Joint Center for Housing Studies
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Enlisting Market Mechanisms to Police the Origination of Home Mortgages

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Introduction

The collapse of the subprime mortgage market has revealed many flaws in the financing of home mortgages in the United States. Financial firms may have been too quick to originate and repackage loans into securitized pools funded through the issuance of mortgage backed securities. Investors in these securities may have too eagerly accepted apparently attractive rates of interest without understanding fully the risks inherent in the underlying loans or the precariousness of the financial position of the borrowers upon whose solvency repayment depended. Credit rating agencies, drawn to the fees associated with rating services, may have bestowed unduly generous ratings on mortgage backed securities without a dispassionate and fully informed analysis of the underlying economics. Borrowers may have casually accepted loan offers and refinancing proposals without adequately considering the implication of the terms of repayment and the likely consequences were interest rates to rise and real estate prices fall. Financial regulators may not have understood the value of consumer protection laws of the sort traditionally imposed at the state level but increasingly preempted by federal officials in an effort to promote uniform national rules. Finally, policy analysts at all levels may have failed to appreciate the extent to which a dramatic contraction of real estate lending could impair the liquidity of other sectors of the credit markets. In short, the sub-prime crisis presents numerous and overlapping instances of possible market and regulatory failure.

In this paper, I propose to focus my attention on just one facet of the sub-prime crisis: the market failures – or perhaps more accurately – consumer abuses that have taken place at the front end of mortgage financing, the point of contact between borrowers the mortgage lending industry, where home mortgage loans originate. Loan origination is the point in the home financing process where the precise terms of mortgage loans are set. Many of the most controversial aspects of subprime lending – interest rate resets, assignment of borrowers to loan categories, and repayment penalties – are established in the course of loan origination. In the improper classification of borrowers as subprime or Alt-A credits when their actual credit histories warranted more favorable treatment also takes place at the loan-origination stage.[1]

One reason why so many consumers were steered into such palpably inappropriate home mortgages is the increasing important connection between loan originations and broader capital

[1] In this article I do not focus on the problem of borrowers who should not have received any sort of mortgage financing.

markets. As is explained below, the value for most mortgages in the United States are tied directly to the capital markets. The more inappropriate the terms of the loan – that is, the higher the economic cost to the borrower – the greater the value of a loan tends to have in the secondary mortgage market. Through payments such as yield spread premiums and the analogous transfer of economic benefits for directly-originated loans, loan originators can often re-coop the additional value gained by steering borrowers into inappropriate mortgages. (See Jackson 2007; Appendix A) These arrangements create a powerful incentive for loan originators to steer borrowers into inappropriate loans and have contributed (perhaps greatly) to the ongoing crisis in the sub prime markets.

While the growing linkage between loan originations and capital markets has produced substantial conflicts of interests in the loan origination process in the recent past, my argument in this paper is that the secondary market pricing mechanism also offers a potentially attractive mechanism for policing consumer abuses in loan originations. Consider, after all, that a loan is nothing more than a stream of promised payments from the borrower. The projected level of those payments depends on a number factors – the duration of the loan, the rate of interest, reset provisions if any, as well as limitations on prepayment – plus, of course, the credit-worthiness of the borrower as well as the value and nature of the property securing the mortgage. The modern mortgage banking industry with the assistance of the secondary mortgage market has developed extensive technology that in a matter of minutes can price the vast majority of mortgages based on fewer than a dozen objective characteristics. As a result of these developments, mortgages have become another form of commodity with a readily ascertainable market price at any point in time.

Having identified home mortgages as commodities, one can then ask the question of whether regulatory techniques employed in other commodities markets might profitably be imported into the oversight of loan originations. In a sense, this is terrain that others – most notably Patricia McCoy and Kathleen Engel – have already plowed by suggesting the imposition of a suitability requirement on loan originators. I build on this line of argument here by suggesting that a better set of securities laws to incorporate in the regulation of home mortgages would be the mark-up rules and duties of best execution that (a) govern the extent to which securities firms can mark up the price of securities purchased on the open market and (b) impose obligations on these firms to execute trades in the most attractive market for their customers' interests. In particular and as I explain in more detail below, I propose that loan originators be

required to maintain contemporaneous records of the market value of all mortgage loan originations thereby establishing the implicit mark up on all loan originations. Originators should also establish procedures (susceptible to ex post validation) that each loan origination represented the most advantageous classification for the borrower at the time of origination given the objective characteristics of the borrower and the borrower's loan.

By requiring loan originators to keep records of the mortgage mark-ups, regulatory officials could readily develop an aggregate picture of the origination practices of individual mortgage brokers and mortgage lenders, and could then focus their supervisory efforts on firms with unusual patterns of mark ups or repeated failures to establish most advantageous classification. Oversight of this sort is common in the securities industry and is often employed where individual violations are difficult to detect and verify. (See Jackson 2008; Appendix B.) In addition to flagging potential sources of consumer abuse, aggregate data of this sort could also assist regulatory officials in policing existing legal standards, including those imposed under the Real Estate Settlement Procedures Act of 1974 (RESPA), the Equal Credit Opportunity Act, the Truth-in-Lending Act (TILA), and the Home Ownership and Equity Protection Act (HOEPA). Finally, one could readily envision how individual borrowers could benefit from the disclosure of mortgage loan mark-ups, both by creating greater transparency in the loan origination process and allowing consumer protection organizations to offer advice regarding the overall quality of origination services of different vendors.

