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GLOBAL CREDIT CARD USE AND DEBT: POLICY ISSUES AND REGULATORY RESPONSES

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Illustrations

Abstract

The rise of card-based payments has transformed the landscape of payments in the last half century, from one dominated by government-supported paper-based payments to one dominated by wholly private systems. The rise of those payments presents a number of policy problems, the most serious of which is the empirically demonstrable likelihood that use of the cards contributes to an undue level of consumer credit and that borrowing on the cards contributes to a rise in the level of consumer bankruptcy. Although the existing pattern shows great variation from country to country, regulators should take no solace in those variations. Building on existing historical research and on detailed contemporaneous data about the patterns of usage around the world, I show that the differences reflect the youth of the system, and the fact that some countries were less suited to rapid takeup of credit cards than others. The pressures of globalization are rapidly driving convergence in card usage, except in those countries that have adopted substantial "speed bumps" to slow the growth of cards.

The natural question, then, is what policies will be useful to confine the problems related to credit cards without creating undue inefficiencies in retail payment systems. The ideal response would be one that encouraged debit cards – protecting the cost savings of electronic payments without the externalities generated by credit card usage. It is not easy, however, to devise policy responses that fit that goal. The closing part of this paper analyzes four different reforms that might be useful to policymakers of different perspectives: (a) permitting merchant credit card surcharges; (b) barring affinity programs, especially those that are conditioned on borrowing; (c) barring marketing to minors; and (d) reorganizing the disclosure system to focus on the behavioral problems that make cards problematic. Among other things, this suggests a shift in emphasis away from disclosures in account agreements to disclosures at the point of sale. Thus, for example, I reject recent proposals to provide enhanced disclosures for universal default

provisions. On the contrary, I argue that those provisions should be banned from credit card agreements entirely, with a view to causing card issuers to contract the credit they extend to those that are demonstrably in financial distress.

GLOBAL CREDIT CARD USE AND DEBT: POLICY ISSUES AND REGULATORY RESPONSES

I. INTRODUCTION

Since they first appeared in the 1950s, electronic payment cards have transformed the practice of retail payment. The dominant payment systems at the time were cash and checks, both systems substantially unchanged for hundreds of years, and both largely government administered and subsidized. Yet only a half century after the introduction of cards, more money is spent on cards than on cash and checks combined.[1] That shift to a wholly private and electronic payment system raises unprecedented policy problems.

Thus, it should be no surprise that card-based payment systems have been the focal point of regulatory inquiry in recent years. Most obvious have been major antitrust inquiries, reflecting the concern of regulators around the world that anti-competitive behavior by the dominant networks has thwarted competition by smaller networks. There also is a growing concern throughout the developed world about the sustainability of credit card usage and debt. Specifically, some have argued that widespread use of credit cards can contribute to excess consumption, and ultimately to an undue incidence of financial distress.[2] Likewise, policymakers around the world struggle with bankruptcy reform, striving to achieve a balance that adequately promotes risk taking yet still discourages strategic bankruptcy.

I am most interested in the problems associated with credit card usage and debt, although I recognize that the competitiveness of the market has complex ramifications for the usage problem. Considering that focus, I have conducted a multi-country analysis of the relation between credit cards and financial distress, which analyzes data about consumer bankruptcy filings and borrowing from Australia, Canada, Japan, the United Kingdom, and the United States. Unlike the existing scholarship on that point, my empirical analysis directly examines the effect of credit card borrowing in general – not just credit card defaults – and uses statistical techniques that separate the effect of credit card borrowing in particular from consumer borrowing in general. As I explain in the

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[1] In the UK, debit and credit card spending overtook cash for the first time in 2004. *See* http://www.apacs.org.uk/downloads/Plastic%20Day%20FINAL.pdf. In the USA, card-based systems overtook cash and checks for the first time in 2003. *See* http://online.wsj.com/article/0,,SB109053116869571496-email,00.html.

[2] *See* Diane Ellis, *The Effect of Consumer Interest Rate Deregulation on Credit Card Volumes, Charge-offs, and the Personal Bankruptcy Rate*, Bank Trends 98-05 (FDIC, Div. of Ins., Mar. 1998); Robert M. Lawless, *The Relationship Between Nonbusiness Bankruptcy Finlings and Various Basic Measures of Consumer Debt* (2002 e-article); JULIET B. SCHOR, THE OVERSPENT AMERICAN (1998); Joanna Stavins, *Credit Card Borrowing, Delinquency, and Personal Bankruptcy*, NEW ENGLAND ECON. REV., July/Aug. 2000, at 15; Elizabeth Warren, *The Bankruptcy Crisis*, 73 IND. L.J. 1079 (1998).

related paper that presents the results of that analysis,[3] the analysis suggests two empirical relationships of great policy significance. First, growth in credit card spending relates to subsequent growth in consumer credit. Second, more provocatively, growth in credit card debt – even if overall borrowing is constant – relates to subsequent growth in consumer bankruptcy filings. The gist of it is that credit card spending leads naturally to increases in borrowing, and that the borrowing that takes place on credit cards is *too* easy, so easy that borrowers fail to appreciate the risks they would see if they borrowed the money in a more traditional way. Those findings raise important policy questions, coming as they do on the heels of reports showing additional increase s in consumer bankruptcy filings in Australia, Canada, the United Kingdom, and the United States.

Those findings resonate with recent concerns about the structure of credit card contracts and products. For example, there is a widespread regulatory concern in this country about "universal default" provisions. Those provisions generally permit an issuer of one card to raise the rate on that card solely because of a default in a payment to another creditor. The primary regulatory strategy to date has been to criticize the disclosure of those terms – the idea being that consumers have not been given fair warning that a default on one card will cause an increase in the rates they pay on allof their cards. The academic literature, however, suggests a more pervasive problem with the substantive design of the provisions of credit card contracts. Building on the behavioral economic literature, Oren Bar-Gill argues that the products that credit card issuers market to consumers are systematically designed to take advantage of common cognitive defects that limit the ability of the typical consumer to price the terms accurately.[4] For example, Bar-Gill argues that issuers are driven to compete for customers based on "teaser rates" and "annual fees," rather than on the longer-term interest rates or default terms that might be more important to consumers in distress.[5]

The juxtaposition of those serious policy concerns with the rapid global growth in credit card use presents an apt topic for comparative study. As it happens, central banks, legislative bodies, and regulatory agencies around the world have taken divergent approaches to address these policy concerns. In some countries—including the United States—regulatory activities have focused on efforts to improve consumer choice and decisionmaking through disclosure requirements and marketing restrictions. As I discuss below, many other countries have imposed stringent limitations on borrowing or on card

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[3] *See* Ronald J. Mann, *Credit Cards, Consumer Credit, and Bankruptcy* (unpublished January 2005 manuscript) [hereinafter Mann, *Cards Data Paper*].

[4] *See* Oren Bar-Gill, *Seduction by Plastic*, 98 NW. U. L. REV. 1373 (2004). Bar-Gill's work builds on and resembles a sophisticated economics literature. *E.g.*, Stefano Dellavigna & Ulrike Malmendier, *Contract Design and Self Control: Theory and Evidence* 199 QUARTERLY JOURNAL OF ECONOMICS 353 (2004).

[5] As I discuss in Mann, *Cards Data Paper*, *supra* note 3, I am not sure that Bar-Gill's arguments about product design are correct. There are rational forces that drive competition in the same direction. Still, his arguments about the way that behavioral problems force competitive issuers to focus on cognitive defects is powerful.

use. The point of this Article is to provide general assessment of the potential policy initiatives that could be brought to bear on the problem.[6]

This analysis is complicated by the fact that a complete account of the economic effects of the credit card must recognize the positive contributions the credit card makes to a market economy. As a payment system, it doubtless is one of the most efficient vehicles ever devised. For one thing, because transaction authorization, processing, and payment proceeds on an almost entirely electronic basis, it is substantially cheaper than the traditional paper-based payment systems (such as checks) that it has supplanted.[7] Given the difficulties market actors have had in building sufficient networks to penetrate the consumer market with electronic payment systems that are not card-based,[8] it is a testament to the value that the credit card provides that it has penetrated that market so pervasively.

The benefits of electronic processing are even more striking for the credit transactions effectuated with the card. If a credit card is a lot cheaper for a bank to process than a check, consider how much cheaper it is for a consumer to borrow $300 with a credit card than it would be to borrow the same amount of money through a conventional bank loan. Putting aside the fees that the bank loan would involve, the activities of traveling to the bank, explaining the purpose of the purchase, and verifying the consumer's creditworthiness are likely to be tens if not hundreds of times as time-consuming as the parallel credit card process, even if we include the time spent filling out the limited amount of information required on a modern American credit card application. Similarly, the separation between the point of underwriting and the point of borrowing makes credit card lending particularly valuable as a safety net for consumers in distress. Distressed families can use credit cards to respond to financial crises even after the crises have occurred. It is much less likely that they could obtain conventional bank financing at such a time.[9]

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[6] This Article does not, however, consider potential bankruptcy reforms, where national approaches also diverge. So, in 2004, England liberalized the discharge provisions of its consumer bankruptcy systems, to encourage increased risk taking by reducing the stigma attached to bankruptcy. The United States enacted similar legislation in 1978, but the United States Congress is now considering proposals to limit the discharge provision, at the behest of credit card issuers. *See* Mann, *Cards Data Paper*, *supra* note 3. The basic problem is that academics and policymakers fundamentally disagree as to whether consumer bankruptcy is caused by profligate spending patterns associated with the lack of stigma in bankruptcy or whether it is primarily caused with external catastrophic occurrences such as job loss, medical crisis, or divorce.

[7] *See* Daniel D. Garcia Swartz, Robert W. Hahn & Anne Layne-Farrar, *The Economics of a Cashless Society: An Analysis of the Costs and Benefits of Payment Instruments* (AEI-Brookings Joint Center for Regulatory Studies, Related Publication 04-24) (September 2004).

[8] *See* RONALD J. MANN & JANE KAUFMAN WINN, ELECTRONIC COMMERCE (2nd ed. 2005).

[9] *See* Mann, *Cards Data Paper*, *supra* note 3.

It is difficult to balance those benefits against the costs that credit cards impose. Because the magnitude of the costs and benefits are difficult to compare, it is at least possible that the costs exceed the benefits to such an extent that it would be appropriate to ban credit cards entirely. My sense, however, is that the benefits are quite substantial in relation to the costs. Hence, I focus more closely on initiatives that do *not* have the purpose or effect of banning any large class of credit card transactions.[10] Thus, my goal is to design reforms that are likely to respond more specifically to the problem identified above – prodigal borrowing. Generally, I discuss reforms designed to alter the decisions of consumers so as to lessen the likelihood of imprudent borrowing, without at the same time decreasing the attractiveness of the benefits that come with it. I am sensitive to the risk that I might fall into the easy compromise – so typical of American consumer regulation – of proposing purely informational protections that expend resources without altering consumer behavior in any noticeable way. I hope that the discussion that follows evinces adequate concern to design reforms that can target the transactions that are problematic, without hindering the value-increasing transactions for which cards are used.

To understand the background against which the policy initiatives operate, it is necessary to understand how and why cards are used as they are. Accordingly, Part II describes the global patterns of credit and debit card use, including the institutional, legal and cultural factors affecting those usage patterns. The basic premise of that discussion is that the major differences in usage that exist today are much more attributable to the relics of conditions at the time the cards first were introduced. I argue that in developed economies participating in the global economy, the logic of globalization will force rapid convergence on a card-dominated payment system except in countries that are willing to maintain substantial institutional obstacles to the use of cards. Thus, the problems evident in the highly developed countries covered by my statistical analysis are likely – absent some vigorous policy interventions – to spread throughout the developed and globalized economies of the world.

Part III, in turn, considers the types of policy responses that regulators might use to guide the development of card-based payment systems. The basic point is that regulations that stem credit card use, and particularly credit card borrowing, can be designed to limit the costs of the financial distress that attends growth in credit card use. Generally, it considers three separate styles of regulation: rules permitting merchant surcharges, regulation of affinity programs (which bridge policies related to pricing and information); and information regulation, limiting the types of programs issuers can use

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[10] I also am motivated in part by the desire to propose politically palatable solutions to the problems that I discern. More generally, the value of prohibitory consumer credit regulation seems to me so closely tied to the system for consumer bankruptcy in a particular country that the two cannot be considered separately. As I explain in Ronald J. Mann, *Regulating Consumer Credit and Consumer Bankruptcy: A Comparative Analysis* (unpublished January 2005 manuscript) [hereinafter Mann, *Backlash*], that leads me to favor an open bankruptcy discharge over directly prohibitory consumer credit regulations.

to stimulate consumer use of their products, all with a view to stimulating more rational use of cards.

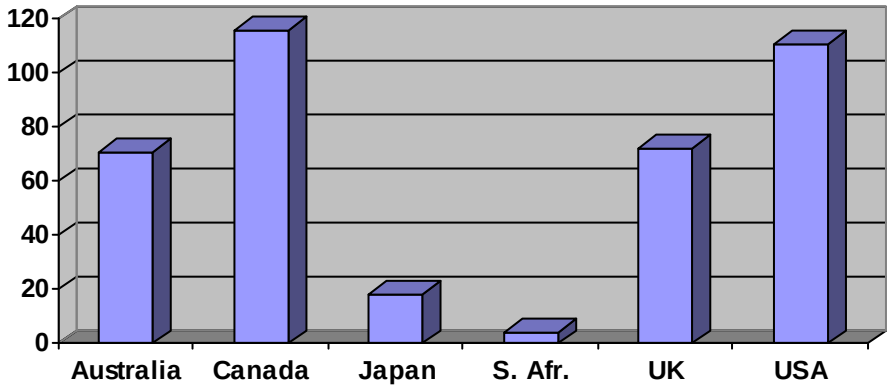
On the first point, I recommend an initiative that would directly validate credit-card surcharges by merchants. Second, I suggest a ban on affinity programs (cash-back and airline-miles programs being the most obvious), because they give cardholders an unduly large incentive to use credit cards. On the third point, I recommend a flat ban on marketing to minors and college students, extending a similar ban that already exists in UK law. Finally, and most importantly, I recommend a general reorganization of the disclosure regime in the Truth in Lending Act. The current disclosure system focuses on disclosures at the time of the application or the time the cardholder reads the monthly bill. If the point of the problem is the point at which cardholders purchase and borrow, disclosures at those points are more likely to be effective. Thus, I doubt the value of proposals to extend more detailed disclosure requirements to deal with such things as universal default provisions. If policymakers are concerned about those provisions (as I think they should be), a more appropriate response is to ban them entirely.

II. GLOBAL PATTERNS OF CARD USE

A. How Are Cards Used?

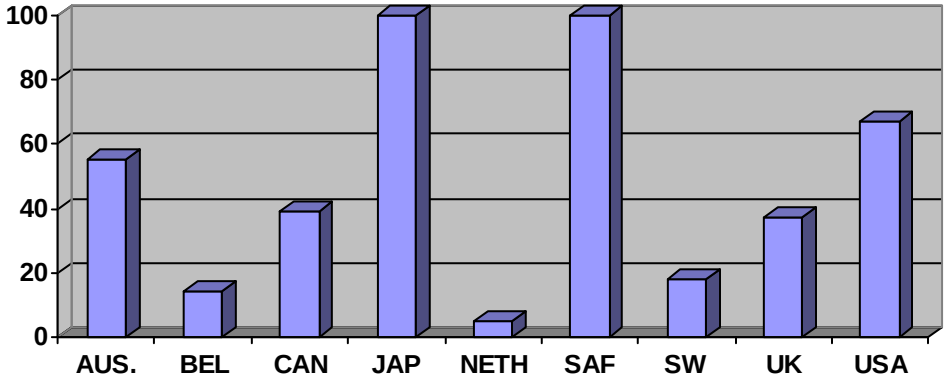
To make any sense of the varied policy responses that different countries have considered and implemented with respect to card-based systems, it is important to understand something about the use of credit and debit cards worldwide. Currently, card use differs substantially on almost any criterion one might care to offer. For example, as shown in **Figure One**, even in highly developed countries the rate of card usage varies from low-use countries like South Africa and Japan, with less than 20 transactions per person per year, to moderate-use countries like Australia and the UK (about 70 transactions per person), to high-use countries – Canada and the USA (about 115 transactions per person).

FIGURE ONE
CARD TRANSACTIONS PER CAPITA (2001)



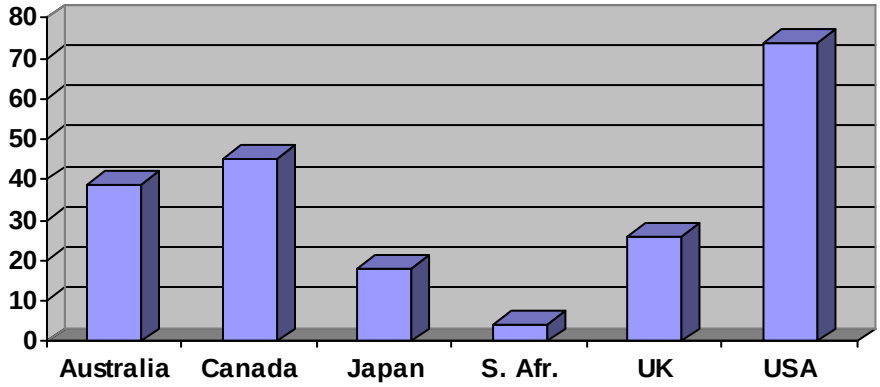
The differences in the types of cards people use for those transactions are equally striking. For example, **Figure Two** shows that the share of card transactions conducted on debit cards varies widely from countries like Japan and South Africa, where debit cards are almost never used, to countries like Belgium, Sweden and the Netherlands, where credit cards are almost never used. For countries that use both cards with some frequency, there is a variation between countries like the United States and Australia, where credit cards are used more frequently than debit cards, to countries like Canada and UK, where debit cards are used more frequently than credit cards.

FIGURE TWO
CREDIT CARD TRANSACTIONS/
TOTAL CARD TRANSACTIONS (2001)



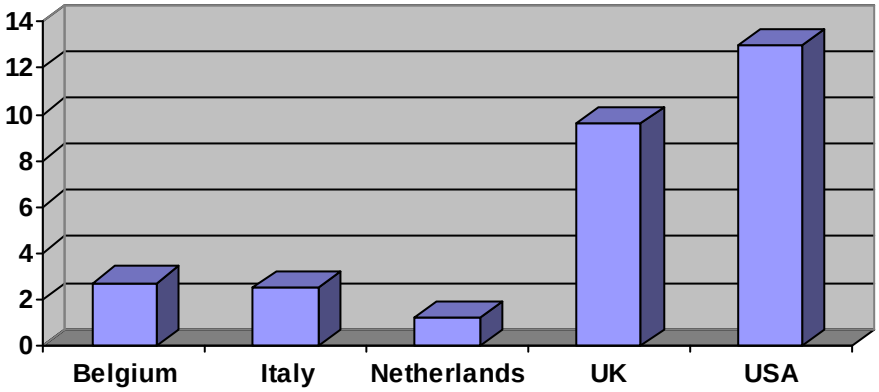
As discussed below, the share of transactions on credit cards to total card transactions is declining in many countries. Still, the number of credit card transactions per capita remains quite high in many countries **(Figure Three)**.

FIGURE THREE
CREDIT CARD TRANSACTIONS PER CAPITA (2001)



To understand broader market effects of cards, it is important to look not only at the number of transactions, but on the value of the transactions. Using card spending as a share of GDP equalizes the metric across various countries.[11] As **Figure Four** illustrates, credit card spending as a percent of GDP ranges from 13% in the US to less than 2% in certain EU countries.

FIGURE FOUR
CREDIT CARD SPENDING/GDP (2001)



As suggested in the introduction, perhaps the most important policy concerns arise from the relation between credit cards and debt. **Figure Five** displays a ratio of outstanding credit card debt to annual credit card volume, which shows the extent to which credit card use reflects borrowing. As **Figure Five** shows, the ratio varies even in highly developed countries from a high in the United States of more than 50% to a low of

[11] I use this metric in Mann, *Cards Data Paper*, *supra* note 3, where it indicates that an increase in credit card spending tends to cause an increase in total consumer credit.

about 5% in Japan.[12] Recognizing some ambiguity in the distinction between credit cards and debit cards for this purpose, **Figure Six** displays a parallel calculation of credit card debt to total card value. Even on that broader calculation, the USA and the UK stand alone with the broad use of cards as a borrowing vehicle.

