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The Impact of Credit Price and Term Regulations on Credit Supply

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February 2008
UCC08-8

Introduction

For centuries, legislated caps on loan interest rates (rate ceilings) have been advocated as a form of consumer protection in otherwise free market economies. More recently, restrictions on creditor collection practices and loan contract features have been added to the regulators' list of tools for protecting consumers from abusive lenders and loans. Exactly why consumers require such protection from the forces of supply and demand in loan markets, but not in other markets, has always been vague.[1] Some advocates of rate ceilings apparently mistrust or fail to understand the powerful pricing discipline imposed on lenders in competitive credit markets where alternative sources of credit are plentiful. Other advocates of creditor restrictions understand market factors very well, and favor the resulting curtailment of credit supply under restrictive rate ceilings as a means of "saving consumers from themselves," and saving neighborhoods and society from the costs of individuals' financial failures, and subsequent bailouts.

Rate ceilings are often promoted as protecting consumers by ensuring lower credit prices. The following discussion will present overwhelming evidence to the contrary. Four decades of empirical research in the United States shows that competitive markets are far more effective than an artificial rate ceiling in limiting a creditor's ability to raise the price of a loan, at the same time increasing the quantity and variety of credit products available to consumers. A rate ceiling can do one, but not both. Moreover, rate ceilings are worse than ineffective at protecting consumers. A binding rate ceiling actually reduces the amount of credit available to consumers.

The following sections will also show that other regulation of creditor collection practices and loan contract terms can have similarly detrimental effects on the supply of credit, although some of these regulations can also serve to increase demand. These types of regulations are particularly relevant today as legislation proliferates at the federal and state level aimed at protecting consumers of mortgage and credit card products. The message of the following discussion is not that regulation of creditor contracts and practices is always a bad idea (although regulation of price may be). Instead, the point of the paper is that all such regulations impose costs on creditors to varying degrees, and will inevitably reduce supply of the regulated product. The policymaker hoping to help consumers must recognize that tradeoff.

[1] Jeremy Bentham raised this telling point in 1787 in his famous series of letters titled *Defence of Usury*. For discussion see Persky (2007).

The following sections review the simple economics of price determination and price controls in credit markets, provide a brief overview of loan rate ceilings in the United States, and survey the empirical literature on the impact of price ceilings and restrictions on creditor practices.

The Economics of Price Determination And Price Controls in Credit Markets

Analysis of price controls goes to the core of modern microeconomic analysis. The economic principles that explain the functioning of consumer credit markets are the same as those that apply to markets for most other goods and services, with a couple of twists to be discussed below.

To summarize the well-established but formal theoretical derivation, analysis of price determination is built around three fundamental principles: 1) the quantity of credit demanded by consumers per time period rises as the price of credit falls; 2) lenders are willing to offer more credit per time period at a higher price than at a lower price; 3) credit markets that generate profits for credit grantors also spur additional entry by new competitors. In markets characterized by these three principles and without artificial limits on entry of new competitors, an increase in the collective requests by consumers for more credit per time period puts upward pressure on price. Competition among lenders puts downward pressure on price. The interaction of these forces of supply and demand leads to the establishment of an equilibrium price in the market and the market "clears." At any other price, those same forces serve to push price down or drive it up until equilibrium is restored. The price that consumers actually pay for a loan may be captured entirely by the nominal interest rate, but may also include other explicit charges and costs (e.g., loan points and fees).

Artificial price ceilings distort and redirect this clearing process. An artificial price ceiling set below the market-clearing rate has several effects. The immediate effect is to create a "shortage", defined as a larger quantity demanded at the posted price than the amount available for sale. But, markets always "clear" and some device other than the nominal price serves to ration the available quantity for sale. In an article that sets forth guidelines for those who would empirically study the impact of price controls, Cheung notes that both buyers and sellers of price-controlled goods will seek to minimize the dissipation in value of the good that occurs as the clearing process takes a different path.[2]

[2] Cheung (1974).

A couple of non-credit examples serve to illustrate the range of possibilities. For a good like gasoline, the rationing device may be time spent waiting in line at the pump – or possibly "black market" side payments to suppliers. Both translate into an actual price paid that exceeds the nominal controlled price at the pump. But the cost of time spent waiting in line doesn't translate into higher revenues for gasoline suppliers, and creates no incentive in either the short-run or the long run to boost production and bring more to the market to resolve the shortage.

If the price controlled good happens to be apartment units, then the rationing device may be an appeal to the landlord's preference for certain types of tenants, or maybe side payments to the landlord in the form of "key money." But unless enforcement is lax, transaction costs are low and landlords are efficient at extracting key money payments, the long-run effects of rent controls can be devastating to the stock of housing available for rent.[3] Landlords have little incentive to invest in upkeep of existing rent-controlled units, and tend to let property deteriorate to a value appropriate to the rent that is permissible to charge. They have even less incentive to invest in new structures that can only be rented at a controlled, below-market rate. Hence, the supply of rental housing declines over time.

Two lessons from standard economic theory are particularly important for thinking about the impact of price controls in credit markets. The short-term impact of a binding price control in reducing the availability of a good will be larger if supply is more elastic, that is, if the quantity supplied of a good is more responsive to changes in price (in terms of a standard supply curve with price on the vertical axis, think gradual upward slope vs. steep slope). And, the long-run impact of a binding price control is always larger than the short-run impact as suppliers have time to redirect resources to other uses and either scale back or exit the price-controlled market. In the gasoline and apartment unit examples, the short-run reduction in the quantity of gasoline supplied would be more noticeable than for apartments. Gasoline is easily stored and can be transported to uncontrolled markets. Refinery processes can be quickly reset to generate production of other products with uncontrolled prices (aviation fuel; diesel fuel, fuel oil for heating homes, etc.). It is easy to imagine such redirection of resources increasing over time. In contrast, apartment units can not be quickly diverted to other uses. A binding rent control law may succeed in reducing rental rates for lucky tenants for a finite time period without affecting

[3] Cheung (1975); Gyourko and Linneman (1990); Moon and Stotsky (1993).

the stock of rental housing. But, eventually landlords will adjust to a binding price control and the stock of rental housing will deteriorate or otherwise decline.

With these lessons in mind, it is clear that consumer credit markets are distinctive in at least two ways that are important for understanding the impact of rate ceilings – or any restriction that lowers the lender's effective rate of return on loaned funds and lowers supply. First, in today's global capital markets, the quantity of funds available to lend for any type of loan product is extraordinarily elastic. Capital can be redirected at the speed of a microchip in response to just a few basis points greater rate of return. Securitization and other financial innovations have made tremendous quantities of loanable funds available to consumer lenders as investors partake in the global chase for higher returns. Consequently, a binding interest rate ceiling on a particular loan product can trigger a swift reduction in product availability. It is simply naïve to think that the available supply would not be affected.

