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BANK TREN

Analysis of E erging Risks in Banking

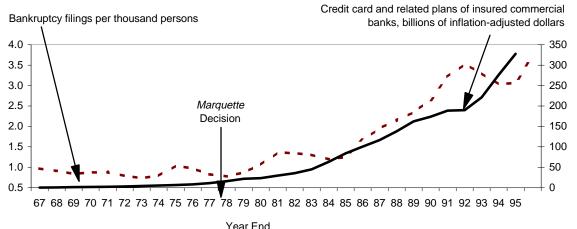
ASHINGTON D.C.

IANE ELLIS diellis@fdic.gov

The Effect of Consumer Interest Rate Deregulation ony Credit Card Volumes, Charge-Offs, and the Personaly Bankruptcy Ratey

The rising Sevel 9f credit card debt is 9ften cited as one 9f the factors in the rising U.S.9 personal 9bankruptcy 9rate. 9Numerous 9theories 9have 9been 9advan@ed 9to 9explain 9the9 increases, including aggressive marketing by credit card issuers and a Pack 9f discipling 9 the part Of consumers. These explanations do Not address the underlying reason for these 9 trends. This Paper Pargues Rhat 9a 91978 Supreme Court Elecision Y"Marquette") Funda-9 metally aftered the market for credit card pans in a way that significantly expanded the9 availability of credit and increased the a9erage risk profile 9f borrowers. Marquette ushered9 in deregulation of usury ceilings on consumer interest rates by allowing renders in a state? with Aberal usury ceilings to export those rates to consumers residing in states with more? restrictive usury ceilings. The result was a substantial expansion in credit card avoilability,9 a reduction in a9erage credit quality, and a secular increase in personal bankruptcies. The9 Canadia experience with bankruptcies supports this argument. This paper contends that 9 a tightly regulated world, marked by restricted access to consumer credit and a low leve9 of personal bankruptcies, was exchanged for a deregulated world, marked by expanded9 access to consumer credit and a higher 9evel 9 f personal bankruptcies. This argument9 implies that a return to the bankruptcy rates and charge-off \(\textit{Qev} \text{\text{l}} \) sthat prevailed in the 9 early 1980s or before may be unlikely.9

The Long-Term Rise in the Personal Bankruptcy Rate Started Shortly after Interest Rate Deregulation



Source: Bank call reports, Administrative Office of the U.S. Courts, and Census Bureau

The Effect of Consumer Interest Rate Deregulation on Credit Cardy Volumes, Charge-Offs, and the Personal Bankruptcy Ratey

Iy troductioy

The 9U.S. Spersonal Sbankruptcy State Shas Stisen Sto Sa9 historically 9high 9 evol, 9from 9 ess 9than 9one 9per9 thousand population annually in the early 1970s t9 almost Stive Sper Sthousand Spopulation Stor Sthe Syear9 ending September 30, 1997. An increase in Soutstand-9 ing consumer debt, particular y credit card debt, has 9 been cited as a significant contributor to the increased 19 rate 9 f filing. Sone financial planner was Stecently 9 quoted as saying, "I've Shevor seen anyono come in with a financial problem that wasn't related to credity cards."

Aggressive marketing by credit card venders va a 9acky of Aliscipline on 9the Spart of Sconsumers often 9are9 blamed 9 for 9 the 9 increase 9 in 9 credit 9 card 9 debt9 outstanding. These explanations in essence argue that9 behavior has changed: that lenders have become more9 aggressive 9 r borrowers 9ess prudent. Whatever the9 merit of these explanations, they 9eave un@nswered9 questions as to when and why behav@r changed.9

Some industry experts have attributed the increases i9 credit 9card 9debt 9outstanding 9and 9personal 9bank-9 ruptcies to changes in marketplace rules rather than 9 changes in 9ender 9r borrower behavior. One type 9f 9 change 9to 9the 9marketplace 9rules 9occurred 9th 9both 91978 9and 91994 9when 9federal 9bankruptcy 9 aw 9was 9 modified, in part, to increase the 9evol 9 f assets that 9 could be protected in a bankruptcy filing.²

The Aauthor Aacknewledges Athe Avaluable Acontributio A fAthe A participants Awh A provided Aeedback A this Apaper An Ai Aebruary A 13, Al 997, Around table Adiscussion. A The Auth A acknowledges Ahe A valuable Acontributia of Alicia Amiel, AFDIC Alibrarian, Alwho A provided Aesearch Assistance. A The Auth A also Aicknewledges Ahe A valuable Acontributia of Alerilyn ARogin, AFDIC Asenior Aattorney, A what provided An formatio A Canada's Anterest Rate Act. A