FIGURE FIVE
CREDIT CARD DEBT/CREDIT CARD VOLUME (2001)

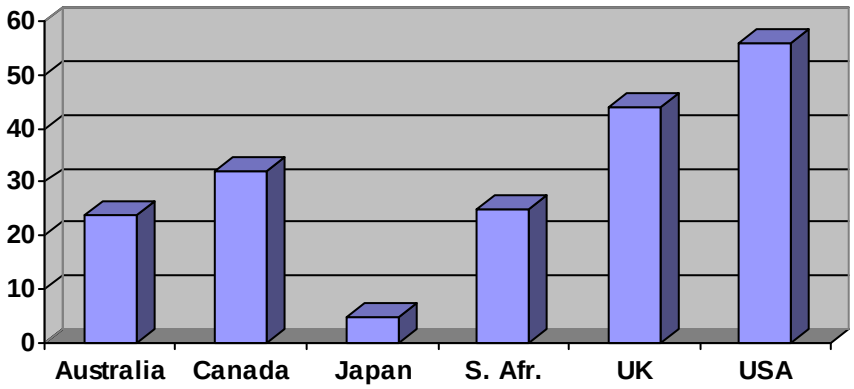
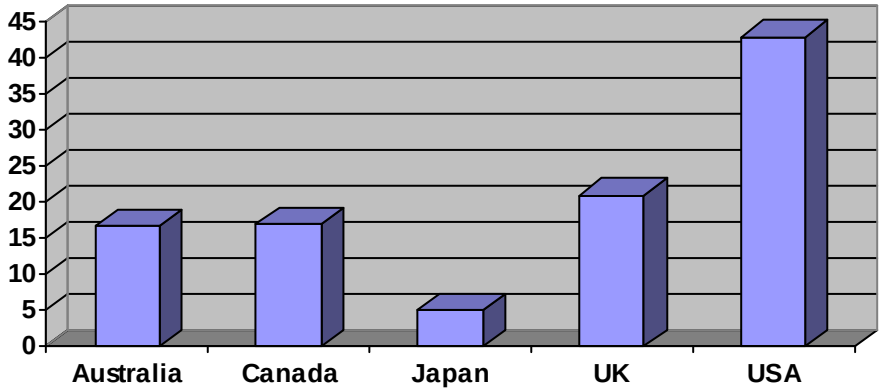


FIGURE SIX
CREDIT CARD DEBT/CARD VALUE (2001)



Looking more broadly at the economy, it also is important to get a sense for the

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[12] Media often assess this concern by reporting the share of cardholders that "consistently" pay off their bills each month. As of the end of 2003, that metric was at 38.30 for bank-issued credit cards in the United States. It rose steadily from 28.60 in 1990 to 44.4 in 2000, but has fallen each of the last three years. *See* CardData, *Bank Credit Card Convenience Usage – Current*, *available at* http://www.cardweb.com/carddata/charts/convenience_usage.amp (last visited Dec. 20, 2004) (subscription required). Aside from the difficulty of knowing precisely what that means, it is not possible to obtain that statistic for any country other than the United States. The metric reported in the text is one that I can calculate readily for other countries.

relation between credit card debt and other forms of non-mortgage consumer credit. Thus, as of 2002, credit card debt in the United States was about 40% of all non-mortgage consumer credit, while in other high credit card usage countries like the UK, Australia, and Canada the share ranged from 20% - 30%.[13]

B. Explaining the Usage Patterns

There are many reasons that countries have different uses of cards as opposed to other payment systems and debit cards as opposed to credit cards. Among other things, the specific level of usage in any particular country is likely to be influenced at least in part by the functionality of other payment products, the interplay among legal rules that foster or retard card usage, demographic trends, cultural norms that support or inhibit the practice of using cards, and more general institutional factors that facilitate or block the development of a robust card market. In the end, however, it appears that a great deal of the *current* pattern has nothing to do with those factors.[14]

I believe that the best explanation of the current pattern of card usage is a path-dependent one. The basic outlines of the current pattern of card usage depend to a substantial degree on fortuitous events that occurred decades ago, at the time the credit card product first came to prominence in the USA. To explain that perspective, I summarize the path by which the modern payment card products have developed. In doing so, I draw heavily on the excellent historical work of a number of scholars who have studied this subject before.[15] My contribution here is to put the specific historical events in a broader global frame. This discussion emphasizes those features of the American story that differentiate the USA from other countries, and thus helps to explain the different paths other countries have taken.

In general, I see three major stages in the development of modern card products. The first stage was the successful deployment of payment cards without the significant extension of credit. The second was the successful development by financial institutions of the revolving credit product that historically has been the principal basis of the card's

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[13] The media and various central banks often report various other measures of borrowing to emphasize different characteristics of the debt problem. Thus, the Bank of England reported in 2004 that overall household debt topped one trillion pounds and that the average person in the UK now owes more, as a percentage of income, then in any other large industrialized country. *See* http://www.iht.com/articles/532612.html.

[14] This is not to say that those factors do not have great explanatory power for predicting the potential size of the credit card market in different countries. It is just to say that the current relative patterns of usage are largely unaffected by those relatively static explanations.

[15] The best general account certainly is LEWIS MANDELL: THE CREDIT CARD INDUSTRY: A HISTORY (1990). Other general accounts of note are DAVID EVANS & RICHARD SCHMALENSEE, PAYING WITH PLASTIC: THE DIGITAL REVOLUTION IN BUYING AND BORROWING (2d ed. 2004); ROBERT D. MANNING, CREDIT CARD NATION: THE CONSEQUENCES OF AMERICA'S ADDICTION TO CREDIT (2000); GEORGE RITZER, EXPRESSING AMERICA: A CRITIQUE OF THE GLOBAL CREDIT CARD SOCIETY (1995).

profitability. Networks and issuers have deployed the profits from that product to provide the incentives that have led merchants and consumers to use the credit card with increasing frequency. Finally, in the third stage, the availability of point-of-service (POS) personal identification number (PIN) technology has made a sophisticated debit card product feasible. The development of that technology has resulted in the rapid growth of that product. The growth of the debit card, in turn, is both lessening the relevance of credit in those countries where it is important and limiting its rise in countries where it has never been important. The section closes with a discussion of the fourth stage of the credit card, which is only beginning. In that stage, I argue, the pressures of globalization will operate to force a substantial convergence of patterns of usage, except in countries where substantial regulatory and institutional obstacles can be brought to bear to limit the convergence. {The policy reforms discussed in Part III, of course, provide a catalogue of potentially effective obstacles.}

1. The Payment Card

Credit cards as we know them today were introduced in the USA in the 1950s. The first product was the Diner's Club card. It functioned much like the product we would now call a travel and entertainment card or a charge card.[16] It was marketed to high-salaried business travelers, and responded to a specific problem with the checking system as it functioned in the U.S. at the time.

Specifically, the business traveler needed some way to pay remote merchants for food and lodging without having to carry large sums of cash. Merchants were reluctant to accept non-local checks, because it was difficult for them to make an informed assessment of the likelihood that the traveler's bank would honor the checks. The problems of creditworthiness were aggravated by the long clearance times prevalent for non-local checks before the Expedited Funds Availability Act.[17]

As a response to that problem, the payment card was a brilliant invention. For the first time, bills from diverse places such as hotels, restaurants and airlines were consolidated, reimbursed by the issuer, and then billed to the customer to be repaid in full the next month. Among other things, this placed the billing function in the hands of an intermediary, so that alternative payment devices were unnecessary and the restaurant did not have to extend "credit" by invoicing a customer directly. Before that time only oil companies and department stores had issued cards; those cards had a limited impact on the overall pattern of consumer activity because they were accepted only at locations affiliated with the issuer, in a limited geographic area.

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[16] MATTY SIMMONS, THE CREDIT CARD CATASTROPHE (1995) provides a particularly entertaining insider's account of the origin of the Diners Club card.

[17] Until Congress's 1987 enactment of the Expedited Funds Availability Act, 12 U.S.C. §§ 4001-4010, "the check-clearing process too often lagged, taking days or even weeks to complete." Bank One Chicago, N.A. v. Midwest Bank & Trust Co., 516 U.S. 264, 266 (1996). For a brief discussion of that statute, see RONALD J. MANN, PAYMENT SYSTEMS (2d ed. 2003) [hereinafter MANN, PAYMENT SYSTEMS].

Still, the complex structure of the market for payment products made it doubtful that the payment card would succeed. The problem is that payment cards are subject to "network" or "bandwagon" effects – so that cards are more valuable to each person in the system when the number of people using and accepting them grows. The problem is exacerbated for payment cards because the system depends on the participation of three separate groups: issuers, users, and merchants. Thus, however much Diners Club wanted to deploy the technology, it could not make the product successful without persuading a critical mass of users and merchants to use and accept the product. Diners Club succeeded because it inserted itself as the sole issuer and because it convinced a large number of merchants *and* users to accept the product.[18]

Diners Club was able profit from the fees it charged to merchants for guaranteeing payment by cardholders as long as it could hold its bad-debt losses and overhead to seven percent of transactions (the amount it charged merchants in the early days, having raised the charge from six percent shortly after the card was launched). Similarly, customers wanted to use the cards because they paid little or nothing for doing so – Diner's Club instituted a $3 annual fee shortly after the system was launched to weed out cardholders that were not active users – and because the cards made the process of obtaining accommodations and other services in remote locations much simpler.

The value to merchants was more complicated, even debatable – presaging the persistent conflict between merchants and issuers that has plagued the industry periodically to the present day. Despite complaints about cost, many merchants in fact were willing to accept the cards because the costs that they would pay to Diner's Club were at most about equal to the costs that they faced when they accepted checks. A rational merchant would include in the costs of check acceptance not only delay in payment, but also losses from nonpayment and the costs (including the indignity and hassle) of credit assessment of their customers.[19] The merchant's costs also included, of course, the profits lost when the merchant turned away a potential customer because it decided not to accept a check and no other payment system was available. Looking forward, that business model remained profitable and successful for decades, although leadership quickly passed from Diner's Club to the better capitalized hands of American Express.[20]

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[18] The best sources for that period are MANDELL, *supra* note 15, and SIMMONS, *supra* note 16.

[19] As explained above, the merchant that accepts the credit card does not bear the risk of nonpayment as it does when it accepts a check. For a general discussion, see Ronald J. Mann, *A Payments Policy for the Information Age*, 93 GEO. L.J. (forthcoming 2005) [hereinafter Mann, *Payments Policy*].

[20] *See* PETER Z. GROSSMAN, AMERICAN EXPRESS: THE UNOFFICIAL HISTORY OF THE PEOPLE WHO BUILT THE GREAT FINANCIAL EMPIRE (1987); MANDELL, *supra* note 15; SIMMONS, *supra* note 16.

In context, the most important aspect of that business model is that it depended directly on two features of the USA economy that were not common elsewhere. The first is the significant amount of remote business travel. The relatively large geographic size of the USA afforded greater opportunity for lengthy cross-country business trips than in many other civilized countries. Similarly, the rise of the interstate highway system and the postwar economic boom of the 1950's fueled a large number of business travelers at distances remote from their homes. The second factor relates to the USA banking market. Although the interstate highway system fostered an unusually integrated economy, the banking market through which checks were processed was *not* integrated. The US banking industry by comparison to the banking industries of other countries was highly fragmented. In 1952, for example, about the time of the invention of the credit card, the US was home to 14,000 commercial banks.[21]

As Mark Roe explains, the geographic fragmentation of the industry rests directly on this country's persistent populist suspicion of large financial enterprises. The regulatory system that governs financial enterprises in this country from the earliest days has been structured to inhibit the growth of the large financial intermediaries that have flourished for some time in England, Germany, and Japan.[22] Extending Roe's account with respect to this issue, it is important to note that the fractionation of the payments system is related to the WWI-era decision of the Federal Reserve to support the collection of checks at par.[23] Before intervention by the Federal Reserve, banks competed against each other in the prices that they charged for collecting checks drawn in remote locations. Had that competition continued unchecked, the obvious economies of scale involved in that process probably would have led to considerable consolidation in the market for check collection (as they did in England, where a single entity controls substantially all check collection).[24] But the intervention of the Federal Reserve provided long-distance collection that at the time was essentially free. That action played a substantial role in the rise of checks as a common payment system in this country, much more common than in most of our trading partners. But it also limited the need for consolidation in the process, thus contributing to the limited concentration of the banking entities that provided that service to customers.

With 14,000 separate commercial banks, and in particular with large numbers of small local banks that would have been eliminated without the support of deposit

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[21] *See* JOINT COMMITTEE ON CHECK COLLECTION SYSTEM, STUDY OF CHECK COLLECTION SYSTEM (1954) (presented to American Bankers Association, Association of Reserve City Bankers, and Conference of Presidents of the Federal Reserve Banks).

[22] *See* MARK J. ROE, STRONG MANAGERS, WEAK OWNERS: THE POLITICAL ROOTS OF AMERICAN CORPORATE FINANCE (1994).

[23] *See* R. Alton Gilbert, *The Advent of the Federal Reserve and the Efficiency of the Payments Systems: The Collection of Checks, 1915-1930*, 37 EXPLORATIONS IN ECON. HIST. 121 (2000).

[24] That entity, "APACS," is an association of the major depositary institutions. For information, go to www.apacs.org.uk .

insurance that the federal government instituted during the FDR era,[25] it is inevitable that a large portion of checks accepted by the types of merchants that deal with out-of-town business travelers would be drawn on banks that did not have a presence in the area in which the check was presented. The slow pace of clearance in the checking system exacerbated the problem, making checks a generally unsatisfactory payment system for those merchants.

Those factors are important in understanding the relatively early rise of payment cards in the United States, because they help to explain why payment cards were not used to any significant degree in any other country until much later. In other countries, it was less likely that a business traveler would go to a remote destination and use anything other than cash as a payment system. And to the extent that they would, a concentrated banking system predictably would lead – as in England – to procedures by which checks readily could be accepted for such transactions throughout the country.

Thus, in England a check-guarantee scheme was introduced in 1969 to compete with early British card products.[26] The check-guarantee card solved the same problem as the Diner's Club card in this country, but did not lead to the early development of a payment-card network.[27] The key to that product was the concentrated banking system. England has only a small number of significant banks (less than five at all relevant times), all of whom have some market presence throughout the country. Thus, a business traveler in a remote part of the country presenting a check for payment, backed by a check guarantee card, had the benefit of a local bank assuring payment. Business travelers in the USA have not had that kind of support for the acceptance of their checks.[28]

2. Revolving Credit

Recognizing the potential for profiting from the issuance of payment cards, a significant number of banks began to offer similar products in the 1960's. Thus, Bank of America created the BankAmericard in 1958, a product which eventually evolved into

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[25] For historical discussion that emphasizes the relative effects of deposit insurance on different types of financial institutions, see HAROLD VAN B. CLEVELAND, CITIBANK: 1812-1970 (1986); JAMES GRANT, MONEY OF THE MIND: BORROWING AND LENDING IN AMERICA FROM THE CIVIL WAR TO MICHAEL MILKEN (1992).

[26] Payment cards have been available in Britain since 1951 when Donald McCullough launched Finders Services after a trip to the United States. Finders Services merged with another company to become Diner's Club in 1962. American Express opened a service in Britain the next year. *See* http://www.apacs.org.uk/downloads/History%20of%20cards%20FINAL.pdf.

[27] The details of the rise of the check-guarantee card are based on interviews with UK regulators and industry executives.

[28] MANDELL, *supra* note 15, presents statistics on check guarantee cards in the USA and on the failed efforts to push such a product in the USA.

the Visa system. MasterCard was formed in 1966 when a group of credit-issuing banks established MasterCharge.[29]

The banks soon transformed the product into a general-purpose payment card that could be used to access a substantial line of revolving credit.[30] Generally, the product and its introduction combined three distinct features of existing markets. The first were the proprietary "store" cards that large retailers had been issuing since the 1920's as a method for identifying customers with lines of credit – the most successful of which were the dog-tag like "chargaplates" issued by New York department stores in the early post-war era.[31] The second was the combination of the line of credit (something with which banks were quite familiar) with the Diner's Club product – a general-purpose card accepted by merchants of various kinds in various locations. The third – the mechanism for solving the initial startup problem – was the mass mailing, a technique used with success by oil companies for their cards earlier in the century.[32]

The resulting product was quite distinct from the business model of the older payment card. For the merchant, the cost in the early days was about the same. The potential benefit, however, was greater than what the payment card could offer, because the new card offered access to a new set of customers. As discussed above, the payment card generally offered access to customers seeking the convenience of remote payment at locations where checks might be difficult or cumbersome. A merchant that declined to accept the Diner's Club card had to fear that it would lose the potential profits from

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[29] MasterCard arose from a group of banks that feared the competitive ramifications of joining a network dominated by Bank of America. The best sources on this subject are Timothy Wolters, "*Carry Your Credit in Your Pocket: The Early History of the Credit Card at Bank of America and Chase Manhattan*, 1 ENTERPRISE & SOCIETY 315 (2000), and DEE HOCK, BIRTH OF THE CHAORDIC AGE (1999). Wolters provides a detailed history based on archival research of early credit card programs at Chase Manhattan and Bank of America. Hock, the original founder of Visa, provides an insider's account of Visa's founding and its early conflicts with MasterCard. For present purposes, the key point in that development was the decision of the government in the 1970's *not* to permit Visa to exclude MasterCard members. Hock argues that this decision, which effectively prevented the creation of truly separate card networks, has been the root cause of the competitive problems that plague the industry today. For a more sympathetic view of the effect of that decision on the competitive landscape, see EVANS & SCHMALENSEE, *supra* note 15. On that point, it is worth noting the considerably more competitive landscape that arose in Canada, where antitrust litigation reached an opposite outcome, permitting the two networks to require banks to become exclusive members of one or the other.

[30] *See* ROBERT HENDRICKSON, THE CASHLESS SOCIETY (1972). The idea was not a major leap. Rather, it was the kind of creative recombination of existing technologies that is characteristic of so many successful inventions. *See* ANDREW HARGADON, HOW BREAKTHROUGHS HAPPEN: THE SURPRISING TRUTH ABOUT HOW COMPANIES INNOVATE (2003).

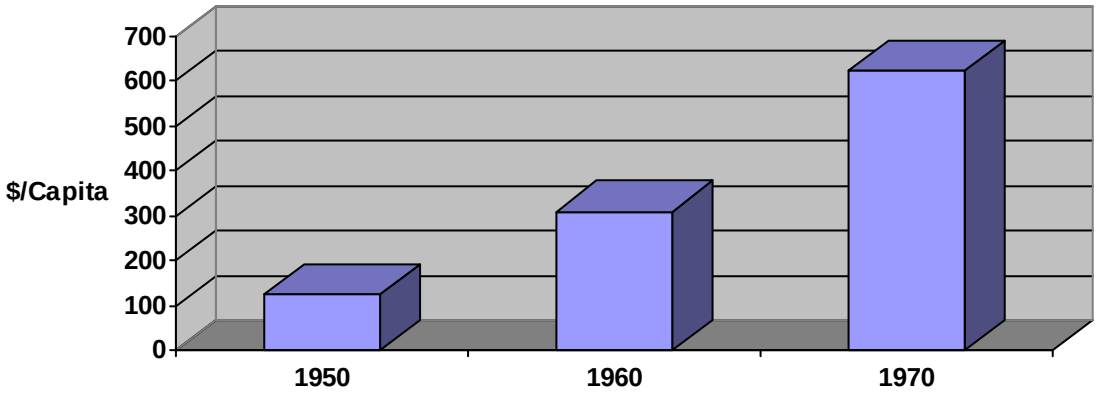
[31] *See* MANDELL, *supra* note 15; GRANT, *supra* note 25.

[32] *See* MANDELL, *supra* note 15.

business travelers that might choose to patronize establishments that would honor the Diner's Club card. The new credit card, however, offered access to customers that want to use the convenience of installment credit for their purchases.

Thus, the card interacted with the existing infrastructure for consumer credit, which by that time already was a major part of the American economy.[33] As **Figure Seven** illustrates, even before the introduction of the credit card, Americans were borrowing substantial amounts on an annual basis. The ability to sell on credit while "outsourcing" the credit functions to a general-purpose credit card issuer was a major benefit to a retailer that was not large enough profitably to operate a credit program of its own.[34]

FIGURE SEVEN: USA NONMORTGAGE CONSUMER CREDIT (TIME SERIES)



Source: *Federal Reserve Statistical Release G.19.*

For the same reasons, the card had the potential to be attractive to a new group of customers, for whom the Diner's Club product was not useful. Specifically, as consumer credit became a greater part of American culture, a substantial majority of Americans became potential customers for a product that offers the ease of instant credit at the point of sale whereas the Diner's Club product was aimed at high-salaried business travelers.

The more difficult problem was how banks could profit from this product. In theory, the banks that issued the cards could profit by charging merchant fees that would

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[33] *See* Wolters, *supra* note 29. The ability to offer installment credit has been a major competitive attribute of United States merchants for the greater part of this century. *See* LENDOL CALDER, FINANCING THE AMERICAN DREAM: A CULTURAL HISTORY OF SECURED CREDIT (1999); MARTHA OLNEY, BUY NOW, PAY LATER: ADVERTISING, CREDIT AND CONSUMER DURABLES IN THE 1920'S (1991).

