Financing Community Development: Learning from the Past, Looking to the Future

<u>Session:</u> Are Legislative Remedies to Limit Predatory Lending Really Remedies?

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Date: March 14, 2007

The best outcomes for consumers require a competitive market, fair opportunities, and a policy framework that makes both possible. The optimization of a policy framework along these lines is often most limited by the quality of information available concerning market realities. Consequently, I would like to preface my remarks by thanking the Federal Reserve, and specifically the Community Affairs Department, for convening this important event to promote the development of high-quality information. With the subprime residential finance market undergoing unprecedented changes, federal regulatory and Congressional policymakers examining a range of policy options, and state policymakers trying to find their way, this session could not be more timely.

The first paper in today's session, from Gregory Elliehausen, Michael Staten, and Jevgenijs Steinbuks, asks whether consumers who receive prepayment penalties on their subprime mortgages also receive a discounted interest rate. The paper notes that the debate on this question has been ongoing. Lenders, and some researchers, have claimed that subprime prepayment penalties are associated with interest rate breaks. Indeed, rate sheets that serve as lenders' pricing guides for brokers routinely and explicitly note that interest rates be increased one percentage point on loans without a prepayment penalty.

The present paper adds to a paper by Ernst (2006) that found that subprime prepayment penalties conferred no interest rate benefits to borrowers and one by DeMong and Burroughs (2005) that found that they do. This paper attempts to advance the literature on this important question by taking into account the interconnected nature of a loan's interest rate, loan-to-value ratio, and prepayment penalty status. To estimate their models, the researchers rely on a proprietary dataset of first-lien subprime loans from 2004. The loans used exhibit traits typical of subprime loans: prices average more than three percentage points over the yield on Treasuries with a comparable term, 60% carry prepayment penalties, borrowers had an average FICO score of 605, 81% were refinance loans, and 59% were originated through a mortgage broker. Models are broken down into fixed rate mortgages, variable rate mortgages, and hybrid ARMs. Each model has over a quarter million loans. The models omit loans that carry loan-to-value ratios over 90 percent. The provided explanation for this choice, that such loans "are not generally available to most subprime borrowers," is somewhat unsatisfactory. Indeed, in a recent report on subprime foreclosures by Schloemer et. al. (2006), more than 13% of subprime loans examined from 2004 carried loan-to-value ratios over 90 percent.

Though the authors provide a short set of descriptive statistics, in light of the proprietary nature of the data used, they would do well to disclose many more measurements and how those measurements vary across loan products. They should also disclose more about the nature of the products themselves. For example, what is the difference between the loans grouped as hybrid ARMs and those grouped as variable rate loans? Pure variable rate ARMs (without any fixed teaser rate period) are very unusual in the

¹ Page 2.

subprime market, but represent over a third of loans in the sample used. More information along these lines also could help assure readers that the loans being examined in each model are uniform.

The central analysis takes the form of three equations. The first equation seeks to predict whether a borrower would accept a loan with a prepayment penalty. One result from this equation is particularly interesting. All else being equal, loans from brokers are shown to be significantly more likely to carry prepayment penalties than loans from retail lenders. Depending on the specific loan product, brokered subprime loans exhibited a striking 9-44 percentage point greater likelihood of carrying a prepayment penalty than loans originated through a retail lender.

This is intriguing because, while not conclusive, it is evidence consistent with a standing hypothesis presented by Ernst (2005): Namely, brokers are more likely to place borrowers in subprime loans with prepayment penalties in an effort to maximize their compensation. To understand why this would be the case, one needs to know something about how mortgage brokers are compensated. First, they can be, though almost never are, paid in cash by the borrower. Second, their fee can be financed into the loan amount. Third, and most relevant to this conversation, they can receive a payment from the lender for placing a borrower in a loan with a higher interest rate than the lender requires for the given borrower's risk profile. This payment is commonly known as a yield spread premium.

It would, of course, be foolhardy for the lender (or any subsequent) investor to agree to pay a substantial premium on such a higher-priced loan without some assurances that the cash payment will actually be recouped over time. For example, if a lender paid the premium and the borrower refinanced three months later into a market rate loan, they would clearly be at a loss. Consequently, subprime lenders routinely cap or prohibit yield spread premium payments in instances where the loan does not carry a prepayment penalty. The prepayment penalty provides the needed assurance that a premium will be recovered since the lender (or subsequent investor) is assured of receiving either the excess interest or the penalty fee, provided the loan is not lost to foreclosure. The net result of all this is that a broker that wants to maximize a yield spread premium, must get the borrower to accept a loan with a prepayment penalty. Accordingly, a finding that brokered loans carry a higher incidence of prepayment penalties after accounting for the contribution of several other factors is interesting indeed.

