Better Than Cash?
Global Proliferation of Debit and Prepaid Cards and
Consumer Protection Policy

Prof. Arnold S. Rosenberg
Thomas Jefferson School of Law
San Diego, California
arosenberg@tjsl.edu
TABLE OF CONTENTS

Abstract............................................................................................................................iii

I. Introduction....................................................................................................................1

II. Debit and Prepaid Card Transactions.................................................................5
    A. Transaction Structure.........................................................................................5
    B. Types of Debit and Prepaid Cards.................................................................6
    C. Fee Structure and the Wal-Mart Settlement...............................................7
    D. Chargeback Rules.........................................................................................10

III. Debit and Prepaid Cards in Emerging Economies........................................14
    A. China: Explosive Growth in Debit and Prepaid Cards as
       Government Policy......................................................................................14
    B. Russia: Payroll Cards and Overdraft Credit..............................................16
    C. Brazil: Debit Card Growth and the Cash Economy.................................17
    D. Mexico: Prepaid Cards for the Unbanked...............................................18
    E. Southern Africa: Mobile Payments and Smart Cards..........................19
    F. India: Debit Cards and Access to Bank Services....................................20

IV. Debit and Prepaid Cards in Developed Economies.........................................20
    A. Marginalization of Credit Card Culture......................................................20
    B. Europe: Checks and Giros..........................................................................22
    C. The North American Credit Card Habit......................................................25
       1. Explaining the Habit..................................................................................25
       2. Resistance to Debit Cards........................................................................28

V. Consumer Protection Policy Issues.................................................................29
    A. Who Makes the Rules? Private Lawmaking and Public Policy
       in the Regulation of Debit and Prepaid Card Transactions........................29
    B. Reversibility of Debit and Prepaid Card Transactions.........................33
       1. Transparency and Reversibility: a Proposal...........................................33
       2. Grounds for Reversal of Transactions.................................................37
    C. Problems of Loss Allocation....................................................................41
       1. Fraud and Unauthorized Transactions..................................................41
       2. Inconsistency in Loss Allocation Rules...............................................46
    D. Behavioral Issues in Disclosure of Card Fees.........................................49
    E. Problems of Access to Banking Services...............................................52
    F. Discharge of Obligations in Debit and Prepaid Card Transactions: the
       Insolvency Problem.......................................................................................53

VI. Conclusion..............................................................................................................54
Abstract

A global deluge of debit cards and prepaid cards – payment cards that do not require consumers to qualify for credit – is rapidly making electronic payment systems accessible to much of the world’s population that previously paid in cash for goods and services. The global proliferation of payment cards is fraught with both risk and promise for consumers.

The billions of people of low to moderate incomes who are being hurled from a cash economy into the era of electronic payments in emerging economies by the proliferation of debit and prepaid cards are particularly vulnerable to abuses by banks and merchants. Unregulated private lawmaking by payment card associations and card issuers will not ensure that consumers are treated fairly, due to their countervailing incentives to attract merchants into their payment networks. Technological solutions promote efficiency and limit abuse, but cannot ensure fair resolution of consumer-merchant disputes. Payment card associations such as Visa and MasterCard operate chargeback systems for resolving disputes, but chargeback systems cannot function in cash economies without merchants’ consent, because cash transactions are usually anonymous, evidenced at most by a receipt, and do not involve an intermediary.

However, while the lack of anonymity inherent in the use of payment cards entails risk for consumer privacy, it also makes possible greater transparency in payment systems. As billions of vulnerable consumers become connected to electronic payment systems, chargeback systems become a possible means of protecting them from merchant misconduct. Moreover, this lack of anonymity makes possible new ways of protecting consumers, such as disclosure to consumers of outcomes of the Visa and MasterCard chargeback systems through merchant ratings such as those posted on eBay.

There is a risk that nations with emerging economies will uncritically emulate regimes of consumer protection adopted in the United States and Europe. These regimes in many respects lack a consistent conceptual foundation and fail to address problems, such as bank fees, access to banking services and payment system insolvency, that are poorly addressed in developed countries if they are addressed at all. For example, debit and prepaid card transactions are both a convenient means of obtaining cash and a substitute for cash, but this does not justify denying chargeback rights to consumers who use debit and prepaid cards, as if they had paid in cash.

Prior scholarship on payment cards has suffered from the assumption that American use of credit cards is normative. This article demonstrates that it is a global anomaly; most consumers worldwide use payment cards for convenience rather than a source of long-term credit, and that is why debit cards have become popular so quickly. Moreover, fees and charges imposed on consumers for payment card services are one of the most prolific sources of consumer complaints. Fee regulation should be regarded as a legitimate part of payments law in scholarship on the subject, and should not be ignored in establishing a regulatory system to govern debit and prepaid cards.
I. Introduction

Debit cards, sometimes issued as “ATM cards,” “check cards,” “cash cards,” and “Smart Cards” or “chip cards,” are proliferating worldwide at a staggering rate. Debit cards are distinguished from credit cards and charge cards in that the use of a debit card results in a direct debit to the user’s bank account, while the use of a credit card or charge card results in an extension of credit to the cardholder.

Although the volume of credit card transactions also has grown, in 2003 debit cards overtook credit cards in aggregate dollar volume worldwide in Visa, by far the largest of the payment card networks representing about half of the global payment card market. Debit cards are now the dominant card-based payment system everywhere except the United States, Canada and Japan, and the most widely used non-cash consumer payment system in the world. Even in the United States, debit card transactions have risen precipitously, and now represent a higher percentage of Visa point-of-sale (“POS”) transactions than credit cards.

In China alone, according to the People’s Bank of China over 663 million debit cards, the overwhelming majority of them issued by domestic banks, were active in 2004; as of 1995, the number stood at 5 million.

Moreover, in a massive change that has accelerated during the past 3-5 years, instead of cash, millions of employees from Russia to Mexico are now paid through prepaid cards called “payroll cards,” which they can swipe at a store to make a purchase and have the price debited from an account funded by wages deposited by their employer.

Prepaid cards include phone cards, gift cards, payroll cards, benefit cards, and travel cards, among others. Prepaid cards are increasingly used to pay public benefits, especially in the many countries in which checks are rarely used as a method of payment. Prepaid cards may be prepaid debit cards, the use of which results in a debit to a bank account opened for the benefit of the cardholder, e.g., by an employer, or they may be

1 “Smart Cards,” also called “chip cards,” are multifunction cards that include a microchip. They can function as debit cards or credit cards, or perform other data functions. See Section II.B. infra.

2 See infra, Section III. See also Ronald J. Mann, “Making Sense of Payments Policy in the Information Age,” 93 Geo. L.J. 633, 653 (2005) (“Mann”) (describing the rise of debit cards in the U.S. to prominence since the late 1990’s).

3 Charge cards, such as Diners Club and most American Express cards, differ from credit cards in that unpaid balances cannot be rolled over at the end of a billing cycle and must be paid in full each time.

4 BIS Retail Payments Study, Charts 3-5; Table 1, infra.

5 “[G]lobal Visa debit card volume reached US$1.48 trillion at the end of 2003, an increase of 17 percent over the previous year. At the same time global Visa credit volume increased five percent from the previous year to US$1.45 trillion.” Available at http://www.corporate.visa.com/md/nt/press217.jsp.


7 Financial Times Asia Intelligence Wire, February 16, 2005. In contrast, only one million of China’s 1.3 billion people have credit cards. Asia Pulse, January 6, 2004, available on Westlaw Database WNS-FI.

8 See Ted Griffith, “MBNA Sets Sights on China,” (May 23, 2004), www.delawareonline.com (also pointing out that most people have to make bank deposits and withdrawals in person, apparently due to the lack of ATM’s).

“stored value cards” in which value is stored on the card itself.10 While some prepaid cards, so-called “closed loop” cards including most gift and phone cards, are usable only for purchases from a particular retailer or service provider, increasingly prepaid cards are network-branded “open loop” cards, transactions with which are processed through the Visa, MasterCard, and other payment card networks.11

Because prepaid cards do not require either creditworthiness or a bank account, they are proliferating especially in areas such as Africa and parts of Latin America where relatively few people have bank accounts.12 However, even in the United States, prepaid phone cards have become popular and payroll cards are catching on as a way to pay wages to the many, usually low-income employees who lack a bank account, sometimes referred to as “the unbanked.”13

Several factors have contributed to the rise of the debit card and the prepaid card. As further discussed in this article, most developing countries never acquired the credit card habit; they lack the credit information and reporting systems necessary to support credit cards, and relatively few of their citizens have sufficient demonstrable income to qualify for credit. While computer use and e-commerce are growing in the developing countries, they remain the domain of a small percentage of those populations. As a result, as the “Plastic Revolution” takes hold in developing countries like China, Brazil and Mexico, it is not credit cards but debit and prepaid cards that are beginning to transform the cash economies in places like China, Brazil and southern Africa.

The trend toward debit and prepaid card use is part of what some economists have erroneously called a trend toward “cashlessness.”14 However, debit cards and many prepaid cards are not only a substitute for cash, but also a convenient means of obtaining

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11 Prepaid cards may also be divided into “online” and “offline” cards. The latter are stored value cards such as copy cards used in copy machines which carry value stored internally on the card. The former are cards that electronically access value stored in an account maintained on a database at a bank, payroll processor, retailer, or other external location. In the U.S., stored value cards are not currently covered by Federal Reserve Regulation E. The Federal Reserve has proposed to extend Regulation E coverage to payroll cards, and the Federal Deposit Insurance Corporation has proposed extending deposit insurance to cover funds accessed with certain payroll cards. See Budnitz, supra, at 6.