In Part One of this paper, I describe in greater detail how the origination of home mortgages are financed in this country, emphasizing the extent to which loan originations are linked to secondary market pricing mechanisms. I also review how these pricing linkages create perverse incentives for loan originators to exploit less sophisticated borrowers. In Part Two, I explore how these same market mechanisms could be enlisted to safeguard consumers by requiring loan originators to maintain contemporaneous records of the implicit mark up on all loan originations. I also describe how a duty of best execution might be incorporated into the field of home mortgage origination to prevent borrowers from being steered into less advantageous loan programs. In both cases, I sketch out how existing systems of secondary market pricing could be adapted to support these proposed new legal requirements. Finally, in Part Three, I discuss the manner in which regulatory authorities might use data on loan origination markups to oversee loan originators and police existing legal standards.

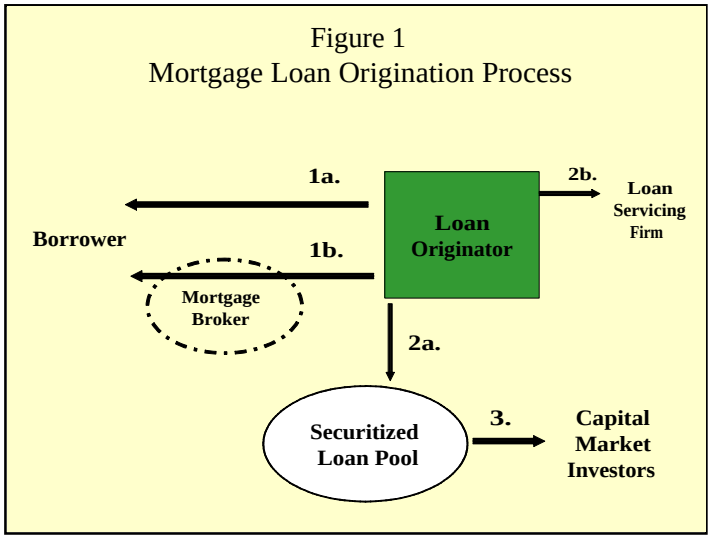
Part One: Mortgage Loan Originations and Modern Capital Markets

Time was with specialized financial intermediaries – both savings banks and savings and loan associations – were the dominant providers of home lending in the United States. These firms both originated and financed home mortgages. These financial institutions not only were responsible for evaluating credit risks, but also handled servicing arrangements – that is the receipt and processing of monthly payments – and dealt with foreclosures and other work out arrangements when borrowers ran into trouble. Over the past three decades, each of the major components of home financing has developed to specialized firms. Some firms specialize in the origination of real estate loans, often with the assistance of mortgage brokers. Through asset securitization, the capital markets are the primary source of mortgage financing with a wide range of institutional investors – both foreign and domestic providing the bulk of funds for U.S. home mortgages. Other firms specialize in servicing home mortgages, typically purchasing servicing rights in exchange for fees paid as long as the underlying loans are outstanding, and still others provide foreclosure and workout services. Finally, the credit rating agencies assume a key role in evaluating credit quality, rendering their judgments with respect to securitized loan pools as opposed to individual loans. In short and as Lowell Bryant predicted many years ago, the American bank has been broken up.

Modern mortgage financing has many advantages. Firms can operate with much greater scale than was ever possible in old geographically segmented lending markets, and the price of mortgage financing (as compared with risk-free government loans) has dropped precipitously. In addition – and of critical importance to my argument in this paper – mortgage prices are now directly tied to the capital market. Consider Figure One. Suppose a borrower wants to obtain a $100,000 loan through a mortgage broker, in recent years the most common channel of home mortgage financing in the United States (1b). Typically, the loan will be originated at an "above par" rate of 102, which means that the loan originator will pay the borrower $102,000 for the loan. The bulk of these funds – the $100,000 amount will be passed along to the borrower to finance his or her home purchase, and the remaining $2000 known as a yield spread premium, will typically be pocketed by the mortgage broker as compensation for services. (The broker may also receive additional direct compensation payments from the borrower in the form of loan origination and processing fees.) In fairly short order, the loan originator will typically transfer that loan to a securitized mortgage pool, but at a somehow higher price of say 103, which will provide the loan originator a $1,000 profit for its efforts (2a). The loan originator may also

supplement its profits by dividing up the servicing rights on the loans and selling them off to a loan servicing firm, typically about 1/8th of a percentage point of the loan amount, which would raise the proceeds to the loan originator in this example by $125 (2b). The price that the securitized loan pool is willing to pay for the loan originator's loans is directly tied to the capital markets current valuation of home mortgage credits at the time of origination, factoring the expenses associated with assembling the loan pool including the costs of obtaining a credit rating and various other expenses of assembling and underwriting the transactions.

Figure 1
Mortgage Loan Origination Process



Under stylized conditions of perfect competition, market pressures should force industry participants to offer consumers home financing alternatives that reflect the costs associated with underwriting their loans – both the costs of origination and the costs of bearing the credit risks associated with the borrower's loan – as well as a reasonable profit margin. But market practices do not always comply with economic theory. On-going investigations into the mortgage origination process suggest that market forces do not work efficiently in this context and often times, borrowers end up paying more than they should for loan origination services and also often commit themselves to loan terms that are less advantageous than would otherwise be available. Although many factors undoubtedly contributed to these abuses, I want to focus here on the role of mortgage financing arrangements described in Figure One as an important contributing factor.

To begin with, there is a fairly obvious problem of allowing borrowers to be charged redundant and overlapping direct charges on borrowers. As I have document in my own research, mortgage originators often charge borrowers direct fees (loan origination fees and other

processing charges) in addition to the compensation that they receive in the form of yield spread premiums derived from the secondary market price of originated loans. These charges add additional costs to the loan origination process and – the evidence suggests – these costs are not fully offset by compensation received from yield spread premiums. So, when mortgage brokers receive both direct fees and yield spread premiums they tend to receive higher levels of compensation, perhaps on the order of an extra $900 per loan according to my research several ago on prime mortgages (Jackson 2008).