In the interest of time, I will skip discussion of the loan-to-value model in the second equation and proceed directly to the third equation risk premium model, which examines the interest rate changes associated with various loan terms. This model estimates the effect of loan-specific information and short-term treasury rates on the risk premium charged borrowers. There are two sets of findings in this model that merit particular attention: the prepayment penalty findings and the findings associated with the broker variable.

First, the researchers report that prepayment penalties are associated with a 13-38 basis point reduction in interest rates. On the most popular product in the subprime market, hybrid ARMs, they report an 18 basis point reduction in rates. This finding is intriguing in and of itself because, as I mentioned, subprime rate sheets almost uniformly show a difference of one percentage point—or 100 basis points—associated with the inclusion or exclusion of a prepayment penalty. Consequently, the paper suggests that hybrid ARM borrowers receive less than one-fifth of the value rate sheets assign to prepayment penalties. In exchange, borrowers are placed on the hook for prepayment penalties that can cost significant sums. The most common formula finds borrowers paying six months' interest on 80% of the outstanding principal balance at the time of prepayment a figure that can be thought of as roughly 2.8% of the original loan amount for loans originated in 2004. Given the tendency toward very quick prepayments in the subprime market (average loan lives of 2.5 years are common)² and the widespread use of prepayment penalties (60% in the sample used here), it is reasonable to expect that about half—and certainly more than one-third of borrowers—with prepayment penalties incur them. Even if just one-third of borrowers paid the penalty, the benefit of slightly reduced rates over the typical average life of 2.5 years is more than offset by the cost of the prepayment penalties. In fact, at this conservative one-third pay assumption, borrowers could be expected to pay 92 basis points in fees in exchange for a cumulative 45 basis points in interest rate savings. In other words, this research suggests that borrowers will pay \$2 in prepayment penalties for every \$1 in interest rate benefits on hybrid ARMs.

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² The average loan life of 2.5 years matches Fitch Ratings cash flow assumptions for prepayments of 2/28 subprime hybrid ARM loans with prepayment penalties. *See* http://www.fitchratings.com/corporate/reports/report_frame.cfm?rpt_id=282286 (verified 3/13/07).

It is worth noting that this admittedly rudimentary analysis neglects one other potential cost that was mentioned in the recently proposed inter-agency guidance on subprime lending. Specifically, since the term of prepayment penalties routinely matches the time to first adjustment of interest rates, borrowers may find it very difficult to refinance to avoid payment increases. On typical subprime hybrid ARMs, payments routinely jump by 30-40% after the expiration of the initial teaser rate. This payment increase is intolerable for most borrowers in the subprime market, where underwriting to date has commonly approved borrowers whose initial teaser-based payment cost them 50-55% of their pre-tax income. Consequently, borrowers mostly have attempted to refinance to avoid these payment increases. To do so in an optimal fashion, however, they have to first recognize that payments are going to increase well enough in advance of adjustment to start the refinance process. Second, they have to time their refinance precisely to occur after the expiration of the prepayment penalty, but before substantial new charges of interest will come due—a window of about two weeks. This is a very difficult proposition, and for the borrower who cannot navigate this challenging terrain, the increase in payment amounts due may be prohibitive, which can leave them trying to refinance a currently delinquent mortgage.

The second finding of considerable interest relates to brokers. In the two loan products that comprise the vast majority of the subprime market, fixed rate mortgages and hybrid ARMs, the researchers report, all else being equal, that borrowers who receive their loan through a broker should expect to pay 65-89 basis points higher interest rates on their home loan. This finding is consistent with empirical evidence from other researchers

(Alexander et Al. 2002). However, given the standing hypothesis that brokers increase their compensation, in part, by maximizing yield spread premiums by steering borrowers to loans with prepayment penalties, it also suggests that the analysis in this paper should have contained a variable that specifically examined the effect of having a brokered loan with a prepayment penalty. Inclusion of this interaction term is especially compelling because of the finding that having a broker is strongly associated with increased probability of having a prepayment penalty in the first place. Without the inclusion of this variable, there is some risk that the results for the broker variable and the prepayment penalty variable are biased. If the hypothesis that brokers' capture the value of the prepayment penalty is correct, one would expect to see a positive coefficient on the interaction term. In addition to the proposed interaction term, the model could likely be improved by including additional variables to control for changing economic conditions that might be thought to affect the value of loans with and without prepayment penalties differently such as the volatility of interest rates and the volatility of local housing prices.