Second, unlike markets for most other goods, time adds a unique feature to loan transactions. The borrower's pledge to repay a loan over time introduces the risk that payment will not occur as agreed. Payment may occur too slowly (or not at all), creating default risk and expected collection costs. Payment may occur too quickly, creating prepayment risk that an anticipated stream of interest income will not occur. Both types of risk affect the price of a loan. Hence, while the good to be supplied in a credit market is fairly homogeneous (a dollar from one lender is the same as a dollar from another, although the package of services that accompany a loan may vary from lender to lender), borrowers are quite diverse in the risk they each bring to the loan transaction. Because higher payment risk lowers the expected returns on a loan, lenders respond to a binding rate ceiling by rationing according to risk.[4]

With the development and widespread use of computer-based risk-scoring models, lenders in the United States now can measure borrower risk far more accurately and at lower cost than was the case 20 or even 10 years ago. As the cost of screening borrowers has fallen, creditors in competitive markets have increasingly employed risk-based pricing to adjust the contract interest rate to reflect each borrower's risk. Thus, a binding interest rate ceiling

[4] Screening borrowers to identify risk can be costly. Even in a loan market without rate ceilings, higher screening costs increase the likelihood that some form of contractual adjustment other than price is employed to clear the market, working either to lower the expected cost of default on a loan at a margin the creditor can readily identify and control (e.g., require a higher downpayment) or to induce borrowers to sort themselves according to risk, thereby reducing the lender's screening costs. See Barro (1976); Jaffee and Russell (1976); Stiglitz and Weiss (1981); Staten, Gilley and Umbeck (1990).

imposed on a credit product will trigger a swift and laser-precise adjustment in acceptance criteria that will have the greatest impact on higher-risk borrowers, especially for products where such borrowers are easily identified. While adjustment to a binding rent control poses a challenge for apartment owners, adjustment by the rate-constrained lender is easy. Because borrowers are heterogeneous, lenders restrict availability by avoiding higher-risk borrowers.[5]

A Brief History of Rate Ceilings in the U.S.

Usury laws are ancient. Laws (political and religious) that regulate interest charges on loans date back to the Babylonian code of Hammurabi (1800 B.C.), and appear through the Bible's Old Testament, Roman Law, and through medieval church prohibitions of any loan repayment in excess of the original principal. The modern word "interest" derives from the medieval Latin word "interesse," which originally meant a penalty for default on a legitimate loan repayment.[6] Over several hundred years, the illegal interesse evolved to the modern term "interest," referring to the legitimate extra payment that accompanies repayment of the original loan principal. But, while the payment of interest became an accepted element of daily commerce long ago, conflict surrounding how much interest was appropriate and permissible has endured. Usury came to refer to the charging of interest on a loan in excess of the amount or rate permitted by law.

Usury laws in England served as the model for the American colonies in the 18th century. The colonies (and later the fledgling states) adopted a usury ceiling of 6% as a carryover of the prevailing 5% ceiling in England, with an extra percentage point added to help raise capital. For the next century ceilings on loan interest rates were the rule throughout the states, though with wide variance in levels as western states, where capital was in great demand, adopted higher

[5] In this era of accessible credit reports and widely-used statistical risk modeling, a lender in a rate-restricted market can easily and rapidly determine that at the maximum rate allowable by law, one customer is profitable to serve and another, higher-risk customer is not. As a result, the restrictive rate ceiling focuses the supply reduction on those higher-cost borrowers, just as surely as if a target had painted on them. This unfortunate result does not disappear with a statutory switch from a nominally fixed rate ceiling (e.g., 10%) to a floating rate cap (e.g., 500 basis points over the prime rate). Tying a regulatory package to a loan price that floats a set number of basis points above some index may prevent a reduction in loans during inflationary times (which is always a problem with a rate ceiling fixed at a nominal rate). But, the effect of even a floating ceiling is still to lop off some part of the distribution of borrowers, those for whom the lender needs a higher price to compensate for the higher risk.

[6] Persky (2007).

ceilings than those in the eastern states, where capital was plentiful.[7] Historically, usury laws in the U.S. and elsewhere have been rationalized as facilitating three primary objectives:

- Protect the small (unsophisticated) borrower in need of a consumption loan from exploitation by big lenders
- Curb the monopoly power of big lenders, especially in smaller, local and rural markets
- Regulate or otherwise discourage certain consumption expenditures by restricting their financing[8]

At the onset of the 20th century, interest rate ceilings made small consumer loans from financial institutions impractical, pushing the underlying loan demand for small loans toward pawnbrokers and less reputable financiers (loansharks). The Russell Sage Foundation drafted a model small loan act (the Uniform Small Loan Law, 1916) that was generally adopted by most states. The law allowed higher rates of interest for small loans than was generally permitted under state usury laws, but also required special licensing and regulation of a small loan industry. This was the genesis of the differential treatment of loan and lender types that prevailed in American usury legislation for most of the 20th century.

By the mid-1960s, consumer finance regulation had developed into a hodgepodge of state laws that "fostered monopolistic or oligopolistic markets with accompanying higher prices for credit."[9] Most state regulations adopted differential treatment of loans by creditor type and loan type. Small loans were the exclusive province of consumer finance companies – banks faced minimum loan size limits. The maximum allowable interest rate differed between cash loans (from banks and consumer finance companies) and sales credit (loans offered by merchants to finance the purchase of goods). Rate ceilings varied by size of the loan, with many states adopting a declining maximum rate for larger outstanding balances. Ceilings on open-end credit (revolving charge accounts) were different than on closed-end installment loans. Johnson noted that "the result of this ad hoc development of legislation is clearly demonstrated, for example, in New York, where there are separate statutes regulating installment loans by commercial banks, loans by industrial banks, banks' check-credit plans, revolving charge accounts, motor vehicle

[7] Boyes (1982).
[8] Blitz and Long (1968). Elements of all three objectives appear in recent proposals to regulate subprime mortgage lending to curb predatory practices (prevent the steering of less-experienced borrowers into excessively priced loans; prevent exploitation of borrowers in under-served neighborhoods; protect consumers from buying more house than they can/should afford).
[9] Shay (1968).

installment sales financing, installment financing of other goods and services, insurance premium financing, loans by consumer finance companies, and loans by credit unions. In these nine statutes there are 14 different ceilings on consumer finance charges."[10]

The regulatory pendulum began to swing in the opposite direction by the late 1960s. At least 2 national commissions recommended the easing of rate ceilings on mortgage loans.[11] The Uniform Consumer Credit Code (UCCC) was approved by the National Conference of Commissioners on Uniform State Laws in 1968. The code (and a revised version in 1974) was eventually adopted by 9 states and an additional 2 states passed consumer finance laws that were substantially similar to the UCCC. Through a standardized and simplified set of consumer finance laws, including deregulation and partial relaxation of rate ceilings, the UCCC attempted to foster a better market for consumer credit that would give consumers more effective tools for shopping and give creditors the freedom to move within and across markets for various credit products.