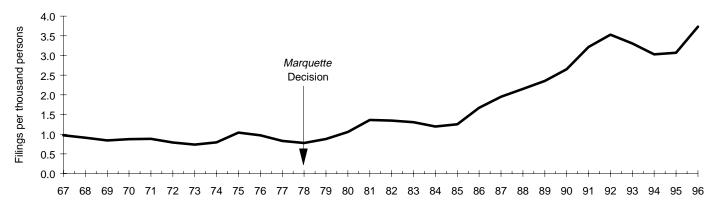
These Legal changes, which made bankruptcy a more9 attractive Option for debtors, sometimes are cited as9 reasons for the rising Level Of personal bankruptcies.9 Despite the instructive appea 9f this argument, there is9 s9me evidence that changes in bankruptcy Laws may9 not 9be 9a 9primary Octiver 9of Officeases 9in 9personal9 bankruptcy rates. For example, Ellis (1998) provides9 evidence 9on 9the 9ack 9of Octivelation Obetween Ostate9 homestead 9 exemption 9 rates 9 and 9 state 9 personal9 bankruptcy 9rates. 9Zandi 9(1997) 9points 9out 9that 9a9 similar increase in personal bankruptcies has Occurred in Canada without any significant recent changes in 9the bankruptcy law.9

Another significant change to the marketplace rules9 occurred 9in 9the 9 ate 91970s 9with 9deregulation 9of9 consumer interest rates. Both Ausubel (1997) and 9 Rougeau (1996) focus on interest rate deregulation as9 the event that set the United States on a course 9 for rising credit card volumes. Chart 1 illustrates that the 9 dramatic 9rise 9in 9personal 9bankruptcies 9did 9indeed 9 begin 9shortly 9after 9the 9Supreme 9Court's 9Marquette T decision, which 9ditiated 9diterest rate 9deregulation.9 This 9chart 9suggests 9a 9relationship 9between 9diterest 9 rate 9 deregulation 9 and 9 the 9 increase 9 in 9 personal 9 bankruptcies. The evidence a 9 e is 9tot sufficient to 9 establish a causal relationship; this paper argues that 9 such a relationship exists.9

The 9argument 9advanced 9i\text{9} 9this 9paper 9 for 9 the 9 importance \text{0}f i\text{1}terest rate deregulation as a driver \text{0}f9 expanded 9credit 9a\text{9}ailability 9 and 9 higher 9pers\text{0}nal 9 bankruptcy 9 rates 9 differs 9 from 9 those 9 offered 9 by 9 Ausubel and Roug\text{0}au. Ausubel (1997) maintains that 9 borrowers underestimate their use 9 f credit cards a\text{0}d, 9 therefore, the importance \text{0}f credit card interest rates, 9 which enables \text{9}enders to earn an extranormal profit 9 on every \text{9}cod customer. He argues that the extra-9 ordinary \text{9}rofits \text{9}made \text{9by \text{9}credit \text{2}ard \text{9}enders \text{9}ave 9

Chart 1

The Long-Term Rise in Personal Bankruptcy Filings Started Shortly after Interest Rate Deregulation



3

Source: Administrative Office of the U.S. Courts, Census Bureau

caused them to relax their standards and make credit9 available to poorer credit risks. Røugeau (1996) sug-9 gests 9that 9the 9absence 9of 9iAterest 9rate 9regulation9 allows credit card penders to pursue unlimited profits9 by 9taking 9advantago 9 f 9borr9wers' 9weakness 9and9 desire to consume, which 9 ften reaches and irrational9 level.9

This paper does not take a position on the merits of Ausubel's and Rougeau's arguments. Instead, it 9ffers another explanation of the Impact of Interest stated deregulation 9that 9 is 9 based 9 on 9the 9 pricing 9 and underwriting Olecisions 9 f Inderes Sand The Interest of Sargument suggests that an increase in both credit analysis and bankruptices 9 was 9 a 9 perhaps 9 inevitable 9 result 9 of 9 interest rate deregulation. 9

Uy ry Lawy Have a Very Long Histyry

Usury Naws perhaps have a more a9cient Nineage than 9 any 9other 9form 9 f 9economic 9regulation. 9Modern 9 scholars appear to agree that Nimitations In Niedling 9 rates 9at 9 east In Wester 9 9 aw Iderive 9from 9biblical 9 prohibitions Ion 9usury. In Journal 9 During 9biblical 9times, 9and 9 throughout 9much 9 f 9recorded 9history, 9usury 9was 9 defined as 9ending at 9any Tamount In 18terest. The 9 prohibition 9 of 9usury 9was 9based 9partially 9 on 9the 9 principle that charging interest is taking advantage 9 f 9 the debtor (M9ser 1997, 3–4).9

The 9 Greek 9 philosopher 9 Plato 9 also 9 condemned9 charging interest because he felt that it produced a9

inequality 9of 9wealth 9and 9destroyed 9the 9harmony9 between 9citizens 9 f 9the 9state 9(M9ser 91997, 95–6).9 Plato's writings suggest that some members 9f society9 need to be protected from 9enders, an argument that9 still finds its way into the modern-day debate 9 ver9 consumer credit. 4