Second and more perniciously, mortgage brokers have an incentive to steer borrowers into loan arrangements that will generate a higher price in the secondary market. This can be done most easily by encouraging the borrower to accept a loan with an above par interest rate (Jackson 2007), but the same effect will occur if the borrower agrees to stringent prepayment penalties, higher reset levels on variable loans, or even unnecessary escrow arrangements that generate additional revenues for loan originators. In addition, there is ample evidence that originators can increase the second market price of a borrowers loan by moving the borrower into a less desirable loan classification (from prime to Alt-A or from Alt-A to subprime).[2] A cursory review of recent enforcement actions and settlements suggests that many mortgage brokers and loan originators engaged in this sort of behavior.

Finally, the imposition of loan discount fees can further pad the pockets of loan originators. Loan discount fees are supposed to allow borrowers lowering their monthly payments by paying down a mortgage interest rate from the level required for a par loan. In some instances – and perhaps more commonly in the subprime markets – originators charge borrowers loan discount fees but simultaneous steer them into loans that don't reflect interest rate reductions of the sort implied by the discount rates. Without examining the price of the underlying loan (that is, whether it is a par loan or an above par loan), it is extremely difficult to determine whether loan discount fees are being charged appropriately. But again evidence from recent enforcement actions suggests that at least some mortgage originators are charging consumers substantial loan discount fees without appropriate offsetting benefits (Jackson 2007).

[2] At least two possible reasons explain this increase. First, the market may have more highly valued loan pools with higher interest loans than lower-interest but higher quality loans. Alternatively, the pricing mechanisms of the secondary market may have been sensitive enough to provide a premium when a subprime or Alt-A pools included some borrowers who could have qualified for lower-interest loans and whose presence improved the average quality of the subprime and Alt-A pools.

Box A: The Trilateral Dilemma in Financial Regulation

Problems quite similar to the ones posed in the origination of home mortgages confront consumers' other financial transactions. Market professionals often occupy positions of trust that permit them to extract side payments as a result of their capacity to steer the financial decisions of consumers. These situations typically involve three separate parties: a consumer, a market professional with authority to make or influence decisions made on the consumer's behalf, and a third-party service provider who can profit from those decisions and make side payments to the market professional in order to influence the professional's recommendation. Many times, consumers are ill-equipped to prevent market professionals from exploiting their power to demand side payments in abusive and economically wasteful ways. Reflecting the three-cornered nature of these transactions, I have labeled this specialized class of agency problem the trilateral dilemma of financial regulation.

I have recently presented a full treatment of this subject in Howell E. Jackson, "The Trilateral Dilemma in Financial Regulation," in IMPROVING THE EFFECTIVENESS OF FINANCIAL EDUCATION AND SAVINGS PROGRAMS (Anna Maria Lusardi, ed.) (forthcoming University of Chicago Press 2008) (attached as Appendix B). For current purposes, it is sufficient to note that the relationship between a consumer and a mortgage broker who selected a mortgage lender and receives a yield spread premium in return has all the hallmarks of a potentially abusive trilateral dilemma. The mortgage broker or direct loan originator occupies a position of trust and confidence and a plays a major, often exclusive role in selecting the consumer's loans. Under current disclosure rules, the mortgage broker's compensation including its receipt of a yield spread premium is difficult for the borrower to monitor, particularly as the market price of mortgage broker service is not well-defined and brokers may engage in a substantial amount of price discrimination at the expense of unwary consumers. Finally, the mortgage broker's compensation is extracted in the midst of a larger, complex transaction and the borrower's attention is likely to be focused on other matters. Under these conditions, market forces are unlikely to protect consumers from abusive practices and excessive charges. The same conflicts are present when a direct lender steers a borrower in a loan that generates additional profits for the loan origination firm.

In my article on the Trilateral Dilemma, I reviewed the many different regulatory strategies that have been employed to police this recurring class of agency problems in the context of consumer finance. One strategy which I identified as especially promising for these kinds of regulatory problems is an "aggregate disclosure strategy," whereby regulatory authorities require financial firms to maintain information on a range of individual transactions and then use this information (or allow the market to use this information) to evaluate firm performance. The proposal presented in this essay is an attempt to bring such an aggregate disclosure strategy to bear on the problem of home mortgage originations.

Part Two. Defining Loan Mark-Ups and Duties of Best Execution for Loan Originations

Over the past few years, I have written extensively about the abusive potential of modern loan origination practices in the U.S. home lending markets, focusing particularly on the tendency of mortgage brokers to exploit the ignorance of some customers to extract the additional profits by steering borrowers into loans with higher interest rates that pad mortgage broker compensation. In the past, some analysts argued that market forces should safeguard consumers from such alleged abuses and doubted the validity of empirical evidence that mortgage brokers were earning substantially greater compensation from loans with yield spread premiums and that minorities were particularly vulnerable to such abuses. (See Jackson 2007; Appendix A.) For current purposes, I will assume that intervening events have largely resolved the question of whether consumer abuses do in fact constitute a substantial problem in the loan origination process as well as the notion that market forces are likely to adequately protect all segments of the lending market in the manner that some analysts had predicted. My goal in this paper is to consider the extent to which regulatory agencies might enlist information that exists as a result of robust secondary markets as a mechanism for policing mortgage lending abuses of the sort outlined above. At the heart of my analysis is the notion of a loan mark-up, that is the amount by which the market price of a loan exceeds its par value (typically the face amount of the loan, but, in the case of loans with bona fide loan discount fees, the face amount minus the amount of discount points).