12 See infra, Sections III.C, D and E.


it at an automated teller machine (ATM), and ATM’s, already ubiquitous in the
developed countries, are rapidly spreading through the developing world. Cash payments
still amount to an estimated 70-90% of retail payment volume\(^\text{15}\) though they are low in
value compared to card transactions. In recent years the growth in volume of debit card
transactions has outpaced that of credit cards, indicating that payment cards – even credit
cards - are primarily used as a cheap means of funds transfer rather than for credit
purposes.\(^\text{16}\) Rather than curtail the use of cash, the spread of debit cards has revitalized
cash economies by making cash more readily available.\(^\text{17}\)

Debit cards and “open loop” prepaid cards can be used either at ATM’s or at the
point of sale (POS).\(^\text{18}\) Other ways by which consumers access and transfer funds
electronically include automated clearing house (“ACH”) payments; home banking;
electronic \textit{giros} (“\textit{e-giro}”) in Europe and parts of Asia; and Internet-based “electronic
cash.” However, none of these other methods has approached debit cards in the number
or volume of transactions, nor in worldwide growth.\(^\text{19}\)

Credit card use is not growing nearly as rapidly as debit card use.\(^\text{20}\) Globally, the
ability to finance a purchase and carry a balance on a credit card seems to hold limited
appeal, because most consumers use payment cards – even credit cards - for convenience,
as a cash substitute or a way to obtain cash, not as a loan. Available data show that card
use in retail payments has grown primarily at the expense of cash.\(^\text{21}\) This is even true in
the United States, where of the personal consumption on goods and services in 1996,
57% were made by checks, 21% with cash and 22% with payment cards. In contrast, in
1984, only 6% of personal consumption spending in the United States was made with
cards, compared with 58% with checks and 36% with cash.\(^\text{22}\) While American
consumers persist in the habit of maintaining large credit card balances and resist the use
of debit cards for purchases, they remain an anomaly compared to consumers in most
other countries.\(^\text{23}\)

The stakes involved in the proliferation of debit and prepaid cards may be much

at 4 (“despite the significant trend towards non-cash retail payments, it is estimated that 70%-90% of the
volume of retail transactions remain cash financed”). However, Mann cites data from a November 2003
Nilson report indicating that in the U.S. as of 2002 only 42% of retail payment transactions were cash-
financed.

\(^{16}\) \textit{Ibid.}; see also Mann, \textit{supra}, at 656-658.

\(^{17}\) Bank for International Settlements, Committee on Payment and Settlement Systems, “Retail Payments in
Selected Countries: a Comparative Study,” September, 1999 (“BIS Retail Payments Study”), at 12.

\(^{18}\) For a description of various uses of payment cards by consumers and the structure of payment card
networks with diagrams, see Benjamin Geva, \textit{The Law of Electronic Funds Transfers} (Newark: Matthew
Bender & Co., 2003), ¶6.02.

\(^{19}\) See \textit{BIS Retail Payments Study, supra}, at 14 and Charts 3-5.

\(^{20}\) See Table 1, \textit{infra}.

and Evidence” (February 2002) (unpublished manuscript); Sheri M. Markose and Yiing Jia Loke,
Correspondent Banking Review Yearbook 2000/2001}, April 2001. These articles are available at
\url{http://private@www.essex.ac.uk/~scher/}

\(^{22}\) David S. Evans and Richard Schmalensee, \textit{Paying with Plastic: the Digital Revolution in Buying and

\(^{23}\) See \textit{BIS Retail Payments Study, supra}, Chart 9, and Ronald Mann, “Credit Cards and Debit Cards in the
United States and Japan,” 55 Vand. L. Rev. 1055 (May 2002). \textit{Also, see infra, Section IV.A.}
greater than the fees generated by payment card transactions. While the deluge of debit and prepaid cards in emerging economies is linking much of the world’s population, and many of its retail businesses, to payment card networks for the first time, mobile telephones are linking many of the same people to the telecommunications network. Mobile banking, in particular, promises to draw many of the as-yet-unbanked into the payments marketplace. Two recent studies suggest that these related phenomena each will generate an economic “growth dividend” in the developing world. Mobile telephone service providers may also emerge as serious competition for banks and money remitters, based on prepaid phone cards. Moreover, technology is emerging in the economically developed world for the use of mobile phones to make payments at checkout counters; mobile payments may become a common method to circumvent the cash register.

This article will explore the implications for consumer protection policy of the global proliferation of debit and prepaid cards and the regional differences in payment habits that affect the pace and distribution of that proliferation. Despite the explosive growth in debit and prepaid cards, and to a lesser extent, in credit cards, few countries outside North America and the E.U. have enacted consumer protection laws regulating the rights of card users with respect to card issuers or merchants. Within North America and the E.U., issues such as the reversibility of consumer transactions and the allocation of losses caused by unauthorized transactions are resolved in ways that are inconsistent and analytically unsatisfactory, and unduly influenced by legal regimes

24 Mobile phone penetration of the consumer market already surpasses, in most countries, the percentage of consumers who have checking accounts. In Africa, 6.1% of the population had a mobile phone as of the end of 2003, and they are often shared – a study in Tanzania revealed that as much as 28% of the population had “access” to a mobile phone - while consumer checking accounts are rare in many African countries. Mobile phone service in Africa is overwhelmingly paid for with prepaid cards. In Europe overall, 55% of the population had a mobile phone, while the highest incidence of checking accounts in Europe was about 40 percent in France. In Asia, 15% of the population had a mobile phone, and in most Asian countries checking accounts are not typically used by consumers. 25 See, e.g., “China’s Exploding Wireless Industry,” mPulse Magazine (Hewlett Packard, Inc.), October 2001, www.cooltown.com/cooltown/mpulse/1001-china.asp (wireless stock trading from mobile phones already common among 70 million Chinese who buy and sell stocks in China); “Calling Across the Divide,” The Economist, March 12, 2005, at 74 (vendors in marketplace stalls in Zambia pay for inventory using text messages on mobile phones).

26 Harry Leinonen, “Developments in Retail Payment Systems,” Bank for International Settlements (“BIS”) Papers, No. 7 (Nov. 2001), at 63, Box 1. 27 See “Electronic Payments Worth R7bn – Visa,” http://business.iafrica.com/news/389484.htm (November 10, 2004) (studies conducted by Global Insight and Econometrix indicating that a ten percent increase in electronic payments as a share of private consumption expenditure would translate into an increase of 0.6 percent in GDP); Leonard Waverman, Meloria Meschi and Melvyn Fuss, “The Impact of Telecoms on Economic Growth in Developing Countries” (“Waverman”), in Africa: The Impact of Mobile Phones (Vodafone Policy Paper Series, No. 2, March 2005), at 10-11, available at www.vodafone.com/africa (study by scholars from London Business School, John Cabot University (Rome), and University of Toronto, together with LECG Consultants, suggesting that an increase of ten mobile phones per 100 people in a typical developing country expands GDP by 0.6 percent) See also “Calling Across the Divide,” The Economist, March 12, 2005, at 74.

designed to regulate the use of different payment technologies twenty or thirty years ago.  

While often cognizant of the inconsistencies in American payments law, scholarship in payment systems frequently has been premised on the assumption that American payments culture, and the American addiction to credit cards, is normative. With over one billion consumers in Asia, Latin America, Africa and the former Soviet bloc countries gaining access to electronic payment networks with debit and prepaid cards, and few of them owning or using credit cards, this assumption is no longer accurate, if it ever was.

At the same time, the resolution of issues of consumer protection policy in those areas has become critical. Without legislation to regulate payment cards in developing countries, the governments of those countries effectively cede consumer protection to private lawmaking by card associations and banks. Part V of this article will discuss the inadequacies of private lawmaking to protect debit and prepaid card users, the problems of consumer protection that must be resolved in regulatory policy, and the lack of satisfactory American solutions to solve the global problems of protecting consumers newly introduced to electronic means of payment by the proliferation of debit and prepaid cards.

II. Debit and Prepaid Card Transactions

A. Transaction Structure

Debit card transactions may be processed through payment card networks such as Visa and MasterCard, or they may be processed through interbank networks such as the Star and Cirrus systems. The key parties to a debit card transaction are the cardholder (usually a consumer), the merchant, the card issuer (a bank where the cardholder maintains an account or has deposited funds), the “merchant acquirer” (the merchant’s bank), the processor (in most cases) that processes the transaction for the merchant acquirer, the payment card association (e.g., Visa and MasterCard) or interbank network (e.g., Star and Cirrus in the United States) that provides facilities for clearing and settling the transaction between banks. Debit card transactions resemble credit card transactions in most respects, the major differences being the debit posted directly to the cardholder’s bank account and the fee structure.

Debit card transactions are governed by a series of contracts. The underlying contract between merchant and consumer gives rise to the payment obligation and authorizes the merchant to draw funds from the consumer’s bank account to satisfy it. The consumer-card issuer contract governs the obligation of the bank to honor an authorized order to pay funds from the consumer’s account. The merchant-merchant acquirer contract governs the rights of the merchant to be credited with funds by the merchant acquirer once the merchant presents the transaction to the merchant acquirer, and the right of the merchant acquirer to deduct a fee, called a “discount.” The merchant transfers its rights against the consumer to the merchant acquirer, which then

29 See generally Mann, supra.
30 See text at note 15, infra. Many countries do not draw a distinction between consumer and non-consumer debit cardholders. The United States and certain EU countries do.
transfers these rights to the card issuer in exchange for payment in accordance with payment card association rules that contractually bind both banks as association members. The card issuer then debits the consumer’s account for the authorized amount in accordance with the payment order and its contract with the consumer.

The costs of processing payment card transactions generally are borne by merchants through discount fees paid per transaction to their merchant acquirers. The merchant acquirers are the merchant’s banks, members of Visa, MasterCard or another card association, which either own – as in the case of Chase - or are part of a bank association affiliated with, a processing entity, the largest of which in the U.S. is First Data Corporation. These banks are called “merchant acquirers” because by contracting with the merchant to accept payment through Visa or MasterCard they are said to have “acquired” the merchant for the Visa or MasterCard association.\(^{31}\)

Visa, the largest payment card network, is an association of banks governed by a common set of bylaws and operating regulations. It is organized as the Visa International association, comprised of six regional entities, the largest of which is Visa USA, Inc.\(^{32}\) Each regional entity is owned by member banks in the region. Worldwide, Visa has about 21,000 member banks. Banks may join as card issuers, merchant acquirers or both; however, the merchant acquirer business as a practical matter is concentrated in a few large banks\(^{33}\) while many smaller banks join so they can issue payment cards with the Visa logo. The regional entities provide member banks with clearing and settlement facilities for payment card transactions within their region, and also with security technology and procedures. The MasterCard association has a structure similar to Visa’s.

**B. Types of Debit and Prepaid Cards**

Debit cards are categorized as PIN (“personal identification number”) debit, also called “online” debit, and signature debit, also called “offline.”\(^{34}\) Signature debit cards are mainly issued in the United States by Visa and MasterCard member banks, bear the Visa or MasterCard logo, and do not exist in most other countries, such as Canada where all debit cards are PIN-based. A signature is required, as with a credit card. PIN debit card transactions require entry of a PIN into a keypad, and normally clear through interbank networks such as the Star and Cirrus systems.

Although most consumers do not know it, there are significant differences between the two. PIN debit card transactions clear and are debited to the consumer’s bank account almost instantaneously; they are real-time transactions. In the U.S., the consumer often will be charged a fee by her bank for using another bank’s or a merchant’s facilities to consummate the PIN debit transaction. Such fees are uncommon in many other countries.


\(^{32}\) Other regional organizations include Visa Latin America, Visa Asia Pacific, Visa Europe, and a region encompassing Africa and the Middle East.