The second paper in this session brings together economists and law professors in an exhaustive effort to evaluate the effect of state and local anti-predatory lending laws on the subprime residential mortgage market. The work by Professors Bostic, Engel, McCoy, Pennington-Cross, and Wachter builds on an earlier paper by Ho and Pennington-Cross (2006). In the interest of full disclosure, three of these five authors serve on a research advisory council to my organization. Much like the first paper in this session, the questions asked by this effort have been the subject of considerable

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³ Professors Bostic, McCoy, and Pennington-Cross currently serve on a research advisory council to the Center for Responsible Lending.

debate over the last few years. The paper provides a substantial overview of the studies that gird that discussion. What sets this paper apart from those other efforts, however, is its in-depth assessment of anti-predatory lending laws based on primary legal sources and its ability to observe differences between those laws. The researchers conclude that their "results are consistent with the view that anti-predatory lending laws have not harmed subprime lending markets and indeed may have enhanced the functioning of the market."

To reach this conclusion, the researchers build a series of models that employ 2004 and 2005 Home Mortgage Disclosure Act data to estimate the influence of laws on originations, applications, and loan denials in counties of states with laws, using adjoining counties of states without laws as a reference. They examine the effects of these laws on subprime lending using two different strategies to identify subprime loans in their data. In addition, they inspect the effects of laws both by looking simply at whether a law was in effect and also by creating a two-part index that seeks to assess the strength and applicable scope of coverage associated with various laws. In addition to choosing geographic criteria in an effort to control for differing economic conditions, the researchers also directly control several economic and demographic variables, such as unemployment and recent population growth.

The researchers find that state laws tend to be associated with increased subprime originations, increased applications for loans from predominantly subprime lenders, and no statistically significant difference in rejection rates on applications to predominantly

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subprime lenders. The researchers also report that the constructed two-part index tends to show that laws that cover a wide swath of loans or potential loans tend to see increased originations and applications, and decreases in rejections. Conversely, laws with strong provisions tend to see originations and applications ameliorate. When these two-parts are combined, the researchers find that laws that scored the highest on the full-index were associated with increased originations, no difference in application rates, and decreased rejections.

These findings are interesting for at least two reasons. First, they directly indicate that policymakers have managed to avoid the unintended consequence of being overly restrictive—the studied laws actually lead to a modest increase in subprime lending. Second, they provide indirect evidence consistent with the notion that policymakers are able to also reform or curtail some undesirable lending. This conclusion flows from the finding that stronger than average provisions can lead to a modest curtailment in subprime originations. Whenever we assess the regulation of credit, both questions are important: For, if policymakers avoid credit curtailments but prove ineffectual at weeding out the problematic loans that motivated their actions in the first place, the policies could hardly be considered a success.

One suggestion for possible improvement would be for the researchers to consider assessing the range of charges that are included in the definition of points and fees under

various laws. The question of which charges should be included has been central to many policy debates.⁵

Both of these papers have attempted to answer questions that are very relevant to an ongoing policy debate about how to best address practices that have the potential to unfairly strip borrowers' precious home equity. The first tells us that only a portion of the claimed benefit of prepayment penalties appears to flow through to borrowers—and suggests that each dollar in benefit is more than offset by \$2 in costs of penalty fees incurred by typical subprime borrowers. The second paper goes to extraordinary lengths to analyze state predatory lending laws, and authoritatively reports that those laws appear to be working to improve subprime markets without detracting from the flow of residential subprime credit. In other words, the research suggests that anti-predatory lending laws are having their intended effect and have successfully avoided unintended consequences. As policymakers continue to search for the best approaches to prevent equity stripping and begin to grapple with concepts like suitability and ability to repay to address increasingly apparent deficiencies in the underwriting and provision of subprime mortgage credit, they can rest assured that researchers will take on challenges like those entailed by the papers here in an effort to provide the best information possible.

⁵ In general, laws tend to group into one of four categories along these lines. First, they mirror the definition found in the Home Ownership and Equity Protection Act of 1994 (HOEPA). Second, they add prepayment penalties to the range of charges that should be considered in addition to HOEPA's scheme. Third, they add yield spread premiums to the range of charges in addition to HOEPA's scheme. Fourth, they add both prepayment penalties and yield spread premiums to HOEPA's scheme.

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