But, while the UCCC proposed a greatly simplified approach to the regulation of loan rates, it did not remove ceilings altogether. At least one participant reported that the UCCC was a political compromise that rationalized continued use of rate ceilings on the grounds that, because some consumers wouldn't be benefited by greater competition "through lack of income, wealth, education and mobility, they may not be in a strong enough position to bargain effectively in a free market. Thus, the consumer in the ghetto may be victimized by the same market forces that benefit the consumer in the suburb. For this reason the Code does not leave establishment of the price of credit entirely to the marketplace. Rate ceilings are provided to nip the unconscionable transactions which result from a joining of an unwary or desperate consumer with an avaricious credit grantor."[12]

As financial markets continued to evolve to cope with periods of rapid inflation during the 1970s, it became clear that rate ceilings (on both loans and deposits) could be devastating to the supply of consumer loans, especially home mortgages. In 1980, the Depository Institutions Deregulation and Monetary Control Act (DIDMCA) effectively eliminated usury ceilings on first

[10] Johnson (1968, p. 305)
[11] "States with unrealistically low usury ceilings. . . should recognize that in the long run they are only preventing some of their residents from obtaining loans;" Duesenberry, et al. (1969, p.117); "Ceilings on mortgage interest, whether appearing in special legislation or in general usury statutes, impede flows of mortgage funds during periods of high interest rates." Hunt, et a (1971, p. 85)
[12] Johnson (1968, p. 303).

mortgages made by federally insured lenders, including state caps on points and fees.[13] Federal legislation in 1982 also pre-empted state restrictions on "creative home financing" (i.e., mortgages with adjustable interest rates, balloon payments, etc).[14] Over the years the National Bank Act has been extended and interpreted by most courts as preempting state attempts to regulate the rate of interest which a national bank may charge in connection with a non-mortgage loan, including state-chartered subsididaries of a national bank, although it does not restrict state regulation of fees not commonly included in the concept of "interest".[15] The credit operations of large retailers and many traditional consumer finance companies have been acquired by or otherwise become affiliated with national banks and their subsidiaries, further reducing the coverage of state rate ceilings. As a result, the large majority of consumer and mortgage credit in the United States in 2007 is unencumbered by explicit interest rate ceilings.[16]

However, rate ceilings have close cousins in anti-predatory lending laws that have emerged over the past decade to curb abusive mortgage lending. Beginning with the federal Home Ownership and Equity Protection Act (HOEPA) in 1994, and then proliferating through several dozen state and municipal statutes, these laws establish separate packages of regulations for home mortgage transactions that are triggered by pricing in excess of a specified threshold. In effect, this approach deems "high-cost" mortgage loans as more likely to be associated with abusive tactics and contract features than other mortgage loans, and deserving of tighter restrictions than would be the case for lower-priced loans. Calomiris (2001) has aptly described these statutes as "stealth" usury ceilings. That is, while the laws do not formally ban the extension of mortgage credit at rates above the trigger values set by the statute (which they are prohibited from doing by federal law), the package of regulations that cover loans priced above the trigger may impose costs sufficient to discourage lenders from making such loans.

Even when they do not discourage high-cost lending completely, these predatory lending laws still raise lender costs and, as a result, reduce supply. The analysis in the previous section

[13] Pridgen (2006, p. 660). States were given an opportunity to opt out if they did so by April 1, 1983, and 15 states did so, though some later repealed their opt out.
[14] Alperin and Chase (1986, Vol 2, p. 165). This act was the Depository Institutions Act, better known as the Garn/St. Germain Act.
[15] Alperin and Chase (2005, Vol 2, p. 474).
[16] One notable area in which explicit rate ceilings seem to be gaining influence is payday lending. As of 2002, 17 states had prohibited payday lending outright or banned it through restrictive ceilings. Many more states impose less restrictive ceilings. In 2007 Congress passed legislation setting caps on payday loan charges made to members of the U.S. military and their families.

makes it clear that, in markets with risk-based pricing, the impact of such a reduction in supply does not fall evenly across the borrower population. Because most predatory lending regulations are triggered by higher loan prices, the reduction in supply impacts higher-risk borrowers the most, i.e, those who would not qualify for loans at lower rates. Similarly, regulations at both the federal and state levels that limit creditor collection practices (e.g., foreclosure, wage garnishment, penalty fees) also impact higher-risk borrowers the most because the regulations affect lenders' expected costs associated with collection and default.[17] So long as lenders can identify borrower risk at the outset, then if tougher restrictions on collection remedies curtail supply, the pullback is greatest for higher risk borrowers.

Empirical Studies of the Impact of Rate Ceilings and Regulatory Restrictions on Creditor Practices

Arguably, knowledge of the detrimental impact of usury restrictions on supply has existed for nearly as long as the restrictions themselves. Warnings that caps on loan interest rates would contract supply and raise the cost of borrowing go back at least 300 years to the writings of John Locke in 1691 who anticipated a reduction in credit supply that would result from lowering a prevailing usury ceiling from 6% to 4%.[18] Nearly a century later, Adam Smith similarly recognized that efforts to ban the charging of interest on loans would actually raise the cost of borrowing, as the borrowing was going to occur in any case and "this regulation, instead of preventing, has been found from experience to increase the evil of usury; the debtor being obliged to pay, not only for the use of the money, but for the risk which his creditor runs by accepting a compensation for that use. He is obliged, if one may say so, to insure his creditor from the penalties of usury."[19] But, in a striking inconsistency that has perplexed scholars since, Smith also favored legal limits on loan interest rates as a way to protect a country's financial

[17] A large set of potential creditor remedies are governed by the FTC Credit Practices Rule that was originally issued in 1977 but did not become effective until 1985. Creditors covered under the FTC's jurisdiction are mostly retailers and finance companies, but the other federal financial regulatory agencies adopted equivalent regulations so that the FTC rule effectively applies to nearly all creditors. Pridgen (2006, pp. 707-712). However, the Rule did not preempt state regulation in this area, so laws pertaining to garnishment and other practices can vary significantly across states.

[18] Persky (2007, p. 230).

[19] Persky (2007, p. 230).

capital from being squandered by spendthrifts and speculators, the only borrowers he believed willing to pay the higher rates that an unregulated market would produce.[20]

Smith lacked the benefits of large databases and modern econometric techniques so can perhaps be forgiven for failing to empirically test his position on usury ceilings. But, in contrast to 18th century English credit markets, the impact of usury laws on modern credit markets in the United States has been well studied. Early empirical attempts to measure the impact of rate ceilings benefited from the natural laboratories afforded by the wide variance in state usury laws that existed between 1960 and the early 1980s. But, empirical efforts were hampered by relatively poor data by today's standards. Very little loan-level data was available, other than for proprietary research. Credit scoring was in its infancy and the data available to researchers for capturing borrower credit risk was quite crude, when it existed at all. Consequently, the early studies focused on measuring the effects of state statutes on credit supply using aggregate measures of lending activity such as loan volumes, revenues, and losses as reported to state financial regulators or collected through supplemental surveys of companies. Later, more sophisticated tools were applied to loan-level databases to validate and extend the earlier findings.

Blitz and Long made an early attempt to apply economic analysis to rate ceilings in American consumer credit markets, and to identify winners and losers under usury regulation as well as testable implications.[21] Building on this theoretical analysis, and using aggregate data, Goudzwaard (1968) and Shay (1970) found that in states where rate ceilings were higher, consumer finance companies accepted poorer credit risks, as evidenced by higher loss rates in those markets. Both studies concluded that higher rate ceilings expanded credit availability to the higher-risk segment of the consumer markets by compensating lenders for accepting more marginal credit risks and the accompanying higher expected bad debt, screening and collection costs. But, Shay lamented that the aggregate data generally were too coarse, given the complexity of state laws, to determine whether the volume of personal loans also rose with rates, and to more thoroughly test all of the theoretical implications regarding the consequences of rate ceilings.