\(^{33}\) In the U.S., a group of large banks affiliated with First Data Corp., the largest processor, has almost half of the merchant acquirer market, while Chase, which has its own processor called Chase Merchant Services, has about 13% of the market.

\(^{34}\) “Offline” is really a misnomer. Stored value cards and cash are true “offline” payment devices. Signature debit transactions may be posted and cleared electronically, but they are not posted and cleared in real time like PIN debit transactions.
Signature debit transactions, like most checks, take two to three days to clear and be posted to the consumer’s bank account. They are riskier for the merchant, which could go unpaid if during those two to three days the consumer closes or depletes his bank account. However, signature debit is favored by American banks, which receive higher fees from merchants, paid in the form of discounts from what is credited to the merchant’s account, than they do in PIN debit transactions. In contrast, merchants benefit from PIN debit in the form of lower discounts, but American consumers have resisted PIN debit due to the fees passed on to them by merchants and banks.

Many newer debit cards are actually “Smart cards.” Rather than a magnetic strip, Smart cards contain a microchip. This makes them capable of storing a greater volume of data and performing multiple functions. Smart cards can have both debit and credit functions, of which the consumer can choose either at the point of sale. They can collect, utilize and send data about purchases, benefit entitlements, and other information.

For the card issuer, Smart Cards represent an additional source of information about the consumer, and a possible source of additional revenue through the use or sale of that information. For the consumer, there is a risk of loss of privacy in the collection of this information. This capacity is not new; the ability to collect information about the consumer proved to be a selling point when Visa and MasterCard were building their bank networks in the United States in the 1970’s. The inability to share customer information with other banks was one reason that in the late 1960’s Bank of America ceded control of its BankAmericard franchise network, the predecessor of Visa, to what became the Visa International association.35

As discussed above, prepaid cards are categorized as “open loop” and “closed loop” cards, depending on whether they are usable only at a certain merchant. At one time “closed loop” credit and charge cards issued by department stores and oil companies were common in the U.S, and they are still issued in some emerging economies.36

C. Fee Structure and the Wal-Mart Settlement

The following is a description of the fee arrangements in a typical credit card transaction, which differ only in limited respects from those of a debit card transaction:

Bank A issues a Visa credit card to Consumer X, who purchases a garment for $100 at Store Y, which was "acquired" for Visa by Bank B. Visa rules mandate that Bank B must pay Bank A an interchange fee of 1.25% of the amount of the transaction, i.e., $1.25. Bank B will charge Store Y a "discount fee" higher than $1.25 in order to recover the mandated interchange fee and other fees that Visa rules mandate Bank B to pay Visa on each and every Visa credit card (and debit card) transaction and to earn a profit for itself. Thus, Bank B may charge a discount fee of 1.60% of the transaction amount (or $1.60) to Store Y. When Store Y presents


36 So-called “private label” credit cards in the United States today normally bear the logo of a merchant but also a Visa or MasterCard logo; because of the Visa or MasterCard affiliation they can be used at other merchants’ locations.
Consumer X’s $100 Visa transaction to Bank B, the bank will credit Store Y’s account for $98.40, send the Visa mandated $1.25 interchange fee to Bank A and retain the $.35 balance of the "discount fee."\footnote{Wal-Mart Stores, Inc. v. Visa U.S.A., supra, 396 F.3d at 102.}

Other than the fact that Consumer X’s bank account at Bank A will be debited rather than having credit extended, there is little difference between the described credit card transaction and a debit card transaction except the revenue structure for the issuing bank. When a consumer pays by debit card, there is no revolving credit extended and no possibility of interest income for the card issuer as in a credit card transaction, so the issuer’s principal revenue source is the interchange fee.

However, interchange fees on PIN debit transactions in the United States have been limited, for historical reasons. Debit cards were introduced in the U.S. in the 1970’s as “ATM cards,” used only for withdrawing cash from automatic teller machines. When in 1986, some banks belonging to interbank networks began to transform ATM cards into online PIN debit cards by persuading merchants, particularly gas stations and convenience stores, to install equipment to accept them,\footnote{The first use of ATM cards at the point of sale in North America appears to have been in Saskatchewan, Canada in 1981, as an experiment operated by a group of credit unions.} consumers resisted having to pay a fee for online debit card transactions to use their own money. Merchants, too, objected to being charged interchange fees for point of sale (“POS”) debit card transactions when no such fees were paid on ATM card transactions, and many merchants instituted per-transaction fees.\footnote{Richard Mitchell, “Bridging the Debit Gap; Signature and PIN point-of-sale debit once were separate worlds, but now there are signs of convergence. Will one form of debit gain primacy in the U.S.?” Credit Card Management, Vol. 17, No. 11, at 30 (February, 2005).} Consequently, low bank fees became the rule for PIN debit.

As a result of the low interchange fee structure for PIN debit compared to credit cards, prior to about 1990, banks in the U.S. displayed little interest in issuing debit cards except as a convenience to their customers for use at ATM’s. Due to the fees they were charged for using a debit card other than at their own bank’s ATM, relatively few consumers used them to make purchases and few merchants installed equipment to accept them.\footnote{Evans and Schmalensee, supra, at 80. Interbank networks independent of Visa and MasterCard started trying to market debit card use at the point of sale with PIN numbers (“online debit”) in 1986.} Online debit cards did not become widespread in North America until the 1990’s.\footnote{Evans and Schmalensee, supra, at 81.}

About 1990, Visa embarked on a campaign to promote the use of debit cards. To overcome the problem that interchange fees on online debit cards were too low to entice its member banks to issue more debit cards, Visa created a different form of debit card, the “offline” or signature debit card, which would work like Visa credit cards and involve an interchange fee set only slightly lower than the interchange fee issuers would receive on credit cards.\footnote{Ibid.} The new signature Visa debit cards would be a better deal for issuers, that would rake in more interchange fees than on online debit cards; the same or a better deal for consumers, who in some cases still would have to pay transaction fees, but in some cases would not; and a worse deal for merchants, that would see more of their
receipts disappear in the form of fees and chargebacks. MasterCard followed suit with a similar signature-based debit card strategy.43

This division of the debit card market was unique to the United States. In no other country are signature-based debit cards regularly issued by financial institutions.44 In Canada, there is only one form of debit card transaction: online debit cards; and there is only one debit card network. There have never been interchange fees; the Canadian debit card network is run at par, like the American check collection system.45 However, Canadian consumers even today pay higher transaction fees for the use of debit cards than Americans; banks charge the consumer instead of the merchant.46

The only flaw in the Visa and MasterCard strategy was the reluctance of merchants to accept signature-based cards when they could require consumers to use online debit cards and thereby lose less money in fees. However, to overcome this problem, Visa and MasterCard relied on a clause in the standard merchant-merchant acquirer contract called the “Honor All Cards” (“HAC”) Clause, which required merchants to accept any card with the Visa or MasterCard logo. In effect, they said to merchants that if they wanted to accept credit cards, they had to accept signature debit cards.

The HAC Clause was the subject of a class action antitrust lawsuit, Wal-Mart Stores, Inc. v. Visa U.S.A.,47 in which a class of over five million merchants represented by Wal-Mart, The Limited, Sears and several other large retailers as named plaintiffs sued Visa, MasterCard and other associations, challenging the HAC Clause as an illegal “tying” arrangement in violation of the Sherman Act. The retailers alleged that they wanted to accept Visa and MasterCard credit cards and online debits but not the offline signature debit cards. After almost nine years of litigation, a three billion dollar settlement of the lawsuit was approved in January 2005, the largest ever in an antitrust case.48

43 Ibid.
44 Mitchell, supra n. 49.
45 Gordon Schnell and Jeffrey Shinder, “The Great Canadian Debit Debate,” Credit Card Management, Vol. 17, No. 2, at 12 (May, 2004). The authors of this article were counsel for the plaintiffs in Wal-Mart, supra.
46 Oddly, however, Canadians are “swipe crazy”; they use their debit cards more frequently than anywhere else in the world despite the higher fees. See “Canadians dishing out $21, 50 a month on bank fees: ´Swipe crazy’ use of debit cards inflates figure,” 1/8/05 Calgary Herald (Can.) at E4, Westlaw 2005 WLNR 297712. “Debit card volume in Canada matches U.S. volume despite the staggering difference in population.” 12/1/04 Bank Tech. News, Vol. 17, Issue 12, at 24, Westlaw 2004 WLNR 13805376. One explanation is heavy marketing using travel miles and similar offers. 1/8/05 Calgary Herald, op.cit. Another possible explanation is that online debit cards got their start in Canada a few years earlier than in the U.S., around 1981, and may have been more heavily marketed there in the 1980’s, when Canadian consumers, like Americans, were forming their payment habits. This heavy use has a heavy price, in that Canada is also distinguished by markedly higher debit card fraud losses than the U.S. A likely contributing factor is that Canadian debit cards are all linked to the same online network, the Interac Association, unlike the U.S. which has 25 electronic funds transfer networks; Canadian fraudsters therefore have an easier task obtaining data and accessing accounts. “Canada Appears to Have High PIN-Debit Losses,” Westlaw 2/3/05 ATM & Debit News 1, vol. 6, Issue 4, 2005 WLNR 1709490.
47 Wal-Mart Stores, Inc. v. Visa U.S.A., supra at n. 47, approval of settlement aff’d, 396 F.3d 96, 102 (2nd Cir. 2005).
48 The settlement reportedly came close to driving Visa U.S.A. into bankruptcy; allegedly it had to be rescued by JPMorgan. “JPMorgan to continue issuing both Visa and MasterCard,” Cards International, March 9, 2005, at 8.
As a result of the Wal-Mart settlement, the debit card industry in the U.S. is undergoing a reorganization in which control of the industry’s future is in the balance. Along with it, the charge card industry, led by American Express, is going through major changes as well. MBNA, the largest U.S. card issuer, is now issuing American Express cards, and Citibank plans to do the same. Meanwhile, Wal-Mart, free of the “HAC” Clause since the District Court initially approved the settlement in 2003, negotiated a temporary 30% drop in the interchange fee as part of the settlement, then temporarily stopped accepting MasterCard signature debit cards to keep fees down. Debit card interchange fees have been in flux since that time.

Meanwhile, merchants, banks and card networks jockey for leverage. Wal-Mart teamed with GE Consumer Finance and Discover to issue its own “private label” debit card, and is issuing prepaid debit and credit cards that can be used by people without a bank account. Discover purchased Pulse, one of the largest online debit card networks. Other retailers, such as Publix Super Markets of Florida, are offering free use of their proprietary ATM’s only to the customers of banks that waive interchange fees. The outcome remains uncertain, as is the effect on consumers. Efforts by consumers to piggyback on Wal-Mart by filing consumer class actions against Visa, MasterCard and others have been unsuccessful due to the U.S. Supreme Court’s holding in Illinois Brick Co. v. Illinois denying standing to indirect purchasers, such as consumers, to bring actions under the antitrust laws on the theory that inflated costs were passed through to them.