[34] *See* EVANS & SCHMALENSEE, *supra* note 15. Banks, of course, by this time had much more experience with installment credit than even large retailers. *See* CLEVELAND, *supra* note 25; GRANT, *supra* note 25; Wolters, *supra* note 29.

offset ordinary administrative costs and interest rates that would compensate for the cost of funds and the risk of nonpayment. In reality, even with the 18% interest rates that were typical, it was difficult for issuers to profit in the early days. It is clear, for example, that most of the issuers who started in the early 1950's left the field promptly.[35] Chase, for example, quit the field after a massive investment, based on a rational determination that it could not become profitable sufficiently quickly to justify continued investment.[36] Among other things, the massive economies of scale in the early days made it tremendously difficult for all but the very largest banks to succeed.[37]

One important part of that phase is that the depositary relations banks had with their customers gave banks an advantage in assessing the creditworthiness of potential cardholders. In the absence of the information or technology for any more sophisticated assessment of creditworthiness than the information readily available from the depositary relationship, non-bank entities (such as Diners Club and American Express) were not able to compete in that market.[38] Similarly, in countries where banks were not permitted to issue cards (Japan being the obvious example), the arrival of the credit card market was delayed by decades.[39] Thus, although the Sumitomo Mitsui card was introduced in 1968 under license from the Bank of America,[40] regulatory constraints that prevented the issuer of that card from extending revolving credit to its users circumscribed the potential growth and profitability of that card for decades.[41]

During the next three decades (from about 1965 to 1995), the revolving credit product became the dominant card product in North America and began to spread rapidly into many other countries. In the UK, for example, Barclays introduced a credit card styled on the BankAmericard in 1966. Despite the early unprofitability of American credit card operations, Barclays believed that it had the infrastructure in place to profit immediately, largely because of its nationwide presence. Nevertheless, credit restrictions imposed by the Bank of England stunted the card's early growth, and the Barclaycard operation was not profitable until 1972. Barclays' competitors responded by introducing the check guarantee system in 1969, hoping to curtail the growing popularity of the

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[35] *See* HOCK, *supra* note 29; MANDELL, *supra* note 15; Wolters, *supra* note 29.

[36] *See* Wolters, *supra* note 29. As Wolters shows, the determination by Chase that its program was less profitable than the parallel and competing Bank of America program rested in part on Chase's more accurate accounting system.

[37] *See* MANDELL, *supra* note 15; MANNING, *supra* note 15; WOLTERS, *supra* note 29.

[38] *See* SIMMONS, *supra* note 16; JON FRIEDMAN & JOHN MEEHAN, HOUSE OF CARDS: INSIDE THE TROUBLED EMPIRE OF AMERICAN EXPRESS (1992).

[39] *See* Ronald J. Mann, *Credit Cards and Debit Cards in the United States and Japan*, 55 VAND. L. REV. 1055 (2002) [hereinafter Mann, *Japanese Cards*].

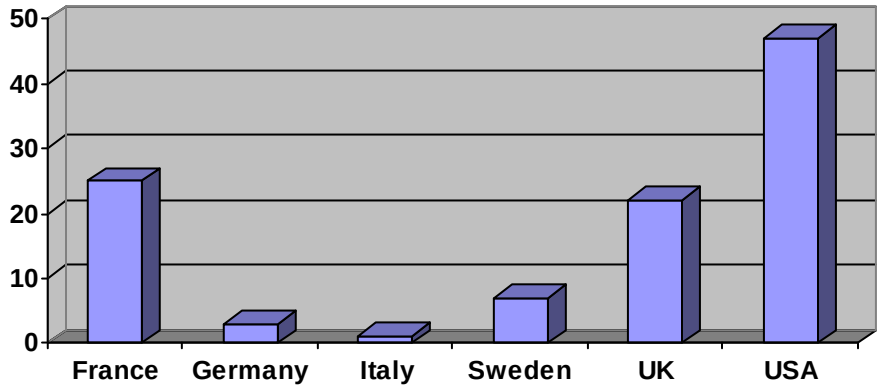
[40] *See* http://www.smfg.co.jp/english/aboutus/profile/history/smbc_card.html; HOCK, *supra* note 29.

[41] *See* Mann, *Japanese Cards*, *supra* note 39.

Barclaycard as a payment device. Faced with the growing market share of the BarclayCard, however, two of its largest competitors – Lloyds Midland and National Westminster – launched the rival Access card in 1972, which was linked to MasterCard two years later.[42]

Collectively, as **Figure Eight** shows, that history suggests that a variety of credit-related regulatory obstacles slowed growth in those other countries so that transaction volume on plastic cards as late as 1992 (the earliest year I can get data for a substantial group of countries) remained quite small, even in the UK.

FIGURE EIGHT: CARD TRANSACTIONS PER CAPITA (1992)



Another important aspect of this story is the level of concentration in the banking industry. The contrast between the market in the US, on the one hand, and France, the UK and Japan, on the other – provides considerable support for the idea that concentration in a country's banking industry slows financial innovation and diversification.[43] This is in part because a highly concentrated industry does not experience the high costs of settling transactions that the fractionated industry in the United States experienced, which is a powerful motivator for some type of payment system that can be cleared and settled electronically. There also, however, is a sense that highly concentrated industries are more likely to settle into comfortable patterns of oligopolistic cooperation, in which the disruptive effects of innovative payment products will be delayed. I have explained in previous writing, for example, the comfortable

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[42] *See* MARGARET ACKRILL & LESLIE HANNAH, BARCLAY'S: THE BUSINESS OF BANKING 1690-1996 (2001).

[43] Germany may provide a counterexample, because it has both the most fragmented banking industry in the EU and at the same time one of the most underused credit card markets. *I need to do more work to understand the situation in Germany, but I believe that consumer credit regulations in Germany made revolving credit products even less practical than in the UK and Canada, where those restrictions were quickly loosened to permit at least some borrowing on cards at an early date.*

assumption of large Japanese banks that their customers just don't want access to easy revolving credit, an assumption belied by the success of recently introduced American-style card products.[44] That also plainly seems to be the case in France, where the coalition of banks in the Bankes Cartaire group apparently has worked hard to prevent disruptive outside entry. Indeed, their successful efforts to exclude the British avant garde issuer Egg seem to be one of the principal motivators of the recent action by the European Commission charging that group with anticompetitive conduct.[45] Even in the UK, interviews suggest that the rapid changes in the market in recent years are largely attributable to the entry of competitors from the US, which have introduced products that UK banks easily could have introduced years ago.[46]

Moving closer to the present, two related institutional factors have been central both to the success of the product in the United States and to its spread overseas. The first was the rise of national credit sharing bureaus, which gave lenders much more extensive information about potential cardholders – not only negative information about defaults and arrearages, but also positive information that helped lenders to make sophisticated determinations about the likely performance of potential cardholders.[47] Those bureaus were formed in the 1950's, shortly before credit cards first appeared in the American market.[48]

The second development, closely related to the first, was the rapid development in the field of computerized information processing. Credit cards depend on that technology in a variety of ways. First, advances in information technology make

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[44] *See* Mann, *Japanese Cards*, *supra* note 39.

[45] *See* Matt Ablott, *French Banks Accused of Cards Cartel Carve-up*, CARDS INTERNATIONAL, Issue 322 (2004), at 3.

[46] Press reports suggest similar effects in Belgium, Portugal, and Slovenia. In Belgium, a consortium of local banks (the Bank Card Company) includes all card issuers other than Citibank, a structure that "has certainly stifled competition in the Belgian market, with almost no promotion of revolving credit products." *Debit Cards Dominate Belgian Market*, CARDS INTERNATIONAL, Issue 299 (2003), at 17 [hereinafter *Belgian Debit Cards*]. In Portugal, press reports attribute the low rate of revolving credit to this fact: "[B]anks' card strategies have been defined by wide-scale co-operation, which, although facilitating technological development, has somewhat discouraged innovation." *Portugal Offers Growth Potential*, CARDS INTERNATIONAL, Issue 322 (2004), at 20 [hereinafter *Portuguese Potential*]. For Slovenia, card issuance is quite high (more than 1.5 payment cards per capita as of 2003), but very little use of them for revolving credit in a highly regulated market dominated by two local issuers with no foreign competition. *See Slovenia – A Small Market with Big Potential*, CARDS INTERNATIONAL, Issue 328 (2004), at 12.

[47] *See* Robert J. Hunt, *The Development and Regulation of Consumer Credit Reporting in America* (Fed. Res. Bank of Phil. Working Paper 02-21) (Nov. 2002).

[48] *See* Marco Pagano & Tullio Jappelli, *Information Sharing in Credit Markets*, 48 J. FIN. 1693 (1993) (discussing the rise of credit bureaus without making any link to credit cards).

processing of the underlying payment transactions immensely more efficient.[49] Increasingly over the last twenty years, credit card transactions have been processed electronically. Thus, only a small percentage of credit card transactions in the United States now involve paper slips. While the checking process struggles to replace 5% of its transactions with electronic processing, the credit card has much more rapidly become almost entirely electronic. The industry as a whole and Visa[50] in particular has shown great nimbleness in moving so rapidly to electronic processing.

The central technological advance was the development of the magnetic stripe.[51] The manufacturer of the card embosses the account number and accountholder's name on the front of the card and encodes the account number on the magnetic stripe on the back of the card.[52] To make counterfeiting more difficult, the major networks also in recent years have included certain additional information on the back of the card that is not visible on the front of the card (a card verification value or card verification code). The advantage of the magnetic coding is that the information identifying the account can be read electronically and transmitted to the issuer for collection. Older embossed cards might produce slips with OCR characters that would be machine-readable for processing, but the numbers could not be read electronically to facilitate an electronic transaction.[53] Thus, the advent of the magnetic stripe freed the payment card from any requirement of paper processing. From that point on, it was inevitable that the costs of processing card transactions would fall steadily with advances in information and telecommunications technology, while the costs of processing older paper-based transactions (those involving checks or currency) would fall, if at all, much more slowly.

The ability to transmit information also makes the payment card cheaper in the sense that transactions are inherently safer than paper-based transactions. Because the information on the card can be read electronically, the system can verify the authenticity of the card in "real time." The terminal that reads the information off of the card transmits that information to the issuer while the customer is at the counter, so that the

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[49] For example, we have come a long way from the days in which credit card transactions depended on the processing and settlement of paper slips. *See* SIMMONS, *supra* note 16; HOCK, *supra* note 29.

[50] HOCK, *supra* note 29, provides an impressive explanation of the risks Visa took and the difficulties it overcame in designing the first electronic transaction settlement system.

[51] This discussion relies heavily on MANDELL, *supra* note 15.

[52] For details on the meaning of the digits in the account number, go to http://money.howstuffworks.com/credit-card2.htm (last visited December 29, 2004).

[53] The technological challenge is underscored by the abject failure of the competing Citibank effort, which resulted in a famous incident in which Citibank's prototype processing machine was thrown into the water just off of Manhattan. *See* MANDELL, *supra* note 15; CLEVELAND, *supra* note 25; PHILIP L. ZWEIG, WRISTON: WALTER WRISTON, CITIBANK, AND THE RISE AND FALL OF AMERICAN FINANCIAL SUPREMACY (1995).

issuer can decide whether to authorize transactions.[54] Although that system certainly is not impervious to fraud, it plainly is more efficient than the checking system, which relies for verification primarily on a manual signature or presentation of a photo-bearing identification card. To be sure, the system depends on a reliable and inexpensive telecommunications infrastructure, but this country has had such an infrastructure throughout the relevant time period.[55]

Developments in information technology also have made the credit card as a lending vehicle immensely more efficient. Again, the basic distinction is one of transaction costs. The most obvious advance relates to underwriting costs – the ability to assess risks accurately. Software products allow lenders to analyze credit information in increasingly sophisticated ways, culminating in the credit scoring products that dominate modern consumer credit underwriting.[56] One recent Federal Reserve researcher, for example, estimated that automated credit assessment through credit scoring reduced bank loan losses on consumer credit by $5 *billion* per year.[57] Thus, part of the story plainly is that the credit card has succeeded because it is a markedly efficient lending vehicle.[58]

The importance of information technology to a modern credit card program has substantially altered the competitive landscape of the issuing process. In a system where a depositary bank is the only entity that profitably can issue a credit card, there is little competition on the terms on which the card is to be issued: the cardholder will use the card if the terms on which his bank offers the card make it valuable for him to do so. However, where a bank's ability to offer profitable card products depends on its information technology more than its depositary relationships, *any* bank can compete for

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[54] The numbers on the card facilitate autonomous routing of the transaction from the merchant to its acquirer to the issuer of the agent that authorizes transactions.

[55] Countries without such an infrastructure have been pressed by fraud problems to move much more rapidly than the USA to adopt smart card technology, such as the chip-and-pin initiative in the UK and the EMV initiative pressed more broadly by MasterCard and Visa. Those technologies generally make it more feasible to assess the security of the transaction without as much reliance on real-time telecommunications connection as the USA system. The adoption of those systems might leave the USA as the country most vulnerable to fraud, which in turn would lead to the adoption of similar systems here.

[56] The difficulty of profiting in the early days of the credit card was directly related to the primitive state of information technology at the time. *See* HOCK, *supra* note 29; Melina Lee Suping & Huang Danwei, *Plastic Money* (Oct. 2002 manuscript) (discussing rise of the magnetic stripe).

[57] *See* Hunt, *supra* note 47. That result is consistent with typical models of screening costs in the consumer credit industry, such as Fahad Khalil & Bruno M. Parigi, *Screening, Monitoring and Consumer Credit* (Oct. 2001).

[58] As Dagobert L. Brito & Per R. Hartley, *Consumer Rationality and Credit Cards*, 103 J. POL. ECON. 400 (1995), points out, the advantage of the credit card is not limited to the underwriting savings; the open-ended credit card loan also costs much less for the typical borrower to obtain and access.

the customer's business. Thus, we see in the United States the rise of monoline banks – banks without substantial depositary businesses that focus primarily on the credit card market. The competition that they bring to the card market is so pervasive that by the late 1990's more than 80% of active credit card accounts in the United States were with banks that do not have a depositary relationship with the customer.[59]

That understanding of the American market has profound implications for the rise of credit card markets in other countries, because many other countries have impediments that prevent their market from developing along that path. As mentioned above, Japan for decades prevented banks from being involved with revolving credit card products, which helped to stifle any substantial credit card market until the early 1990's when those restrictions began to be repealed. Japan is marked even to this day by a stunted revolving credit market. In Japan, every card is tied to a specific deposit account. When you purchase with a credit card, the system operates on the assumption that you will pay for the first transaction in the first billing cycle ("ikkai barai"). If you do not change that assumption, payment for your purchases will be debited from your account automatically once a month, in much the same way that we can arrange to have recurring payments taken automatically from our accounts. If you do not want to have payment for the purchase taken from your account in that way, you have to orally request a different payment plan, essentially advising the retail clerk and any customers who happen to be nearby that you do not plan to pay off your credit card bill the next month.[60] It is not surprising that the public assertion of borrowing required to take advantage of Japanese revolving credit has not been common.[61]

A more common obstacle relates to the information on which banks rely for accurate underwriting. The bank's use of that information is profoundly offensive to the privacy customs in most of the developed world – particularly mainland Europe. Thus, although the Fair Credit Reporting Act might be a high point in the largely ineffectual protections American law provides for personal data,[62] that statute provides much less protection than the European Data Privacy Directive, to which all countries in the European Union are obligated to conform.[63] Under that Directive, the storage and

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[59] *See* EVANS & SCHMALENSEE, *supra* note 15.

[60] Another debilitating feature of Japanese revolving credit is that you must select from a menu of repayment schedules while at the counter. Typically, you could agree to pay for the transaction in 2, 3, 4, 5, or 10 months, or from your next annual bonus. *See* Mann, *Japanese Cards*, *supra* note 39. Although that menu is a long one, it does not provide the flexibility American cardholders have, to pay each month for whatever share of the transaction appears best at the time.

[61] *See* Mann, *Japanese Cards*, *supra* note 39.

[62] For a discussion of how American issuers use data for marketing, see BILL GRADY, CREDIT CARD MARKETING (1992). For an early recognition of the privacy problems that this raises, see HENDRICKSON, *supra* note 30.

[63] *See* MANN & WINN, *supra* note 8.

transmission of identifiable credit information to third parties without the specific knowledge and consent of the customer would be plainly illegal.[64] Hence, in countries adhering to such a regime, it is not possible for a lender to obtain the kind of broad-ranging positive and negative information on which American-style credit scoring depends.[65] If the absence of such information would have the negative effects on the profitability of the American industry that observers suggest,[66] it is easy to see how great an obstacle the general absence of such information poses to the expansion of the credit card in those countries. Empirical work by European academics finds a strong causal connection: the inability of lenders to obtain both positive and negative information about borrowers appears to correlate with smaller consumer lending markets.[67] It is of course not clear which phenomenon would cause the other, but it does seem fair to say that the use of credit cards in the continental EU is quite low.

The significantly higher rate of card use in the UK – despite the formal adherence to the same directive – is doubtless attributable at least in part to the UK's willingness to tolerate a complicated system that allows credit card issuers to work around the constraints of the Directive.[68] The issue has come to the fore in the EU in the last few years, as proposed revisions to the European Consumer Credit Directive would make it all but impossible for monoline issuers to operate in Europe.[69] Among other things, that directive would require personalized counseling about the pros and cons of various lending products that is antithetical to the lean staffing traditional for a successful

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[64] *See* Data Protection Directive arts. 7, 15. Those provisions are implemented into law in the UK in the Data Protection Act, §§ 4 (and Schedule 1), 11.

[65] *See* Nicola Jentzsch, *The Economics and Regulation of Financial Privacy – A Comparative Analysis of the United States and Europe* (JFK Working Paper No. 128/2001).

[66] *See* Hunt, *supra* note 47.

[67] *See* Tullio Jappelli and Marco Pagano, *Information Sharing in Credit Markets: A Survey* (Centre for Studies in Economics and Financing Working Paper No. 36) (March 2000); Tullio Jappelli & Marco Pagano, *Information Sharing, Lending and Defaults: Cross Country Evidence* (CSEF Working Paper No. 22) (Mar. 2000); Nicola Jentzsch, *The Implications of the New Consumer Credit Directive for EU Credit Market Integration* (2003 draft); Nicola Jentzsch & Amparo San Jose Riestra, *Information Sharing and Its Implications for Consumer Credit Markets: United States v. Europe* (May 2003 draft); Jorge A. Padilla & Marco Pagano, *Sharing Default Information as a Borrower Discipline Device* (1999 draft) (forthcoming in EUROPEAN ECON. REV.).

[68] Under that system, credit bureaus permit issuers to evaluate files of individuals stripped of identifying information. After the issuers determine which files reflect credit histories suitable for their marketing, the issuers can send solicitations to the individuals reflected in those files. Interview with Experian's Bureau in the UK. The legal environment for a similar system apparently exists in Germany, Italy, and the Netherlands, but not elsewhere in the EU. *See Overindebtedness in the Enlarged EU*, CARDS INTERNATIONAL, Issue 319 (2004), at 20.

[69] *See* Proposal for a Directive of the European Parliament and of the Council on the Harmonization of the Law, Regulations and Administrative Provisions of the Member States Concerning Credit for Consumers, COM (2002) 443 (Sept. 11, 2002).

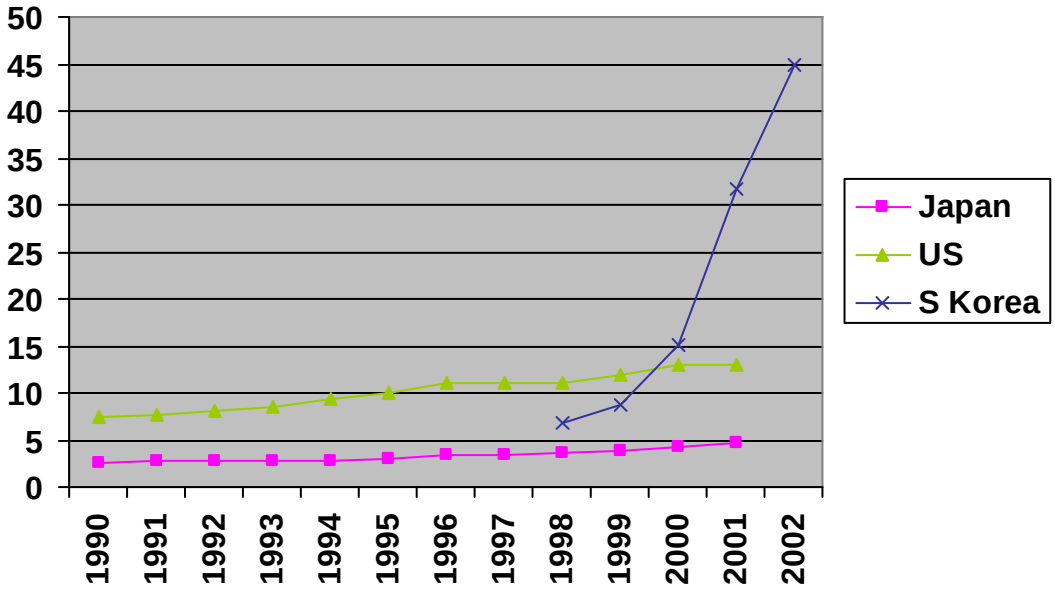
monoline bank.[70] As discussed above, regulations that make it difficult for monoline issuers to operate are likely to have the inevitable effect of stifling innovation by limiting competition so that for most cardholders the only plausible issuer is the bank at which the cardholder maintains the primary deposit account. That is particularly important in the UK, where the advent of American monoline issuers in the late 1990's seems to be connected with the recent growth of credit card spending and debt.[71]

To illustrate that point, consider the cautionary tale of South Korea. Issuers in that country recently have engaged in heavy marketing and issuance of revolving credit cards, despite the absence of the kind of credit-assessment system customary in the United States. At first, those efforts were successful, as shown by the rapid increase in credit card spending displayed in **Figure Nine**.