As commerce expanded and money rending became increasingly important, opinions about usury changed.9 The Romans were more tolerant of usury and were one 9f the first societies to recognize interest and set maximum of opinions of opinions of the first societies and set of maximum of opinions of opinions of opinions of opinions of opinions opinions of opinions op

Americang rg Lawg Have Beenging Placeg ince the Colonial Erag

The American Solonies Souilt Supon Swell-established9 English Naw regarding usury and after the Re9olution9 retained this body 9 f Naw (Ackerman 1981, 85). By9 1886, Severy State Shad Some Seneral Susury Simit Solonies. SHowever, Swhen States Sfelt Sthat Sthe 9 eneral9 usury Slimit Swas Sunduly Prestricting 9the Samount Sof9 credit, Shey Spassed Segislation Sto Screate Sexceptions. For example, almost every state has some provision permitting businesses to boorow at higher rates than the govern usury limit (Ackerman 1981, 108). As the number of exceptions grew, state usury Saws became an complex and disordanized array of rules.

The Development of the Credit Cardy Indystry and the Role of Uy ry Lawy

Charge 9cards 9came 9into 9use 9around 91914 9when9 Western Union and various department stores, hotels,9 and 9oil 9companies 9began 9using 9them. These eary 9 cards could be used to purchase the issuer's 9 oods9 and services only, and bahances had to be paid in full9 each month. In 1950, Diners' Chib introduced the9 first "general-purpose" charge card that could be used at 9a 9 ariety 9 f 9establishments; 9American 9Express 9 issued a similar card in 1958. Credit cards evolved 9 from charge cards when banks entered the industry as 9 issuers 9in 9the 9 ate 91950s. 9Bahks 9issued 9 eneral-9 purpose credit cards that allowed balances to be 9 carried over from month to month.9

Even after banks eltered the credit card industry, the growth of the Hadustry was slow Har Impre than 249 decade because most merchants accepted only cards issued by Iocal banks. The moder9-day credit card9 industry temerged In 91966 when Bank of America9 began Icensifig its BankAmericard credit card logo to other banks, and a national system to process credit9 card Iransactions Ibegan Ito Stevelop. These Participating Ibanks Pater Hormed In the Latity Ichown Roday9 as VISA. 9 Another 9 group 9 of 9 banks 9 formed 9 the Master Card association in 1966.9

Stateg rg Lawg Respricted the Credit Cardg Industrg

Lenders 9were 9bound 9to 9the 9th dividual 9state 9limits 9 because 9 f the way 9the federa 9banking 9 aw was 9 interpreted at that time. Federal 9aw subjects 9tational 9 banks to the rate ceilings imposed by the states. This 9 law 9riginally was interpreted as requiring the 9ender 9 to charge 9to more than the 9timit prescribed by the 9 state where the borrower resided. State 9aws 9aried as 9

to the maximum rates that could be charged n credit9 card nans as well as n whether ther charges, such9 as membership fees and late fees, were permissible.9

rg Lawg LimitedghegVolgme gf Creditg Card Lending

The 9development 9of 9the 9VISA 9and 9MasterCard9 associations Resulted 9n Rignificant growth 9n Redit9 card Alebt Soutstanding; Showever, Shot 9all Ronsumers9 were 9ranted access to credit cards. If the rate ceiling9 in effect was too 9ow to enable 9enders to generate9 sufficient income to cover the 9osses incurred when9 lending to high-risk borrowers, 9enders would deny9 that group access to credit. Therefore, in a regime of 9 restrictive usury ceilings, where the 9enders' income9 potential was 9mited, 9enders extended credit only to 9 higher-quality borrowers, and poorer quality borrow-9 ers 9were 9shut 9out 9of 9the 9market. 9This 9situation9 resulted in 9ess credit analability and 9ower charge-9 offs.9

Studies Sby Canner And Fergus (1987) And Wille as (1989) confirm that restrictive usury ceilings reduce the 9 verall 9 supply 9 of 9 credit 9 and 9 that 9 high-risk 9 borrowers are the hardest hit by the cutback. The 9 example Sof Sears provides a good illustration Sof a lender's reaction to restrictive usury ceilings. In 1974, 9 rising interest rates caused usury mits in some states to Specome Spinding, and Sears Spegan Sto Scut Spack 9 promotion 9 of Sits 9 retail 9 card 9 in 9 those 9 states. 9 For 9 example, 9 in 9 Arkansas, 9 Minnesota, 9 South 9 Dakota, 9 Iowa, and Washington, where interest rate mitations 9 ranged from 9 to 12 percent, residents were allowed 9 to receive service, but accounts were spened 9 y 9 request. Delinquent customers in these states Soften 9 found that their accounts were closed perman only. 9