D. Chargeback Rules

Major payment card networks, such as Visa and MasterCard, operate chargeback systems by which transactions can be reversed and the price charged back to the seller through the network, and credited to the consumer’s account. The chargeback systems are governed by network association rules that are contractually binding on both card issuers and merchant acquirers, such as the Visa Operating Regulations. Chargeback rules differ by region.

Typically, chargeback rules provide that if a dispute is of a type that is subject to chargeback, once the consumer has made a good faith attempt to resolve the dispute with

49 Charge cards differ from credit cards in that, at least nominally, the entire balance is due each month, while credit cardholders have the right to revolving credit. Charge cards have never been as popular as credit cards, in part due to the decision by American Express, the primary issuer of charge cards, in the 1950’s and 1960’s to resist the trend toward credit cards and to remain a luxury brand with more stringent credit requirements and lower volume.


52 Ibid. About nine percent of the U.S. population is “unbanked.”


54 Kuykendall, supra, n. 61.


the merchant, the card issuer must investigate. If it determines the consumer’s complaint is justified, the charge to the consumer’s account must be reversed by the card issuer. Under association rules, binding between banks under contract law, the issuer then may pass on the resulting claim for a refund to the merchant acquirer. The merchant acquirer then is entitled to debit the merchant’s account to satisfy that claim. 57

Chargeback may provide the consumer with recourse for certain common problems. “I cancelled the transaction but didn’t get credit on my statement”; “I lost my card [or it was stolen] and someone used it to buy something”; “someone stole my information and card number and used it to buy merchandise on my account or to withdraw money from my bank account” (a/k/a “identity theft”); “I never received the goods”; and “the amount on my statement is wrong” are all common complaints that can be grounds for a chargeback. Grounds for chargebacks are assigned separate “chargeback reason codes”; Visa U.S.A. currently recognizes 24 reason codes, while MasterCard has 18 and Discover has 14. 58

However, the chargeback system is operated by Visa, MasterCard and other associations to resolve disputes between banks and between banks and merchants, not between consumers and merchants. Consumer protection laws generally regulate the consumer-card issuer relationship and the consumer-merchant relationship, but not the multilateral relationship among consumers, banks and merchants that characterizes the credit and debit card systems. The issuer’s right to pass on the claim to the merchant acquirer is a contractual right of the issuer, not a right of the consumer. Issuers have little incentive to pursue chargeback except to the extent they are compelled by law or contract to recredit the consumer’s account.

Laws enacted in the United States, UK and several EU countries that preserve against the card issuer claims and defenses the consumer may possess against the merchant have acted as a spur to card associations and issuers to adopt chargeback rules. In the United States, §170 of the Truth-in-Lending Act (“TILA”) 59 permits credit cardholders to raise against the issuer any claims or defenses they may have against the merchant, on certain conditions: (1) the cardholder made a “good faith attempt” to resolve the dispute with the merchant; (2) the transaction exceeded $50; (3) the initial transaction occurred in the same state or within 100 miles of the cardholder’s billing address; and (4) claims or defenses are limited to the balance remaining on the card when the cardholder first notifies the card issuer or merchant of the claim or defense.

However, laws on reversibility, with the exception of Denmark’s and Israel’s, 60

57 OECD Chargeback Study, supra, at 49-54. The OECD Chargeback Study gives country-by-country descriptions of chargeback regimes for 21 countries and the EU as of 1996. The countries covered are Austria, Australia, Belgium, Canada, Denmark, Finland, France, Germany, Hungary, Japan, Korea, Mexico, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, the UK, and the United States. It should be noted, however, that in most non-OECD countries chargeback rights may be limited to billing errors and may not encompass unauthorized transactions or product-related disputes.
60 Israeli law goes farther than Denmark’s in preserving consumer defenses against issuers of both credit and debit cards in case of defective and non-conforming goods and services. Compare Debit Cards Law,
contain different protections for credit and debit card holders. In the United States and UK, for example, only consumers who pay by credit card and not those who pay by debit card retain against the card issuer product related claims and defenses such as breach of warranty and failure of the goods or services to conform to the contract between the consumer and the merchant or to reasonable standards. In Denmark protections are the same for different types of cards, but do not include preservation of defenses against the card issuer in case of defective and non-conforming goods and services. Without the impetus of a law entitling the consumer to withhold payment from the card issuer in such cases, card issuers have little incentive to initiate chargeback procedures based on these types of claims and defenses, and consumers therefore have no effective remedy against merchants in many cases due to the high transaction costs of pursuing them.

Moreover, chargeback procedures were not designed as an optimal solution for the resolution of disputes between consumers and merchants, but to resolve disputes between issuer banks that issue payment cards and merchant acquirer banks that “acquire” merchants for the payment system and handle their accounts. Consumers lack standing to pursue remedies through the chargeback process. Because chargeback systems are matters of private law between banks, there are at least four features of an adequate consumer-merchant dispute resolution system that they lack: (a) comprehensiveness; (b) transparency; (c) access to information; and (d) competence.

The OECD conducted a major study of chargebacks in 1996. Its conclusion was that “[p]ayment card companies, as financial intermediaries, may be in the best position to address consumer concerns by performing a broad spectrum of ‘chargeback’ redress functions, as they do for example in the United States.” The OECD’s Report on Consumer Protections for Payment Cardholders, issued in 2002, echoed this view. A number of academic studies have also advocated expansion of chargeback procedures as a means of dispute resolution in cyberspace. These studies have been primarily concerned with the use of chargeback procedures to resolve cross-border disputes arising out of electronic commerce.

Certain countries require card associations to enforce a chargeback regime for domestic transactions, and some card associations have voluntarily extended their domestic regime to cover international transactions. These regimes generally cover unauthorized transactions and billing errors, and some also cover product- and service-related disputes. They vary in the extent to which consumer fault affects the consumer’s

5746-1986 (Israel), §§5 and 9, with the Act on Certain Payment Instruments, Act No. 414 of May 31, 2000 (Denmark), §11.


OECD Chargebacks Study, supra.

OECD Chargebacks Study, supra, at 47.

Concerns about theft of card numbers “suggest that…chargebacks…have an important role to play in developing the business-to-consumer electronic marketplace.” OECD Report on Consumer Protections for Payment Cardholders, at 4.


right to reverse the transaction.

The consumer is entitled to reversal of unauthorized transactions in several countries, including Belgium, Canada, Denmark, Finland, Greece, Hungary, Korea, Mexico, Norway, Sweden, the UK and the United States. However, several countries, including Belgium, Denmark, Korea, Norway and Sweden, follow a fault standard which allows liability to shift back to the consumer in certain cases.

Fault standards are of two types. One standard shifts liability back to the consumer if the consumer was at fault in enabling the defrauder to use the card, e.g., by negligently losing the card or giving it to a third party. Such standards may include varying degrees of shifting depending on the degree of fault; for example, in Belgium, there are different ceilings of liability for consumer negligence and for “extreme” negligence. They also may require more than mere negligence, as in Korea where a “serious mistake” is required, and in the UK where “gross negligence” will shift liability back to the consumer.

The other type of fault that can shift liability back to the consumer is delay in notifying the issuer of loss or theft of the card or other circumstances that give rise to a risk of misuse. Standards in some countries are more specific than others; they may state a particular number of days from notice of the loss or theft, they may give a reasonable time; or they apply only upon receipt of a bank statement reflecting unauthorized transactions, shifting liability prospectively for any further unauthorized transactions. The latter is a type of “bank statement” rule, similar to rules in the United States according to which delay in reporting errors or unauthorized transactions after receipt of a checking account or credit card statement reflecting the error or unauthorized transaction can estop the consumer from obtaining a recredit to his or her account.

Billing errors, such as duplicate charges, are another type of chargeback. In general, chargeback regimes require correction of billing errors. Some, as in the United States, require that the consumer’s account be recredited while the error is being investigated, unless the investigation is concluded within a fixed, and brief, time frame.

The other principal type of consumer dispute covered by some chargeback regimes is product- and service-related disputes, such as non-delivery or non-performance by the merchant and delivery of goods in defective condition or in non-conformity with the consumer’s contract with the merchant.

Non-delivery tends to be covered by chargeback regimes, but issuers are less enthusiastic about intervening in disputes over product quality and conformity with the underlying contract, and this is reflected in consumer protection laws. In the United States, the U.K., Austria, Canada, Finland, and Greece who pay by credit card have the right of chargeback against the issuer when goods arrive in defective or non-conformity condition, or when they have any other claims or defenses against the

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69 Ibid.
70 Ibid.
71 UCC §4-406 (giving account holder 90 days after receipt of bank statement to dispute items reflected on it); TILA §161, 15 U.S.C. §1666 (giving credit cardholder 60 days after receipt of credit card statement to report “billing errors”).
merchant that would give them the legal right not to make the payment. Debit card
holders, however, do not have these rights.\textsuperscript{75} Among OECD member countries, only
Denmark’s laws provide debit and credit cardholders equal chargeback rights, and
Denmark does not provide for chargeback in product- and service-related disputes.\textsuperscript{76}

\section{III. Debit and Prepaid Cards in Emerging Economies}

\textbf{A. China: Explosive Growth in Debit Cards as Government Policy}

The People’s Republic of China, apart from Hong Kong, was almost exclusively a
cash economy until very recently, but much has changed. A study published by China
UnionPay (“CUP”) in December 2004 revealed that as of June 2004, 685 million debit
cards had been issued in China,\textsuperscript{77} compared with about 300,000 as of 1990 and about
eight million as of 1995.\textsuperscript{78} The number of debit cards grew 64\% in 2002 alone, and rose
from 544 million to 663 million during 2003.\textsuperscript{79} In comparison, according to the study,
there were 29 million other bank cards in circulation.\textsuperscript{80}

The proliferation of debit cards is the result of a central bank policy called the
“Golden Cards Project,” started in 1993.\textsuperscript{81} Its purpose was to prepare the country’s
infrastructure for a national electronic payments system that would move payments in
China from cash to chip (“Smart”) cards.\textsuperscript{82} To build this infrastructure it was necessary
to establish a national switching system, with sixteen regional centers, to combine the
several incompatible card payments systems already established by Chinese banks.\textsuperscript{83}
Before the switching system, payment cards were difficult to use due to incompatibility
among the systems used by Chinese banks.\textsuperscript{84}