An extensive series of academic studies was commissioned by Congress under the direction of the National Commission on Consumer Finance (NCCF) during 1970-1971. An integral part of that research was the collection of company-level data from large national

[20] On this point perhaps Smith was anticipating the effects of adverse selection on a market, and the classic "lemons problem" for which economist George Akerlof won a Nobel prize for his analysis over two centuries later.
[21] Blitz and Long (1965).

creditors during 1971.[22] Using that data, Greer examined lending volumes across states, controlling for a variety of factors that would influence supply, including the level of the applicable rate ceiling.[23] He found that that the supply of loans fell sharply as state rate ceilings fell from an observed maximum of 40% to the minimum of 10%. In addition, personal loan supply rose with easy entry and low market concentration, especially in high-ceiling states. In a related study, Greer examined rate ceilings and loan turndowns during 1971 in 48 states for customers of 3 large national consumer finance companies.[24] Rejection rates rose in states where legal ceilings were relatively low, consistent with the earlier studies that found higher bad debt loss rates in states with less restrictive ceilings.

Because the NCCF studies were conducted at a time when there was wide variance in state rate ceilings affecting a significant portion of consumer credit, the company-level data on loan interest rates in 48 states shed some light on the question of whether competition regulates loan rates more effectively than rate ceilings. As discussed previously, supporters of rate ceilings have historically argued that a statutory limit on the price of credit protects consumers from exploitation by creditors. This view is based on the assumption (implicit or explicit) that, even in markets where multiple loan alternatives exist, "most consumers are not knowledgeable about the complexities of finance charges, are incapable or unwilling to use Truth-in-Lending information, and do not shop for credit."[25] According to this view, actual loan rates tend to rise to the ceiling rate, and only the ceiling prevents them from rising further. A cross-state comparison of rate ceilings and average rates charged on loans provides a good test.

Figures 1 and 2 display NCCF data collected on commercial bank loans during 1971. Figure 1 compares the ceiling rate with the average APR charged on 36-month direct auto loans for new automobiles. The exhibit groups the states by the level of the rate ceiling. The average ceiling for the group of ten states with the lowest ceiling rates was 10.9% and the average APR charged was 9.9%. Moving rightward, each successive pair of bars illustrates the mean ceiling and actual rates in states with increasingly higher ceiling rates. If actual rates tended to move to the ceiling levels (i.e., only the ceiling imposed pricing restraint), then we should see the height of the bar reflecting average APR rising in step with the rate ceiling bar. The striking feature of

[22] National Commission on Consumer Finance (1972).
[23] Greer (1974).
[24] Greer (1975).
[25] National Commission on Consumer Finance (1972, p. 96).

the diagram is that the ceiling was immaterial to the actual rate charged, which had a median value of 10.8% nationwide. Moreover, banks in the five states without ceilings charged an average rate almost identical to those in the states with regulated rates.

Figure 2 displays rates on 12-month personal loans from the same sample of banks (average loan size = $1,000). Not surprisingly, given the unsecured nature of the loan, the mean APR on these loans was higher than was charged on direct auto loans. The figure shows that the mean "free-market" rate on such loans was around 14 - 15%, judging from the mean rates charged in the five states without ceilings (14.3%) and the 16 states which had ceilings substantially above 15%. In contrast, the actual rates in the remaining states which had ceilings in the 11-15% range clustered tightly at or near the level of the ceiling. In particular, average actual rates in the 20 states with the tightest ceilings were about 300 basis points below those in states with less restrictive ceilings. The NCCF report noted that "legal rate ceilings may reduce the price of personal loan credit to some borrowers, but when ceilings are sufficiently low to affect the observed market rate in a significant way, there is a substantial reduction in the number of borrowers included in the legal market."[26]

A decade later, Villegas reached the same conclusion after introducing a higher level of econometric sophistication and examining loan-level data.[27] Using a cross-state sample from the Consumer Expenditure Survey conducted by the U.S. Bureau of Labor Statistics, Villegas examined 1,029 auto loans made in 1972-73. He found that *equilibrium* interest rates are not higher in states with high ceilings or no ceilings, nor are they lower in states with low ceilings. However, ceilings do curtail the availability of credit. The data showed an inverse relationship between the ceiling and the probability of rejection for auto loans. Many of the borrowers rejected in ceiling states would qualify for credit in other states. Consequently, the average interest rate paid is observed to be higher in states with higher ceilings (and in states with no ceiling) because in those states more higher-risk borrowers are able to obtain credit (by paying higher rates). Villegas notes that "the explanation that lending institutions in those states charge higher rates for comparable loans is not supported here."[28] He concluded that ceilings do not bring about access to "fair" interest rates, and legislating ceilings for that purpose is misguided. Market forces effectively drive price toward an equilibrium rate.

[26] NCCF (1972, p. 136).
[27] Villegas (1982).
[28] Villegas (1982, p. 951).

As mentioned above, until 1980 mortgage markets were subject to a wide variety of rate ceilings, and provided another set of natural laboratories for examining the impact of ceilings on credit supply, residential home building and home purchases. In 1970, all but 5 states had statutory ceilings on residential mortgages, ranging from 7.5% in New York to 21% in Rhode Island.[29] Robins examined home-building activity in 77 SMSAs in 1970, and found that, where the state mortgage rate ceiling was below market rate, housing starts were, on average, 28% lower than in states where the ceiling was set above the market rate. The lower was the ceiling rate relative to market, the bigger the effect.

Crafton tested the impact of business-cycle fluctuations in interest rates from 1971 – 1975 across 21 states with and without ceilings on mortgage rates.[30] Like Robins, Crafton found that the greater the gap became between the mortgage ceiling rate and the market rate, the larger the decline in both residential building permits and the dollar value of residential construction in the following quarter. Yandle and Proctor examined three separate "credit-crunch" periods characterized by rising interest rates in 1966, 1971, and 1974.[31] They found that the adverse effects of usury ceilings on housing starts increased in magnitude through each successive credit-crunch period in states with binding ceilings. Ostas examined other adjustments made by lenders in states with particularly low ceiling rates and found higher closing fees and larger downpayments were required in low-ceiling states.[32]

McNulty explicitly recognized that rate ceilings can ration the upper end of the distribution of borrowers even when the ceiling itself is above the ***average*** rate prevailing in the market.[33] Borrowers fall along a distribution according to risk, and the result is that a competitive market for loans is characterized by a distribution of rates. Consequently, as ceilings pinch the higher end of the distribution, some borrowers and potential loans are squeezed out – namely, those with higher LTV and other higher risk factors. McNulty tested this hypothesis using data on mortgage lending and building permits in Georgia during the period 1965-1977, a time period in which the Georgia mortgage rate ceiling was generally above the average market rate. The study revealed that a 100 basis point reduction in the spread between the ceiling and the market rate (due to rising market interest rates) generated a 7.5 – 12.6% drop in lending.

[29] Robins (1974).
[30] Crafton (1980).
[31] Yandle and Proctor (1978).
[32] Ostas (1976).
[33] McNulty (1980).

McNulty also found that the impact of ceilings adversely affected loans for purchase of both new and existing homes during periods of rising interest rates.

Evasion and De-regulation

By the mid-1970s, many states were beginning to streamline their consumer finance laws and loosen their usury ceilings. Arguably, the most dramatic regulatory change in the pricing of non-mortgage credit came not as a result of legislation, but stemmed from a 1978 U.S. Supreme Court decision ruling (Marquette National Bank vs. First of Omaha Service Corporation) which confirmed that a national bank could charge its credit card holders up to the interest rate allowable in the bank's charter state, regardless of the cardholder's state of residence. The court's decision to allow the "export" of home-state finance charges substantially raised the expected return from nationwide credit card marketing campaigns. At about the same time, a decade of technological advances in data processing had brought to the marketplace 1) sophisticated interbank settlement systems for authorizing and clearing credit card transactions, and 2) powerful statistical risk scoring models for evaluating credit card applicants. These complementary developments poised the bank card industry for massive expansion.