A. A Stylized Model of Loan Markups

For every mortgage loan underwritten through the process sketched out in Figure One, there are several levels at which mark-ups occur and could be measured for regulatory purposes. The first markup occurs at the level of origination, whether through mortgage brokers (in the case of channel 1b) or directly from the loan originator (in the case of channel 1a). Where transactions are originated through mortgage brokers, the price of the loan is usually determined through the lender's rate sheet in effect at the time of origination and is typically documented in a loan confirmation that the loan originators issue at the time the borrower's rate is locked in. Occasionally the price will be renegotiated again before closing if the origination process takes longer than the lock-in period or if there is some other intervention. But in either case, the parties ultimately agree upon a "retail price" for the loan, and the mortgage broker's

compensation will typically be the sum of that retail price minus the par value of the loan plus whatever additional fees the mortgage broker receives for its loan origination services.[3]

When a loan originator makes its loan directly (through channel 1a), the loan documentation may not include explicit reference to a retail price for each loan. For internal control purposes, however, most financial firms that originate directly will have an internal price of each loan and the firms use those loans to calculate the profitability of each lending transaction and in some cases, such as at Countrywide, these margins are used to pay sales commissions to loan officers. One could therefore speak in terms of an "internal" retail price of direct loans, and use that price (combined with the par value of each loan) plus the direct fees charged by the institution to generate a measure of total compensation comparable to the one outlined above for mortgage brokers. Or, one could refer to the contemporaneous rate sheet of the loan originator or comparable organizations to estimate the prevailing retail price of loans equivalent to each borrower's loan, and then use that estimate to derive the loan originator's implicit compensation for each loan.

An alternative approach would be to focus on the wholesale price of each loan, by which I mean the market value of the loan for purposes of sale into securitized loan pools. As outlined above, this price will typically be higher than the retail price, as the additional margin finances the costs associated with transferring the loan into wholesale market. A broader measure of the costs that borrower's face in financing their mortgages is the wholesale cost of the loan (minus the loan's par value) plus any direct fees paid for loan originations.[4]

Finally, one could calculate the "adjusted" wholesale price of loan originations that would increase the price of home mortgages to include the proceeds for the sale of ancillary functions, like loan service or the holding of escrow accounts. In the case of loan originators (or securitized pools) that retained these services, one would have to factor in a estimate of the market value of such services. When added into the simple wholesale price of a mortgage, this additional data could generate another estimate of the gross compensation earned on a loan origination.

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[3] Other fees paid for loan origination are supposed to be disclosed on HUD-1 forms, though one needs to distinguish those HUD-1 fees that are paid over to bona fide third party vendors (like appraisers and title insurance companies) from those retained by the loan originator. In some instances, mortgage brokers rebate to borrowers some (or even all) of the excess of the retail price of the loan over its par value. In those instance, these rebates reduce the mortgage broker's compensation.

[4] As mentioned above, one would need to subtract out any rebates paid over to borrowers from either the mortgage broker or loan originator.

In sum, one could in theory develop for each mortgage loan through the modern securitization process, the following information:

1. Direct fees paid by the borrower
2. A retail price of the loan over par value
3. A wholesale price of the loan over par value
4. An adjusted wholesale price of the loan over par value.

For the moment, I leave to the side the question of how difficult it would be to collect this data, and consider initially the uses to which information of this sort might be put and also how the collection of mark-up information might compare to other possible regulatory responses to the current crisis in sub-prime lending.

B. Potential Uses of Loan Pricing Information

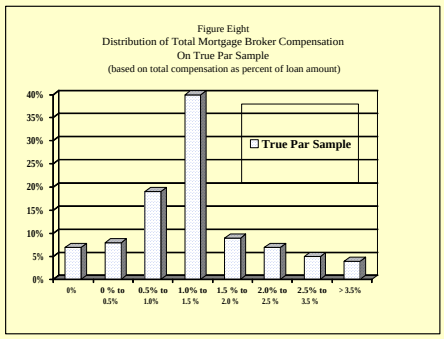
Broadly speaking, one might think of the usefulness of mark-up data first as a source of aggregate information about particular firms – whether mortgage brokers or loan originators – and then also as a source of information for individual borrowers.

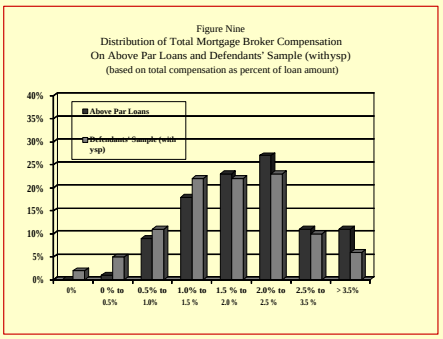
1. Aggregate Perspective on Compensation of Mortgage Brokers & Loan Originators

When dealing with complex financial transactions, the specifics of a particular transaction may be hard to assess, but one can get a much clearer picture if one considers the aggregate data surrounding each firm's performance. So, for example, when I was studying the yield spread premiums of a major mortgage lender several years ago, I obtained through discovery aggregate data about the compensation of mortgage brokers working with this lender on loans with yield spread premiums as compared with mortgage broker compensation on loans without yield spread premium. I then assembled estimates of total mortgage broker compensation on each loan, generating a measure that was equivalent to the retail markup described above plus direct fees. As reproduced in Figure Two, this aggregate analysis revealed that mortgage brokers were making much more money on loans with yield spread premiums and the distribution of compensation was much wider, suggesting that some consumers were having trouble monitoring mortgage broker compensation on loans with yield spread premiums and that mortgage brokers were exploiting that difficulty to earn additional compensation on loans with yield spread premiums. In subsequent statistical analysis controlling for borrower characteristics

that might justify higher broker charges, I found that the price differential for loans with yield spread premiums persists, and were several hundred dollars higher per loan for African American and Hispanic borrowers.