The concentration on issuance of debit cards rather than credit cards was
compelled, in part, by the lack of any national credit information system in China prior to
2004. Moreover, because 92\% of personal consumption expenditure was in cash, it was
logical to focus on displacing cash with debit cards\textsuperscript{85} rather than inducing Chinese

\begin{footnotes}
\item[75] OECD Report on Consumer Protections for Payment Cardholders, supra, at 14-15. Prof. Mann has
argued that this distinction between debit and credit cards should be eliminated on functional grounds.
Mann, supra, at 665.
\item[76] Geva, “Consumer Liability in Unauthorized Electronic Funds Transfers,” supra, at 252. However,
Denmark’s Consumer Ombudsman Guidelines include protections in case of non-delivery. OECD Report
on Consumer Protections for Payment Cardholders, supra, at 15.
\item[77] \textit{Cards Int’l}, 5/13/05, at 5, 2005 WLNR 8716395 (Westlaw).
\item[78] “China Moves Up a Gear,” \textit{Cards Int’l}, 5/22/97, 1997 WLNR 3406271 (Westlaw). Figures for 1994 and
1995 differ; the central bank figures are consistently lower than those reported by the card associations.
Eight million is the number reported by state-owned banks.
\item[80] Compare the CUP
\item[81] “China Set for Radical Payments Transformation,” \textit{Cards Int’l}, 8/21/00, at 11, 2000 WLNR 4029837
(Westlaw); see also, “China learns western ways; Chinese banks’ concentration on debit cards is a move
which should aid growth in card issuance over the next decade,” \textit{Cards Int’l}, 11/28/97, (page unavailable
online), 1997 WLNR 3344379 (Westlaw).
\item[82] Id.
\item[83] Id.
\item[84] He Li-Ping, \textit{op. cit.}
(Westlaw).
\end{footnotes}
consumers to change to an American-style credit card culture. The Golden Payment Card program also was seen as a counterinflationary measure to control the money supply, a function that ruled out card-based credit. Accordingly, the cards are usable at ATM’s and points of sale, but do not have a credit function.

However, issuance of cards does not mean that they are used. Only about three percent of China’s merchants accept payment cards. It is not uncommon for an individual to own six or seven debit cards. “Sleeping cards” are a problem; about two-thirds of the 685 million debit cards issued are unused, and recently the four state-owned banks began to charge annual fees for debit cards in order to cull dormant cards. Other banks, however, have not followed suit. Foreign banks, meanwhile, are forbidden from extending credit to persons other than foreigners until January 1, 2007.

China remains predominantly a cash economy, but according to the Nilson Report, card spending grew to nearly 10% of all retail sales revenue in 2004 from 2.7% in 2001, mostly on debit cards. People’s Bank of China gives a more conservative, but still telling, estimate that cards account for five percent of retail sales volume in 2004, up from two percent in 2001. However, payment cards accounted for as much as 20% of retail sales revenue in the major cities of Beijing and Shanghai.

Credit cards have not gained as much in popularity as debit and prepaid cards, and overwhelmingly they are used for commercial purposes. Of about 29 million credit cards extant in China as of June 2004, 24 million were secured by guarantee deposit accounts. These secured credit card accounts carry extremely high interest rates for overdrafts. Those credit cardholders that do exist in China rarely carry balances from month to month; as in Japan, credit cards are primarily used as cash substitutes in China.

Prepaid cards are also becoming common in China, and the unbanked

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87 “China Gears Up for EMV Migration,” Cards Int’l, 2/7/05, at 8, 2005 WLNR 3082697 (Westlaw) (“According to CUP [China UnionPay], the Chinese cards market had a merchant acceptance footprint of only 3 percent by the end of September 2004….”).
90 Cards Int’l, 5/13/05, at 14, 2005 WLNR 8716446 (Westlaw).
91 Asia Payment Systems, Inc. profile on http://profiles.shazamstocks.com, citing the Nilson Report, a payment card industry newsletter.
92 “China Pacific Insurance to Issue Credit Cards,” Cards Int’l, 3/31/05, at 7, 2005 WLNR 6261362 (Westlaw). Yet a third estimate, apparently by the central bank, placed bank card payments at 10% of all retail sales as early as 1999. See “China Set for Radical Payments Transformation,” supra.
93 “China Pacific Insurance to Issue Credit Cards,” op. cit.
94 SinoCast China Financial Watch December 9, 2004, “Singapore Bank Sets Up Representative Office in Dongguang,” available on Lexis News and Business under “China Country Files”; “China moves up a gear,” Figures for credit cards outstanding in China vary wildly; the People’s Bank of China claims there are as many as 98 million credit cards in circulation in China, while other reports give figures of 29 million and one million, respectively. The 29 million figure comes from the CUP study of December 2004 and is estimated as of June 2004.
95 According to one report, only 5% of Chinese credit cardholders revolve credit, compared with 75% in the U.S. who revolve credit at least once a year. Asia Payment Systems, Inc. profile, op.cit., n. 15.
96 See, e.g., “Debit and Prepay Aligned at MasterCard,” Cards Int’l, 6/7/05, at 20, 2005 WLNR 10149257 (Westlaw) (interview with Rick Lyons, global head of debit and prepaid card strategy at MasterCard; “Some of our largest prepaid programmes are in China….”).
population remains large. Personal bank accounts started in the late 1980’s but became generally available only in April 2000, and checking accounts are generally limited to business and institutional users.\footnote{He Li-Ping, “Facing the WTO Accession: Problems and Challenges in China’s Banking Industry,” Institute of World Economics and Politics, Chinese Academy of Social Sciences (March 2001), \url{http://www.iwep.org.cn/wec/english/articles/2001_03/heliping.htm}.} ATM’s are scarce in many parts of China, and bank customers have to wait in line to deposit and withdraw cash.

The Chinese government’s incentive to encourage electronic payments may have been bolstered by the Asian financial crisis of 1997-1998. Weak domestic consumption was seen as one of the culprits. In 2000, South Korea took more extreme measures to encourage consumption, in the hope of warding off repetition of the crisis. In a debacle reminiscent of the October, 1966 credit card giveaway in Chicago\footnote{See the entertaining account of these events in John C. Weistart, “Consumer Protection in the Credit Card Industry: Federal Legislative Controls,” 70 Mich. L. Rev. 1475, 1478-1481 (1972).} which created the momentum for the enactment of the TILA, more than 57 million credit cards were issued within one year to South Koreans, with lax underwriting.

Recipients did not, for the most part, use the cards for purchases; rather, they went on a binge of drawing cash advances and spent the cash.\footnote{http://www.mastercard-masterindex.com/asiapac/insights/2Q2004/2Q2004Issue01.html.} This credit card boom precipitated a bust in 2002 and a crisis of overindebtedness in South Korea, the effects of which are still reverberating in that country.\footnote{Korea Herald, May 12, 2005, “Korea Exchange profit triples in Q1,” available on Lexis News and Business in South Korea Country Files.} The nation’s second-largest card issuer, LG Card, lost 5.59 trillion won (over five billion U.S. dollars) in a single year.\footnote{Ibid.} Credit card issuance is growing rapidly in Thailand, but stricter underwriting there has resulted in more modest growth in consumer debt.\footnote{See \url{http://www.mastercard-masterindex.com/asiapac/insights/2Q2004/2Q2004Issue01.html}. Credit card growth in Thailand of 45% in 2001, versus 8% the preceding year, was attributed to the Thai government’s capping credit card interest rates together with reduction in fees due to competition among commercial banks. \textit{Id}.}

**B. Russia: Payroll Cards and Overdraft Credit**

The American Chamber of Commerce in Russia describes the use of payment cards as “exploding throughout Russia.”\footnote{103 “Plastic Cards – Coming of Age in Russia!,” available at \url{www.amcham.ru} (last checked April 12, 2005).} About 22 million cards are in circulation and the number is expected to exceed 32 million by the end of 2006.\footnote{Ibid.} However, only six percent of card transactions are retail payments; most cards are payroll cards used to withdraw cash from ATM’s.\footnote{Ibid.} According to the Central Bank of Russia, 97% of the 10.6 million cards issued by Visa and MasterCard in Russia are deferred debit cards linked to bank accounts.\footnote{Russian Business Monitor, March 11, 2005, “Number of Credit Cards Issued in Russia Grew One-Third.” [N.B.: The headline is misleading; the term “credit card” appears to be used sometimes in Russian media as a generic term for payment cards.]} There are also 11.1 million “private label” cards, mostly debit cards, issued by domestic banks such as Sberbank. Of the latter, 4.7 million are “smart
cards,” using chip technology, that can be used for purposes other than payments. Most cards that are not payroll cards, possibly as many as nine million cards, are reportedly “overdraft” cards bearing high fees and only available for small overdrafts of bank accounts. Only about four percent of payment cards in Russia are credit cards.

The principal impetus to payment cards in Russia was the adoption of a flat tax of 13% in 1998, which has substantially cut down on the past practice of “black” salary payments and resulted in direct deposit of salaries into bank accounts, linking many people to the banking system for the first time. However, a major Russian online merchant, Yandex, reports credit cards “have yet to catch on in Russia,” so paid services on the Internet are not a big moneymaker. Bankers describe trying to “develop the payment culture of Russians” to “overcome a psychological barrier” and pay with credit cards, and do not expect credit cards to exceed 30% of all bankcards issued in Russia in 2005. An amendment to Article 212 of the Taxation Code, effective February 1, 2005, gave banks permission to offer an interest-free grace period requirement on credit and overdraft cards – banks are otherwise forbidden from waiving interest on extensions of credit - which may enhance their attractiveness.

C. Brazil: Debit Card Growth and the Cash Economy

According to one recent estimate, Brazil has 135 million debit cards and 45 million credit cards in circulation. About one-third of Brazil’s population now has a bank account. The figure is about 43% for urban residents.

Like China, Brazil is predominantly a cash economy. 77% of urban Brazilians continue to use cash for all payments, even utility bills. Of 70 billion dollars (U.S.) in annual private consumption, 15% is paid electronically. Checks never were a major way to make payments in Brazil; only 61% of bank account holders – about 20% of the population – even have access to checking facilities today, and this figure was far lower several years ago when credit cards were being introduced.