The removal of limits on bank card finance charges by South Dakota (1979) and Delaware (1981) triggered the physical relocation to those states of the credit card operations of major money center banks and a rapid expansion of bank card offers to customers nationwide.[34] By physically relocating their credit operations, major banks were able to evade the constraints imposed by the more restrictive state-level ceilings on bank revolving credit. Between 1979 and mid-1985, 18 states relaxed their rate ceilings on revolving credit, and another 16 states removed the ceilings altogether. Demuth (1986) summarized the rapid reversal in regulatory policy: "The Marquette decision, combined with the emergence of credit card technology, ignited a round of usury policy competition in which states sought to attract large bank card issuers and to help local banks compete effectively with out-of-state banks."[35] Bank card issuers in states without rate ceilings on bank card credit experienced a135% inflation-adjusted increase in card receivables between 1980 and 1985, compared to only 58.4% growth in receivables in states with

[34] Erdevig (1988).

[35] Demuth (1986, p. 216). States that were first to deregulate garnered the lion's share of the increase in receivables held by "local" credit card issuers. State government coffers benefited accordingly. Erdevig (1988) reported that state and local tax revenues from commercial banks jumped from $3 million annually to $27 million in South Dakota between 1980 and 1987, and from $2 million to $40 million in Delaware.

strict controls. Of course, this does not mean that consumer residents of those states experienced similar growth in their credit card balances (since many issuers were marketing nationwide out of their "home" state), but it illustrates rather dramatically how supply can shift in response to credit regulation.

The potential for market participants to side-step or work around interest rate ceilings has always complicated empirical testing of their impact. As previously noted, both borrowers and lenders will seek to minimize the impact of regulatory constraints on their ability to contract for valued goods and services. Recognizing the complexity of market responses to the patchwork of state-level consumer finance regulations, the National Science Foundation funded a remarkably ambitious research study by Purdue University's Credit Research Center to examine the impact of interest rate ceilings and restrictions on creditor collection tactics on consumer credit use. The unique empirical core of the project involved surveys conducted in 1979 of 3,600 households and more than 150 creditors in four local markets located in Wisconsin, Illinois, Arkansas and Louisiana. The local markets were chosen to achieve a broad contrast in state-level restrictions on loan interest rates and creditor remedies, but to otherwise compare localities that were geographically well-defined markets and had similar economic and employment conditions. Several important conclusions emerged from subsequent analysis of the data.

Peterson found that in order to minimize the negative impact of an especially low rate ceiling on credit supply, banks and finance companies shifted toward more indirect, retailer-generated credit and away from direct cash loans.[36] For goods typically purchased on credit, merchants would make financing available to consumers at the legal ceiling rate, sell the loan to banks and finance companies at a discounted rate, and make up for the loss by raising the price of the good. Cash credit offered by banks did not provide a similar opportunity.

In 1979 Arkansas had a 10% ceiling on consumer loan rates, the lowest in the nation and substantially below permissible rates in Louisiana and Illinois. Using both the creditor and consumer surveys, Peterson found that the structure of the Arkansas credit market was much different from the markets in the other three states. Pawnbrokers were abundant and no consumer finance companies operated directly in the market. Banks and credit unions imposed larger minimum loan size requirements on cash loans, and had higher loan rejection rates. Cosignors were more frequently used on credit contracts, and in some cases loan maturities were

[36] Peterson (1983).

shortened. Consumers searched less frequently for credit and when they did search they were less likely to search for low rates and more likely to search for credit availability or non-rate terms than residents in the other survey states. Most importantly, point-of-sale credit (i.e., dealer credit) was significantly larger while cash credit (i.e., bank and finance company loans) was significantly smaller in Arkansas.[37] But, in terms of overall household credit use, there was no significant difference in total consumer credit holdings for Arkansas households relative to consumers in the other states.

The Peterson paper was the first empirical research to challenge the idea that consumer credit usage always declines under restrictive rate ceilings. Restrictive ceilings may or may not reduce credit usage, depending on the extent to which lenders and borrowers can work around (evade) the ceiling.

In subsequent research Villegas used a large national household sample (the 1983 Federal Reserve Board Surveys of Consumer Finances) to conduct a broader examination of the extent to which borrowers and lenders substitute retail credit for cash credit to mitigate the impact of a binding rate ceiling, and whether this substitution occurred across the borrower risk spectrum.[38] By 1983, 7 of 37 states represented in the survey had removed ceilings on consumer credit, setting up an interesting natural laboratory. Using cross-sectional, borrower-level data, Villegas found that restrictive rate ceilings significantly reduced the quantity of consumer credit (all types, non-mortgage) obtained by higher-risk borrowers (measured by income level), relative to those in unconstrained states. Household debt for medium-risk borrowers was also reduced, though not as much. Rate ceilings had no impact on the total credit usage of higher-income (lower-risk) borrowers. In addition, rate ceilings did not lower rates paid by successful borrowers. Villegas concluded that restrictive ceilings diverted funds from higher-risk borrowers to other borrowers in unconstrained markets, or to other capital markets.

[37] The significantly greater importance of indirect sales financing in Arkansas is consistent with earlier studies that found higher prices on goods typically purchased with credit in Arkansas. See Lynch (1968); Blades and Lynch (1976). However, if we had similarly binding ceilings today, as was the case in the 1970s, this form of evasion would be much harder to accomplish, given Internet shopping and the availability of many goods online for purchase from retailers in states without binding ceilings. Of course, this form of evasion is not relevant for ceilings on mortgage rates, as there is no "retail credit" equivalent to a mortgage loan.

[38] Villegas (1989).

Summary of Evidence Regarding Rate Ceilings

To summarize, this section has drawn on studies of credit markets with and without restrictive rate ceilings. Broad conclusions regarding the impact of loan rate ceilings include the following points:

- ***The legal ability to raise loan interest rates does not correspond to the economic ability to sustain higher rates.*** Rates for various types of consumer credit do not necessarily rise to a regulatory ceiling and are less likely to do so, the higher the ceiling. Instead, knowledgeable consumers and unrestricted entry of new competitors are the forces that make credit available at prices commensurate with the costs and risks of providing the credit. The threat of being undercut by competitors keeps existing creditors' pricing power in check.
- ***Restrictive ceilings on credit tend to result in higher charges at unregulated margins.*** As surely as a balloon squeezed in the middle will bulge somewhere else, when lenders are denied an adequate return for their credit services, they will attempt to push their shortfall into higher fees on unregulated margins. For cash loans from banks, mortgage companies and finance companies, this may mean higher application fees, prepayment penalties, or elevated charges at other unregulated pricing margins. A restrictive loan rate ceiling on sales credit (credit offered by merchants for purchase of goods or services) pushes retailers to raise cash prices for the goods which loans are used to purchase.
- ***Restrictive rate ceilings are most harmful to the consumers they were apparently designed to protect.*** Regardless of where a ceiling is set, some higher risk consumers needing cash credit are rationed out of the market because the cost of servicing them is too high relative to the revenue received, and competition prevents creditors from subsidizing high-risk borrowers through higher charge to lower-risk borrowers. Excluded customers are typically young, have short time-on-the-job or at their residence, are relatively unskilled workers, have relatively low incomes, few assets, and short or checkered credit histories – all attributes that tend to raise the lender's risk and expected costs. In other words, the customers rationed out of the market are those consumers who are financially vulnerable, and presumably most in need of assistance.