[70] Article 6.3 of the proposed Directive would require lenders to provide advice to customers about the proper product for the customer's particular use. That requirement would be burdensome for credit cards generally because of the difficulty of predicting at the time of the application how the card ultimately will be used. It would be particularly difficult for monoline issuers that do not ordinarily maintain staff to engage in personalized discussions with each customer. For a general discussion from the perspective of the industry, see APACS, *The Proposed Consumer Credit Directive (Com (2002) 443) & Its Potential Consequences for the UK Credit Card Market* (Apr. 23, 2003).

[71] This discussion draws on interviews with British credit card executives.

FIGURE NINE
CREDIT CARD SPENDING/GDP
(SOUTH KOREA TIME SERIES)



Those transactions also, however, led to an unnatural increase in the volume of credit card lending, as shown in **Figure Ten**. The consequence of lending without appropriate information, unfortunately, is an unacceptable rate of defaults. In the case of South Korea, it led in 2003 to delinquencies by twelve million cardholders (in a country with a population of less than 50 million), approximately 30% of all households.[72] Those delinquencies eventually required a $4 billion government bailout of the major credit card issuers.[73] Only after the crisis have issuers had access to positive ("white") data as a tool to assess the creditworthiness of potential cardholders.[74]

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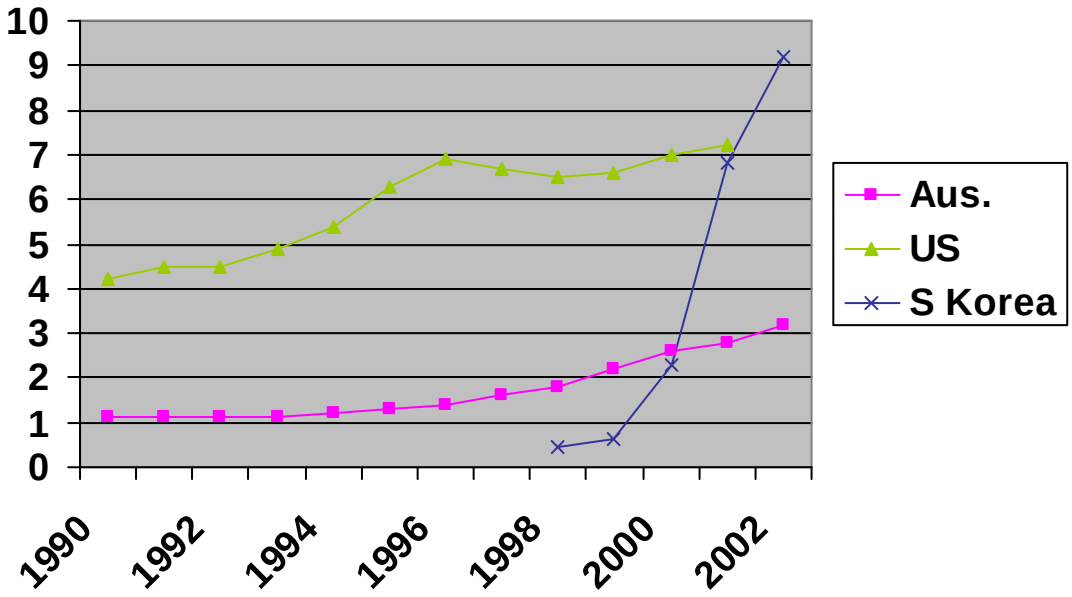
[72] *See The Korea Credit Card Meltdown – What Happened and What Lessons Are Relevant?*, CARDS International, Issue 318 (2004), at 13; *Korean Card Company Blacklist Reaches 3m*, CARDS INTERNATIONAL, Issue 297 (2003), at 11 [hereinafter *Korean Card Blacklist*].

[73] *See Korean Rescue Programmes Unveiled*, CARDS INTERNATIONAL, Issue 298 (2003), at 23; *Korean Card Blacklist*, *supra* note 72; *Investors Nervous over South Korean Card Debts*, CARDS INTERNATIONAL, Issue 296 (2003), at 11; *South Korea Takes Action over Credit Debt Crisis*, CARDS INTERNATIONAL, Issue 294/295 (2003), at 9 [hereinafter *South Korean Action*].

[74] *See Regulators Tighten South Korea's Belt*, CARDS INTERNATIONAL, Issue 290 (2003); *see also Taiwan Takes Action over Credit Crunch Fears*, CARDS INTERNATIONAL, Issue 319 (2004), at 9 (attributing stability of Taiwanese market, as compared to Korean market, to capabilities of national credit bureau).

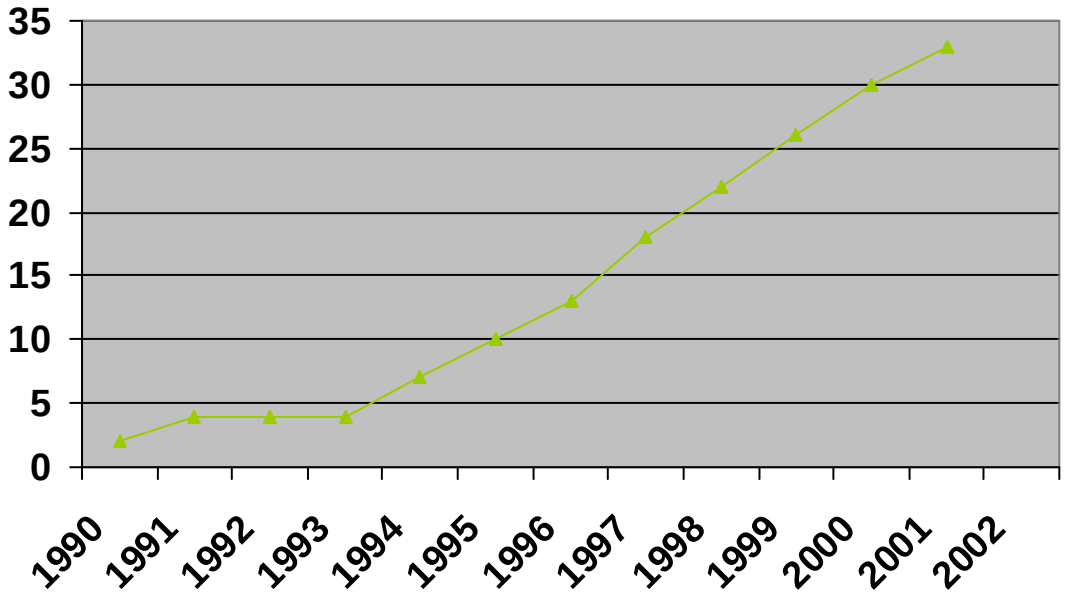
FIGURE TEN
CREDIT CARD DEBT/GDP
(SOUTH KOREA TIME SERIES)



3. Point-of-Sale Debit

The most prominent trend of the last ten years has been the rapid rise of the debit card, which threatens to eclipse the credit card in its dominance of the industry. For example, even in the USA – the great bastion of credit card borrowing – the share of debit cards in all card transactions has risen significantly since the early 1990's **(Figure Eleven)**.

FIGURE ELEVEN
DEBIT CARD TRANSACTIONS/CARD TRANSACTIONS
(USA TIME SERIES)



In some countries, that increase reflects the first major influx of card use. For example, in the UK, Australia, and Canada card transactions per capita rose from about 30 in the early 1990's to much larger numbers by the end of the decade (about 80 for the UK and Australia, and 120 for Canada). Except for Australia (which I discuss below), debit cards drove most of that growth. In countries in which the revolving credit model described above never succeeded, technological advances offered a separate route to a burgeoning card industry, leapfrogging the revolving credit stage. Here, the specific infrastructure development was the continuing decline in the cost of POS terminals, which has made it cost-effective in many countries for all but the smallest merchants to accept debit cards at the POS.[75] The business case for the card in that situation – typified by the UK – was as a replacement for the check. Essentially, the debit card served as a

[75] The introduction of debit cards had a significant impact on average transaction values, because the average transaction values for debit cards traditionally are significantly lower than those for credit cards, reflecting their roots as a product that substitutes for cash and checks. Thus, for example, as of 2001 the average USA credit card transaction was $61, while the average USA debit card transaction was $36. As the credit card market has matured, issuers have searched for new revenue streams and increased transactions. Thus, issuers have strived to find ways to encourage existing users to use credit cards for different types of transactions, including both small value transactions and more routine transactions such as bill payment, groceries and fast-food restaurants. Those newer transactions tend to be smaller value and thus to deflate the average transaction value. *See* http://www.washingtonpost.com/wp-dyn/articles/A45393-2005Feb22.html; http://online.wsj.com/article/0,,SB110685605351138309-email,00.html.

convenient vehicle for fostering a switch from expensive paper-based transactions to cheaper electronic transactions.[76]

Canada is the most notable example of that trend: card transactions in Canada have grown even more rapidly than in the USA, so that since 1998 there actually have been more card transactions per capita in Canada than in the USA. As a latecomer to those transactions, though, Canada has maintained a persistently low rate of borrowing in its credit card transactions. Thus, the overall ratio of card debt to card value is now about 20%, roughly half the rate in the USA.

Similarly in the UK, the ready technological availability of the debit card in the late 1990's came shortly after the wide deployment of the revolving credit card in the early 1990's. As a result, British credit card debt as a share of card transactions began to fall shortly after its appearance, resulting in a current market similar to Canada's: a ratio of card debt to card value of about 20% at the turn of the millennium.

Australia offers a slightly different example, because a disproportionately large share of its growth has come from credit card transactions, rather than debit card transactions. Australia is perhaps the only country in the world in which the relative share of credit card transactions grew during the 1990's. Nevertheless, even in Australia, debit card transactions have grown rapidly, and the rate of borrowing on credit cards has fallen steadily, so that the absolute share of debt as a portion of total card value has fallen to about the same level in Australia as in the UK and Canada.

Finally, South Africa affords the example of a lesser-developed country. Although South Africa has had a fully developed market for revolving credit on the cards that its consumers have, it does not have the technological infrastructure necessary for wide deployment of the technology necessary for a successful system of processing. Accordingly, card use in South Africa remains quite low, about 3-4 transactions per year per capita compared to more than a hundred per year per capita in the United States and Canada.

The rise in use of the debit card is somewhat harder to understand in countries like the USA, the only major country where the credit card was commonly used as a payment device in the early 1990's. {Refer again to **Figure Eight**.} In the USA, for example, the debit card in many ways is inferior from the perspective of a hypothetical rational consumer. For one thing, the consumer must pay for the purchase immediately, without the flexibility and float that the revolving credit card provides. For another, the consumer is much less likely to receive affinity benefits (particularly for PIN-based products). Similarly, as discussed below, the marketing strategies of credit card issuers suggest that those benefits attract a significant number of consumers.

Finally, the consumer receives fewer legal protections for problems with debit transactions than it does for credit card transactions. In the USA, for example, the Truth

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[76] Interviews with British credit card executives and regulators.

in Lending Act and the Electronic Funds Transfer Act provide protection for cardholders against unauthorized transactions on credit or debit cards.[77] The Truth in Lending Act goes even further for credit cards, providing, among other things, a right to withhold payment that allows the cardholder, in appropriate circumstances, to present against the card issuer any defense that the cardholder had against the merchant.[78] England[79] and Canada[80] have similar though somewhat narrower protections for credit cards. Japan has a somewhat similar, though even narrower, protection.[81] None of those countries, however, has substantial protections for debit cards.[82]

For several reasons, however, I doubt that the breadth of the legal protections significantly influences choice among card-based payment systems, either in the USA or elsewhere. First, the statutes can motivate consumer behavior only if consumers understand the protections they afford. That seems most unlikely. Is it likely, for example, that the average American consumer understands the difference in legal protections that arises from the use of a debit card rather than a credit card?[83] Second, even if consumers in fact do understand the protections that the statutes afford, those protections can motivate consumers only if consumers accurately weigh the risks when

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[77] TILA § 133; EFTA § 909; *see* Mann, *Payments Policy*, *supra* note 19.

[78] TILA § 170. Thus, for example, if a cardholder purchases a book from an online bookseller and the book never arrives, the cardholder is not obligated to pay the credit card bill associated with that transaction; it is up to the issuer to recover from the bookseller. For careful analysis of the details of those rules, see HOWARD STRONG, WHAT EVERY CREDIT CARD USER NEEDS TO KNOW: HOW TO PROTECT YOURSELF AND YOUR MONEY (1999).

[79] Section 75 of the Consumer Credit Act imposes liability on the issuer for defects in goods and services purchased with a credit card (parallel to TILA § 170 in the United States. Sections 83 and 84 limit the issuer's ability to charge the customer for unauthorized transactions (parallel to TILA § 133). *See* GRAHAM STEPHENSON, CREDIT, DEBIT & CHEQUE CARDS: LAW & PRACTICE (1993).

[80] Canada limits liability for $50 for unauthorized transactions that occur before notification of the creditor, but does not protect telephone-order or Internet transactions at all. Cost of Borrowing Regulations § 12; *see* Benjamin Geva, *Consumer Liability in Unauthorized Electronic Funds Transfers*, 38 CANADIAN BUS. L.J.207 (2003).

[81] Japan has a limited protection against unauthorized transactions (parallel to TILA § 133) in Article 30 of the Installment Sales Law [Kappu hanbaihō], Law No. 159 of 1961. That law, however, only applies to *kappu* transactions; it excludes the overwhelming majority of transactions that are accomplished through *ikkai barai*. *See* Mann, *Japanese Cards*, *supra* note 39.

[82] Voluntary codes among banks in Australia, Canada, and the United Kingdom provide protection for unauthorized debit card transactions where the cardholder is not negligent, but assign responsibility to negligent cardholders. *See* Geva, *supra* note 80; STEPHENSON, *supra* note 79.

[83] This problem has gotten much more serious as multiple credit and debit functions have begun to reside on a single card and as terminals progressively have lost the ability to accurately interpret those functions. I address those problems in Mann, *Payments Policy*, *supra* note 19.

they select a payment system. As I have discussed elsewhere, common behavioral biases that limit rational consideration of uncommon unfortunate events suggest that for many consumers those problems will not be given due weight.[84] Third, even if consumers do understand the statutes and do give due weight to them, in many cases the protections would not affect their use of the card. Protections against unauthorized transactions, for example, should not motivate card use if the use is one that is not likely to result in an unauthorized transaction. For example, why would protections against unauthorized credit card use motivate cardholders to use their card in an ordinary face-to-face transaction? Perhaps, you could say, the statute allows the cardholder to overcome the fear that the shopkeeper might be stealing the card number. For example, the handheld wireless payment terminals common in Europe apparently are designed to assuage the concerns of cardholders that a waiter might write down the cardholder's card number if the waiter took the card out of the cardholder's sight. It is difficult to believe, however, that a concern about that problem is driving the use of cards generally.

Those commonsense understandings are buttressed by the available empirical evidence about use of cards, which does not seem to be influenced in any obvious way by the extent of legal protections. For example, the statutory protections for credit card transactions in the UK and Canada are relatively similar, while Australia has no similar protections. Yet, the rates of credit card usage per capita are almost twice as high in Australia and Canada as they are in the UK. Similarly, rates of credit card usage have increased significantly over the last ten years in many countries, but none of those countries recently has strengthened the statutory protections for credit cards in any cognizable way. Finally, and most tellingly, the facts of debit card usage are profoundly inconsistent with the hypothesis. The USA has by far the most effective consumer protections for debit cards. Yet, debit cards in the USA have an unusually low share of all card transactions, lower than their share in countries like Canada and the United Kingdom, both of which have much more favorable protections for credit card transactions than they do for debit card transactions.

Still, despite the apparent attractiveness of the credit card, it is easy to see strong reasons for the rise in use of the debit card. First, even in the USA, a significant part of the population does not have credit cards. Estimates vary widely, but about 25% of the adult population does not have a credit card.[85] Others may be facing binding credit limits. For those individuals, debit cards are the only available payment card.[86] Further,

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[84] *See* RICHARD H. THALER, QUASI RATIONAL ECONOMICS (1991); Mann, *Payments Policy*, *supra* note 19.

[85] *See* Demos, *Borrowing to Make Ends Meet: The Growth of Credit Card Debt in the 90's, available at* http://www.demos-usa.org/demos/debt_assets/borrowing.pdf {*This is based on the SCF and thus might be quite inaccurate. The next draft will include some other estimates, which often are considerably higher.*}

[86] Because of the well-developed subprime market in the USA, the number of people excluded from the credit card market is much lower than in countries that have aggressive usury laws.

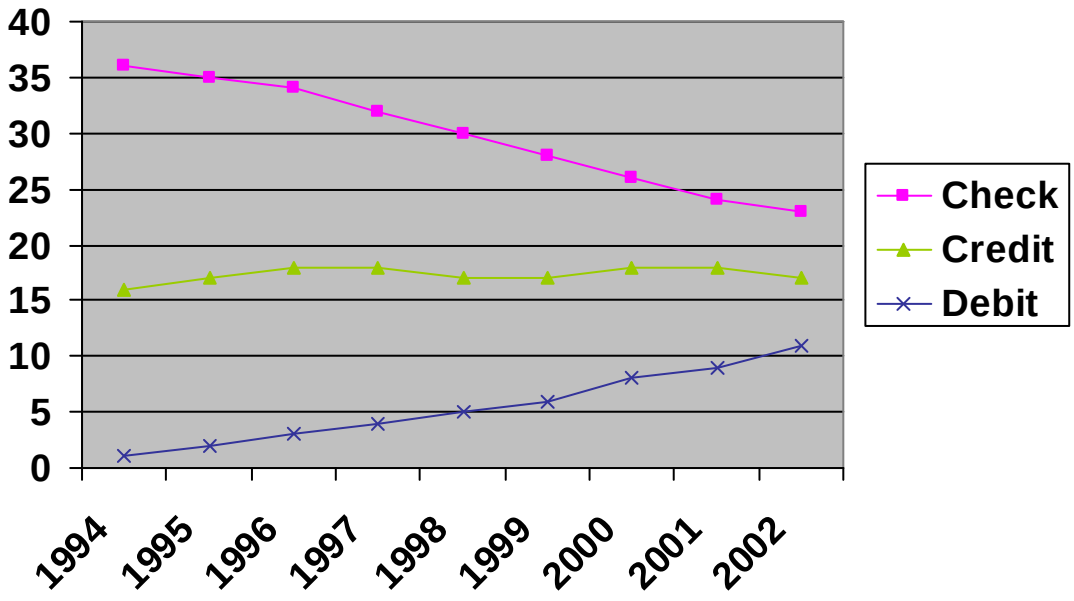
debit card users that have revolving credit balances might use debit cards to minimize interest payments.

Another explanation looks more broadly at the payment systems market. Around the world, there is a migration from paper-based forms of payment (including cash and checks) to electronic forms of payment such as payment cards. From that perspective, the appropriate comparison is not between the credit card and the debit card, but between the debit card and the check in the USA.[87] In the USA, the debit card has been introduced as a close substitute for the check, allowing a purchaser to pay for goods by authorizing his bank to disburse funds from a deposit account directly to the merchant. The principal difference is that the customer makes the authorization electronically (with the card) rather than by paper (with a check). The growth of debit cards in the USA United States probably is best seen not as a shift from credit cards, but rather as the growth of a new cards market by purchasers who are abandoning checks in favor of debit cards. That explanation is supported by statistics on retail use of payment systems. As **Figure Twelve** shows, that data indicate that the use of credit cards has remained more or less constant at 16-18% of transactions since 1994. The growth of debit cards during that same period from about 1% to 11% has closely matched a fall of checks from 36% to 23%.[88]

[87] An interesting cross-current relates to the small but growing market for payments in electronic commerce. As that segment of the market grows, we can expect the use of payment cards to increase substantially except in those countries where electronic money products succeed. In the USA, as it happens, debit cards have had relatively little online penetration to date, largely because of the technological difficulties of online PIN authorization (a problem that should not persist long). Thus, in the USA (which has the largest retail ecommerce market by far), most of the non-credit card payment vehicles currently in broad use piggyback to some degree on the credit card or directly on checking accounts. *See* Ronald J. Mann, *Regulating Internet Payment Intermediaries*, 82 TEXAS L. REV. 681 (2004) [hereinafter Mann, *Payment Intermediaries*].

[88] *See* NILSON REPORT (Issue 799).