Debit card transactions are growing in Brazil by 60% annually as opposed to 20% annual growth in credit card transactions. Meanwhile, check volume is decreasing by 3.4% per year. While debit cards help preserve the predominant cash economy,

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107 Ibid.
108 RIA Novosti, ACC-No. 5499347, “Foreign Banks Fight for Clients in Russia.”
109 Moscow News, March 30, 2005. Only about 5% of online sales are made using cards; an estimated 85% of online sales are paid C.O.D. The Economist Intelligence Unit, “Doing ebusiness in Russia,” available at www.ebusiness.com.
110 Russian Business Monitor, March 11, 2005, supra.
114 Id., par. 45.
115 World Bank Report No. 27773-BR, op.cit. n. 7, par. 46.
116 Latin Trade, op.cit., n. 9.
117 World Bank Report No. 27773-BR, op.cit. n. 7, par. 45.
118 Latin Trade, op.cit., n. 9.
119 Ibid.
however, problems of overindebtedness involving credit card use are growing in Brazil. About 25% of Brazilian consumer bankruptcy cases involve credit card debts.120

While Brazil, the world’s ninth largest economy, represents by far the largest market for e-commerce in Latin America, exceeding 3.8 billion USD in e-commerce in 2003, and has the largest number of Internet users in the region (14 million as of the end of 2003),121 as of 2001 only about two-thirds of Latin Americans who bought online were using any kind of payment card to make their purchase,122 while over 90% of Americans and Western Europeans use credit cards to make online purchases. Also, the number of mobile telephone users, about 37.4 million as of the end of 2003, far exceeds the number of Internet users, and 10 million Brazilian consumers are expected to be using mobile payment systems by the end of 2005.123

D. Mexico: Prepaid Cards for the Unbanked

Mexico, the second largest market in Latin America, displays the same pattern as Brazil of the dominance of the cash economy and debit cards. Fewer Mexicans than Brazilians are “banked”; only 25% of urban Mexicans have a bank account.124 However, 75% of economically active Mexicans carry a debit or prepaid card, compared with just 25% who carry a credit card.125 Only 12% of purchases in Mexico are made with credit cards,126 and only 160,000 businesses in the country of 105 million people accept credit cards.127 To make it easier for lower-income people to use cards, MasterCard in 2004 began offering prepaid cards in Mexico.128

The spread of debit and prepaid cards has to a great extent coincided with the spread of mobile telephones, and the prepaid phone card is often the first exposure of consumers to electronic payments. As in Brazil, mobile telephones dominate the Mexican telephone market; there are over 28 million of them, compared with fewer than half as many fixed lines. The dominant way to pay for telephone service in Mexico is with prepaid phone cards; over 23 million of the 28 million mobile subscribers pay for

123 Ibid., at 16.
124 Ibid., at 16.
125 Latin Trade, op.cit. n. 9.
126 Ibid. 127 Ibid.; population figure from http://www.infoplease.com/ipa/A0004379.html
128 Latin Trade, op.cit. n. 9. The author is informed by Visa that it is doing the same.
service in this way.\textsuperscript{129} The average denomination of phone card is $10 US, yet the average expenditure is about $12 US per month.\textsuperscript{130} This means that the average subscriber is buying a new phone card more than once a month. TelCel, the dominant cellular telephone service provider, maintains over 400,000 points of sale for phone cards, including mom-and-pop stores and street vendors, to satisfy the demand.\textsuperscript{131}

E. Southern Africa: Mobile Payments and Smart Cards

Nowhere has cell phone use grown more than in Africa over the past five years.\textsuperscript{132} As many as 97% of people surveyed in Tanzania said they had access to a mobile phone, though only 28% had access to a landline.\textsuperscript{133} Cell phones are revolutionizing African economies by overcoming barriers created by poor transportation networks, postal systems and fixed telephone systems.

Cell phones are starting to be used to make mobile payments in southern Africa. In Zambia, for example, 300 small businesses that sell Coca Cola have begun using cell phones to pay for their inventory.\textsuperscript{134} In Zambia, too, gasoline stations, dry cleaners, restaurants, and scores of other retail shops let customers pay by cell phone.\textsuperscript{135}

Only about forty percent of the population of the Republic of South Africa has a bank account,\textsuperscript{136} but the SIM cards used in the GSM cellular phones that are standard in South Africa are “smart cards” that contain microchips and are capable of performing payment functions.\textsuperscript{137} As of January 1, 2005, all new debit and credit cards issued in South Africa are required to be smart cards, and all pension payments handled by the South African Department of Social Welfare will move to a smart card system from 2005 onward.\textsuperscript{138} Visa cards are growing by about 43% per year in South Africa,\textsuperscript{139} but debit cards are growing more than credit cards, as the lack of bank accounts and lack of creditworthiness of much of the population limits the issuance of credit cards.\textsuperscript{140}

\textsuperscript{130} Ibid.
\textsuperscript{131} Ibid.
\textsuperscript{132} Telecompaper, March 9, 2005, “Mobile subs in Africa grow faster than rest of the world,” www.telecompaper.com/index.asp?location=http%3A//www.telecompaper.com/site/news_TA.asp%3ftype%3Dpressrelease%26id%3D70566%26nr%3D056 (reporting research by the Centre for Economic Policy Research, the Department for International Development and Vodafone Group).
\textsuperscript{133} Ibid.
\textsuperscript{134} The Economist, “Calling Across the Divide,” March 12, 2005, at 74.
\textsuperscript{135} Ibid.
\textsuperscript{138} Ibid.
F. India: Debit Cards and Access to Bank Services

In India, debit cards have become immensely popular, while credit card penetration is low and credit card holders tend to pay their balances in full each month. One reason may be that Indians, despite their generally impoverished condition, have a relatively high rate of owning a bank account. A survey of residents of Uttar Pradesh and rural Andhra Pradesh revealed that 47.5% had bank accounts. The high population density in India, even in rural areas, means that large numbers of people live close to a bank branch. Thus, while the average population per branch in Brazil was 9,331 and the area per branch was 470 sq. km., the corresponding figures in India were 14,888 and 44 sq. km., respectively.

Mobile payments, however, have not yet become common in India as they have in southern Africa. Sumitomo Bank, together with a Chicago-based company, has just recently introduced a “mobile electronic wallet” as a service to its customers, but it is a luxury item for the affluent. Elsewhere in Asia, however, particularly in South Korea, mobile payments are rapidly increasing in use.

However, globally mobile payments are hampered by the slow speeds at which most mobile telecommunications networks still operate, and by high per-minute charges for use of cell phones in developing countries, especially where mobile telephone service suffers from monopolistic or oligopolistic practices. As G3 packet switched data networks, the newest and fastest GSM mobile telephone systems, become more widespread and as calling charges go down, mobile payments are expected to rapidly gain popularity as a way to make small payments, particularly in high crime areas where carrying cash and payment cards presents a risk of theft.

IV. Debit and Prepaid Cards in Developed Economies

A. Marginalization of Credit Card Culture

As debit and prepaid cards proliferate globally, the American and Canadian addiction to credit cards is increasingly marginalized. Meanwhile, Western and Central Europe and Scandinavia are divided into two payment cultures. Some countries like Germany rely heavily on giros, which are deferred debit transactions, while in others such as France and the United Kingdom credit cards have a larger profile, though not

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142 Stijn Claessens, op. cit. n. 19.
143 Ibid.
145 Author’s interview with Lyn Boxall, Executive Vice President and Regional Legal Counsel of Visa International, Asia Pacific Region, April 13, 2005. (Notes on file with the author.)
147 Giros are a means by which a consumer authorizes a merchant to draw funds from the consumer’s deposits at a bank or other financial institution (e.g., funds deposited with the local post office) to make a payment.
nearly as large as in North America.

In Japan, credit card use also exceeds debit and prepaid card use. However, Japan maintains the institution of ikkai barai, loosely translated as “payment in one cycle.” In about 85% of Japanese credit card transactions the card is used to arrange a prescheduled debit transfer as in the case of the giro in Europe. At the cash register, the consumer makes the decision that the transaction will be paid to the issuer in full on the next monthly payment date, and authorizes a debit transfer out of his or her account to pay the transaction shortly after the last day of the payment cycle. “Because the cardholder at the point of purchase already has given the issuer access to a specified amount of funds in a specified account, the transaction resembles much more closely an American debit card transaction than an American credit card transaction.” Apart from Japan and the credit card giveaway in South Korea, nowhere in Asia or other developing regions are credit cards as widely used as debit and prepaid cards.

The failure to recognize the anomalous nature of American and Canadian payment culture is a flaw in the work of the leading American scholar on payment systems, Ronald Mann. In a 2002 article Prof. Mann attempted to explain why Japanese consumers use both credit cards and debit cards far less than American consumers, and why when they use credit cards, the payment arrangements tend to resemble a deferred debit transfer rather than a loan, with the balance automatically deducted from the cardholder’s bank account at the end of a billing cycle.

Calling the credit card “the dominant card-based payment system in the world,” Prof. Mann concluded that the credit card is “likely to languish as a relatively minor system” in Japan, because “[f]inancial systems that develop in one country cannot be transplanted without change to other countries that have different institutional settings.” Yet, even in 2002, credit cards were not the dominant card-based payment system outside North America and a few countries in Western Europe. The immensity of the American economy obscures the status of Americans as outliers in relying on credit cards as a source of financing instead of convenience.

Moreover, payments by direct debit transfer in Japan dwarf the volume of payments by credit card. 53% of all non-cash payments in 1990, and 51% in 1997, in Japan were by direct debit transfer compared with 9% and 10% of payments by credit card and 9% and 5% by check in those years, respectively. Direct debit transfer – authorizing a merchant to debit one’s bank account – is also a dominant payment method in Germany – the giro - and is common in the UK, France and Italy. The dominance of direct debit and ikkai barai is functionally consistent with payment methods common both in Japan and Europe, but differs from the use of credit cards in North America.

Japan is not an anomaly with a unique payment culture. Rather, there is a functional equivalence between Japanese use of credit cards as “convenience cards,” payment by direct debit transfer, and the use of debit and prepaid cards for convenience

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148 See Ronald Mann, “Credit Cards and Debit Cards in the United States and Japan,” 55 Vand. L. Rev. 1055 (May 2002).
149 Id.
150 Id., at 1071.
151 Id., at 1108.
152 BIS Retail Payments Study, supra, at 26.
153 Evans and Schmalensee, supra, at 44.
in much of the world outside North America.\textsuperscript{154} Japanese cardholders prefer to have the option of rolling over a balance on their cards, an option that debit cardholders in China, Russia or India do not yet have due to both a lack of credit information systems and their relatively impoverished circumstances; but the Japanese exercise that option relatively infrequently. Moreover, Prof. Mann himself has more recently noted the trend in the United States toward (or back to) use of credit cards for convenience rather than as a source of financing.\textsuperscript{155}

In 2005, nowhere other than in the United States and, arguably, Canada do credit cards still predominate among card-based payment systems.\textsuperscript{156} Even in the UK, where payment habits before the advent of payment cards were more similar to those in the United States than in continental Europe, the debit card payment volume of £108 billion in 2003 exceeded credit card volume of about £100 billion.\textsuperscript{157} Given the trend in favor of debit card use even in the United States and Canada, they might not continue to predominate there, either. However, if Americans are unable to substantially change their payment habits, it is they who will remain out of step with the rest of the world in their use of credit cards.