The Dismantling of Consumer Usury Lawsy

Economic Forceg inghegl970g Made Creditg Card Lending nprofitableg

High inflation and high interest rates in the 9ate 1970s9 made state usury mits more restrictive. As a result,9 credit card issuers experienced declining ear9ings and even suffered Posses. A General Accounting Office9 (1994) report on the credit card industry shows that9 the averago pretax earnings 9 f VISA and MasterCard9 issuers was over 4 percent of outstanding balances in 9

1977 but fell for four consecutive years to Dess than 9 negative 1 percent in 1980 and 1981. The interest rate 9 ceilings set by many states simply were too 9 w to 9 make 9credit 9card 9 ending 9profitable 9in 9the 9high-9 interest-rate environment.9

Usury ceilings 9 aried widely throughout the United9 States, but at the elid of the 1970s, 37 states had some9 kind of iliterest rate ceiling on credit cards. Oy 9 three states had no nimit, and two states had nimits9 that were above 18 percent. Three states a9 wed rates9 of above 18 percent for a portion of the balance,9 while the remainder 9 f the states set trates flower. Millines that 9 had 9 the 9 owest 9 interest 9 ceiling 9 in 9 the 9 country, at 8 percent. 9

The Sgpreme CogrtgDeregulated Congumerg InteregtgRateg

In the economic environment of the 9ate 1970s, the 9 general opinion on usury omits appeared to change. Part 9 f this relaxation can be attributed to the high 9 nominal interest rates 9 f the time, which restricted 9 credit availability and made the disadvontages of usury 9 limits more apparent. 9

In 1978, the Supreme Court profoundly changed the9 interpretation of usury 9aws with a ruling in the case9 of MarquetteT ational Bank If Minneapolls v. TFirst TOmahaT Service TCTrp. ("Marquette"). 9The 9s9licitor 9 eneral 9 f9 Minnesota was attempting to prevent First Omaha9 from soliciting credit card customers in Minnesota at9 the higher Nebraska interest rates by contending that9 the 9exportation 9of 9Nebraska's 9interest 9rate 9would9 make it difficult for states to enact effective usury9 laws. 12 The Supreme Court agreed that such might be 9 the case, but it decided that the usury issue was a9 legislative problem to be handled by Congress.¹³ The 9 Court held in Marquette that section 85 of the National9 Balik 9Act 9allowed 9a 9lender 9to 9charge 9the 9hi9hest9 interest 9rate 9allowed 9in 9the 9 ender's 9home 9state,9 regardless of a 9ower rate amitation in the customer's9 state of residence.14

The Effects of the Marqgette Decision ony Credit Card Lensingy

The 9Marquette 9decision 9applied 9to 9alD9types 9of9 consumer 9oans, but it had the 9reatest consequences9 for the credit card industry. Because of its use \emptyset f tech-9 nology in the s \emptyset licitation and underwriting process,9

credit card Jending can be accomplished entirely by mail, without the borrower and Jender e9er meeting.9 Consequently, credit card Jenders head-quartered i9 states with Jiberal usury ceilings can easily export their rates to borrowers residing in states with restrictive usury ceilings.9

State g rg Ceiling Wereg Digmantledg

After 9the Marquette Alecision, Aiberalization 9of 9state9 usury ceilings 9 ccurred. Some states quickly seized9 the Opportunity to deregulate interest and Other bank-9 ing functions to attract banks and 9other consumer9 lenders. Two 9such 9states 9were 9south 9Dakota 9and 9Delaware. Citicorp was one 9f the first 9enders to take9 advantage 9f deregulation at the state 9evel. It estab-9 lished a new 9tational bank and credit card processing 9 center in Sioux Falls, South Dakota, in 1981 (Janklow9 1985, 32).9

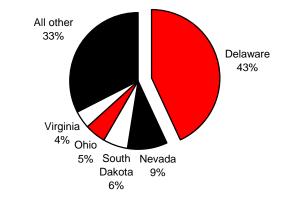
The practical effect 9 f the *Marquette* decision was to9 force states to deregulate 9 r face a loss of the credit9 card segment of the banking business (Langevoort9 1987, 686). Major banks pressured state regislatures t9 relax timits on tending by threatening to move their9 businesses to states with m9re tiberal ceilings. The9 four argest banks in Maryland did move their credit9 card operations to Delaware when the Maryland state9 legislature refused to relax the state's usury laws.¹⁵

According to Ausubel (1991), m9st 9eading banking9 states 9had 9relaxed 9 r 9repealed 9their 9interest 9rate9 ceilings by 1982, and the bank credit card market was9 effectively deregulated.9

