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Author(s): Richard L. Peterson

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Usury Laws and Consumer Credit: A Note

RICHARD L. PETERSON*

MUCH HAS BEEN WRITTEN on the potential effects of rate ceilings on consumer credit markets,¹ and numerous empirical studies have analyzed the impact of rate ceilings on mortgage loans and housing construction markets.² However, the actual effect of loan rate ceilings on consumer financial markets in general has not been well documented—in part because credit terms are complex so the credit offer function has several arguments.

Notwithstanding the potential complexity of credit terms, it is usually assumed that if a rate ceiling reduces the nominal price of credit, P , the market will fail to clear, and excess credit demand will need to be rationed out of the market by adjusting credit terms other than the rate. In this context, most investigators assume, first, that the price of credit is solely a function of the interest rate, r , and second, that required credit rationing is conducted by suppliers who reject risky customers or alter credit terms to reduce risk.

When credit obtained at the retail point-of-sale is considered, however, more options are available. In particular, the price of goods purchased with credit can be raised.³ Thus, a more general model of consumer credit would note that $P = P(r, P_r)$ where P_r = the price premium on goods purchased with credit.

Since funds are highly fungible, it is likely that consumers are able to substitute retail-originated credit for other sources of consumer credit at low cost. If portfolio adjustment costs were zero, a rate ceiling could have no effect on consumer's total indebtedness, as any decrease in r could be exactly offset by an increase in P_r at retail credit sources, so that P would remain unchanged.

However, it is unlikely that all consumer credit needs can be met by obtaining retail credit so that consumer use of credit may be reduced by rate ceilings. This would occur if consumers bore adjustment costs (such as transportation costs), when they switched from cash to retail credit sources, that suppliers did not receive. The question then arises whether, when retail credit is available, adjust-

* I. Wylie and Elizabeth Briscoe Professor of Bank Management and Finance, Texas Tech University. This study was funded at the Credit Research Center (CRC) by the National Science Foundation (NSF) Grant DAR77-20041. Robert W. Johnson, Gene Lynch, and A. Charlene Sullivan provided helpful comments on earlier drafts. Gregory A. Falls provided valuable research assistance. However, any opinions, conclusions, or errors contained herein are the sole responsibility of the author and do not necessarily represent the views of NSF, CRC, or Texas Tech University.

¹ See, for instance, Avio ([1, 2]), Dunkelberg and DeMagistris [6], Goudzwaard [7], Greer ([8, 9]), Greer and Shay [10], Jadow [11], Lynch [13], National Commission on Consumer Finance [15], Peterson ([16, 17]), Peterson and Falls [19], and Shay [21].

² See Dahl, Graham, and Rolnick [4], Ostas [15], Robins [20], and Yandle and Proctor [22].

³ For instance, assuming all payments are made as scheduled, a creditor will receive equal cash flows (\$44.92 per month) from selling a good for \$1,000 on a two-year installment credit contract with an 18 percent rate or from selling the same good for \$1081.90 on a two-year installment credit contract at a ten percent rate.

ment costs are sufficiently large to permit restrictive rate ceilings to reduce aggregate consumer credit use significantly.

I. Empirical Evidence

Previous empirical investigations have largely focused on the price and availability of cash credit.⁴ This focus has led most investigators to conclude that rate ceilings reduce the availability of credit—particularly to high risk borrowers. This study differs from previous studies in that it considers all sources of consumer credit, not just installment credit contracts. Data used in the study were obtained from a survey of 3572 consumers living in four different states in 1979.⁵

One of the survey states was Arkansas, which had a restrictive rate ceiling in the form of a ten percent usury law. In 1979, that law applied to all creditors except federally chartered credit unions—they were subject to a 12 percent ceiling. The other survey states had higher consumer credit rate ceilings (considerably higher in Louisiana and Illinois and modestly higher in Wisconsin).

As a result of the restrictive rate ceiling, the structure of the Arkansas credit market differed considerably from the structure of credit markets in the other states. Pawnbrokers were abundant and no consumer finance companies operated in the market. Banks and credit unions imposed larger minimum loan size requirements on cash loans, and credit rejection rates were higher. Also, cosignors were more frequently used on credit contracts and, in some cases, loan maturities were shortened.⁶ Furthermore, consumers less frequently searched for credit and, when they did search, were less likely to search for low rates and were more likely to search for credit availability or nonrate credit terms than residents of the other survey states.⁷

Given these differences between the consumer credit market in Arkansas and the other states, one might expect Arkansas consumers to have used less consumer credit than consumers in the other states. Indeed, Dunkelberg and DeMagistris [6] reported such a finding. However, they followed the methodology of the Federal Reserve Board's 1977 *Consumer Credit Survey* [3] and did not include credit card debt with total consumer debt.