Figure 2
Comparison of Mortgage Broker Compensation
(Direct Compensation versus Compensation with Yield Spread Premiums)





Source: Howell E. Jackson & Laurie Burlingame, *Kickbacks or Compensation: The Case of Yield Spread Premiums*, 12 Stan. J. Law, Bus. & Fin. 289 (2007).

With similar information about loan mark ups for all mortgage brokers and loan originators, one could conduct similar analyses. For example, within any given regional market, regulatory officials could review the mark up practices of both loan originators and mortgage brokers (again controlling for objective factors that could reasonably justify higher costs). Relatively simple statistical tests could reveal if any firms were engaged in unusual pricing practices and it would be relatively simple to test for racial discrimination in markups or origination compensation. Individual loans with especially large markups could be tagged for review in periodic examinations. While these reviews would be particularly useful for supervisory officials,[5] one could imagine that loan originators would want to collect similar data on mortgage brokers with whom they do business in order to ascertain whether these firms were engaged in markup or compensation practices that could create regulatory risks for the lending firms.

[5] While I cannot disclose the details of these investigation, I can report that I have worked with regulatory officials in undertaking just such analyses and that the investigative approach outlined in the text has proven to be both practical and informative in situations where regulatory officials have had access to the kind of information I am describing.

2. Information for Individual Borrowers

Especially in a context where markup information on mortgage loans were more widely available, individual borrowers could be greatly assisted in the negotiation of individual loans. To begin with, one might also imagine consumer advocacy groups – or independent private firms – reviewing markup data of this sort to assess the competitiveness of various providers of mortgage loans and then to develop some sort of rating system that would assistant consumers in picking vendors and evaluating the terms on which they are being offered loans. Borrowers might be able to rely upon this sort of rating mechanisms in order to select firms with whom to do business. But even in the absence of ratings, consumers would benefit greatly from having great knowledge of typical levels of origination compensation (markup plus fees) – roughly $1500 in my studies of par value loans made several years ago. This information would be especially valuable for sub-prime and Alt-A borrowers, who are often unsure about the quality of their credit and the terms upon which they should be able to obtain a par value loan. Armed with the knowledge that loan origination services in their market should be typically on the order of, say, $1500 to $2000, a subprime borrower could be in a much better position to negotiate loan terms than they are today.

3. Defining Best Execution Duty for Mortgage Brokers and Loan Originators

If one accepts for a moment, the proposition that the secondary mortgage markets provide mortgage brokers and other loan originators a mechanism for determining contemporaneous retail and wholesale prices of mortgages, then one can also think in terms of defining and administering a duty of best execution for loan origination. I would articulate the duty as follows. At the time of origination, did the loan originator get the best possible price for the loan terms offered in light of the objective factors about that loan which the secondary market uses to establish prices? Suppose, for example, a mortgage broker steers a borrower into an alt-A 30-year fix loan with an interest rate such that the loan has a retail par value of 100. If that borrower would have been qualified for a prime loan at the time of origin, then the loan would have an above par value as a prime loan (because the interest rate will be above par for the consumer's credit profile). In that case, the loan originator would have violated its duty of best execution because it could have gotten the borrower a better price.[6]

[6] Note that the issue of best execution is distinct from the question of appropriate mark-up. My thinking is that if we

As has been true in the articulation of duties of best execution in the securities field, much additional detail is necessary to flesh out a legal regime of this sort. One would to develop standards for the amount of effort loan originators are expected to undertake in exploring alternative purchases for a loan. In addition, when better prices are available with slightly different terms (perhaps a shorter maturity or different rate reset formula or a no documentation requirement), some judgment calls are in order. But the key step is to articulate a requirement that loan originators are under an obligation to get the best price for their customers and also have an obligation to maintain a record of the steps they took to satisfy this duty at the time of origination.

C. Practical Considerations in Defining Contemporary Market Prices

I now turn to the more practical question of how loan originators might go about obtaining information on loan prices. I start with currently available information about retail prices for loans and then turn to wholesale pricing mechanisms. Next I consider how these mechanisms might be employed to establish compliance with a duty of best execution. I finally identify several additional considerations that regulatory authorities should address in developing a system of establishing contemporaneous market prices for home mortgages.

1. Retail Pricing of Home Mortgages

Within the retail context, there are several different ways a firm might go about establishing a retail price for loan originations. The most straightforward are existing procedures that mortgage brokers have for several years been using to establish prices for their loan originations. As documented in Jackson 2007, mortgage brokers typically work off of rate sheets from a number of lending institutions. These rate sheets are updated daily and sometimes hourly based on market conditions and include specific prices for loans in a variety of loan programs, which vary according to the kind of loan and the credit characteristics of the borrower. When the broker proposes to originate a loan, a confirmation is issued indicating the key features of the loan and locking in a price. Figure 3 shows the loan confirmation statement and associated rate