A Redigtribgtiong of Credit Card Lending Occgreedgamong Stateg

After Seading Sbanking States Shad Steregulated Stheir9 interest ceilings, a redistribution of credit card activity9 to 9those States 9 ccurred. 9Delaware Shas Sbeen 9the9 primary magnet for credit card Senders. If In the two9 years after Delaware deregulated, at Seast ten banks9 had a Shew, major credit card presence in Delaware. 9 Today, Six 9 f Sthe Stop Sten Sbanks Swith Sthe Shighest9 volume 9f credit card Sending are Socated in that state, 9 and Senders Sin SDelaware Shold 943 Spercent Sof Stotal9 credit 9 card 9 loans 9 made 9 by 9 issured 9 depository9 institutions 9(see 9Chart 92). 9Chart 93 Sillustrates 9the9 dramatic 9rowth in credit card 9 olumes that Occurred 9 after deregulation in Delaware.9

Chart 2
Delaware Has the Largest Credit Card Volume* of any
State in the United States. June 1997



Source: Bank and thrift call reports

*Includes securitizations

Credit & ard Lending Hag Acceleratedg

In addition to a redistribution of 9ending to certain9 states, growth in credit card 9ending has accelerated9 throughout 9the 9United States. Since 9the 9MarquetteT decision, total credit card soans have 9rown at a rapid9 pace compared with the previous decade (see Chart9 3). According to the Federal Reserve SurveT f C n-T sumer Finances, the percestage 9 f households with at9 least one credit card account grew from 38 percent in9 1977 to 43 percent in 1983 to 54 percent in 1989 (GAO 91994, 913). Scredit scards Shave Srevolutionized9 consumer debt and have become firmly entrenched as9 means of financing household purchases.9

The Benefitg of Holding & redit Cardy Haveg Increagedg

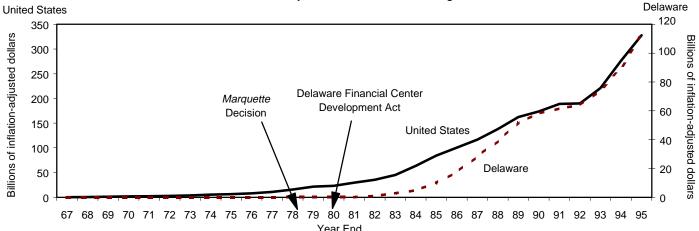
As 9credit 9cards 9have 9become 9m0re 9widely 9held,9 collateral benefits 9 f holding credit cards have arisen9 (Baxter 91995, 91022). 9M9re 9merchants 9have 9started9 acceptin9 9credit 9cards, 9which 9has 9made 9paying 9f0r9 goods and services more convenient for consumers. 9 Also, 9cntire 9ndustries, 9such 9as 9the 9catalog/phone9 order 9industry, 9have 9emerged 9as 9a 9result 9of 9the9 widespread acceptange of credit cards. 9

The 9expansion 9of 9the 9credit 9card 9industry 9and9 increased competition also havo resulted in financia9 innovations 9(Baxter 91995, 91022), 9such 9as 9balanoe9 transfer offers that have reduced the cost of switching9 to a new credit card that offers better terms. Further-9 more, in addition to competing on price, credit card9 lenders have devoloped a wide array of price-service9 options. Credit cards that offer frequent flyer miles, 9 cash 9rebates, 9 r oredit 9card 9future optichases 9 for goods 9such 9as 9 asoline, 9 roceries, 9and 9cars 9have 9 become the standard.9

How Could Interest Rate Deregylatioy Trigger anylogrease in the Number ofy Personal Bankruptciey?y

The remainder 9of this paper analyzes how interest9 rate deregulation altered the consumer credit market9 and 9how 9 enders 9and 9borr9wers 9reacted 9to 9this9 change. 9The 9paper 9develops 9a 9"chango 9in 9credit9 markets" 9hypothesis 9that 9deregulation 9altered 9the9 consumer credit markets and triggered a substantial9

Chart 3
Credit Card Volumes* Have Increased Dramatically after Interest Rate Deregulation



Source: Bank call reports (credit card and related plans of insured commercial banks). *Does not include

*Does not include off-balance-sheet securitizations.

increase 9in 9consumer 9credit 9av@ilability, 9charg@-off9 rates, and personal bankruptcies.9

Lenderg Will ExpandgCredit Availability in gg Dereg lated Environmentg

One of the most important results of the shift to a9 deregulated Environment Swas That Tenders Found 9t9 profitable to Grant credit to individuals who had been shut Sout of the market in a regulated environment.9 Lenders Swere 9no Tonger This couraged Toy Trestrictive 9 usury Teilings From Tending 9th Tertain States. 9Con-9 sequently, Enders extended the 9eographic breadth of 9 their activity, and major credit card 9enders with a9 nationwide presence emerged.9