The Impact of Restrictions on Creditor Collection Practices

While the analysis above focused on regulations that explicitly limit price movements in loan markets, the same analytical tools can be applied to examine the impact of other regulations that affect creditor practices and operations. Many of these "consumer protection" regulations can increase the demand for credit at the same time they raise creditor costs and reduce the supply.

A second major contribution of the 1979 NSF/Purdue study was to explicitly acknowledge the impact of such regulation on both demand and supply, and to incorporate it into the study design. In two separate studies, Peterson noted that, in response to regulatory limits on creditor collection tactics (e.g., foreclosure, repossession, garnishment) and penalty pricing (late fees), demand for credit will rise for a consumer who 1) thinks he has a non-zero probability of default, and 2) expects his personal loss to be lower in the event of default because of the collection restriction.[39] Put another way, consumers who are particularly averse to certain practices are willing to pay somewhat more to avoid them. Consequently, creditors recognize that if they use unpopular remedies on delinquent accounts, they incur a loss of valuable "goodwill" that translates into reduced customer flows and profitability. Of course, the value to a lender of using the remedy will be higher for loans to borrowers with higher default probabilities. Consequently, creditors will use a relatively unpopular remedy only if that remedy is a highly valuable collection device.[40] If markets are efficient in translating borrower aversion to a remedy into a cost for a creditor that insists on using the remedy, then an observed remedy in use represents an equilibrium that comes about through the interplay of both forces. If markets are efficient, when a new regulation bans a widely-used remedy, the supply of credit will fall.

In the presence of regulatory restrictions on creditor remedies, the supply of credit should be reduced (due to higher collection/screening costs and reduced recoveries) most for higher risk borrowers. Creditors may raise the price of credit (where not pinched by a ceiling), raise the required downpayment, or more frequently require a consignor. The resulting impact on the quantity of credit actually used is an empirical question that depends on the relative value borrowers and lenders place on the regulated terms. The NSF/Purdue study was

[39] Peterson ((1979; 1986).

[40] Umbeck and Chatfield (1982, p.513) note that "the most significant cost of an additional remedy to the lender is the decline in the borrower's demand for a credit contract as the remedy shifts more of the risk to him. Wealth maximizing creditors will weigh the gains and costs of adding an extra remedy to a standardized contract and their resulting behavior is predictable through the use of an economic model."

designed to explore these effects in the four local markets with four distinctly different regulatory environments.

Remedies examined in the NSF/Purdue study included garnishment, late payment charges, attorneys fee charges, repossession, foreclosure, reaffirmation, deficiency judgements, cosignor agreements, wage assignments, contacting non-debtors, and blanket security agreements. Creditors and consumers were each surveyed to solicit views on the separate remedies. Peterson reported that consumers found some remedies more acceptable than others.[41] Creditors frequently did not use all of the collection remedies legally available. Moreover, they tended not to use remedies that consumers strongly disliked. "The evidence suggests that creditors use relatively unpopular remedies only because their value for collecting bad debts exceeds their value to consumers. Prohibition of such remedies, therefore, will lead to reductions in aggregate credit use and in consumer welfare. Further, if a remedy is disliked by most consumers and a creditor does not find that remedy highly effective as a collection tool, the creditor will not value the remedy highly or use it frequently for fear of losing customer goodwill."[42] The conclusion: restrictions on creditor practices are not necessary to discourage creditors from using more onerous tactics.[43]

In a conclusion that resonates well today, Peterson wrote "While these findings relate to 1979 data, they have continuing relevance. The results suggest that state and federal legislators who consider restricting creditor practices in the future must determine whether they are attempting to correct a problem that is more apparent than real (which would be the case if legitimate creditors avoid the use of harsh remedies to protect goodwill). Legislators must also ask themselves if the restriction of credit practices useful to lenders will add sufficiently to the social welfare to compensate for the reduction to consumers of the quantity of credit available."[44]

Barth confirmed some of the NSF/Purdue study's findings using loan-level analysis on a database of 6,000+ personal finance loans made by 9 large lenders during 1975-1977.[45] The study assessed the impact of 1) entry restrictions, 2) limits on creditor remedies, including garnishment,

[41] Peterson (1986). Further analysis of the same data by Falls and Worden (1988) confirmed that some consumers placed a positive value on protection from creditor remedies, while others found no need for it. Moreover, the data provided evidence that the former group was willing to pay lenders some amount to obtain such protection.
[42] Peterson (1986, p. 84).
[43] However, a restrictive rate ceiling changes the decision calculus: creditors in the NSF/Purdue study used tough and legal collection remedies sooner and most frequently in a state with low rate ceilings.
[44] Peterson (1986, p. 85).
[45] Barth, et al (1983).

wage assignment and late fees, and 3) bankruptcy levels on loan interest rates and loan size. Their study joined a small but soon-to-grow literature that used loan-level data to analyze the functioning of credit markets. They found supply-side reactions to factors that raised lenders costs that were consistent with standard theory. In particular, regulatory limits on income that could be garnished, and caps on permissible late charges each raised the contract interest rate. Limits on entry of new competitors (through "convenience and advantage" rules for licensing) also raised the contract interest rate. Higher levels of Chapter 7 bankruptcy (reflecting higher losses on unsecured accounts) raised the interest rate, while higher incidence of Chapter 13 repayment plans (holding Chapter 7 incidence constant) lowered the interest rate. Overall, the study provided further confirmation that the supply of loans (and hence the price) is sensitive to the costs of doing business, including those costs influenced by restrictive regulations.

In another study, Barth Cordes and Yezer examine the net benefits and costs of restrictions on creditor collection remedies.[46] Taking a different methodological approach from Peterson's 1986 report, which relied on survey evidence, the study estimated supply and demand equations to see if the amount borrowers are willing to pay for a creditor's agreement not to use a remedy offsets the amount that creditors lose from a ban on the remedy. Despite the different empirical approach and different data set the authors reached the same conclusions as Peterson. Restricting the use of remedies is unlikely to provide net benefits to the typical borrower, and does impose a net cost. Only restrictions on deficiency judgments showed positive net benefits.

Other regulatory restrictions on creditors' ability to recover balances on delinquent loans have been found to reduce the supply of credit. Gropp, Scholz and White examined the influence of cross-state differences in Chapter 7 bankruptcy asset exemptions.[47] They found that, other things equal, generous Chapter 7 bankruptcy asset exemptions (i.e., allowing debtors in Chapter 7 to keep rather than forfeit to creditors a larger dollar value of their net assets) affect both the supply of and demand for credit in such a way as to increase the amount of credit held by high-asset households and reduce the availability and amount of credit to low-asset households. In other words, bankruptcy exemptions tend to redistribute credit toward borrowers with high assets. They also observed a price effect: interest rates on auto loans to low-asset households are higher in high-exemption states.