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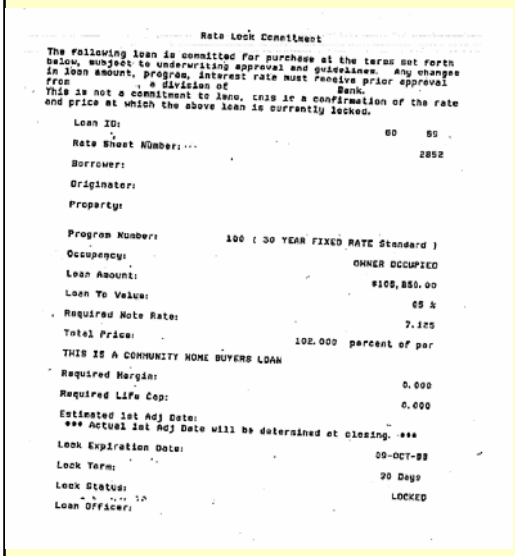
first require loan originators to get borrowers into the program that generates the best price, we can then take additional steps, such as requiring aggregate disclosure of markups and other sources of compensation, to ensure fair and competitive pricing.

sheet for a $106,850 loan originated in 1998, along with the rate sheet off of which the loan was priced. The confirmation indicates that the price on this loan was 102, which means the loan included a two percent yield spread premium equal to $2,137.[7] So, one way to establish the price of a loan originated by a mortgage broker would be to incorporate the price recorded on the loan confirmation issued in connection with the loan, as supported by the associated rate sheet. To establish the total cost of loan originations for the borrower, one would then add in any direct fees paid for the origination and make appropriate adjustments in the markup to account for loan discount fees.[8]

Figure 3
Sample Pricing Information at Retail Level



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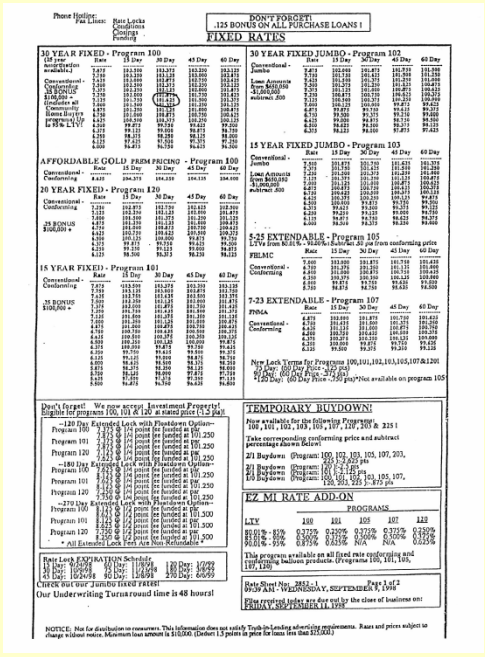
Property:

Program Number: 100 (30 YEAR FIXED RATE Standard)
Occupancy: OWNER OCCUPIED
Loan Amount: $106,850.00
Loan To Value: 65 %
Required Note Rate: 7.125
Total Price: 102.000 percent of par
THIS IS A COMMUNITY HOME BUYERS LOAN
Required Margin: 0.000
Required Life Cap: 0.000
Estimated 1st Adj Date:
*** Actual 1st Adj Date will be determined at closing. ***
Lock Expiration Date: 09-OCT-98
Lock Term: 90 Days
Lock Status: LOCKED
Loan Officer:



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Source: Howell E. Jackson & Laurie Burlingame, *Kickbacks or Compensation: The Case of Yield Spread Premiums*, 12 Stan. J. Law, Bus. & Fin. 289 (2007).

When a lending institution issues a loan directly, the price of the loan is somewhat more difficult to ascertain, a fact which has complicated the regulation of yield spread premiums paid to mortgage brokers. In some instances, firms maintain an internal pricing mechanism for loan

[7] This transaction is described in greater detail in Jackson 2007. The basic price (circled) of 1.01875 appears in the rate under the Program 100 for 30-year fixed rate loans, with a 7.125 stated interest rate and a 30 day lock, parameters recorded on the confirmation sheet. The full price is 102 because, as noted at the top of the sheet, the loan originator was at the time offering a 0.125 premium on purchase loans, for which this loan qualified.

[8] In the example given in Figure, the mortgage broker also received another $1,068 in origination fees plus $335 for a processing fee, leading to total consumer costs for the origination of this loan equal $3,540.

originations that is comparable to the loan rate sheets distributed to mortgage brokers. Conceivably, direct lenders could be required to document the price of loans based on these internal pricing mechanisms, deriving an implicit mark-up on direct loans. The drawback of this approach, however, is that many factors may contribute to internal pricing protocols and it is not clear that these internal prices would be entirely comparable to the market prices reflected on rate sheets used by mortgage brokers. In addition, to the extent that regulatory scrutiny of home mortgage mark-ups became a serious constraint on firm behavior (the goal of this exercise), firms might be tempted to adjust their internal pricing rules in order to disguise inappropriate behavior by shifting gains to other units of the organization. One way to deal with this problem would be to require direct lenders to utilize externally generated rate sheets to establish loan prices. This would be relatively straight forward for firms that both made direct loans and also funding originations through mortgage brokers. For loan originators that were exclusively direct lenders, these rate sheets would need to come from outside vendors, and again there might be potential for manipulation if lenders could select rate sheets that disguised inappropriate practices. Nevertheless, one could think in terms of requiring direct lenders to establish a market retail price of direct loans by reference to the kinds of rate sheets employed by mortgage brokers and then take steps to police intentional efforts to evade this standard. Again, comparable problems have arisen, and solutions devised, in ascertaining the mark-up rates of securities sold from the inventory of full-service securities firms.

2. Wholesale Pricing of Home Mortgages

One way to finesse the problems of establishing consistent retail prices for direct lenders as well as mortgage brokers is to look instead to wholesale prices for these loans, channel 2a in Figure 1. By looking to the wholesale price for these loans, regulatory authorities could obtain a more consistent picture of the costs of loan origination, which could then more reliably measure the performance of all different types of loan originators. As it turns out, the secondary mortgage market has developed a number of different mechanisms to price individual loans. These mechanisms were devised to purchase loans from smaller institutions that have relatively small volumes of originations and cannot themselves practically securitize their own pools of loans. These pricing mechanisms are, however, well suited to support a regulatory requirement that loan originators maintain contemporaneous records of loans prices.