After the dismantling 9of usury 9 aws, 9 enders also 9 extended the depth of the credit card market in order9 to increase their market share and profitability. F@r9 example, 9 w-income 9borrowers 9received 9unprece-9 dented access to credit. Empirical tests 9f credit card9 lending prior to the Marquette decision confirm that9 restrictive 9usury 9ceilings 9resulted 9in 9limited 9credit9 availability 9for 9low-income 9iadividuals. 9Two 9such9 studies, a Credit Research Center study and a New9 York 9State 9study, 9found 9that 9pre-Marquette 9rate9 ceilings affected the probability that a 9 w-income 9 r9 lower-middle-income family would hold a credit card9 but did not affect the probability of cardholding 9 f9 higher income families (Baxter 1995, 1023). The wider9 access 9to 9credit 9that 9occurred 9after 9interest 9rate9 deregulation is sometimes referred to as the "dem-9 ocratization of credit."9

High-rigk BorrowersgWill Receive Moreg Creditgin a Dereg lated Environmentg

Another group that benefited from the expansion &f9 credit was high-risk borrowers, or Addividuals with9 poor credit ratings regardless &f their income Nevel.9 The ability to generate more income allowed Lenders9 to Aend to Andividuals who were Further Clown the9 spectrum &f credit quality because 9enders could be9 compensated 9for 9a 9higher 9rate 9of 9credit 9losses.9 Lenders were able to increase their profitability by9 expanding their 9ending 9 olume 9while taking 9on 9a9 greater degree &f credit risk. As discussed earlier, and restrictive usury regime resulted in significant credity rationing, with high-risk borrowers being shut &f the market. When interest rates were deregulated, Less9

credit rationing 9 ccurred, and higher risk borrowers9 were allowed into the market.9

Lenderg Will Set Price According togheg Credit Qgalitg ofghegBorrowerg

Among the factors that Renders consider when pricing9 credit, 9the 9credit 9quality 9of 9the 9borrower 9is 9a9 important 9one. 9 9High-risk 9borrowers, 9as 9a 9 roup, 9 usually 9 are 9 char9ed 9 higher 9 interest 9 rates 9 t9 compensate for their higher default rates. In setting price, enders assume that the average credit quality 8f9 borrowers in a portfolio will decline as the portfolio interest 9rate 9rises. 9This 9outcome 9occurs 9because 9 higher quality borrowers tend to decline to borrow at 9 high 9nterest 9rates 9because 9they 9usually 9nave 9other 9 sources 9 f 9credit. 9B9rrowers 9with 9poorer 9credit 9 qualities usually havo fewer borrowing 9options and, 9 consequently, will remain willing to borrow at higher 9 interest rates. 9

In short, b9rrowers have different price sensitivities.9 Therefore, 9a 9 ender 9can 9maximize 9rev@nues 9by9 segmenting 9borrowers 9thto 9different 9credit 9 roups9 and charging them different rates. Charging a higher9 price to credit 9roups that are \$\text{less price sensitive and9} charging a 9 wer price to credit 9roups that are more9 price \$\text{less}\$ stitive 9will 9ncrease 9a 9 ender's 9profitability9 over charging a single price for every credit group.9

Average Credit Card Interest Rates Will Riges in a Deregulated Environments

Because 9enders tend to set prices according to the9 credit quality &f the borrower, another result 9 f the9 shift to a deregulated environment is an increase i9 the 9average 9credit 9card 9interest 9rate. 9The 9 ew9 customers allowed into the credit markets tend to be9 charged higher interest rates because 9 f their poorer9 credit ratings. Consequently, average borrowing costs9 across the &pectrum &f &porrowers &f &po

Congumerg Will BorrowgMoregingag Dereg lated Environmentg

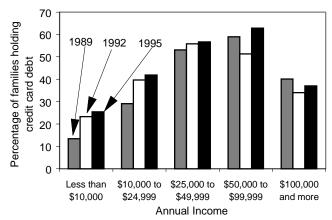
One consumer response to interest rate deregulation9 was 9to 9take 9advantage 9 f 9the 99creased 9supply 9of9 credit to borrow more. Individuals who could already9 obtain 9 credit 9 card 9 loans 9 in 9a 9 hi9hly 9 regulated9 environment 9did 9not 9necessarily 9benefit 9from 9the9

increased 9access 9to 9credit, 9but 9they 9were 9able 9to9 increase 9their 9holdings 9of 9credit 9cards 9and 9take9 advantage 9 f 9the 9cards' 9increased 9acceptance 9by9 merchants. 9This 9 development 9 gave 9 rise 9 to 9 the9 "convenience users," who use credit cards for their9 convenience 9 over 9 cash 9 or 9 checks 9 but 9 pay 9 the9 outstanding 9balance 9in 9full 9each 9month 9to 9avoid9 interest 9 charges. 9 Higher 9 quality 9 borrowers 9 who9 wanted 9to 9borr9w 9occasionally 9were 9able 9to 9take9 advantage 9 f 9tinancial 9nnovations 9such 9as 9balance9 transfer 9ption 9, which allow consumers to shop for 9 interest rates and easily transfer existing balances t9 the most competitive lender. 9