[46] Barth, Cordes and Yezer (1986).
[47] Gropp, Scholz and White (1997).

On the same theme, empirical studies have documented how state-imposed limits on the mortgage foreclosure process affect mortgage lender costs which can ultimately create cross-state differences in mortgage credit availability and price.[48] As of 2005, 21 states required lenders to go through the courts to foreclose on property (judicial foreclosure). Judicial foreclosure substantially lengthens the foreclosure process, relative to the non-judicial option. Several studies show that judicial foreclosure raises lender foreclosure costs as much as 10% of the loan balance.[49] Pennington-Cross estimated that houses foreclosed in judicial-foreclosure states sell for 4% less, presumably because of greater depreciation during the longer foreclosure period.[50] Other costs include maintenance, taxes and foregone interest, which grow over time, as well as transaction costs in general.

Pence (2006) examined the impact of laws governing the mortgage foreclosure process on loan sizes by comparing approved mortgage applications in census tracts that border each other but are located in different states, with different laws governing foreclosure. She found that loan sizes are 3% to 7% smaller in defaulter-friendly states. Pence concluded that "this result suggests that defaulter-friendly laws impose material costs on borrowers at the time of loan origination."[51]

As mentioned in an earlier section, the predatory lending laws that have proliferated across the states over the past decade to combat abusive mortgage lending have provided a new set of natural laboratories for testing the differential impact of restrictions on supply. Some laws have been in place sufficiently long to allow tests of their impact. Because such laws are the topic of one or two other papers at this conference, I'll leave a review of that literature to other authors.

But, for advocates of tougher mortgage regulations one lesson should be clear from the literature survey above. If elements of those laws significantly impact lender costs it would be foolish to expect them not to have a negative impact on the supply of credit. For example, prepayment risk is a real cost faced by lenders. Subprime borrowers have been shown to prepay 30% more often than prime borrowers.[52] If prepayment penalties are banned, as is required by many predatory lending laws, what do we think is going to be the creditor reaction? In the same vein, if creditors (and even subsequent purchasers) of loans in the secondary markets face legal liability for borrower repayment problems under a "suitability standard", what do we think the

[48] Clauretie and Hertzog (1990); Ciochetti (1997); Pence (2006).
[49] Pence (2006).
[50] Pennington-Cross (2003).
[51] Pence (2006, p. 177).
[52] Pennington-Cross, (2003).

reaction will be when creditors view loan applications from higher-risk borrowers?[53] The magnitude of the supply reduction is an empirical question and is clearly dependent on the regulatory language. But, both theory and decades of research observation leave no doubt that a reduction should be expected.

In summary, it should be pretty clear that the supply of credit in competitive markets is sensitive to regulations that raise lender costs. Forty years of empirical research on American credit markets has demonstrated that the simple concepts of supply and demand acquired in a basic economics principles course are remarkably powerful for predicting actual adjustments in credit markets to rate ceilings and certain other restrictions on creditor practices. Of course, this does not imply that all such regulation produces negative net benefits. Although we've seen that creditors are sensitive to consumer aversion to some practices, sometimes market forces alone fail to eliminate particularly onerous practices. Nevertheless, the lesson from this survey of empirical research is that when regulation raises lender costs, it also reduces the supply of credit to some degree, and usually not evenly across the distribution of borrowers.

Ironically, rate ceilings and other creditor restrictions are usually rationalized as helping the most vulnerable members of society, but the regulations actually put those borrowers on the receiving end of lender adjustments. Creditors pull back lending most to higher-risk borrowers who are readily identifiable as more costly to service, i.e, those with lower incomes, poor credit history, limited credit experience, fewer assets, limited or interrupted employment history, and so forth. The result calls to mind the old Mills Brothers standard from the 1940s, "You always hurt the ones you love."

Concluding Thoughts

This paper has drawn on studies of credit markets with and without restrictive rate ceilings and other limits on credit operations to illustrate their impact on credit markets. Armed with an understanding of the simple economics of pricing in credit markets, it becomes clear that with the gradual shift over the past 20 years toward risk-based pricing of loans, the odds of a rate

[53] We've already seen that an "assignee liability" provision that create legal liability for mortgage holders in the secondary market can trigger a severe pullback in credit supply. When Georgia passed the Georgia Fair Lending Act, effective October 1, 2002, the security rating agencies such as Standard and Poor declared that as of February 1, 2003 they would no longer rate mortgage-backed securities that included loans covered by the GFLA. As the number of subprime lenders declaring they would no longer do business in the state mushroomed, the Georgia legislature moved quickly to rescind the assignee liability provisions. The incident provided a vivid reminder that the supply of credit can be directly and sharply affected by regulatory activity, no matter how well intended.

ceiling actually *helping* any borrowers have become very low, especially where loan markets are competitive. Competition dictates that good borrowers pay lower rates anyway, with or without ceilings. Truly uninformed borrowers may pay less if rates were controlled, but only if they were sufficiently low risk as to still qualify at the restricted rate. Higher risk borrowers aren't helped at all. What good is the legal protection from paying more for a loan if I can't find any loan ? Rate ceilings clearly limit access to credit for those who are generally at the bottom of the economic ladder. So do other creditor restrictions that are written in such a way as to raise the costs of serving higher-risk borrowers.

In the face of such overwhelming economic evidence, how does support for usury laws persist? Certainly in the United States, if not elsewhere, support for explicit loan rate ceilings has waned over the past 25 years. But the re-emergence of payday loan rate ceilings and the "stealth usury ceilings" created in many predatory lending laws should give us pause. Are legislators and policy advocates simply uninformed of the negative effects on supply from rate ceilings and other creditor restrictions?

Perhaps they are not. As the question of the impact of usury ceilings became settled and evidence of the costs of usury ceilings became widely accepted, economists took up the interesting question of why, and under what conditions, usury ceilings persist. Glaeser and Scheinkman note that usury laws have been justified for centuries as social policy intended to redistribute income between the rich and the poor.[54] Three decades ago, Avio speculated that while legislators often argued that ceilings were necessary to protect borrowers from "immoral" and "unconscionable" transactions, their real motivation might actually be to let binding rate ceilings ration higher-risk (lower-income) borrowers out of the credit markets.[55] The rationale would be to reduce present-period consumption expenditures for rationed consumers (presumed to be low-income and/or more financially vulnerable) and therefore reduce the need for government income subsidies in later periods when such households were burdened by interest payments resulting from borrowing in the initial period. Posner takes the argument to a more sophisticated level, arguing that "the provision of welfare in a free market produces perverse incentives to take credit risks, which both drive up the cost of the welfare system and undermine its goal of poverty reduction. The laws against usurious or unconscionable contracts are

[54] Glaeser and Scheinkman (1998).
[55] Avio (1973).