As long ago as 1999 – a long time when discussing payment cards - the Bank for International Settlements study of the G10 countries and Australia recognized the trend toward debit card dominance: “[O]nly in Canada, Japan and the United States are credit card payments still a significantly greater percentage of non-cash payments than debit cards.”\textsuperscript{158} Prof. Mann’s study of the Japanese use of credit cards demonstrates that even in Japan, the dominance of the credit card as a non-cash payment method is illusory.\textsuperscript{159}

**B. Europe: Checks and Giros**

One European scholar has summed up payment habits in Europe as follows: “As far as payment habits are concerned, traditionally there were two groups of countries in Europe. On one side, Germany and the Netherlands characterized by large use of cash in retail payments and transfers for remote transactions, and France and the UK on the other side, where typically less [sic] retail payments were in cash, cheques were also largely used.”\textsuperscript{160} In her view, checks “actually constituted an intermediate step between cash and

\textsuperscript{154} See Sections III and IV.B.
\textsuperscript{155} See Mann, supra at 653.
\textsuperscript{156} Id.
\textsuperscript{158} Bank for International Settlements, Committee on Payment and Settlement Systems, “Retail Payments in Selected Countries: a Comparative Study,” op.cit. n. 25, at 9. Note that the BIS study was addressing the G10 countries and Australia, in most of which there are significant numbers of credit cardholders. It did not include developing countries such as China, in which there are very few credit card holders and massive numbers of debit cardholders.
\textsuperscript{159} See Bank for International Settlements study, op.cit. n. 5, at 9.
Credit cards came into regular use in Europe not long after they did in the United States, in the 1960’s, but did not receive the same degree of acceptance. The difference in acceptance has much to do with differences in preexisting payment traditions: the check in the United States, the United Kingdom, Canada, France and Italy, direct credit (account to account or “A2A”) and direct debit elsewhere in Europe.

In Germany, the Benelux countries, Switzerland and Scandinavia, unlike the U.S., the most common consumer payment system is the *giro*, a form of payment instruction that traditionally was in hard copy like a check. In the *giro* the consumer can authorize a merchant, such as a utility company, to withdraw payments from her bank account as a direct debit transfer. *Giros* are commonly used to pay utility bills, telephone bills, taxes, and other recurring obligations, and they are used in other countries such as Singapore as well as in Europe. *Giros* could also take the form of a credit transfer; for example, a common, and early, form of giro was the “postal giro” in which an amount was deposited by the consumer at the Post Office together with instructions to pay creditors. In the mid-1960’s, while American consumers were opening checking accounts in record numbers and beginning to open credit card accounts, many European merchants were automating their systems so that consumers could actuate a *giro* electronically at the point of sale. In areas where the *giro* was well-established, neither checks nor credit cards became popular.

Two studies from 1999 and 2001 illustrate this point; and it must be borne in mind that if anything, checks see greater use in Europe, for example, than they did fifty years ago. While in the U.S. as of 2001, almost 60% of non-cash payment transactions in number were by check, only in France among the other G7 countries did the percentage exceed 30%. While 74% of non-cash payment volume in the U.S. as of 1997 was by check, and the figure had been as high as 82% six years earlier, in no other country among the G10 countries and Australia did it exceed France’s 46%. Other than in France, and Australia at 41%, in no other country among the G10 and Australia did checks exceed 32% of non-cash payment volume, and in many checks are almost unknown.

Results of the Bank for International Settlements 1999 study, based on 1990 and 1997 data, are shown in the chart below:

<table>
<thead>
<tr>
<th></th>
<th>Credit Card</th>
<th>Debit Card</th>
<th>Check</th>
<th>Credit Transfer</th>
<th>Direct Debit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>11/14</td>
<td>4/20</td>
<td>56/41</td>
<td>21/20</td>
<td>8/5</td>
</tr>
<tr>
<td>Belgium</td>
<td>2/3</td>
<td>8/19</td>
<td>24/8</td>
<td>58/60</td>
<td>8/10</td>
</tr>
<tr>
<td>Canada</td>
<td>30/31</td>
<td>0/22</td>
<td>63/31</td>
<td>4/9</td>
<td>3/7</td>
</tr>
</tbody>
</table>

161 Id., at 2.
162 Evans and Schmalensee, at 44.
164 Data are taken from BIS Retail Payments Study, Chart 9, at 25-27.
France | 0/0 | 14/22 | 60/46 | 16/18 | 10/14  
---|---|---|---|---|---  
Germany | 1/2 | 0/2 | 10/6 | 52/48 | 42/37  
Italy | 1/7 | 0/5 | 46/32 | 50/46 | 3/10  
Japan | 9/10 | 0/0 | 9/5 | 29/34 | 53/51  
Netherlands | 0/0 | 2/18 | 15/3 | 62/52 | 21/27  
Sweden | 0/1 | 5/17 | 15/2 | 73/76 | 4/7  
Switzerland | 4/4 | 3/9 | 6/1 | 85/72 | 2/4  
UK | 11/13 | 3/18 | 52/31 | 21/19 | 13/19  
US | 16/19 | 0/4 | 82/74 | 1/2 | 1/1  

Prof. Laura Rinaldi calls checks an “intermediate step between cash and cards.”¹⁶⁵ There is an intuitive logic to this theory. The credit card system depends on the cardholder’s paying the card issuer by another means of payment. One cannot pay off a credit card with another credit card payment, except through a balance transfer, and at some point, there has to be a way of paying the bill.

However, in the case of a country like Germany where remote transactions traditionally were paid by giro, checks would be an unnecessary step, as giro would be more secure for the merchant and in a jurisdiction with a non-par checking system, perhaps less costly. Nor would an evolution from giro to credit card make sense, unless the consumer intends to carry a balance as a loan; using a credit card would then require a further payment transaction to pay the credit card invoice, either a check or a giro. In a cash-and-carry culture in which consumers normally pay either in cash or by a direct debit or credit transfer – i.e., in which one’s intent was to commit to transfer funds to the card issuer as payment in full, either immediately or at the end of the month – as in Japan and Germany, paying by credit card would serve no purpose other than, perhaps, reallocating some of the burden of processing from the merchant to the card issuer. In other words, while an evolutionary progression from cash to checks to credit cards makes sense, a progression from cash to giro to cards would not.

Moreover, if credit cards become part of payment culture more readily in countries in which consumers first become accustomed to paying bills by check, one would expect to see a pattern of usage of checks and credit cards. Yet, in France, for example, checks are the dominant method of payment, yet credit card usage is extremely low, while debit card usage is increasing.¹⁶⁶ It is sometimes assumed that the absence of checks in a national payment culture makes it easy for payment cards to make inroads in a consumer population. Bankers, including the Federal Reserve, often conceive of checks as a competing payment system. However, evidence from Spain does not bear this out. Consumer payments by check in Spain have never been as widespread as in Italy, the UK and France.¹⁶⁷ “Partly because of that,” said a leading European Commission-funded study, “Spain entered the stage of payment cards quickly.”¹⁶⁸ Yet, when Visa Espana and Spanish banks installed “abundant” POS terminals and issued a large number of payment cards, they found that

¹⁶⁵ Rinaldi, supra, at n. 81.
¹⁶⁶ Table 2, supra.
¹⁶⁷ ESTO EPS Study, supra, at 85.
¹⁶⁸ Ibid.
consumers were not using the cards – they continued to use cash.\(^{169}\)

C. The North American Credit Card Habit

1. Explaining the Habit

If acquiring a check-writing habit pre-ordains acceptance of credit cards, the United States provides a good example. Americans acquired a check-writing habit with the assistance of the Federal Reserve Board which subsidized the costs of the U.S. check clearing and collection system from 1918 to 1980. Beginning in 1915, the Federal Reserve Board set up a national check clearing and collection system. Obviously there were substantial costs of this system, totaling up to 500 million dollars per year, but from 1918 to 1980 the U.S. Federal Reserve Board elected to have the American taxpayer absorb those costs by operating the system free of cost to member banks in order to maintain check collection at par.\(^{170}\) Thus, a bank customer who deposited a check for $100 would, in fact, be credited with $100 in his or her account, not $100 minus a fee for the cost of clearing and collecting the check.

The use of checks grew enormously in the post-war United States, and checking account customers were among the first to receive credit cards. In 1966 when Bank of America decided to “go national” with the BankAmericard, predecessor to Visa, competing banks in Chicago sent four million unsolicited credit cards to their existing checking account customers, as well as other consumers they could identify, in an effort to build their credit card business.\(^{171}\) It was the massive fraud resulting from this incident that provided the initial impetus for TILA provisions prohibiting the distribution of unsolicited credit cards.

Prof. Mann, in his recent Georgetown Law Journal article,\(^{172}\) has pointed to the increasing use of credit cards as convenience cards. This is not new, but a return to pre-1983 habits. Prior to about 1983 most American credit cardholders carried relatively low balances, and they were stable or declined over time.\(^{173}\) However, after 1983 in the

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\(^{169}\) Ibid.

\(^{170}\) Evans and Schmalensee, supra, at 42.

\(^{171}\) John C. Weistart, “Consumer Protection in the Credit Card Industry: Federal Legislative Controls.” 70 Mich. L. Rev. 1475, 1478-1481 (1972). Weistart describes how upon learning of Bank of America’s plans shortly before they were to go into effect in the fall of 1966, a group of five Chicago banks, including Continental Illinois and Harris Bank, that had planned to issue a competing card called the Midwest Bank Card hurriedly tried to beat Bank of America to the punch. Lacking time to screen recipients, in the first weeks of October 1966 the banks sent over four million unsolicited credit cards not only to their customers, but to virtually anyone whose name they could obtain in the Chicago area. One man received seven cards from a single bank in one day, and another received 18 cards in a three-day period. Young children received cards; postal clerks stole unmailed cards and sold them on the black market. The result was chaos and massive fraud. See also David S. Evans and Richard Schmalensee, Paying With Plastic; the Digital Revolution in Buying and Borrowing (Cambridge, Mass.: MIT Press, 2005) (2d ed.) (“Evans and Schmalensee”), 72-73.

\(^{172}\) Mann, supra, at 656.