Since credit card debt is usually originated at the point-of-sale where prices can be marked up to cover any additional charge,⁸ it may not be effectively restricted by usury laws. Consequently, if usury laws are restrictive one would expect credit card credit, as well as other retail credit, to be substituted for consumer cash credit.

Table I compares total consumer installment debt holdings, by income and risk class,⁹ in Arkansas and the other survey states. Because not all consumers

⁴ See, for instance, Greer [8, 9], and Shay [21].

⁵ A complete description of the survey is contained in Dunkelberg, et al. [5].

⁶ These effects are documented by Peterson [16] and Peterson and Falls [19].

⁷ These results are reported by Peterson and Black [18].

⁸ Johnson [12], for instance, found that banks apparently discounted merchant originated credit card paper more heavily in Arkansas than in other states.

⁹ Risk classes were determined by assigning credit scores to consumers and dividing consumers into deciles according to their score. The scoring system used was similar to one used by one of the nation's largest banks. It was initially developed by Dunkelberg and DeMagistris [6].

Table I
Total Household Debt Holdings, by Risk and Income¹

	(a) Total Consumer Debt Outstanding Per Household ²			(b) Non-point-of-sale Consumer Debt Outstanding ² Per Household			(c) Ratio of Point-of-Sale Credit To Total Consumer Debt-Average Ratio per Debt Holding Household ²		
	Arkansas	Other Survey States	t-Value	Arkansas	Other Survey States	t-Value	Arkansas	Other Survey States	t-Value
By Credit Risk									
Riskiest 5%	1267.00	951.13	-.99	563.28	699.54	.48	.7519	.4644	-3.19*
Next Riskiest 5%	1227.52	1698.72	1.35	626.26	807.02	.71	.6226	.4145	-2.04*
Second risk decile	1645.92	1990.74	.91	652.78	1275.69	2.53*	.6862	.3905	-4.01*
Third risk decile	1587.53	1863.42	.76	591.81	1017.21	2.03*	.6483	.5079	-1.81*
Fourth risk decile	1864.98	1545.41	-.95	912.90	928.10	.05	.6861	.5834	-1.39
Fifth risk decile	2468.93	1614.65	-2.19*	935.37	887.29	-.19	.6768	.6100	-.90
Sixth risk decile	1477.73	1729.39	.67	596.88	1238.83	2.60*	.7202	.5446	-2.11*
Seventh risk decile	1288.36	1437.07	.34	535.76	877.12	1.31	.7769	.6025	-2.17*
Eighth risk decile	1246.44	1089.69	-.49	466.08	835.57	1.50	.7911	.6484	-1.76*
Ninth risk decile	1093.39	808.78	-.87	757.32	585.10	-.60	.7829	.6988	-1.05
Least risky ten percent	330.35	308.35	-.15	53.00	179.21	2.21*	.9053	.8989	-.12
By Income									
\$1-\$3500	148.67	150.20	.02	3.55	68.53	2.55*	.9231	.6800	-2.18*
\$3501-5500	675.68	188.80	-2.75*	201.97	102.63	-.74	.8529	.7891	-.03
\$5501-8250	697.65	406.67	-1.86*	345.29	203.85	-1.09	.7287	.6230	-1.25
\$8251-10500	987.00	599.05	-1.65	368.87	391.12	.14	.7841	.5550	-2.56*
\$10501-13250	1140.54	1230.90	.36	477.54	636.59	.90	.7524	.6070	-1.82*
\$13251-18750	1974.35	1679.14	-.99	858.04	997.89	.62	.7039	.5694	-2.37*
\$18751-23750	3027.86	2097.91	-1.98*	1099.26	1232.03	.44	.7030	.5464	-2.53*
\$23751-27500	2419.29	2642.78	.45	667.00	1573.96	3.14*	.7610	.5467	-2.77*
Over \$27500	2876.48	2664.52	-.45	1430.14	1884.61	1.35	.5657	.5574	-.12
Total	1455.71	1367.68	-0.81	605.59	848.52	3.28*	.7286	.5845	-6.22*

* Significantly different at the 10 percent confidence level.