FIGURE TWELVE
TRANSACTION SHARES OF
NONCASH CONSUMER PAYMENT SYSTEMS
(USA TIME SERIES)



A more general explanation rests on standard types of quasi-rational behavior by cardholders. Most obviously, some cardholders might prefer to use a debit card because it provides a pre-commitment against spending in excess of a present income stream.[89] Of course, a rational consumer could make the same purchases with a credit card and gain the additional financial benefits that come with that product in the United States market. Still, anecdotal evidence suggests that a desire to avoid the temptation of borrowing is behind a significant part of the rise of the debit card in the United States.[90] That story resonates strongly with the story about "budgetism" that Lendol Calder famously uses to explain the attractiveness of consumer credit in the first instance in this country.[91]

The discussion above helps to explain the unusual failure of the debit card in Japan. Introduced with great fanfare in the spring of 2000, the product has not made any significant progress in the market: the most recent statistics indicate far less than one transaction per capita per year. Because Japan is a country in which cards are not used

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[89] *See* THALER, *supra* note 84.

[90] The empirical evidence appears to be quite equivocal. *See* Jonathan Zinman, *Why Use Debit Instead of Credit? Consumer Choice in a Trillion Dollar Market* (Fed. Res. Bank of New York Staff Report No. 191) (July 2004).

[91] *See* CALDER, *supra* note 33.

for borrowing, the failure of the debit card at first puzzled me. Eventually I concluded that it had failed for two reasons. First, unlike the UK and the Commonwealth countries discussed above, there is no market impetus to promote debit cards to save the costs of checks; Japanese consumers do not use checks.[92] Nor is there any need to use the product to precommit against borrowing.[93] Japan's odd credit card already had filled the market niche for the debit card. The *ikkai barai* product discussed above provides automatic payment from the account for all but the most inveterate of consumer borrowers. That arrangement gives the precommitted cardholder enough support to refrain from borrowing. Thus, if the market niche for the debit card rests on a fear of borrowing coupled with a desire to precommit to avoid excessive borrowing, the existing Japanese products already fill the niche adequately. From that perspective, the Japanese debit card has failed because its marketers have failed to produce a business case that can persuade cardholders to switch to the card.

Some academics have suggested that a country's preference for cash might slow the development of card-based payment systems, suggesting that payment card use in general is less common in countries where public places are sufficiently safe to make people feel secure in carrying large amounts of cash. This "fear-of-crime" hypothesis is advanced to explain why cardholders in Japan use cards relatively little in their safe urban environments, while cards are used much more commonly in the relatively unsafe United States.[94] It is also argued that recent growth of cards in Latin America can be explained by the lack of safety in some Latin American countries.[95] As an academic matter, this hypothesis generally is associated with the work of David Humphrey, which often is regarded as having proven the truth of this hypothesis.[96]

Several things make it difficult to test that thesis directly. First, because the thesis relies on a perception of crime that makes individuals reluctant to carry cash, hard statistical evidence about the frequency of crime cannot respond directly to the thesis. Recent research by Sara Sun Beale underscores that point, showing that perceptions of crime and safety are in major part constructed by the media without regard to the reality of the underlying problems.[97]

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[92] *See* Mann, *Japanese Cards*, *supra* note 39.

[93] I discuss the second explanation at length in Mann, *Japanese Cards*, *supra* note 39.

[94] *See* Mann, *Japanese Cards*, *supra* note 39. The relation of cards to crime cuts in two directions. As has long been recognized, the rise of card-based transactions makes possible new and more serious financial crimes that were not possible in a paper-based payments system. *See* HENDRICKSON, *supra* note 30.

[95] *See* EUROMONITOR, WORLD MARKET FOR FINANCIAL CARDS (2002).

[96] The key paper is David B. Humphrey, Lawrence B. Pulley & Jukka M. Vesala, 28 J. MONEY, CREDIT & BANKING 914 (1996).

[97] *See* Sara Sun Beale, *The Political, Social, Psychological and Other Non-Legal Factors Influencing the Development of (Federal) Criminal Law*, 1 BUFFALO CRIM. L. REV. 23 (1997);

Second, it is difficult to disentangle that thesis from related cultural norms about cash. For example, one reason people might pay with cash in some countries and credit cards in others is the significance the payment system has as a status symbol. In the United States, for example, credit card issuers have succeeded in creating a norm, perhaps less powerful than it was once, that payment with a credit card is a sign of status.[98] Thus, a payment of $1000 for a restaurant bill in the United States surely would appear suspicious, if not incriminating evidence of money laundering. In other countries – Japan being the obvious case – payments with cash carry a similar status.[99] Anecdotal evidence in some sources suggests that a similar pattern might explain the duration of the use of cash – and the related slow uptake of credit cards – in Italy[100] and India.[101] For whatever reason, however, while that norm persists it is difficult to separate its effects on card usage from the effects of crime.

Finally, the data available to compare crime rates in different countries are problematic in a number of ways. First, they typically rely on police reports and thus inevitably understate the true amount of crime. Thus, if the amount by which crime is understated differs by country, then comparisons may be inaccurate.[102] Second, because the data depend on reports of local enforcement activity, they are based on local definitions of the various crimes. Those definitions are likely to differ substantially from country to country.[103] Finally, it is not clear which types of crimes would be most likely to support or undermine the insecurity thesis, because it is not clear what particular crimes foster the feeling of insecurity that might make the consumer reluctant to carry cash. On the one hand, property crimes would seem to relate most closely to the actual risk created by carrying cash. On the other hand, violent crimes like murder are more likely to be publicized in a way that would cause consumers to become insecure about their overall safety.

In any event, it is not clear that Humphrey, Pulley & Vesala 1996 actually supports the hypothesis. The first thing that is evident from a close reading of the paper

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Sara Sun Beale, Economic *Pressures and Internal Structure Shape the U.S. Media's Treatment of Crime: Do They Also Shape U.S. Criminal Justice Policy?* (Nov. 2001).

[98] *See* MANDELL, *supra* note 15.

[99] It may be that the duration of such a cash status norm in Japan has links to the relatively large role in the Japanese economy of underreporting of income and the relative significance of organized crime in Japan. *See* Curtis J. Milhaupt & Mark D. West, *The Dark Side of Private Ordering: An Institutional and Empirical Analysis of Organized Crime*, 67 U. CHI. L. REV. 41 (2000).

[100] *See* EUROMONITOR, *supra* note 95.

[101] *See India's Banks Join the Party*, CARDS INTERNATIONAL, Newsletter 483 (2002).

[102] *See* GLOBAL REPORT ON CRIME AND JUSTICE (G. Newman ed. 1999) (noting that problem).

[103] *See* GLOBAL REPORT ON CRIME AND JUSTICE, *supra* note 102 (noting that problem).

is that it does not identify the source of the crime data used in the regressions. More importantly, it is evident from the tables in the paper that their statistical finding on this point is not at all robust. Specifically, [*the Durbin-Watson coefficients suggest an unacceptably high degree of autocorrelation in the time series.*][104]

Against that background, I tried to replicate and update their study as best as I could. It is still instructive to look at the available data, if only because data relevant to the thesis are available. To that end, I collected data from Interpol about crimes in the Group of Ten countries for which the Bank of International Settlements periodically issues its so-called Red Book of payments statistics.[105] I also collected from various editions of the Red Book (which appears to be the source for the payment systems data in Humphrey, Pulley & Vesala 1996) data on the use of various card and non card-based payment systems over time. **[*Data analysis to come*.]**

* * * * *

To summarize, the USA has a unique pattern of credit and debit card usage because of the circumstances existing in the USA financial market in the early 1950's. The USA also is unique in having a large infrastructure of consumer credit by the end of the 1950's. Those features together made the USA better suited for the rapid uptake of the credit card as a lending vehicle. Countries that adopted card products later fall into three groups. The first group is developed economies that have not imposed substantial barriers to card use. In those countries, debit cards tended to take root first, with revolving credit growing during the 1990's in absolute, but not relative, terms. The examples here are places like the UK, Canada, and Australia. The second group is developed economies that have imposed substantial barriers on credit card use; the result there has been stunted use of cards and of revolving credit (as in Japan). The third group is undeveloped countries, where the lack of infrastructure has made it impractical to have deep market penetration of any type of card (as in the case of South Africa).

4. Are Card Use Patterns Converging?

What do the coming decades hold for the credit and debit card? Although it is difficult to predict with any certainty, two main features of the discussion above seem likely to dominate the shifting pattern in the years to come: globalization and information.

The first is the most obvious: the continuing pressures of the global economy will create ever-more powerful forces toward the convergence of products and brands in the developed economies. We see this already in a number of contexts. For example, the source of the first American-style revolving credit card to be marketed in Japan was a Japanese consumer-finance company that developed the product in a series of field visits

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[104] In defense of the authors, their paper does not itself present the hypothesis with great vigor. [*Add details*]

[105] For more details on the Red Book, see the Data Appendix.

to the offices of American monoline issuers like Providian. Similarly, the rise of loyalty cards and aggressive marketing in the UK and Ireland is commonly attributed, at least in the popular media, to the entry of American competitors like MBNA.[106] In the same vein, it seems clear that Citibank will play a major role in the development of credit products in numerous countries,[107] the most important of which doubtless is mainland China, a vast market which has seen the number of true credit cards quintuple between 2001 and 2004, with expectations of geometric growth continuing in the immediate feature, as China enters the WTO in 2007 and hosts the Olympics in 2008.[108] Indeed, even in countries like Thailand that are trying to impose serious limits on consumer credit, the companies that are developing the local market are American companies like GECC.[109]

Much of the apparent differentiation in products reflects a McDonald's like phenomenon in which American products are cosmetically altered to suit local tastes – so that local consumers can reassure themselves they are using a product reflecting their unique heritage but retaining the underlying features that make the product profitable.[110]

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[106] *See New Entrants Shake Up Irish Market*, CARDS INTERNATIONAL, Issue 319 (2004), at 23 (Ireland). Press accounts suggest a similar pattern in Belgium and in Portugal. In Belgium, Citibank is both the only credit card issuer that is not part of the local consortium (Bank Card Company) and also the first issuer of revolving credit cards. *See Belgian Debit Cards*, *supra* note 46. In Portugal, Citibank (along with the French Cetelem and the British Barclaycard) is one of the major catalysts in developing a market stifled by local co-operation. *See Portuguese Potential*, *supra* note 46. MBNA recently has begun operations in Spain, but it seems to be too early to tell whether they will be as successful there. *See* Louise O'Mahony, *Overseas Players Eye Hot Spanish Market*, CARDS INTERNATIONAL, Issue 298 (2003), at 17.

[107] Press reports suggest that Citibank is particularly focused on introducing revolving credit in countries where competing card issuers focus on cards only as a payment medium. This tends to support a substantial increase in the number of cards, because it justifies cards as profitable on their own, rather than as a convenience issued only to the top end of an institution's customers. *See Cards Slowly Overcoming Barriers in Indonesia*, CARDS INTERNATIONAL, Issue 316 (2004), at 19 [hereinafter *Indonesian Cards Barriers*] (discussing Citibank's general business model in Asia); Wayne Arnold, *Boom Time for Credit in Southeast Asia*, N.Y. TIMES, Nov. 12, 2004 (discussing Citibank's success in Malaysia, the Philippines, and Indonesia); *Cards Jump on Consumer Credit Bandwagon in Poland*, CARDS INTERNATIONAL, Issue 296 (2003), at 19 (discussing Citibank's business model in Poland).

[108] *See Culture Clash For Chinese Cards*, CARDS INTERNATIONAL, Issue 325 (2004), at 2; Matt Ablott, *Citibank's Chinese Head-Start*, CARDS INTERNATIONAL, Issue 298 (2003), at 10; *South Korean Action*, *supra* note 73.

[109] *See* Arnold, *supra* note 107.

[110] For general discussion of that phenomenon under the name of "glocalization," see GEORGE RITZER, THE GLOBALIZATION OF NOTHING (2004). For a particularly entertaining example, consider the kosher product recently introduced in Israel. *See* http://www.jpost.com/servlet/Satellite?pagename=JPost/JPArticle/ShowFull&cid=1106018363749.

The example that motivates this thought is Germany, where it is widely thought to be impossible to succeed with a conventional American credit card product. At the same time, however, German consumers seem to be willing to use check cards that include overdraft protection, so that consumers at the point of sale can use plastic to make purchases by borrowing funds from a financial institution that has agreed in advance to make such a loan.[111] For a similar development, consider the rise in recent years of "Sharia-compliant" credit cards in the Middle East, which are marketed as offering the benefits of American style credit cards while maintaining a technical compliance with Islamic law.[112] The distinctions between that card and a conventional credit card doubtless are important for some purposes, but the product relies on the same features that have made the American product successful.

Although it is plain that the branding and concept of an American-style credit card is a prominent example of globalization, it is less clear (as the data described above suggest) that widespread use of the revolving credit feature first introduced in America has spread. Indeed, the most common explanation for limited use of credit cards is that certain countries have cultural norms against borrowing, making the revolving credit feature of the credit card unattractive. I encountered the "frugality" hypothesis while studying the Japanese card market.[113] It is not, however, limited to that market; observers also attribute low rates of card use in southern Europe and the Netherlands to similar norms.[114] Under this view, the rise of credit cards can be attributed to the gradual assimilation of a global norm that includes the prodigality characteristic of American society.

The limited use of consumer credit in some countries reflects differences in the receptivity of some cultures to borrowing. For example, the Islamic rules that forbid the payment of interest surely have stifled the development of credit in countries like Saudi Arabia and Indonesia.[115] That is not to say that there is not now and never will be consumer credit in countries with dominant Muslim populations.[116] It is to say, however,

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[111] For a discussion of similar American programs that illuminates how similar they are to conventional borrowing programs, see Marc Fusaro, *Check Bouncing Goes Mainstream: An Empirical Study of Bounce Protection Programs* (unpublished Nov. 2003 manuscript).

[112] *See Adib Launches Credit Card that Complies with Sharia*, GULF NEWS, Jul. 5, 2004, *available at* www.zawya.com (last visited July 30, 2004) [hereinafter *Adib's Sharia Card*].

[113] *See* Mann, *Japanese Cards*, *supra* note 39.

[114] EUROMONITOR, *supra* note 95, discusses southern Europe. Press reports tell a very similar story in the Netherlands, where the low rate of revolving credit is attributed to a "traditional Dutch aversion to credit." Yet, as in Japan, local banks did not issue a revolving credit card product until recently, and found it successful when it was issued. *See Dutch Revolve, But Not on Cards*, CARDS INTERNATIONAL, Issue 318 (2004), at 24.

[115] *See* EUROMONITOR, *supra* note 95 (discussing Saudi Arabia); *Indonesian Cards Barriers*, *supra* note 108 (discussing Indonesia).

[116] *See Adib's Sharia Card*, *supra* note 112 (discussing "Sharia-compliant" credit card issued in 2004 in Abu Dhabi); *The Risk-Reward Challenge of Credit Cards in the Middle East*,

that the level of consumer borrowing in Saudi Arabia is relatively low for a country with such a high level of economic development,[117] and that sincerely held religious beliefs seem to be a reasonable explanation for the relatively slow development of credit institutions. As current events in that country suggest and as the argument in the remainder of this article will make clear, however, in a short time – a matter of decades – those obstacles are likely to dissipate[118] and leave Saudi Arabia and similar countries[119] with a rate of consumer borrowing commensurate with their developed status.

Most countries, however, do not have such an objective obstacle as the religious tenets of Islam. And in those countries, the frugality hypothesis runs up against the basic problem that it rests on a parochial view that resistance to consumer borrowing is an artifact of any particular culture. The large role of consumer credit in most developed countries suggests an alternative explanation, that a substantial amount of consumer credit is a natural attribute of a fully developed economy, and that only some substantial institutional obstacle – like the Islamic religion – will prevent that market from developing.[120] To illustrate that point, Table One shows the ratio of consumer credit to GDP for 2000 for 19 countries.

CARDS INTERNATIONAL, Issue 319 (2004), at 14 [hereinafter *Middle East Credit Cards*] (discussing business problems in fostering cards businesses in the Middle East).

[117] It is difficult to judge the relevant level of economic development. In overall dollars, Saudi Arabia has a relatively low level of GDP per capita (about $8500 in 2002, when the UK's was about $26,000 and the USA's was about $36,000). I am assuming, however, that income inequality in Saudi Arabia is greater than in the UK and the USA, and that the market for credit card use is thus among a group of people with incomes more similar to those in the USA and the UK.

[118] It does not require a great deal of cynicism to anticipate that those rules will meet the same fate in a developing merchant economy as the similar Christian rules against usury met in the late Middle Ages.

[119] *See Indonesian Cards Barriers*, *supra* note 108 (discussing efforts by Citibank to foster use of revolving credit by Muslim population in Indonesia); Arnold, *supra* note 107 (discussing Citibank's success in Indonesia).

[120] *See* RAGHURAM G. RAJAN & LUIGI ZINGALES, SAVING CAPITALISM FROM THE CAPITALISTS (2003).

TABLE ONE: CONSUMER CREDIT/GDP[121]

country	cons. credit/gdp (%)
Canada	17.8
USA	16.4
UK	15.9
Singapore	15.1
Japan	14.4
France	12.0
South Korea	11.7
Australia	11.6
Netherlands	10.4
Hong Kong	9.1
Taiwan	8.0
Germany	7.0
Belgium	4.8
Brazil	4.7
Italy	3.9
Spain	3.5
Argentina	3.3
India	2.1
Mexico	0.5

Several things about that table are illuminating. First, with respect to the idea that credit cards are necessary for a high level of consumer credit, consider two countries that have similar cultures, but strikingly different levels of credit card usage: the United States at the high end with more than 70 transactions per capita per year and the UK at the low range with around 20 transactions per year. Both the United States and the UK are near the top of the consumer credit chart, both with roughly 16%. Similarly, with respect to the idea that cultural differences might be driving rates of borrowing, notice how the continental EU countries (most of which have very low rates of credit card use) are scattered throughout the distribution, from Spain and Italy at the bottom through Belgium and Germany in the midrange, to the Netherlands and France near the top.[122]

What I see of importance in the chart, however, is that lesser developed countries are likely to have a lower level of consumer credit: the three lowest countries are Mexico,

[121] Based on data from Morgan Stanley.

[122] For an older empirical study of the distribution of consumer credit in the EU, see Nuria Diez Guardia, *Consumer Credit in the European Union* (ECRI Research Report No. 1) (Feb. 2000). Also, compare the high place of the Netherlands on this table with the press reports discussed above about the Dutch aversion to borrowing.

India, and Argentina, doubtless the three least developed countries in that dataset. To get a sense for what the chart says about more fully developed countries, consider the example of Japan, which appears near the top of the chart despite a low rate of credit card borrowing. The answer for Japan may be that the restrictions that have limited credit card borrowing have resulted in a shift of the consumer credit market (at least as compared to other countries) to less savory non-bank lenders such as *sarakin* and *yenya*.[123] Those lenders are considerably more likely to rely on extra-legal means of enforcing their loans than the banks that have been prevented from developing a credit card market. In the end, the consumer credit market is about the same size as in other developed countries. It is just less hospitable to the borrowers that use it.[124]

Of course, the suggestion that consumer credit is more common in countries at an advanced stage of development is not inconsistent with the view that consumer borrowing has risen as the frugality characteristic of countries in a natural state is overcome by the norm of American prodigality that accompanies globalization. If credit card use has risen generally throughout the world, perhaps the reason is that the pressures of globalization[125] during the last decade have contributed to the development of a single homogenized culture, of which credit card usage is a significant part. For example, my studies in both Japan and the United Kingdom make it clear that the leading marketers of modern revolving credit cards are either American companies or businesses that consciously adopt the business practices of American companies.[126]

One problem with the globalization hypothesis is that the data discussed above do not clearly indicate a convergence toward United States practices. On most of the metrics illustrated in the tables above, the United States is an outlier, not a trendsetter. So, to use the most obvious example, **Figure Thirteen** shows how the relative rate of credit and debit card usage in the United States has for the last decade been rapidly falling from an almost uniquely[127] high rate to a rate much more in line with the practices of most other developed countries. That evidence buttresses the historical explanation provided above, which suggests that the situation of the United States depends on attributes of its history that other countries do not share. If that explanation is correct, then there is little reason to believe that other countries will have the same patterns of

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[123] Press reports suggest that recent Thai limits on credit cards might have a similar effect, driving lower-income borrowers to "loan sharks." *See* Arnold, *supra* note 107.

[124] Although I have not yet collected data to support this hypothesis, I expect that in many of the most developed countries that have relatively similar overall levels of consumer credit, the individual components into which that credit is divided are likely to differ significantly.