After deregulation, there also was an illicrease in the9 number of consumers with outstanding credit card9 balances, e9en at high rates 9 f interest. As discussed9 in the illitroduction, one illiterpretation of this trend is 9 that observowers of the properties of this trend is 9 that observowers of the properties of

Low-income households are Not the Only Ones with a high propensity to borrow. Young households, which have 9yet 9to 9reach 9their 9prime 9earning 9years, 9and 9 households with 9rolatile incomes that are experienced ing an 9ff year are more 9kely to take On debt, e9en at 9 high interest rates. They may be will not borrow at 9

Chart 4 The Fastest Growth in the Credit Card Market Has Been at the Lowest Income Brackets



Source: Federal Reserve Board Survey of Consumer Finances

high rates of interest on Occasion with the expectation9 that future income will enable them to repay their9 debts.¹⁷

Interest rate deregulation resulted in greater access to credit 9for 9individuals 9with 9a 9high 9propensity 9to 9borr9w. This access to credit created a 9ew chass of 9risky borrowers.9

More Borrowerg Will Experience Creditg Problemg in ggDeregulated Environmentg

One 9 of 9 the 9 consequences 9 f 9 more 9 consumer9 borr9wing can 9be 9an 99 crease 9an 9aredit 9problems. 9 Credit 9problems 9are 9not 9unique 9to 9low-income9 households; 9 any 9 household 9 that 9 takes 9 on 9 debt9 increases 9ats 9arisk 9of 9aredit 9problems. 9Deregulation 9 expanded 9apportunities 9ar 9anuseholds, 9articularly 9 those with a high propensity to borrow, to take 9 debt. One 9 f the implications 9 f some households'9 higher propensity to borrow is that they will tend to 9 experience 9aigher 9anancial 9evorage 9at 9anaron. 9 Higher 9financial 9 everago 9ancreases 9a 9anusehold's 9 exposure to financial shocks, such as job 9ass, illness, 9 and divorce, which are events 9 ften cited as reasons 9 for personal bankruptcies. 9

The fact that access to credit has come ar9ely in the9 form 9 f &redit &ard Joans, &ather &han &ome & other 9 form 9 f & Sonsumer 90an, 9s 9an 9mportant 9factor 99 rising 9credit 9problems. 9Credit 9card 9loans 9are 9un-9 secured, 9eneral-purpose Poans that can be Pranted in 9 small denominations. Even for the best borrowers,9 they usually carry a much higher interest rate than 9 other forms 9 f consumer 90ans. Consequently, bor-9 rowers may turn to credit card Jenders as a kind 9of9 "lender 9of 9 ast 9 resort" 9 when 9 other 9 less 9 expensive 9 means have beed Exhausted. Moreover, Lonsumers9 who are heavy users 9of credit card 9oans probably9 have limited finan@ial res@urces eBewhere and are the9 most at risk f9r credit problems. Finally, the fact that9 these borr9wers are 9ikely payin9 high interest rates9 compounds their risk foo credit problems.9

Lenderg Will Experience More Credit Log eg in a Deregulated Environmentg

One 9of the implications 9 f borrowers having more9 credit problems is that 9enders will experience higher9 charge-off rates. Chart 5 shows the close relationship9 between the rising U.S. personal bankruptcy rate and 9

the consumer charge-off rate for commercial banks, which is being driven by charge-offs on credit card loans.

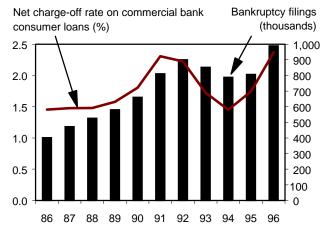
Despite rising charge-off rates, credit card lenders on average have been able to maintain profitability. The willingness of some individuals to borrow at high interest rates and their ability to repay is critical to offset banks' losses on those who default.

The Canadian Experience

This paper has argued that interest rate deregulation altered the credit markets and led to a substantial expansion in credit card availability and an increase in the level of personal bankruptcies. This argument can be tested by analyzing the experience in Canada, because the modern history of credit cards in Canada is very similar to the U.S. history. In 1968, two years after the development of the VISA and MasterCard associations in the United States, VISA entered Canada, resulting in a dramatic growth in credit card loans (*Canadian Banker* 1994).