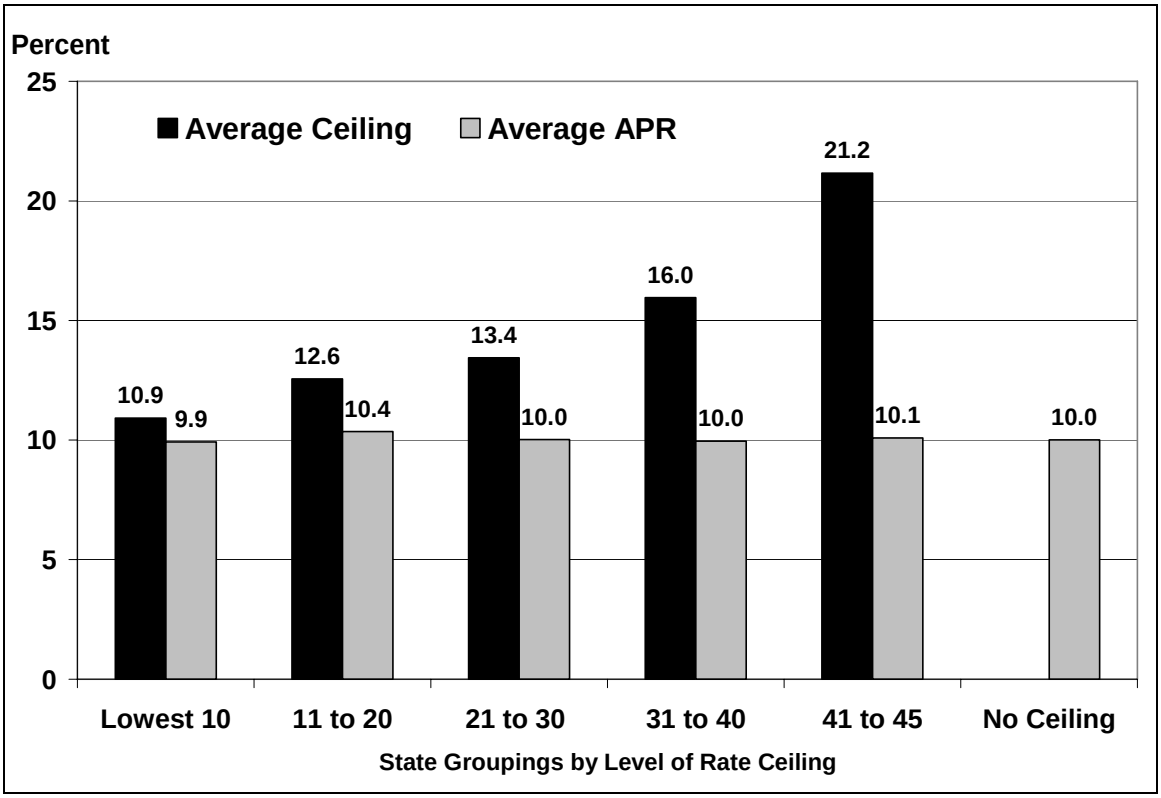
desirable because they deter this risky, socially costly behavior."[56] So, rate ceilings and other restrictions on creditor practices are designed to save society from borrowers, and save borrowers from themselves.

Glaeser and Scheinkman argue that loan rate ceilings are a primitive form of social insurance that facilitate transfer of income in certain economies and during certain time periods that are missing market-based institutions to accomplish the same purpose. They note that "even in biblical Israel (and even earlier in Babylonia), interest-rate restrictions seemed to have been intended to limit the degree to which an individual could become indebted. If the community paid some of the price of bankruptcy (perhaps in having to care for the bankrupt), then the community sensibly wanted to restrict the individual's ability to overcommit himself to loans."[57]

This argument may seem compelling against the backdrop of this years' mortgage headlines and the risk that a new home purchase and home mortgage payments can quickly overextend a consumer. Perhaps predatory lending laws are really targeting the broader activity in the subprime mortgage market with the intention of rationing the higher-risk borrower in the interest of saving him – and society – from subsequent pain. If so, the economic evidence suggests that advocates of predatory lending laws tied to loan interest rates wield an extremely blunt instrument that imposes high costs in the form of lost opportunities. There surely must be a way to fine-tune protections without lopping off a large chunk of the market, as the more restrictive "stealth usury laws" would do.

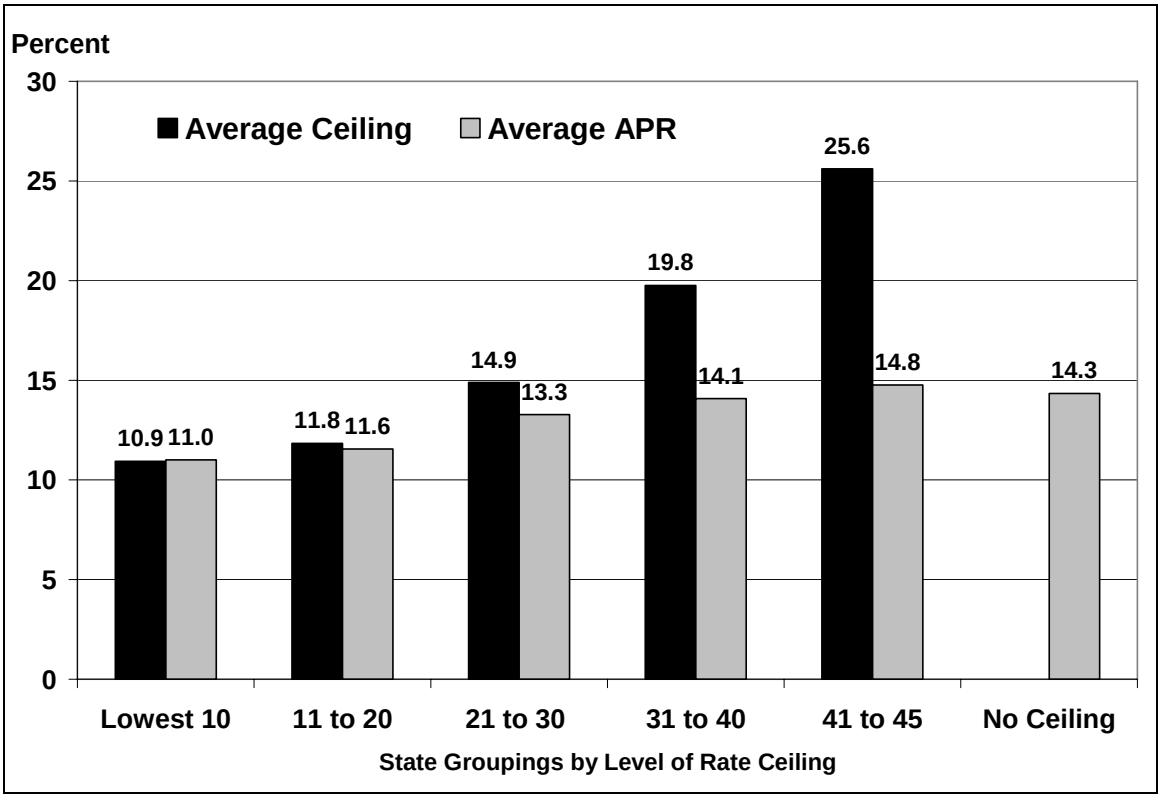
[56] Posner (1995, p. 283).
[57] Glaesner and Scheinkman (1998, p. 27). They develop a model as to when and where such restrictions will evolve. Tests of the geographic patterns of usury ceilings in the United States during the 1950s (when ceilings were common and varied) provide support for their thesis.

Figure 1
36-month Bank Loans for New Autos:
Average Rate Ceiling vs. Average APR, 1971



Source: National Commission on Consumer Finance (1972).

Figure 2
12-month Bank Personal Loans:
Average Rate Ceiling vs. Average APR, 1971



Source: National Commission on Consumer Finance (1972).

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