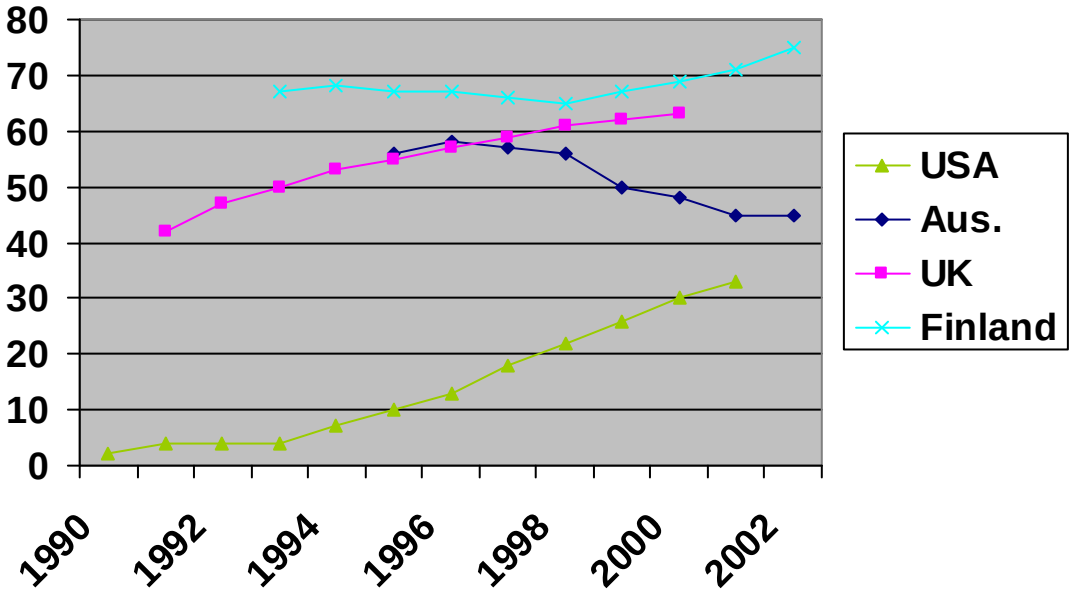
[125] For a general account of those pressures, see THOMAS L. FRIEDMAN, THE LEXUS AND THE OLIVE TREE: UNDERSTANDING GLOBALIZATION (1999).

[126] *See* Mann, *Japanese Cards*, *supra* note 39.

[127] Japan's rate of almost 100% credit card usage is, as I explain in Mann, *Japanese Cards*, *supra* note 39, attributed to the use of a credit card product that in operation serves the functional role that the debit card serves in most other countries. It also is characteristic of countries with very small card markets (like South Africa).

usage as the United States. Thus, although the spread of American cultural norms may support the growth of the credit card to some degree, there is room for variation that speeds or retards the rate of growth.

FIGURE THIRTEEN
DEBIT CARD TRANSACTIONS/CARD TRANSACTIONS
(TIME SERIES)



The conflicting intuitions about the data suggested an empirical test to assess whether the factor that relates to a high level of consumer credit is a high level of economic development or assimilation of global culture. Accordingly, I regressed the consumer credit data reported above against indicators of economic development and globalization. For economic development, I used the level of GDP/capita. For globalization, I used the globalization index published periodically by *Foreign Policy*.[128] When those metrics were analyzed separately, each was significantly related to the level of consumer credit as a share of GDP.[129] When I combined both metrics in an OLS regression, however, the globalization index lost its significance. Thus, only the level of economic development retained any independent explanatory value.[130] Although the

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[128] That index combines normalized data on a variety of things, including trade, foreign investment, personal contact (through tourism and international travel), international telephone traffic, and cross-border remittances. *See How the Index is Calculated*, *available at*. http://www.foreignpolicy.com/issue_janfeb_2003/gindexsidebar.html (last visited Dec. 2, 2003).

[129] Each was significant at the 1% level.

[130] In the multiple regression, GDP per capita was significant at the 5% level. The adjusted R-squared of the model was 43%.

evidence of course is rough, and limited to a small number of countries, it does support the view that the institutional infrastructure associated with economic development is more likely to explain the level of consumer credit than the weakening of cultural norms against borrowing.

The second (and final) factor likely to affect the shifting usage pattern relates to information. As suggested above, the availability of consumer credit information is necessary for a successful credit card program. The pressures of globalization will only make this problem more acute. Advances in information technology necessarily will make it possible for issuers to make ever more effective use of that information – better underwriting to predict losses, finer adjustment of products to reflect differentiations of risks in different classes of cardholders, etc.[131] That means that issuers in countries that permit those uses to occur will be able to offer more attractive products successfully (that is, profitably) than issuers in countries that continue to regard those uses with suspicion. Turkey, for example, has what is by European standards a strikingly successful revolving credit card market, attributable at least in part to its early development of a national credit bureau.[132] Thus, it is no surprise that in recent years the two largest developing countries in the world – India and China – both have announced plans to support national credit bureaus that would include *both* positive *and* negative information.[133] Similarly, Hong Kong recently introduced such a bureau to help rein in chargeoffs that increased by 600% in the wake of the SARS crisis in 2002.[134] Central banks are attending to this specific concern even in the Middle East, where Islamic law at least technically prohibits lending for profit.[135]

It is clear that culture will affect how information practices develop in ways more complex than a binary question of availability suggests. Among other things, many countries are likely to resist private credit bureaus. In France, for example, the information that is available apparently is provided solely by the Banque of France. There is good reason to think that public agencies will do a much less effective job at making the information useful than the profit-oriented agencies in the West. For example, press reports suggest that France and Italy are opposing moves to facilitate EU-

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[131] Mark Furletti, *Credit Card Pricing Developments and Their Disclosure* (Fed. Res. Bank of Philadelphia, Payment Cards Center, Discussion Paper) (January 2003), discusses the ever-finer parsing of consumers in the USA into separately priced risk classes.

[132] *See Turkish Card Growth Accelerates*, CARDS INTERNATIONAL, Issue 321 (2004), at 16. For discussion of a recent similar effort in Portugal, see *Portuguese Potential*, *supra* note 46.

[133] *See* Tony Morbin, *Chinese to Launch National Credit Bureau in 2005*, CARDS INTERNATIONAL, Issue 325 (2004), at 3 (China); *India Credit Bureau Set for Launch in 2005*, CARDS INTERNATIONAL, Issue 327 (2004), at 10 (India); *India Unveils First National Credit Bureau*, CARDS INTERNATIONAL, Issue 319 (2004), at 8 (India).

[134] *See Hong Kong Returns to Profitability*, CARDS INTERNATIONAL, Issue 320 (2004), at 12.

[135] *See Middle East Credit Cards*, *supra* note 116 (discussing actions of central banks in Oman, Kuwait, UAE, Saudi Arabia, Bahrain, and Qatar).

wide credit scoring. Of course, they also might do a much *better* job at protecting the privacy of those whose information is involved.

To the extent that the success of the credit card depends in part on its pure efficiency as a lending vehicle – and that surely is part of it – those pressures are likely to make it harder to impose serious constraints on the products that issuers can provide their customers. The natural outcome, then, is for those pressures to run headlong into the burgeoning awareness of regulators around the world of the potential policy problems that credit cards raise. It is too soon to tell what the ultimate shape of the regulatory landscape will be. It is enough for this paper to sketch the factors that will shape the incentives against which the regulators will act.

III. POLICY RESPONSES

Although the usage pattern of the payment card vis-à-vis other payment systems takes different forms from country to country, it is clear that payment card and credit card use have risen steadily over the last decade. Governments around the world have responded to that phenomenon in different ways, and in large part, the policy responses can be attributed to the regulatory priorities of the specific agencies charged with regulating payments on a country-by-country basis and the specific usage patterns existing in any particular country. Nevertheless, the problems associated with credit card use are sufficiently similar to warrant comparative analysis.

Two overarching points warrant emphasis. The first relates to my emphasis. From my perspective, the most serious policy issues presented by credit cards, especially in the USA and the UK, arise from their relation to burgeoning levels of consumer debt and bankruptcy. As the opening pages of this Article noted, a comprehensive regulatory analysis of credit cards would consider a variety of policy initiatives not directly related to that problem. Most obviously, a variety of perceived market failures have led to a number of antitrust-related initiatives in several countries.[136] The focus here, however, is on the adverse effects that credit cards arguably have on broader economic measures of debt and bankruptcy.

The second point relates to my strategy. My goal is to analyze policy initiatives that respond to the harms that credit cards cause. As I have explained in the related paper,[137] increases in bankruptcy filings seem to relate to credit card borrowing, but rises in overall borrowing levels can be attributed at least in part to the rise in credit card spending directly. Thus, the most plausible policy initiatives are those that would stem credit card use, and especially credit card debt. At the same time, the benefits of plastic cards make it imprudent to stifle card-based spending altogether: the high social costs of paper-based payment systems should undermine any proposal designed to push

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[136] Regulators also struggle with payment card fraud and the inequitable distribution of card products among demographic groups.

[137] *See* Mann, *Cards Data Paper*, *supra* note 3.

consumers back toward the use of cash and checks.[138] Thus, the most useful policy initiatives probably are those that push people toward the use of debit cards, generally the least expensive and most impervious to fraud of the electronic payment systems in widespread use.[139] Working from that perspective, the remainder of the Article considers three groups of proposals: pricing regulation, affinity regulation, and disclosure regulation. Existing regulation of those subjects reflects considerable variety from country to country. My aim is not to articulate some "perfect" regulatory program for all polities. Rather, I hope to assess in an informed and balanced manner the costs and benefits of the most salient existing initiatives and a few obvious extensions of them.

A. Permitting Merchant Surcharges

Perhaps because credit cards are used to implement a flow of money through a substantial chain of parties participating in the transactions, it is not surprising that a common regulatory response has been to react to the price structure of the credit-card network, particularly the differential prices that merchants face when they accept credit cards rather than competing payment systems. Specifically, regulators outside the USA have imposed a variety of constraints – primarily with regulations directly setting prices merchants (and their banks) pay to issuers for credit card services.[140] Those approaches for the most part have been directed at a problem quite distinct from my focus here – the potential for differential interchange fees to increase the overall level of consumer pricing. Accordingly, they are not directly relevant to my analysis here. Still, a closely related initiative – permitting merchant surcharges – would respond to my concerns by increasing the relative costs of credit cards as compared to debit cards and other payment systems.

At the outset, it is important to note that the factual premise of that argument is unclear. There is little reliable data on the actual "all-in" costs that merchants pay for

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[138] Even with the decline in use of cash and checks, those costs amount to more than 1% of the gross domestic product in the USA. *See* David B. Humphrey & Allen N. Berger, *Market Failure and Resource Use: Economic Incentives to Use Different Instruments*, in THE U.S. PAYMENT SYSTEM: EFFICIENCY, RISK, AND THE ROLE OF THE FEDERAL RESERVE 45 (1988); Swartz et al., *supra* note 7.

[139] *See* MANN, PAYMENT SYSTEMS, *supra* note 17; Swartz et al., *supra* note 7.

[140] *See* Office of Fair Trading, *MasterCard Interchange Fees: Preliminary Conclusions* (Feb. 2003); RESERVE BANK OF AUSTRALIA, REFORM OF CREDIT CARD SCHEMES IN AUSTRALIA: FINAL REFORMS AND REGULATORY IMPACT STATEMENT (Aug. 2002); Commission Decision of 24 July 2002 (Case No. COMP/29.373); Commission Decision of 9 August 2001 (Case No. COMP/29.373) (the Visa litigation). The EU Commission recently initiated a similar case against MasterCard. CI309:3. Press reports in early 2005 suggest that the Federal Reserve Board may be considering the propriety of similar regulations in this country. Cards International 2005. CARDS INTERNATIONAL (2005). Issuers report that interchange fees are also being reviewed in a number of other jurisdictions, including Poland, Spain, New Zealand, Portugal, Mexico, Colombia, South Africa and Switzerland. *See* MasterCard Incorporated 10-K for year ended December 31, 2004 at 14.

accepting varying forms of payment.[141] The most reliable existing data, however, strongly suggests that credit cards often are (at least from the merchant's perspective) the most expensive systems and that debit cards are almost always less expensive than credit cards, and often even cheaper than cash or checks (after taking account of the costs of labor, delays in checkout lines, and the like.[142] Although it is difficult to get reliable data for other countries, the overall picture is similar. In Japan, for example, the discount rate for credit card transactions typically is 3% or more.[143] In the EU, the discount rate for credit card transactions is about 1%.[144]

At the same time, we know that merchants typically do not charge more for credit card payments than they do for other payments. Tying the matter back to the preceding part of the article, however, that suggests a system in which consumers have an inappropriately high incentive to use credit cards. The question, then, is whether regulation can respond to that problem. The most logical way to think about that question is to consider the prices charged among the various parties to a credit card transaction. Looking at the credit card system in its simplest form, there are three different pricing interfaces: the interface between the customer and the merchant; the interface between the merchant and the credit-card issuer (or network); and the interface between the credit-card issuer and the customer.

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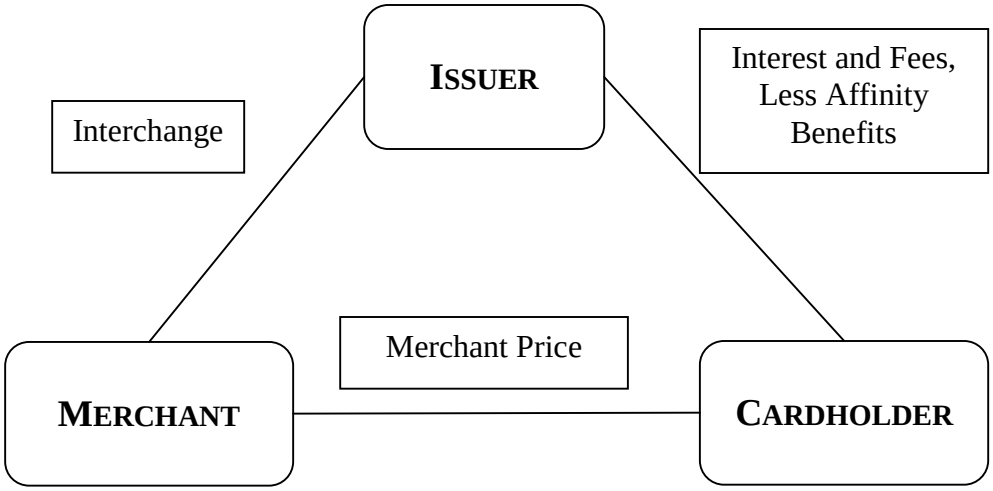
[141] A growing body of literature attempts to assess the social costs of the various systems. *See*, *e.g.*, Humphrey & Berger, *supra* note 138 (the basic paper). A glance at the categories of costs that are included, however, makes it clear that the data to make those determinations is not readily available. For example, the accepted estimate for credit cards relies on *1985* data about float times and processing costs.

[142] *See* Food Marketing Institute, *A Retailer's Guide to Electronic Payment Systems* (1998); Swartz et al., *supra* note 7.

[143] *See* Mann, *Japanese Cards*, *supra* note 39.

[144] Interviews with British regulators and credit card executives. For the EU generally, the rates are discussed in the Commission Decisions of 24 July 2002 and 9 August 2001 (both in Case No. COMP/29.373).

FIGURE FOURTEEN: PRICING INTERFACES



Policy responses could address any of those three interfaces. Perhaps the simplest response would be to directly prohibit the transactions or (which is much the same thing) set low ceilings on the interest rates that could be charged. Although those regulations would be most effective at stemming credit card use and borrowing, they also raise questions far beyond those addressed in this paper, largely because (if they are to be made effective) they would affect the entire consumer credit system. Regulations of that sort can be examined only in the context of the consumer bankruptcy system against which the credit system operates. When examined from that perspective, I conclude in a related paper that it makes more sense to allow relatively unconstrained access to consumer credit, together with a relatively lenient bankruptcy discharge.[145] Thus, I do not further address those types of responses to credit card borrowing in this paper. Rather, this paper addresses policy responses that respond more specifically to problems with credit cards in particular.

The interchange regulation discussed above responds indirectly to the problem by addressing charges between the issuer and the merchant. A more direct and simpler response would be for merchants to charge customers different prices based on the payment system that purchasers use. That response would address the problem of cross-subsidization directly. Further, if merchants could price differentially based on the amount each issuer or network charged, there might be greater competition in the market for the rates merchants pay. Finally, higher charges might limit casual use, which would address the problem of excessive or profligate use to a certain extent. The existing evidence – from a policy in Norway under which banks charged customers per-item fees for checks, but not debit card transactions – suggests that customers are highly sensitive to such charges and would switch payment systems quickly to avoid them.[146] The

[145] *See* Mann, *Backlash*, *supra* note 10.

[146] *See* David B. Humphrey, Moshe Kim & Bent Vale, *Realizing the Gains from Electronic Payments: Costs, Pricing, and Payment Choice*, 33 J. MONEY, CREDIT & BANKING 216 (2001).

question, then, is why in a competitive retail market – something that certainly exists in this country – merchants do not charge their customers differentially based on the payment system that they select.

One answer in the USA is a wrongheaded legal system. For a time, federal law actually barred any price discrimination between cash and credit card transactions.[147] Current law has reversed that policy in part – TILA § 167 bars card issuers from imposing any rule that would prevent merchants from granting discounts for payments by methods other than a credit card. Thus, *discounts* for non credit card payments are now lawful. That change has had a limited practical effect, however, because the card networks continue to have rules that prevent merchants from imposing *surcharges* on credit card use. At first glance, that would seem only a detail. Previous writers have argued, however, that this distinction is important in practice. Frankel, for example, suggests that it may be more acceptable in the retail marketplace for a merchant to charge for credit card use – a service offered the customer for which the merchant must pay – than to discount for cash, which could suggest to the consumer that the merchant's price might have an unduly high margin of profit.[148] Other suggest that the problem is that a discount-only system requires merchants to price all credit card transactions in the same way – it does not permit, for example, distinctions between different types of credit cards based on distinctions in their merchant-discount rates.[149] Whatever the reason, the legislative history of TILA suggests that credit card issuers fought hard for the right to bar surcharges.[150] Assuming that they were rational in doing so, it is reasonable to think that the discount-only system is a substantial restraint on the practical ability of merchants to discriminate in pricing. If that is so, then the existing statutory policy does not really go far enough to foster full competition at the point of sale in merchant-discount rates.

There are two reasons why a rule permitting merchant surcharges might be a poor policy choice. The first is the most obvious: that the change would have no effect because merchants would ignore it. It is not costless for merchants to construct a system that subtracts a specified discount from transactions that are made with cash or other non-credit payment systems. Decisions must be made about the appropriate size of the discounts and the transactions to which they will apply – will checks be covered or will their higher costs justify a smaller discount? Sales terminals must be programmed to

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[147] *See* Dennis W. Carlton & Alan S. Frankel, *The Antitrust Economics of Credit Card Networks*, 63 ANTITRUST L.J. 643 (1995); Alan S. Frankel, *Monopoly and Competition in the Supply and Exchange of Money*, 66 ANTITRUST L.J. 313 (1998).

[148] *See* Frankel, *supra* note 147; THALER, *supra* note 84.

[149] *See* Edmund W. Kitch, *The Framing Hypothesis: Is It Supported by Credit card Issuer Opposition to a Surcharge on a Cash Price?*, 6 J.L., ECON. & ORG. 217 (1990). Kitch points out that the distinction between discounts and surcharges was important in the history of the statute, which suggests that Congress recognized it was substantially limiting the effect of the statute by validating only discounts but not surcharges.

[150] *See* Kitch, *supra* note 149.

reflect the new program. Customers must be educated about the program. Those costs may not be overwhelming, but if they are substantial, and if merchants worry those customers will rebel (as experience suggests they will) at paying more to use a credit card, then merchants rationally might forgo investment in those programs.

A second concern, often noted in the existing literature, is the idea that surcharges currently tend to appear in circumstances where merchants have substantial bargaining power, so that the fees are used to extract a greater share of the surplus from the underlying transaction. This is thought to be the case, for example, in Australia, where firms with near monopoly power (like Qantas) appear to be the only merchants that assess surcharges.[151] That concern does not, however, seem troubling if one believes that in most contexts consumers have choices in merchants and payment mechanisms, so that unreasonably high surcharges will not lead to customers paying extortionate fees. Moreover, if that belief is inaccurate or seems too naive, it also is true that merchants often are in a position to take advantage of consumers regardless of whether a credit-card surcharge is available to them.

At bottom, there is some reason to believe that we would see more merchant price discrimination if legislatures invalidated network rules that prohibited surcharges. Other countries – the UK, Netherlands, and Sweden – recently have taken similar steps.[152] I do not want to overstate the effects of such a change: it is unlikely that all or even most merchants will charge. I also take seriously the notion that these charges may function primarily to facilitate the exercise of market power by merchants that do not face competition. But if that concern can be cabined, and if consumer welfare gains from each merchant that does charge, there is some reason to invalidate the contracts that prohibit it. To the extent that kind of price discrimination would result in consumer choices more responsive to the true costs, it is probably a good thing, even if it occurs only incrementally.