One example of such a program is Fannie Mae's Desktop Underwriter program, which allows loan originators to get an immediate evaluation of whether Fannie Mae will approve a loan based on specific loan origination information about the borrower, the loan, and the underlying property.[9] According to industry sources, loan originators who participate in the Desktop Underwriter program also can obtain contemporaneous information regarding the price Fannie Mae will pay for particular loans, although there may be some variation in pricing based on the volume of loan originations that the lender provides and the charges that Fannie Mae imposes for guarantee fees.[10] Of course, the Fannie Mae program is insufficient to provide a robust pricing mechanism for loan originations. Many loans do not qualify for Fannie Mae programs and the organization and other GSE traditionally have not participated in the subprime market. But the existence of this sort of pricing mechanisms shows that it is possible to establish a contemporaneous pricing mechanism.

Another and more robust example of a wholesale pricing mechanism for mortgage brokers can be found on the webpage of the self-styled "Mortgage Professor," Jack M. Guttentag, Professor of Finance Emeritus at the Wharton School.[11] In an effort to provide greater transparency to borrowers, Professor Guttentag has developed a pricing engine that draws on the prices of twelve wholesale lenders that routinely purchase mortgages from mortgage brokers and correspondent lenders. The engine, which has been operational since September of 2007, now offers contemporaneous wholesale pricing information on a range of loan types and extends down to Alt-A loan categories, but not subprime loans. In Figure 4, I reproduce a chart

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[9] According to the Fannie Mae website.

Desktop Underwriter® is Fannie Mae's innovative, computer-based, automated underwriting system.

After you complete a loan application with a Fannie Mae-approved lender, your loan will be underwritten -- using Desktop Underwriter -- by the lender. Underwriting is the process used to determine whether borrowers can afford the mortgage payment on the loan for which they are applying and their ability to repay the mortgage on a timely basis. In the past, underwriting was a manual process. An underwriter would review the information, analyze the data, and approve or deny the loan. The process typically took between 30 and 60 days.

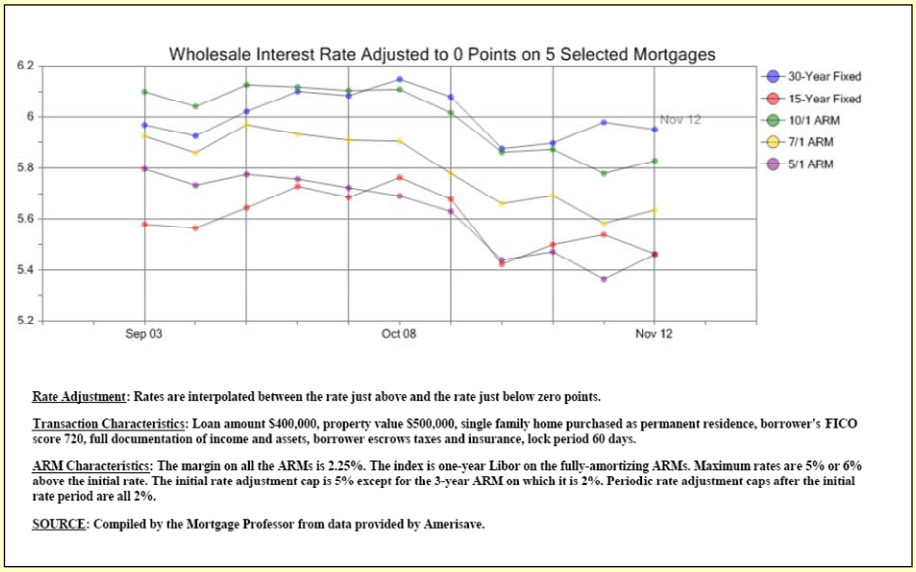
With Desktop Underwriter, the underwriting process can take minutes. Desktop Underwriter automates the process for lenders by requesting information online and then analyzing the borrower's loan application and credit history data, as well as the property information. Desktop Underwriter performs this objectively and without bias, and returns the results of the analysis to the lender in the form of a recommendation. The lender then uses the recommendation returned by the system to decide whether to approve or deny the loan.
See http://www.fanniemae.com/homebuyers/glossary/desktopunderwriter.jhtml?p=Resources&s=Glossary.

[10] [Confirmation of details of Fannie Mae program to come.]

[11] See http://www.mtgprofessor.com/Default.htm

generated by Professor Guttentag's engine showing the interest rates on par loans for five different types of loans over the past few months. The notes at the bottom of the chart indicated the parameters necessary to generate these rates. All are the kind of objective factors that mortgage markets typically use to price loans.

Figure 4
Sample Wholesale Mortgage Prices



Source: http://www.mtgprofessor.com/wholesaledata/WholesaleTablesAndCharts.aspx

The primary purposes of Professor Guttentag's pricing engine is to assist borrowers in ascertaining the interest rate to which they would be entitled for a par value loan on which all mortgage broker compensation would take the form of direct (or up front) payments. But the engine could easily be adapted to price the market price of covered loans at whatever interest rate the borrower was being asked to pay, given the characteristics of the loan, the borrower's credit history, and the underlying property. Of course, the engine would have to be expanded to cover subprime lenders, but the underlying architecture would be appropriate for a wide range of lending products. And, if a regulatory requirement were established requiring loan pricing information, one could reasonably expect other vendors to emerge providing alternative vehicles for producing this information and a market for such price services to develop.