However, there were significant differences at that time between U.S. and Canadian laws regarding interest rate regulation. Interest rates in Canada have been deregulated since at least 1886, when the Interest Act of Canada was passed *Financial Post* 1994). This act permits a lender to charge any rate of interest that is agreed upon (Hutchison 1986). Therefore, although the modern-day credit card industry got its start at the same time in the two countries, there were no legal limits that restricted

Chart 5There Is a Close Link Between Bankruptcies and Charge-Offs

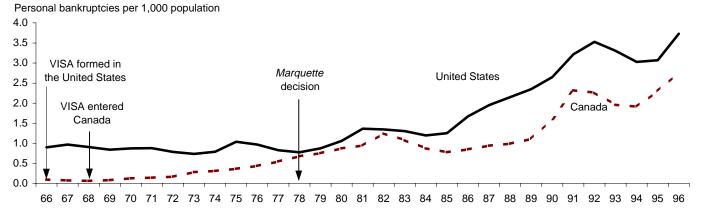


Source: Administrative Office of the U.S. Courts, Bureau of Census, Federal Reserve Board

credit availability in Canada, as there were in the United States.

Credit card outstandings have grown dramatically in Canada in the past two decades, as they have in the United States. Personal bankruptcies have grown in Canada as well. Chart 6 shows that personal bankruptcies grew sharply and immediately after the VISA association entered Canada. From 1966 to 1976, the personal bankruptcy rate in Canada grew 340 percent. Over that same period, the personal bankruptcy rate in the United States grew by only 8 percent. One explanation for this difference in rates may be that usury laws were limiting credit availability in the United States over that period, while the absence of

Chart 6
Personal Bankruptcies Started Rising Sooner in Canada than in the United States



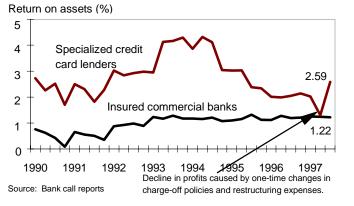
Source: Superintendent of Bankruptcy (Canada), Statistical Abstracts of the United States, Administrative Office of the U.S. Courts, and Census Bureau

usury ceilings in Canada was permitting the expansi9 of credit card debt to more high-risk borrowers.9

Chart 6 also shows that after interest rate deregulation9 in the United States, the personal bankruptcy rates in9 both countries follow a remarkably himilar pattern.9 Over 9the 9 ext 9decade, 91976–1986, 9the 9Canadian9 bankruptcy rate 9 rew by approximately 93 percent,9 and the U.S. bankruptcy rate 9 rew by 72 percent. I9 the 9decade 91986–1996, 9as 9the 9credit 9card 9f2dustry9 underwent rapid innovation and expansion, personal9 bankruptcy rates in both countries grew dramatically.9 In 9Canada, 9the 9personal 9bankruptcy 9cate 9 rew 92259 percent; in the United States, it grew 123 percent.9

The Canadian experiende als9 suggests that changes9 in 9U.S. 9federal 9banRruptcy 9law 9have 9not 9been 9a9 significant factor in the rise in U.S. personal bank-9 ruptcies. 9Some 9industry 9experts 9have 9pointed 9to9 federal 9bankruptcy 9aw 9reform, 9which 9occurred 9at9 roughly the same time as interest rate deregulation, as9 an explanation for the rise in personal bankruptcies. 9 However, 9Chart 96 9shows 9that 9Canada's 9personal9 bankruptcy rate has taken a 9 ery similar path to the9 U.S. personal bankruptcy rate since 1978, and though9 there 9have 9been 9no 9significant 9recent 9changos 9to9 Canada's bankruptcy law (Zandi 1997).9

Chart 7Credit Card Lending Is a Very Profitable Line of Business, Despite Recent Declines in Returns



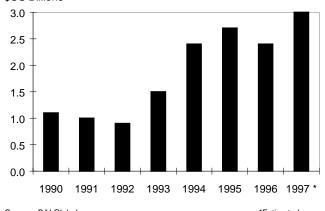
Conclusiony

This paper argues that the deregulation &f c&nsumer9 interest rates i&the 9ate 1970s triggered a dramatic9 increase In &msumer &msumer

Despite the costs associated with a higher 9evol 9 for personal 9bankruptcies, 9the 9results 9 for 9 deregulation 9 have not been all negative. Deregulation has resulted 9 in more choice for consumers, particularly those with 9 poorer credit ratings. 9

For 9 lenders, 9 deregulation 9 has 9 expanded 9 market9 options and increased profit poportunities. The poportunity to earn high profits has attracted intense9 competition, which appears to be eroding some of the9 high profits earned in the early 1990s (see Chart 7).9 Chart 8 shows that the 9 olume of credit card solicies tations remains at high 9 evels, despite high rates 9 for personal 9 bankruptcies 9 and 9 credit 9 card 9 charge-offs, 9 suggesting that the expansion 9 of credit is 9 segments 9 for expansion 9 of 9 credit 9 to 9 new 9 market 9 segments 9 described in this paper is continuing. 9

Chart 8
Credit Card Solicitations Continue to Rise
\$US Billions



Source: BAI Global *Estimated

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About the Authory

Diane Ellis is a Senior Financial A9alyst in the Economic Analysis Section of the Division 9 f I9surance.9

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