¹ SOURCE: CRC 1979 Consumer Financial Survey

² "Total Consumer Debt" includes all "Point-of-Sale" (credit card debt plus dealer-originated installment credit) plus all "Non-Point-of-Sale Debt" (installment credit not originated by dealers).

reported some critical data, such as income or the dollar value of certain types of debt-holdings, the debt analysis in Columns (a) and (b) applies to the 80 to 90 percent of the respondents who provided the requisite data. The point-of-sale ratio analysis in Column (c) applies, by necessity, to the portion of the sample (roughly half) that held non-zero amounts of debt. Each column presents the mean value of debt holdings in Arkansas and other survey states for each class of consumers. Reported *T*-statistics were calculated from the means and standard deviations of debt holdings for comparable consumers in Arkansas and the other survey states.

Column (a) of Table I indicates that the average consumer installment credit obligations of Arkansas debtors were not significantly different from those of debtors in other survey states. Indeed, for several income and risk classes of debtors, Arkansas debtors owed significantly more consumer credit than similar debtors in other states.

Column (b) of Table I indicates that the picture was far different if only non-point-of-sale consumer credit was considered. Non-point-of-sale debt equals total installment credit less installment debt contracts originated by retail dealers and credit card debt (which may be acquired by banks or other firms, at a discount, but is predominantly originated by retailers at the point-of-sale).

The rate of return on cash credit contracts can be restricted by rate ceilings while those who extend retail credit may avoid the consequence of rate ceilings by adjusting retail selling prices. Cash creditors, therefore, are less likely than retailers to extend credit or take risks if their rate of return on credit is limited by a restrictive usury law, and that is shown in Column (b). Overall, as well as for several of the riskiest classes of consumer borrowers, the average amount of non-point-of-sale consumer credit held in Arkansas was lower than in other states.

The data presented in Column (c) of Table I show why, on average, consumers held as much credit in Arkansas as in other survey states, while their non-point-of-sale credit obligations were much lower. Point-of-sale credit (including both credit card debt and installment debt contracts issued by dealers) was a much higher proportion of total consumer credit in Arkansas than in other survey states. This was particularly the case for the highest risk classes of borrowers, who, presumably, would have encountered the greatest difficulty in obtaining cash credit directly.

II. Conclusions

This study shows that previous investigations which considered only a portion of consumer's total debt portfolios may have yielded misleading evidence on the effect of usury laws on the price and availability of consumer credit. It does not appear that a restrictive usury law will necessarily reduce the amount of consumer credit used by even the highest risk consumers, when account is taken of point-of-sale credit. The evidence suggests that the cost of substituting point-of-sale credit for cash credit is sufficiently low that consumers can easily make such

substitutions when a usury law is restrictive.¹⁰ As a result, while restrictive usury laws can have a major impact on the structure of credit markets and the availability of cash credit, particularly to high risk borrowers, they are not likely to have a substantial effect on the total amount of credit used by consumers.¹¹

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¹⁰ There is another possible reason to explain this result. If cash customers at credit granting retailers also paid higher prices for goods, the price premium of credit related goods (Pr) would not rise sufficiently to exactly offset the effect of reduced interest rates. As a result, total borrowing costs would have been reduced and even the existence of small positive adjustment costs would not necessarily have caused the total cost of retail credit to increase, as they would have been offset by subsidies from cash buyers.

¹¹ It should be noted, however, that this whole discussion refers only to the nominal value of credit holdings. Because the discounted present value of low rate credit contracts is less than the discounted present value of an equivalent face value of high rate credit contracts, one could argue that if credit were equally available in Arkansas, the face value of consumers' credit holdings should be higher than in other states. If that line of reasoning is accepted, even a finding of equal nominal credit holdings could be consistent with the notion that rate ceilings actually reduced credit availability. Nonetheless, since average per capita credit holdings in Arkansas were (insignificantly) seven percent larger than in other survey states (and the example in footnote 3 suggests that an 8.19 percent difference could compensate for an eight percent rate difference on a two year loan), it is unlikely that the average present value of credit contracts held by Arkansas consumers was lower than the average present value of contracts held in other states.

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