3. Implementing a Duty of Best Execution

Accept for a moment that loan originators had access to contemporaneous pricing engines that could give objective market information about loan prices at the time of origination. Establishing a duty of best execution would then be relatively straight forward. Loan originators would simply need to check whether the objective characteristics necessary to price the loan could obtain a better price in another comparable loan program but designed for borrowers with lower levels of riskiness. In practical terms, that would mean that before originating a loan of less than prime quality, the lender would have to determine that it could not obtain a better price in several comparable loan programs but in higher categories of credit quality. Checking for possible price improvement is a standard duty of securities brokers handling orders on behalf of their customers, and could fairly simply be incorporated into mortgage lending operations once contemporaneous pricing mechanisms were widely available.

4. Other Considerations

As the foregoing analysis suggests, the key issue in developing a contemporaneous pricing mechanism for home mortgages is ensuring that the engine reflects bona fide prices from independent sources, preferably based on offers from numerous potential purchasers. This is the basic structure of Professor Guttentag's pricing mechanism and it could quite plausibly be expanded to cover a wider range of loan products and generate results based on loan prices as opposed to the interest rate of par loans. In developing regulatory requirements that loan originators maintain contemporaneous records of loan prices, government officials would need to define with greater clarity the standards to be expected of pricing engines. But the basic contours of these engines already exist, and they could easily be expanded to fulfill this regulatory purpose.

One open question is whether the subprime market is deep enough to support a continuous and legitimate pricing mechanism. More research on this point is necessary, but consideration should be given to whether Fannie Mae and other government sponsored agencies might not be encouraged to participate more substantially in the subprime markets. Having Government Sponsored Enterprises (GSE) developing more subprime programs would have dual benefits. First, it would ensure a reliable supply of home mortgage financing to less qualified customers and it could assist regulatory officials in obtaining a clearer picture of the price of

subprime loans with which to police the lending practices of subprime loan originators.

Part Three: Legal Applications of Loan Pricing Information

(Summary of Legal Analysis)

Aggregate information about home mortgage pricing for loan originators and mortgage brokers could be a valuable adjunct to the enforcement of a number of existing legal standards.

First, with respect to the Real Estate Settlement Procedure Act of 1974, as amended, guidelines developed by the Department of Housing and Development require that compensation for mortgage brokers for loan origination services must be reasonable. It has, however, been quite difficult for individual plaintiffs or government officials reviewing particular transactions to establish the unreasonableness of specific transactions. Indeed, the standard of reasonableness almost necessarily entails some sort of comparative analysis with respect to other similar transactions with the same market. By requiring loan originators to maintain contemporaneous records of the cost of loan origination (including both direct payments as well as revenues from loan markups), regulatory officials would be in a much better position to assess the unreasonableness of fees charged on specific transactions, either as compared with the fees charged by the same originator on other comparable transactions or as compared with similar transactions from other vendors in the same market. In addition, in terms of identifying loan originators or mortgage brokers that may be taking advantage of unsophisticated consumers, regulatory officials could periodically review the aggregate compensation of firms to determine unusual patterns of origination costs. Evidence of this sort need not constitute irrefutable proof of unreasonableness in violation of HUD standards, but it might be of considerable value in establishing a prima facie case of RESPA violations under certain circumstances, with the loan originator in question then being required to rebut that presumption based on a showing that special circumstances surrounding particular transactions or particular business practices justified higher than average origination costs.

Another area of law in which contemporaneous mortgage pricing information could prove useful is policing of the Equal Credit Opportunity Act (ECOA). Prior work (see Jackson 2007) has demonstrated that in some contexts mortgage brokers obtain higher compensation from certain minority borrowers, even controlling for credit quality, loan type, and objective factors related to the underwriting of home mortgages. In a similar vein, a statutory mandate that

mortgage brokers and other loan originators maintain records of contemporaneous records of home mortgage markups and other direct charges for loan originations could facilitate monitoring compliance with the ECOA. As with other forms of anti-discrimination laws, the mere showing that racial minorities incur higher loan origination costs than other borrowers (controlling for relevant objective factors) would not necessarily constitute a violation of the ECOA, but it could be used to shift the burden of justification to the lending institution.

Finally, for purposes of policing HOEPA regulations, regulatory officials and consumer could use mark up information to identify loans that should be subject to these statutory requirements.[12] The current standards for subjecting loans for coverage under the HOEPA do not adequately consider the value of home loan markups to originating firms and – with the kind of data outlined in this essay – those standards could easily be amended to identify more precisely loans that include excessively high origination costs. Another point of difficulty in policing current HOEPA is the use of discount fees. Bona fide discount fees do not count towards HOEPA limits. However, without reference to the price of a mortgage loan, it is difficult to ascertain whether or not discount points are bona fide. Contemporaneous records of the price of loans at times of origination could help distinguish legitimate discount fees from disguised additional compensation for loan originators.

One could envision similar amendments of the Truth-in-Lending Act to incorporate markups on mortgage prices to produce more accurate measures of the full cost of borrowing for home mortgage loans.

[12] A point of particular difficulty in policing HOEPA is the use of discount fees. Bona fide discount fees do not count towards HOEPA limits. However, without reference to the retail price of a mortgage loan, it is difficult to ascertain whether or not discount points are bona fide.

Appendix A

Available online at:
http://www.jchs.harvard.edu/publications/finance/understanding_consumer_credit/papers/jackson_appendix_a.pdf

Appendix B

Available online at:
http://www.jchs.harvard.edu/publications/finance/understanding_consumer_credit/papers/jackson_appendix_b.pdf