B. AFFINITY PROGRAMS

The failure of merchants to charge customers different amounts for different payment systems is not the only reason that cardholders have a hyperoptimal incentive to use cards when they make purchases. If the key problem is the divergence of private and social cost for the consumer at the point of purchase, then any reform that helps to remove the consumer's private incentive to use the card might be helpful. Here, the most obvious incentive is the affinity program, which gives consumers a tangible incentive to use the card. The logic of the argument is to ask whether affinity programs should be banned? All of them – cashback,[153] airline miles,[154] anything that is a tangible benefit

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[151] *See* Julian Wright, *An Economic Analysis of a Card Payment Network* (Dec. 2000).

[152] *See* Matt Ablott, *MasterCard and Visa Go Separate Ways on Surcharging*, CARDS INTERNATIONAL, Issue 325 (2004), at 10.

[153] *See* CCM1002:54.

that a third party awards to the consumer based on the consumer's choice to use a credit card at the point of sale. These programs are a major part of the competition by which different issuers retain customers and encourage them to spend.[155] It is difficult to overestimate their importance to the industry's growth: the share of loyalty cards in the United States has grown from 10% – 25% since 2000, while the market share of standard cards has fallen from 57% to 36% (with cobranded cards making up the third category).[156] The reason those cardholders are attractive is the industry's perception that they are better cardholders: recent data suggests that the average monthly expenditure on a rewards card is $943, compared to $360 on a non-reward card.[157]

The variety of the programs is increasing rapidly, as technological advances permit greater differentiation of benefits.[158] For example, a burgeoning product that is related to the products that I discuss here provide benefits not to the consumer but to a third party organization of interest to the consumer: a recent program by Providian issues Democratic National Party credit cards.[159] As a matter of payments policy, prohibition of those programs would directly increase the cost to the consumer of using a credit card and thus would do much to mitigate the cross-subsidization problem that has troubled overseas regulators.

It is less clear precisely what affect such a ban would have on the prodigality problem that is the focus of this paper. It does seem likely that it would reduce credit card usage. First, the fact that debit card usage is rising so rapidly even in the United States – where affinity programs are pervasive for credit cards and uncommon for debit cards – suggests that consumers in fact perceive a cost associated with using a credit card. Second, as discussed above, the limited available evidence suggests that consumers are highly sensitive even to small per-item transaction charges. In this context, for example, one recent story declared the market advantages of a program that provides affinity benefits as a device to help persuade tenants in Manhattan to use credit cards to pay their

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[154] Airline miles are one of the most successful benefits. *See* CCM1201:50; CCM0503:14. To get a sense for their value, airline miles are sold in a secondary market at about 2.75 cents per mile. *See* CCM1201:50.

[155] *See* CCM0802:30. 77 out of 84 (92%) banks responding to a recent Federal Reserve survey of card terms have such a program. *See* www.federalreserve.gov/pubs/shop/tablwb.pdf.

[156] *See* Ronald G. Mazursky & F. Alan Schultheis, *The Evolving Role of Credit Cards in Consumers' Wallets* (April 2004), available at www.edgardunn.com/eletter/2004-04, last visited September 3, 2004.

[157] *See* Burney Simpson, *The Case for Easier Redemptions*, CARD MANAGEMENT, ???, at 13.

[158] *See* CCM0602:26 (discussing benefits provided at the register based on the profile of the particular customer).

[159] *See* Jennifer Bayot, *Credit Card Lets Democrats Shop with Party Loyalty*, NEW YORK TIMES, Jan. 20, 2004, at C8.

rent.[160] Thus, a shift in the relative advantages of different payment systems – lowering the per-transaction attractiveness of the credit card by approximately 1%[161] – might shift consumers away from credit cards in a significant way.

But a reduction in credit card usage does not directly match a reduction in imprudent credit card borrowing. The best evidence on the effect such a reform might have on credit card borrowing could come from Germany. Press reports suggest that the 2001 repeal of a similar law in Germany have been followed by rapid increases in credit card usage.[162] It is not clear yet, however, whether that increase in usage will lead to a substantial increase in credit card debt.[163] The empirical evidence I have analyzed in other work suggests that a reduction in credit card spending might reduce overall consumer credit, which in some jurisdictions would be thought to be a salutary policy effect.

There is one narrow group of affinity programs, however, that do not raise that problem, a growing set of programs that condition the affinity benefits on a cardholder's bill-payment practices. Specifically, those programs provide affinity benefits only to cardholders that do not repay their bills completely each month.[164] Another variant (offered by American Express) increases the amount of the normal affinity benefit for those cardholders that carry a monthly balance.[165] In a sense, those programs provide affinity benefits out of the interest revenues earned by the issuers. Because they are tied directly to borrowing, they do not present the problem discussed above. Thus, prohibition of those programs would respond to both the cross-subsidization problem and the prodigality problem.

At first glance, of course, a ban on affinity programs seems politically insane, because it involves a statute designed to protect consumers by taking away something of value to consumers. But that should not be surprising. The basis for regulatory intervention would be frankly paternalistic: that consumers do not accurately understand

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[160] *See* Rachelle Garbarine, *Paying Rent by Credit Card, and Dreaming of Waikiki*, NEW YORK TIMES, Dec. 29, 2003, at A17. Lest there be any doubt about it, there is some reason to think that the credit card issuers pressing these programs expect that *some* of the payments will not be repaid during the first billing cycle.

[161] *See* STRONG, *supra* note 78 (discussing the economic value of and the secondary market for airline miles).

[162] *See* CCM0103:16 (statement of Visa executive that "Germany is going loyalty-made since [the repeal of the so-called Rabattgesetz law]).

[163] Unfortunately, despite correspondence with the German central bank, I have not been able to obtain data about credit card debt in Germany.

[164] *See* Ron Lieber, *A Bonus for Blowing Off Your Bills*, WALL ST. J., Sept. 16, 2003, at D1.

[165] *See* CCM1002:54.

the costs of credit extended to them and that they are particularly vulnerable to prodigality when the credit is extended through the convenience of a credit card.

Another obvious concern is that eliminating affinity programs would simply make credit card issuing even more profitable than it is now. To understand that point, consider data from Australia, where affinity programs are much less pervasive than they are here: there, affinity programs cost about forty-six cents per transaction, about 20% of all of the expenses of issuers on their card programs.[166] Removing those costs would raise the profits of card issuers substantially. But that assumes that all of the pricing is entirely independent, and that removal of affinity expenses would have no effect on the prices set at the other exchange points in the network.

As discussed above, that is a naïve view of the economics of credit card networks. It is much more likely that credit card markets – at least in the competition among issuers for active cardholders – are relatively competitive despite the highly oligopolistic structure.[167] Data from Australia, for example, suggests that the amount by which issuer revenues exceed the costs of their operations and a reasonable profit is almost exactly the amount by which they subsidize their cardholders with affinity programs.[168] That suggests that in the relative near-term a ban on affinity programs would result in a drop in interchange rates through the simple press of competition, as outlined in the economic models about the rational operation of a card network. If that occurs, then the cross-subsidization problem would be mitigated from a second side, reducing the cost differential that merchants face (as well as the negative cost that attracts consumers).

This proposal is a tentative one, primarily a suggestion for exploration. There are quite a number of details that would have to be worked out in the process of implementation. For example, the proposal at the beginning of this section refers to benefits provided by third parties. I doubt it would be useful for the proposal to apply to retailer cards. In the context of retailer cards, an affinity program is simply a discount for volume purchasing. Because the seller receives all of the revenue from the covered sales

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[166] *See* Joshua S. Gans & Stephen P. King, *The Role of Interchange Fees in Credit Card Associations: Competitive Analysis and Regulatory Issues*, 20 AUSTRALIAN BUS. LAW REV. 94 (2001).

[167] The most persuasive empirical evidence is an analysis of the cost efficiency of credit card banks, which suggests that they are generally as competitive as other American banks. *See* Sivakumar Kulasekaran & Sherrill Shaffer, *Cost Efficiency Among Credit Card Banks*, 54 J. Econ. & Bus. 54 (2002). Studies relying on data from industry profits and pricing practices have drawn markedly inconsistent conclusions. *Compare* Brito & Hartley, *supra* note 58 (favorable assessment of competitiveness of American credit card industry); Edith H. Jones & Todd J. Zywicki, *It's Time for Means-Testing*, 1999 BYU L. REV. 177 (same); Todd J. Zywicki, *The Economics of Credit Cards*, 3 CHAPMAN L. REV. 79 (2000) (same), *with* Lawrence M. Ausubel, *The Failure of Competition in the Credit Card Market*, 81 AM. ECON. REV. 50 (1991) (reasoning that the American credit card industry is not competitive because credit card interest rates do not drop when the cost of funds in the industry falls).

[168] *See* Gans & King, *supra* note 166.

transaction, those cards do not raise the same price-discrimination problems as those raised by third-party cards.[169] Similarly, card issuers (especially those in the high-end market) often provide a variety of nonmonetary benefits to cardholders that often are not tied directly to purchases (access to travel counselors, personal shoppers, concierge assistance, etc.)[170] Those benefits are more in the nature of services provided in return for the annual fee rather than an inducement to use the card. The logic of the proposal suggests that it should be limited to consideration that is directly attributable to a particular purchase or group of purchases; that problem raises some definitional challenges.

There also is a fundamental question of justifying the regulatory intervention. In particular, a skeptic might ask why we should care if card issuers give back excess revenues through this device instead of charging lower interest or lower annual fees. The basic answer – at least implicit in the concern about prodigality – is that consumers in credit card markets cannot plausibly be viewed as entirely rational. The concern that would motivate action here would be a perception that the affinity program is attractive to the issuer because it is behaviorally seductive. Thus, from that perspective, the issuer uses the affinity program to shift its costs and benefits in a way that takes advantage of behavioral weaknesses.[171] Reforms that force issuers to concentrate their monetary relationship in the more transparent price point of an annual fee might enhance the rationality of consumer action by lowering the information costs that give so much room for behavioral departures from rational calculation. That perspective is particularly important in the modern environment, in which competition on interest rates becomes increasingly unimportant, as all interest rates are likely to move from point to point in time as the creditworthiness of individual cardholders changes from time to time.

In the end, the viability of this proposal probably depends on the perspective of the regulator in question. A regulator highly motivated to solve the cross-subsidization problem might view the broad proposal as an important option. A regulator (like me) less interested in that problem and more troubled by the prodigality problem might be concerned that the proposal interferes with market transactions that are not tied with sufficient directness to the problem. A regulator that both thinks the prodigality problem is serious and is convinced that any decline in credit card spending would mitigate the prodigality problem should think this proposal is quite valuable. Finally, any regulator that takes the prodigality problem seriously should want to prohibit affinity programs that reward carrying a monthly balance. Thus, those programs offer a good place to start any such prohibition.

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[169] I assume that regulations could specify how the provision would apply to cards issued by entities that are distinct from the retailer, but under common control with the retailer.

[170] *See* CCM0203:46.

[171] The argument here resonates with Bar-Gill, *supra* note 4; Dellavigna & Malmendier, *supra* note 4.

C. REGULATING INFORMATION

The most intriguing response to the problems with credit card borrowing is to take steps to alter the information available to those that borrow. After all, the problem is not one of coercion, but simply one of consumers making decisions that do not seem to give due weight to later adverse consequences. Furthermore, in a situation in which many of the transactions are value-increasing, it is difficult to identify particular transactions that should be prohibited. Thus, rules that help consumers make better decisions would be the optimal response. The obvious problem, however, is that this kind of regulation is quite often ineffective. As Bill Sage recently has discussed in the health-information context, it is much easier to say that consumers are making bad decisions than it is to figure out how to provide them information that will cause them to make better decisions.[172] With those concerns at the fore, the remaining pages of this essay outline an agenda for reform of the rules that regulate the information provided to card users.

1. Special Rules for Minors

The simplest possibility is to establish special rules for minors. We might be less troubled by frequent issuance of cards to minors if it was part of a strategy of making credit readily available to all segments of the population; but there are still significant groups of "unbanked" based on demographic factors such as age, marital status and the like. Thus, there are good reasons to worry that issuance to minors reflects not pervasive issuance, but rather opportunistic recognition of vulnerability.

If the concern about credit cards is that consumers use them without fully appreciating the costs and risks associated with incurring substantial amounts of debt, then we might be particularly concerned about transactions in which minors are involved. The law in other contexts often relies on the possible susceptibility of minors to articulate special paternalistic rules designed to protect minors from their own mistakes. Consider for example rules invalidating certain contracts made by minors and rules validating spendthrift trusts.[173] In this context, some parallels are apparent. Most obviously, Section 50 of Britain's Consumer Credit Act flatly prohibits direct marketing of credit

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[172] *See* William M. Sage, *Regulating Through Information: Disclosure Laws and American Health Care*, 99 COLUM. L. REV. 1701 (1999).

[173] Nor is it unheard of to extend those rules to credit cards. For example, MONT. CODE ANN. 31-1-115 bars the issuance of a credit card to a minor without first obtaining consent to the issuance from the minor's parent or legal guardian. As discussed above, I am reluctant to recommend reforms that actually prohibit transactions. Accordingly, this section recommends the lesser reform of barring marketing to minors rather than the greater prohibition of barring the issuance to minors entirely.

cards to persons under the age of 18.[174] Similarly, several states recently have adopted rules restricting or studying the marketing of credit cards on campuses.[175]

There is good reason to think in this country that credit card institutions are devoting a substantial amount of effort to marketing targeted at minors.[176] For example, recent news stories discuss initiatives in which major card issuers, with the approval of university administrators, implement card-issuance programs directly on University campuses.[177]

Such programs are most effective. For example, recent surveys suggest that 78% of college students that have student loans also have credit cards, that about half of all college students do not pay off their balances each month, and that the average undergraduate student is carrying $2,748 in credit card debt.[178] Even more sobering is a recent CitiBank product, which offers 3% cash-back to minors based on their purchases – but only if they do not repay their bills in full each month.[179]

The parallel to the efforts of cigarette manufacturers to get a foothold with young customers is eerie. Although the psychological parallels between the marketing efforts are doubtless only superficial, there is much to be said for the notion that the inadequate

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[174] *See* STEPHENSON, *supra* note 79.

[175] *See* ARK. CODE ANN. §§ 4-104-201 et seq. (barring face-to-face solicitation on college campuses); CALIF. EDUC. CODE § 99030 (requiring colleges to regulate card marketing and stating the "intent of the Legislature" that the regulations should prohibit offering gifts in exchange for card applications); Hawaii Act of January 24, 2003 (requiring colleges to regulate card marketing and requiring that "consideration be given to" a prohibition on offering gifts in exchange for card applications); Kentucky Act of Mar. 5, 2004 (invalidating card applications from college students unless authorized in writing by a parent); LA. REV. STAT. ANN. § 9:3577.2 et seq. (barring solicitation on college campuses unless accompanied by debt education brochures); New York Act of July 7, 2004 (requiring colleges to prohibit marketing of credit cards on campuses); PA. STAT. 24 PS § 2301-A (requiring colleges to regulate card marketing and requiring that colleges "consider" a prohibition on offering gifts in exchange for card applications)W. VA. CODE § 18B-14-10 (requiring colleges to adopt rules regulating card marketing that must, among other things, prohibit offering tangible gifts in exchange for a card application); *US State to Restrict Card Marketing on Campus*, CARDS INTERNATIONAL, Issue 321 (2004), at 11 (discussing statutes in Arkansas, California, Hawaii, Illinois, Louisiana, Missouri, New Mexico, Virginia, and West Virginia).

[176] *See* Laurie A. Lucas, *Integrative Social Contracts Theory: Ethical Implications of Marketing Credit Cards to U.S. College Students*, 38 AM. BUS. L. J.413 (2001).

[177] *See* Kate Fitzgerald, *They're Baaaaack: Card Marketers on Campus*, CREDIT CARD MANAGEMENT, June 2003, at 18.

[178] *See* Joanne Y. Cleaver, *The Challenges of College Collections*, CREDIT CARD MANAGEMENT, June 2002, at 28.

[179] *See* Lieber, *supra* note 164. I proposed in the previous section that such products be prohibited even when they target adults.

understanding of the risks of cigarette smoking that makes teenagers so vulnerable to the temptation to smoke closely resembles the hyperbolic discounting that makes consumers vulnerable to excessive ill-calculated borrowing decisions.[180] At a general level, both programs aim to get people immersed in a pattern of behavior while they are young that will produce a long-term stream of income for the marketer – a pattern that is much easier to initiate with an adolescent than with an adult.

A simple and direct response to this problem is obvious. Congress readily could add to the Truth in Lending Act a provision based on Section 50 of the British statute. Given the particularities of the American marketing practice, it almost might make sense to extend the provision to include college students. It is difficult to imagine broad-ranging opposition to such a provision. {*The next draft will address pending state legislative initiatives.***}**

It is easy to imagine broader reforms, such as banning minor cards altogether, treating debt incurred by minors differently in bankruptcy, or requiring special repayment rules. Each of those has special problems that make them less attractive to me than the narrower reform that I propose here. For example, for reasons discussed at the beginning of this essay, my desire to give weight to the efficacy of the card as a payment system makes me reluctant to deprive families of the ability to permit use of cards by their children, particularly when their children are in a semi-independent situation like college. Another possibility would be to subordinate in the Bankruptcy Code the right to recover debts incurred by minors on credit cards. My concern about that proposal is that it does raise a considerable possibility of a countervailing abuse by minors that might take advantage of the rules. I am most ambivalent about special repayment rules – a baseline idea might be to require those issuing cards to minors to require minimum payments that would repay all debt within twelve months. That would have the virtue of quickly bringing home to minors the real cost of the purchases and borrowing in which they have engaged. At the same time, it seems to me much more complicated (and thus expensive) to implement than the proposal I suggest and for that reason alone less palatable. Hence, I worry that attention to that proposal might detract from my first proposal, which strikes me as considerably less controversial.

2. Disclosures

The premise of this article is a link between prodigality, on the one hand, and the ease of credit card borrowing and the failure of consumers to appreciate the risks of borrowing in which they engage, on the other. That is not a new problem. Indeed, the core policy of the Truth in Lending Act is to respond to unwise borrowing.[181] The specific response of the statute, of course, is not to prohibit the unwise transactions, but instead the less paternalistic move of requiring the issuer to provide more information to the cardholder.

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[180] *See* Dellavigna & Malmendier, *supra* note 4

[181] *See* Mann, *Payments Policy*, *supra* note 19.

That is, of course, the common compromise solution in our laissez faire regulatory regime. That solution makes sense in some contexts, for example those in which sophisticated intermediaries can receive and process the information.[182] The difficulty with the situation here is that the information produced by the current system is complex and that it is provided at the point when an account is opened, not at the point of decision. Thus, it is not unduly pessimistic to say that the existing disclosure system is for the most part a waste of money.[183] It produces complicated paper disclosures of information that is not comprehensible to the typical consumer and not particularly useful, such as the total amount of interest that will be paid over time. Consumers are unlikely even to read those disclosures.

More importantly for my purposes, much of the information is offered at the time that the credit card application is sent and the account is opened.[184] That is not a time at which increased information is likely to be useful. A salient feature of the credit card system is the separation between the time of the credit card application and the time of the borrowing.[185] TILA does not require any disclosure of information at the time of the specific time of purchase or borrowing.[186] If those are the points at which borrowers are failing to appreciate the significance of their actions, then disclosures at those points might be more effective. The existing disclosures for the most part are largely a waste of resources that would be better expended in other ways.

For the system to work, the goals should be to get simple information presented at the point of decision, or to develop systems for providing complex information to intermediaries that can process it on behalf of consumers. At a big-picture level, that suggests three different regulatory strategies: regulation of information at the time the account is opened (the current strategy), regulation at the point of borrowing (in the statement), and regulation at the point of sale (at the checkout counter). The sections that follow assess each of those strategies.

(a) Disclosure at Account Opening

As discussed above, the conceptual problem with the existing set of disclosures is that it produces a set of disclosures of complex information delivered to people that are

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[182] *See* Sage, *supra* note 172.

[183] Thus, I find the recent legislation promoting so-called "Schumer boxes" an aggravation of the existing problem, not an improvement. 15 U.S.C. § 1637(c), 12 CFR § 226.5a(b). England's pending decision to adopt a similar disclosure requirement is equally unfortunate. *See* http://news.bbc.co.uk/2/hi/business/3293707.stm (Dec. 8, 2003) (discussing the British government's recent proposal to require Schumer boxes in British card solicitations).

[184] *See* Regulation Z, 12 CFR § 226.5a (describing requirements for applications and solicitations), 226.6 (describing required initial disclosures).

[185] *See* Mann, *Cards Data Paper*, *supra* note 3; Mann, *Backlash*, *supra* note 10.

[186] *Compare* Regulation E, 12 CFR § 205.9(a) (requiring contemporaneous receipt in electronic point-of-sale transactions).

disinclined to assess them with care, at a time when they have no immediate reason to attend to them.[187] Thus, there is good reason to be skeptical about the benefits of any reforms related to account-opening disclosures.

