conference focused on the subject, clearly laid out the objectives of this pursuit: "a carefully designed guarantee in a reformed system, with the objective of providing a measure of stability in access to mortgages" (Geithner, 2010). In considering these remarks, one should view stability as referring not only to the broad financial system – undoubtedly a key concern for Geithner – but also to the finances of households considering how to be housed. These households face risk to be managed as well. Achieving this goal will require a multi-faceted approach. The Dodd-Frank financial reform act was a first salvo in the reframing of housing finance. It established some high-level policy objectives, but left many details to regulatory bodies to hash out.

Discussions at that conference and in many other forums on that topic invariably migrated to the issue of a "dual mortgage market" and its desirability. While it is clear that this type of market structure market carries risks, the fundamentals of underwriting and the realities of the distribution of wealth and income across the population make clear that dual markets will be necessary if the charge to keep access to credit broad and affordable is taken seriously. The challenge for policy makers remains how to accomplish this in a safe and sound fashion.

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Table 1. Median Value of Family Wealth, Income, and Savings, by ethnicity (in thousands)

	Net Worth (4)		Financial holdings (6)		Income (1)	
	White	Non-white, Hispanic	White	Non-white, Hispanic	White	Non-white, Hispanic
1989	121.7	10.6	27.3	3.4	51.0	24.6
1992	105.7	18.2	23.8	4.5	46.6	28.0
1995	108.8	22.0	26.8	7.9	46.4	29.0
1998	128.0	22.1	40.5	8.7	51.4	31.1
2001	150.6	22.4	48.6	8.9	55.4	31.5
2004	162.2	28.6	42.1	5.8	56.7	34.3
2007	179.7	29.5	47.4	9.4	54.5	38.8
2010	129.8	20.5	37.1	6.0	52.9	34.6

Source: Survey of Consumer Finances, Board of Governors of the Federal Reserve System, multiple years.

Table 2. Median Value of Family Wealth, Income, and Financial Assets, by income (in thousands)

	Net Worth (4)		Financial Assets (6)		Income (1)	
	Second Quintile	Fourth Quintile	Second Quintile	Fourth Quintile	Second Quintile	Fourth Quintile
1989	41.8	113.9	7.4	25.5	24.6	68.6
1992	42.1	114.3	5.9	26.4	23.3	63.7
1995	49.1	106.8	8.7	30.5	24.7	63.8
1998	46.2	149.0	8.9	48.4	27.1	71.7
2001	47.2	173.5	10.0	68.6	30.2	79.4
2004	39.6	184.1	5.7	55.8	29.5	78.0
2007	39.6	214.5	7.4	62.3	30.2	78.7
2010	27.7	127.1	5.3	39.2	28.5	71.2

Source: Survey of Consumer Finances, Board of Governors of the Federal Reserve System, multiple years.

Table 3. FHA purchase loan share for all borrowers, minority borrowers and borrowers in lower-income neighborhoods, 2001-20011

	All loans	African-American borrowers	Hispanic borrowers	Lower-income neighborhoods
2004	9	17	12	14
2005	6	10	6	8
2006	6	10	6	8
2007	8	15	10	11
2008	29	50	44	39
2009	42	62	63	54
2010	41	62	64	54
2011	35	56	59	48
2012	31	54	55	44

Source: Home Mortgage Disclosure Act data, count includes all owner-occupied first-lien loans, calculations by Madura Watanagase.

Table 4. FHA refinance loan share for all borrowers, minority borrowers and borrowers in lower-income neighborhoods, 2001-2011

	All Loans	African-American borrowers	Hispanic borrowers	Lower-income neighborhoods
2004	3	8	1	5
2005	2	1	3	3
2006	2	4	2	3
2007	5	9	4	6
2008	17	35	20	24
2009	16	42	29	28
2010	12	29	21	20
2011	8	20	15	14
2012	10	20	18	15

Source: Home Mortgage Disclosure Act data, count includes all owner-occupied first-lien loans, calculations by Madura Watanagase.

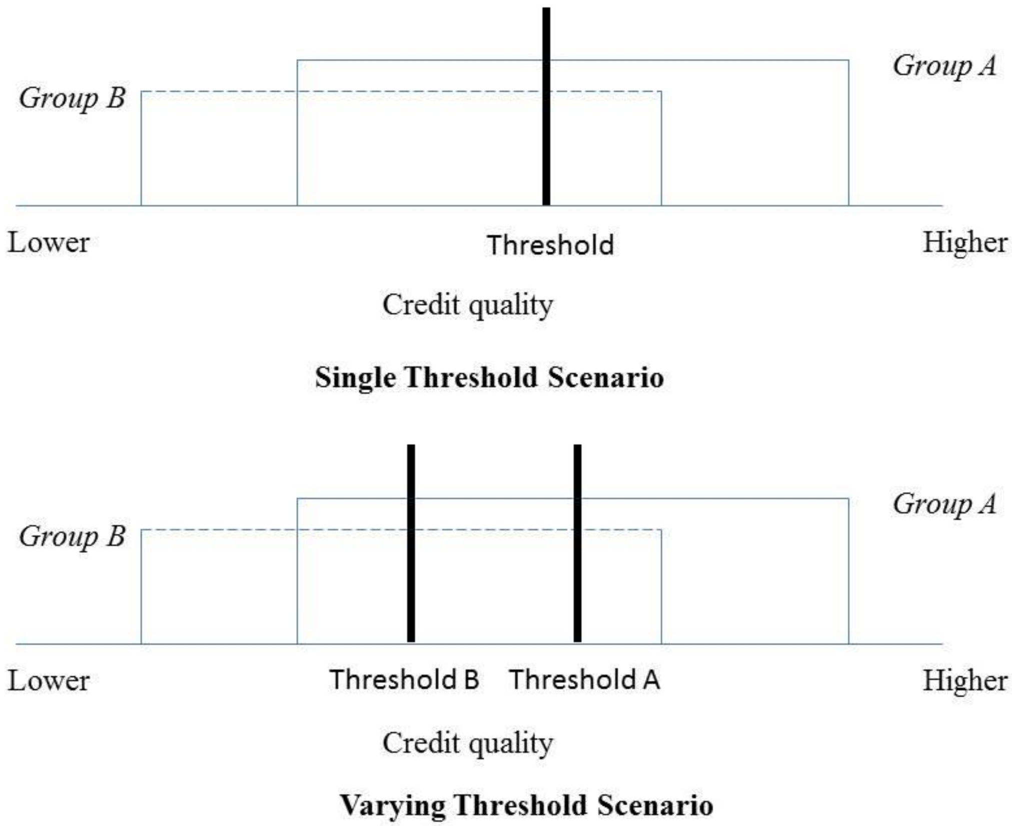

Figure 1. Lender Underwriting Policies and Access to Credit