Having said that, the problem at this stage is exacerbated by the nature of the market in which credit card issuers operate. Given the competitive pressures that issuers face, issuers that do not exploit the advantages that the behavioral defects of their customers present ineluctably will lose market share to issuers that do.[188] The rapidly increasing concentration of the market for credit card debt suggests that the companies that are most skilled in understanding the behavioral capabilities of their customers are in fact rapidly taking market share from those issuers that are not adept in that undertaking.[189]

From the perspective discussed above, the appropriate regulatory response is to force the production of the relevant information in a way that makes it amenable to evaluation by intermediaries. Fortunately, the Internet makes that much easier than it would have been when TILA was enacted, indeed much easier than it would have been a year ago. Thus, Congress might require credit card issuers to post certain important terms[190] of their agreements in a uniform format on publicly available Internet sites.[191] Congress also might require that any set of terms remain in effect for a certain minimum period of time (90 days seems a reasonable period), to facilitate the activity of intermediaries that might examine all of the postings and provide public assessments of the various terms. In sum, despite the reasons to doubt the efficacy of such disclosures, a policymaker concerned about the pressure issuers face in this area might consider the suggestions summarized here as more likely than existing law to have a real impact on the problem.

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[187] The existing literature supports the idea that consumers are not particularly responsive to changes in the cost of borrowing. *See* Ausubel, *supra* note 167; Paul S. Calem & Loretta J. Mester, *Consumer Behavior and the Stickiness of Credit card Interest Rates*, 85 AM. ECON. REV. 1327 (1995); Zywicki, *supra* note 167.

[188] *See* Bar-Gill, *supra* note 4; Dellavigna & Malmendier, *supra* note 4; GRADY, *supra* note 62.

[189] {*Insert data from 2005 Nilson Report.*}

[190] As the discussion below should make clear, this concept would not extend to interest rates, for which a 90-day fixing would seem impractical.

[191] This could be done in a variety of ways – on Web sites for the individual issuers or on a Web site hosted by the FTC or the Federal Reserve. The simplest approach probably would be to post them on the FTC's user-friendly Web site, so that intermediaries reliably could locate all of the terms in a single place. Issuers that wished to do so also of course could post their terms on their own sites. Of course, if the FTC required issuers to provide a url for an address at which the issuer had posted the terms, it would not matter where the terms technically were posted, because the FTC site could provide a catalog of links to the individual postings. The benefit of requiring the terms to be posted directly at the FTC is that it would facilitate downloading all of the terms in a *readily* analyzable format such as a spreadsheet.

The discussion in the preceding section suggests a market in which interest rates that issuers charge to particular customers are so dynamic, changing from time to time based on the credit position of the individual consumer. In such a market, it would make little sense to require issuers to maintain fixed offers of interest rates. One exception might be for so-called "teaser rates," which might be defined as any offer of an introductory rate that by contract is limited to a specific period. The existing literature suggests an irrational behavioral focus by consumers on those rates.[192] A specific set of rules for those rates to facilitate comparison might require a uniform disclosure of the period for which the rate is to last and of the overall annual interest rate a consumer would pay if it borrowed a standard amount ($1000 for example) on the first day, paid the relevant annual fee, and paid off the entire balance on the last date for which the teaser rate would be available.

The problems with the existing system are presented most clearly in the recent debate about universal default provisions. Essentially, universal default terms in credit card agreements permit an issuer to raise the rate it charges one of its borrowers substantially if that borrower commits a default on an unrelated debt, even if the borrower has not missed a payment to the credit card issuer in question. Regulators, upset by the application of those provisions, have responded by insisting that credit card issuers provide more transparent disclosures related to those provisions in their agreements with their customers.

That seems to me an entirely wrong-headed response. For one thing, it rests on the premise that consumers that receive those disclosures will alter their behavior. I think that is most improbable. First, most obviously, the modal consumer doubtless does not read any terms placed in its credit card agreement. There are a variety of reasons, rational and quasi-rational, for that behavior,[193] but improving the type size of the disclosure will not alter that outcome. Second, as the existing literature makes quite clear,[194] there is little reason to think that the rates for credit card debt that will be charged at any point other than the immediately foreseeable future will affect the choices consumers make in choosing between credit card products.

More fundamentally, an emphasis on disclosure misses the point. My sense is that the underlying complaint of consumers is that the provisions are fundamentally unfair: I shouldn't have to pay more to Bank One simply because I was late on a payment to Providian. Policymakers have retreated to a disclosure-based response because of their unwillingness to press that fairness argument.

But in my view the fairness argument conceals a plausible economic argument for barring universal default provisions. The argument in favor of universal default provisions is that they are a highly effective part of the recent developments in the credit

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[192] *See* Lawrence M. Ausubel, *Adverse Selection in the Credit Card Market* (1999).

[193] *See* Mann, *Payment Intermediaries*, *supra* note 87.

[194] *See* Bar-Gill, *supra* note 4; Zywicki, *supra* note 167.

card market that have fostered segmentation of the market, which has led in turn to a marked differentiation of rates among cardholders with different risk profiles.[195] As a general matter, that segmentation and differentiation strikes me as a good thing, because it permits more accurate pricing to individual cardholders. In this context, however, that seems much less clear, primarily because individual cardholders cannot possibly take the pricing into account at the time of their borrowing: it is difficult when I make a purchase today to factor in the likelihood that the interest rate on that purchase at some distant time in the future will rise by some unspecified amount because of a default I make in a payment to some other creditor. And if even an omnicompetent consumer could not take account of the rate differentiation, then it is serving a much less valuable function.

Finally, getting to the heart of the matter, consider the likely effects of a flat prohibition on universal default provisions. One possibility is that the implementation of the provisions is entirely opportunistic, that they are exercised in response to events that do not reflect any actual increase in risk level, that the reason they work is that the switching costs for consumers in default are so high that the consumers have no market-driven response to the elevated interest rate. I find that unlikely. Rather, my intuition is that the universal default provisions reflect a reasoned (though perhaps imperfect) elevation of interest rates in reaction to information that indicates an increased risk level.[196] If that is the case, then a prohibition on those provisions will not prevent lenders from responding to the increased risk. Rather, it will have the natural effect of causing a contraction of credit to those borrowers: more risk without an increased price must lead to a limit on the available credit. From a broader societal perspective, that probably is a response to be lauded. If we believe – as I do – that financial distress by cardholders imposes externalities on the rest of us, and if we believe – as I do – that existing systems probably encourage borrowers to wait *too* long before filing for bankruptcy, a system that caused card issuers to terminate lending sooner might lower the social costs of financial distress by pressing risky borrowers into a resolution of their affairs at an earlier date.

All of this is of course quite speculative, and rests on empirical intuitions that are not particularly well-informed. It does, however, reflect considerably more attention to the reality of disclosure and pricing than the existing simplistic reforms that would require the expenditure of resources on disclosures that would likely have no positive effect on the underlying problems.

(b) Disclosure at the Point of Borrowing

The next obvious point to consider is the possibility of disclosures at the point of borrowing – which in the American system is the point at which the cardholder selects the amount of its monthly payment. I am considerably more ambivalent about disclosures that might affect the decision to select a monthly payment amount. Supporting a regulatory response is the possibility that consumers will fail to appreciate

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[195] *See* Furletti, *supra* note 131.

[196] In that sense, they resemble the early warning systems in place on commercial loans for quite some time.

the consequences of making low monthly payments. Under the current system, low minimum payments join with the fees discussed in the text as part of a system that can lead to aggregate outstanding balances far in excess of the original borrowed amount. On the other hand, countervailing points make major reforms seem counterproductive. I am quite skeptical about imposing a larger minimum-payment requirement by statute, largely because cardholders in distress can obtain benefits from low minimum payments just as surely as they can abuse them by repaying their balances too slowly.

Thus, what is left is a purely informational reform that might attempt to influence the cardholder's payment decision. Here, because the relevant information is tailored to each particular bill, it seems implausible to rely on the strategy discussed in the previous section, in which sophisticated intermediaries could filter and assess information on behalf of cardholders. Hence, a judicious response must settle for attempting to disclose information that is sufficiently simple and comprehensible to be understood by a typical cardholder. It also is important that any disclosure requirement be sufficiently simple that an issuer can implement it with relatively low expenditures.

Tentatively, for those who think any such reform could be useful, I suggest a requirement that each statement include a plain statement indicating the date by which a cardholder would pay its balance in full if it made no further purchases and continued to make equal monthly payments in an amount equal to the last monthly payment. Thus, for example, a March 1, 2005 statement to a cardholder that paid half of the bill in February 2005 might indicate that the balance would be paid in full with two further payments; a similar statement to a cardholder that paid only 3% of the balance might indicate that the balance would be paid in full with sixty further equal payments (if that is the correct figure, taking account of the appropriate interest rate).

(c) Disclosure at the Point of Sale

The final possibility is to regulate the information provided to customers at the point of sale. Presently, federal law does not require contemporaneous disclosures at the point of sale for credit transactions governed by TILA, though it does require a tangible acknowledgment of the transaction (typically a printed receipt) for transactions governed by the EFTA.[197] The plausibility of a regulatory focus on the point of sale is underscored by widely noted shifts in the revenue models of credit card issuers. Two traditional revenue sources – annual fees and interest revenues – have declined substantially in importance by comparison to fees for such things as late charges and overlimit transactions.[198] For example, between 1994 and 1998, interest income rose by about 70% (from $34 billion to $58 billion), while penalty charges rose by about 125% (from $8 billion to $18 billion) and late fees rose by more than 300% (from $1.7 billion to $7.3

[197] *Citations to EFTA and Regulation E.*

[198] *See* Furletti, *supra* note 131.

billion).[199] Current industry statistics indicate that the average late fee among large issuers is now more than $30,[200] and the average overlimit fee is now over $29.[201]

Based on experience in my household (which has paid a significant amount of late fees over the last few years), it seems quite likely that a substantial amount of those fees does not reflect financial distress, but an imperfect ability to manage information related to the credit card. The payment is not late because the money is not there, but because of an imperfect effort to time the payment to fall on the latest possible day. The transaction does not go over the limit because of a crisis-driven need to borrow to the hilt, but because of a lack of information as to exactly how much is outstanding on any particular card at any particular time. The validity of that point of course is an empirical question. I do not really know what share of late charges and overlimit fees accrue on accounts that are not generally in default, but that is my point. If we knew that a substantial amount of those fees were incurred because of mistakes rather than a "true" need for the funds, it would be an indictment of the business model that relies on those fees so heavily.

As an informational matter, that problem resonates with much of the discussion in my related papers. We in fact know very little empirically about the operation of the card system in this country. It is an embarrassment that the regulatory authorities in other countries (Australia and the UK in particular) have so much more accurate historical and current information about payment systems in their countries than we have in this country. If these issues present problems of concern to policymakers, a first step that should encounter little opposition would be for some agency of the government to begin collecting some minimal amounts of information about the subject. On questions of

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[199] *See* Demos, *supra* note 85, at 35-36.

[200] *See* http://www.cardweb.com/carddata/charts/latepayment_fees.amp. The amount has increased by 45% since 1998 and 176% since 1993. *See* Dec. 5, 2003 CardFlash. Part of the cause of the increased revenue from late payment fees doubtless is the persistent shortening of grace periods. The average grace period has fallen from 29.7 days in 1990 to 21.5 days at the end of 2001. *See* http://www.cardweb.com/carddata/charts/grace_periods_endofyear_averages.amp. There also appears to be an increasingly technical approach that credit card companies use to determining when payments arrive. *See* Liz Pulliam Weston, *More Games the Credit-Card Companies Play*, *available at* http://moneycentral.msn.com/content/Banking/Yourcreditrating/P51865.asp (discussing practices under which payments are not treated as received on the date that they reach the credit card issuer's processing center). The problem also is exacerbated by the impression created by media reports, that card issuers are much more likely to battle customers over small billing disputes than in former years. *See* ConsumerReports.org, *Credit Cards: What's Wrong with This Bill* (January 9, 2004), available at www.consumerreports.org (last visited January 9, 2004); W.A. Lee, *Magazine Slams Industry, Regulators over Bill Disputes*, AM. BANKER, Jan. 9, 2004.

[201] *See* http://www.cardweb.com/carddata/charts/overlimit_fees.amp. That amount is 42% larger than the comparable 1998 figure and 141% higher than the comparable 1993 figure. *See* Dec. 5, 2003 CardFlash.

particular interest, targeted government data collection seems appropriate. The relation between late and penalty fees and financial distress seems an obvious candidate.[202]

That discussion suggests that a disclosure system keyed to the point of borrowing could be more effective than the existing disclosure system keyed to the point at which the line of credit is authorized. Specifically, I suggest that it might alter the actions of cardholders in a substantial way if they were advised at the time of each transaction as to the amount of their credit line, the amount of credit available at the time of the transaction, and any overlimit or other fees that would be charged to them for engaging in the transaction in question. In transactions that are authorized "online" with a contemporaneous electronic communication from the issuer, the relevant information could be transmitted to the merchant along with the authorization; the merchant's payment terminal could display the information to the cardholder before the cardholder finally approves the transaction. The EFTA already requires a paper receipt in electronic point-of-sale payments.[203] Essentially, this would be similar to the common screen requiring the cardholder to approve a fee charged by an out-of-system ATM machine before the transaction proceeds.

As with the proposal related to affinity fees, this proposal would require considerable delineation before it could be enacted. Thus, it would not be practical for Congress to articulate the details of the proposal. Among other things, the proposal would depend on alterations in the method by which terminals process transactions. Details about such things could be ironed out only after consultation with affected industry groups – terminal manufacturers, issuers, acquirers, and merchants.[204] Moreover, it well might be impractical to extend the proposal to the small share of

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[202] Specifically, it would be interesting to know what share of accounts that pay late charges or overlimit fees become delinquent by 30 days within 12 months after payment of such a fee and the extent to which that share differs significantly from the share in the overall pool of cardholders. My hypothesis is that there would be little significant risk of default presented by cardholders that incur an overlimit fee or a late charge for a payment less than five days late, and have not incurred a similar charge during the preceding 12 months.

[203] *See* Regulation E, 12 CFR § 205.9(a).

[204] The Federal Reserve recently estimated in a study of the possibility of disclosing fees in debit transactions that the costs would be quite high, in the range of $5 - $10 billion. Federal Reserve System, Board of Governors of, *Report to the Congress on the Disclosure of Point-of-Sale Debit Fees* 34-35 (November 2004). I am skeptical that in the long run this proposal would impose costs nearly so high as those that the Federal Reserve suggests, in part because the Federal Reserve appears to have accepted industry estimates of high costs for such things as reprogramming network accessible databases to provide the relevant information, without recognizing the increasingly routine nature of changes to the technology of such databases. In any event, it certainly is true that the costs of implementation could be minimized by a process that included industry consultation to facilitate an adequate transition period and standardization of format. Moreover, whatever the costs of such a system might be today, they certainly will continue to decline rapidly with advances in information technology, and the accompanying advances in the sophistication of typical merchant terminals and payment-processing networks.

transactions that are cleared without contemporaneous electronic authorization.[205] Those details should be left to the Federal Reserve for implementation through amendments to Regulation Z. The broad outlines discussed above, however, would be suitable for implementation through amendments to the Truth in Lending Act.

IV. CONCLUSION

The appropriate regulatory response to the credit card phenomenon must take account both of the effectiveness of credit cards as a device for payment and borrowing and at the same time attend to the risks that the credit card will lead to prodigal behavior that harms users and imposes externalities on the rest of society. I have suggested a number of specific statutory reforms – rules permitting merchants to impose surcharges for credit card use, limiting affinity programs and universal default provisions, barring marketing that targets minors, and revamping the disclosure system. But my broader goal is to further a general understanding of that phenomenon. I certainly would not suggest that I have solved the basic problem of the credit card. I do hope, however, that I have provided some food for thought about it.

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[205] In countries that clear a smaller share of their transactions electronically (a category that includes most if not all countries other than the United States), this proposal would impose much greater costs and thus be much less practical.

DATA APPENDIX

Nilson Report: The *Nilson Report* is a proprietary periodical that reports detailed information about all aspects of credit and debit card transactions in the United States and a variety of information about other countries. Because it is proprietary, it is not clear exactly how it is collected. It is, however, plainly the best source for the United States, in the absence of any substantial public statistical source.

BIS Data: The most general source of data is the Bank for International Settlements' series *Statistics on Payment and Settlement Systems in Selected Countries* and *Statistics on Payment Systems in the Group of Ten Countries*. The first of those (the so-called "Red Book") now includes information on Belgium, Canada, France, Germany, Hong Kong, Italy, Japan, Netherlands, Singapore, Sweden, and Switzerland. The G-10 series includes information on Belgium, Canada, France, Germany, Hong Kong, Italy, Japan, Netherlands, Sweden, Switzerland, the United Kingdom, and the United States.

The information typically includes whatever information is available about the number and value of credit and debit card transactions, as well as matching information about GDP, population, and exchange rate. The data are obtained from the central banks of the respective nations. The problem with relying on the data is that they are inconsistent, in the sense that different publications report different data for the same year. For example, the 1999, 2000, and 2001 G-10 publications all might report different numbers for 1998 credit card transactions in Japan. The data also (as with Canada) commonly include such serious discontinuities in the data as to suggest a shift in data collection techniques. Because the data come from central banks, I do not think I should dismiss them as unreliable. I do not, however, use them whenever I have better data sources available.

Euromonitor: Euromonitor publishes an extensive set of information about a large number of countries. Ultimately, however, I decided that the data has too many errors to make it reliable. The difficulty is that in the few countries where I am confident that I have reliable information directly from central banks (Canada and the UK, for example), the Euromonitor data is widely off (much lower than the central bank data).

Australia: Australia has the best collection of information in the world. Substantially all of the relevant information is on the Royal Bank's Web site at www.rba.gov.au. From that site I collected information on the number and value of credit and debit card transactions, as well as information about credit card debt. I collected information on population, GDP, and exchange rates from the World Bank's WDI database. Because they were not available at WDI, I collected 2002 information on population from www.abs.gov.au/ausstats, GDP from www.rba.gov.au, and exchange rate from www.xe.com.

Belgium: The National Bank of Belgium provided information on the number and amount of credit card and debit card transactions. I collected information on population and GDP from the World Bank's WDI database.

Canada: I have collected data on Canada from a variety of sources. Data on the number of credit card and debit card transactions has been compiled from the *Nilson Report*, a proprietary periodical, supplemented with data from Interac (Canada's local debit card system), www.interac.org. For information on credit card debt, and on ratios of credit card debt to credit card volume, I have accepted the advice of the Bank of Canada and rely on data about Visa and MasterCard transactions, which the Bank has provided to me. Data on fraud are from epaynews.com. I collected information on population, GDP, and exchange rate from the World Bank's WDI database. Because 2002 information was not in WDI, I collected 2002 population from CIA World Factbook (www.cia.gov) and the 2002 exchange rate from www.x-rates.com.

China: I collected information on the value and number of credit and debit card transactions, population, GDP, and exchange rates from *Payment Systems in EMEAP Countries*, published in July 2002 by the Working Group on Payment and Settlement Systems of the Executives' Meeting of East Asia-Pacific Central Banks and Monetary Authorities (EMEAP). This publication is modeled on the BIS publications, but includes information on a number of East Asian countries.

France: Data on France is hard to acquire, because the system is dominated by the Cartes Bancaires card, offered by a consortium of banks. It is easy to obtain statistics about that system, but not about the card products offered outside that system. I collected information on population from the World Bank's WDI database.

Italy: I collected data on the value and amount of credit and debit card transactions, population, GDP, and exchange rates from the BIS publications.

Japan: I collected data on credit and debit card transactions from the BIS publications. Data on fraud are from the Japan Consumer Credit Industry Association's annual yearbook. I collected information on population and GDP from the World Bank's WDI database.

Netherlands: I collected data on population, GDP, and the number and amount of credit and debit card transactions from the BIS publications.

New Zealand: I collected information on credit card debt and volume from the central bank's Web site at www.rbnz.govt.nz.

South Korea: For information on credit card debt and credit card volume, I rely on information published in *Cards International*, supplemented with related unpublished data collected by Anthony O'Brien. I collected information on GDP from the World Bank's WDI database. I collected information on exchange rates from www.x-rates.com (because it was not available in the WDI database).

Sweden: I collected information on the value and amount of debit and credit card transactions, population, GDP, and exchange rates from the BIS publications.

UK: The most general source of information is APACS (the Association for Payment Clearing Services), www.apacs.org.uk. I have relied on APACS's *Plastic Card*

Review 2002 for information about the number and amount of credit and debit card transactions. Data on fraud are from Cardwatch (an arm of APACS), www.cardwatch.org.uk. For credit card debt, I rely on information provided to me by the Bank of England. I collected information on population, GDP, and exchange rates from the World Bank's WDI database.

USA: There is no general governmental source for information about credit-card and debit card transactions in the United States. The most widely used source is the *Nilson Report*. I have compiled from various issues of that periodical data about the number and amount of credit and debit card transactions and about credit card debt. Data on fraud are from epaynews.com. I collected information on population and GDP from the World Bank's WDI database. The information in Figure Nine about noncash consumer payment systems also is from the *Nilson Report*.