\(^{173}\) See Business Week (Industrial Edition), October 18, 1982, at 30, Westlaw 1982 WLNR 371774 (“The US consumer debt load in relation to income has fallen to its lowest point in 20-30 years….Although revolving credit, mostly credit cards, accounts for 40-45% of total consumer credit extensions and 66% of all new non-auto credit, it accounts for only 19% of total debt outstanding. C.B. Kenney [a Shearson/American Express economist] sees the reason being that consumers use a lot of credit as a
United States average credit card balances surged. As interest rates started to come down in 1983, consumers ran up credit card debt, as shown in Table 2. The termination of Federal Reserve subsidization of the check clearing and settlement system in 1980 also, by 1983, resulted in the imposition of checking account fees. Meanwhile, interest-bearing money market accounts (“NOW accounts”) became available as a way of avoiding the fees and earning interest on deposits that were seen as rapidly losing value due to high inflation; however, those accounts were limited to two checks per month. Thus, there was an economic incentive for consumers to charge purchases, then pay for them with a check drawn on a money-market account.

Table 2: Credit Card Balances and Interest Rates in the United States

<table>
<thead>
<tr>
<th>Year</th>
<th>Average balance per card with an active balance</th>
<th>% carrying a balance</th>
<th>Average most common interest rate on credit cards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969</td>
<td>$776(^{178})</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1983</td>
<td>$751(^{179})</td>
<td>56.6</td>
<td>18.78</td>
</tr>
<tr>
<td>1989</td>
<td>$1362</td>
<td>57.9</td>
<td>18.02</td>
</tr>
<tr>
<td>1992</td>
<td>$1366</td>
<td>59.0</td>
<td>17.78</td>
</tr>
<tr>
<td>1995</td>
<td>$1852</td>
<td>61.9</td>
<td>15.79</td>
</tr>
</tbody>
</table>

174 Evans and Schmalensee, at 76-77.
176 Source: Bird, Hagstrom and Wild, infra at n. 25, Table 1. Their data were taken from the Federal Reserve Board, Survey of Consumer Finances.
docs/rptcongress/creditcard/1997/default.htm.
178 $187, adjusted to real 1995 dollars using Bureau of Labor Statistics website. Source: 4/3/70 N.Y. Times (Abstracts) 51, Westlaw 1970 WLNR 4164. Data were for national banks only, issued by the Comptroller of the Currency. There were 10.5 million credit cards in circulation.
While in the 1977-83 period banks had cut back on issuing new credit cards, as the economy improved in the 1980’s, banks loosened underwriting criteria and consumers flocked in droves, attracted by interest rates that were fairly nominal when adjusted for inflation which peaked in 1981 at around 13%. Accordingly, from 1980 to June 1985, the average outstanding balance on active Visa and MasterCard credit card accounts increased 28% in real (inflation-adjusted) dollars, while the number of accounts grew by 41%.

After 1983, however, the cost of funds to banks dropped from 13.5% to three percent by the mid-1990’s, yet credit card interest rates remained virtually unaffected. As credit card balances rose in the mid-1980’s, banks showed an abrupt increase in the profitability of their credit card operations, and credit card interest rates displayed reduced sensitivity to changes in the cost of funds. Various attempts have been made to explain why competition among the more than 4,000 card issuing banks did not lead credit card interest rates to follow these decreases in the cost of funds. Evans and Schmalensee argue that issuer profits in fact fell during the 1990’s and that the high interest rates were therefore justified by higher costs other than the cost of funds, such as charge-offs due to consumer bankruptcies. Lawrence Ausubel posited that “many consumers systematically underestimate the extent of their current and future credit card borrowing and, using these underestimates, make suboptimal decisions regarding the choice and usage of credit cards.”

A consumer who thinks she can pay off her credit card balance whenever she wants to will be less inclined to worry about the interest rate. The American consumer was abetted in making her change of payment habits permanent by the escalation in home values of the late 1980’s and 1990’s. As long as refinancing home mortgages and thereby paying off accumulated credit card balances was an option, consumers did not

180 Evans and Schmalensee, supra, at 97.
181 This is dramatically shown in Figure 4.3 in Evans and Schmalensee, supra, at 97. The only exception was the lowest income quintile of the population. See also Robert D. Manning, Credit Card Nation: the Consequences of America’s Addiction to Credit (New York: Basic Books, 2000).
183 Christopher DeMuth, “The Case Against Credit Card Interest Rate Regulation,” 3 Yale J. on Reg. 201 (1986), at n. 39. Apparently either there was a dip in, or in years leading up to, 1980 or most of the 28% increase was between 1983 and 1985, given the statistics shown in Table 2.
184 Lawrence M. Ausubel, “Credit Card Defaults, Credit Card Profits, and Bankruptcy,” 71 Am. Bankr. L. J. 249, 260-261 (1997). It was an inopportune moment for the American consumer to begin to run up high credit card balances. In 1979, the U.S. Supreme Court had held in Marquette National Bank v. First of Omaha Service Corp., 439 U.S. 299, 99 S.Ct. 540, 58 L.Ed.2d 534 (1979), that under the National Bank Act, 12 U.S.C. §85, the interest rate limit set by an issuer’s resident state overrode usury limits imposed by other states in which the issuer did business. By 1982, credit card issuers had established residency for purposes of the National Bank Act in states such as Delaware and South Dakota in which usury laws were lenient or nonexistent. Evans and Schmalensee, supra, at 69-70. See the account of Citicorp’s move to South Dakota late in 1980 and 1981 in The Economist, November 29, 1980, at 73. South Dakota raised its usury ceiling to 19.8% in March 1979; New York’s lifting the ceiling altogether in November 1980 came too late to keep Citicorp’s credit card operations in Manhattan.
worry too much as their balances grew.\footnote{See Ben Weberman, “Second Thoughts on Second Mortgages,” \textit{Forbes}, October 5, 1987, at 42 (citing banker’s complaints that home equity lending was cannibalizing more profitable credit card lending).}

### 2. Resistance to Debit Cards

While differences between American payment habits and payment habits elsewhere may have been shaped by historical factors such as the preexisting use of checks or giros and inflation and the costs of credit at a crucial stage in the development of consumer payment habits, it is the fee structure that shaped early resistance to debit cards in the United States. Given the choice between being charged a $1.00 or $1.50 fee by their bank to use a debit card at a point of sale and no fee to use a credit card, consumers chose the credit card, even when they had a revolving balance and would be charged interest in excess of the fee they avoided. In contrast, debit card fees at the point of sale are relatively unusual in Europe, and only a small percentage of prepaid cards involve payment of a per-transaction fee.

This phenomenon of incurring interest-bearing debt in order to avoid imposition of an immediate fee is consistent with what behavioral economists call “hyperbolic discounting,” the tendency for consumers to have higher discount rates for events perceived as likely to occur far in the future than they do for events likely to occur in the immediate future.\footnote{See Mann, \textit{supra}, at 651-652; Stefano Dellavigna & Ulrike Malmendier, Contract Design and Self-Control: Theory and Evidence, 119 \textit{Q. J. Econ.} 353 (2004); Shane Frederick \textit{et al.}, Time Discounting and Time Preference: A Critical Review, 40 \textit{J. Econ. Lit.} 351, 360 (2002); Jonathan Gruber & Botond Koszegi, Is Addiction “Rational”? Theory and Evidence, 116 \textit{Q. J. Econ.} 1261 (2001); George Lowenstein & Richard H. Thaler, Anomalies: Intertemporal Choice, \textit{J. Econ. Persp.}, Fall 1989, at 181, 184-87 (discussing dynamic inconsistency in discount rates); Richard H. Thaler, Some Empirical Evidence on Dynamic Inconsistency, 8 \textit{Econ. Letters} 201, 202 (1981).} One may never have to pay interest if the credit card balance is paid currently, and in any event it is not incurred immediately and the amount is not known, whereas the $1.00 or $1.50 fee imposed by one’s bank for use of a debit card at the point of sale or at another bank’s ATM is charged immediately and is in a known or at least, predictable amount.

However, since 2000, debit card payment volumes and cards in circulation have grown rapidly in the United States. From 2000 to 2003, use of debit cards in the United States grew 23.5% per year compared with 6.7% for credit cards,\footnote{2004 Federal Reserve Payments Study, December 15, 2004, at 8, available at http://www.frbservices.org/Retail/pdf/2004PaymentResearchReport.pdf.} totaling 15.6 billion debit card transactions compared with 19 billion credit card transactions in 2003.\footnote{Ibid.} Debit cards today (2005) are used in about one third of all in-store transactions in the United States, compared with 20% four years ago.\footnote{Ibid.} Per household debit card spending, $5,322 as of 2003, are expected to nearly double by 2008.\footnote{Lavonne Kuykendall, \textit{supra}, n. 136.} However, debit card payment volume remained less than half of credit card volume as of 2004.\footnote{2004 Federal Reserve Payments Study, \textit{supra}.}

Debit cards have fared better still in Canada. In Canada in 2002, there were already more debit card transactions than credit card transactions, but credit card
purchases still totaled CD 135.7 billion compared to debit card use of CD 104.9 billion. However, debit card fraud is also higher in Canada than in the United States.193

V. Consumer Protection Policy Issues


Prof. Mann, in his recent Georgetown Law Journal article, asserts, “At its heart, payments law must resolve four fundamental questions: who bears the risk of unauthorized payments; what must be done about claims of error; when payments are completed so that they discharge the underlying liability; and when they can be reversed. The first three questions are categorically different from the last because they often should be resolved based on the nature of the underlying technology…”195 Mann goes on to argue that reversibility of payment card transactions is different, due to the inequality of bargaining power between consumers and merchants, and that the TILA legal regime designed to protect consumers against making imprudent borrowing decisions, largely through disclosure requirements, should be reconsidered, as to payment cards, as a means of “redressing an imbalance of leverage.”196

Parenthetically, it is odd that Prof. Mann omits any mention of regulation of fees and penalties charged by banks for the use of payment cards. In 2004, the highest percentage of all complaints to the Federal Reserve regarding state member banks concerned card fees and penalties.197 The same is true of complaints about banks in the U.K.198 To exclude laws (or the lack thereof) regarding the cost of making a payment from “payments law” is analogous to excluding wage-hour laws, governing the cost of labor, from “employment law,” or excluding rules regarding brokerage commissions and the pricing of securities offerings from “securities law.”

Prof. Mann is not the first to call for reform of reversibility rules in payment card transactions.199 One EC study said, “In relation to debit cards, charge back rules are necessary, providing the consumer with the right to have the money transferred back on

194 See Note 28, supra.
195 Mann, supra, at 653.
196 Ibid.
his demand, not only in case of fraud, but also where he avails himself of the right of withdrawal [from the contract with the merchant].” The same study cited the need for an “open and flexible regime” of consumer protection that could adapt to new payment methods as they developed, and the consumer’s lack of anonymity online as mandating privacy concerns. However, the study also emphasized the need for legislation rather than reliance on self-regulation.

The proliferation of debit and prepaid cards in developing countries has been met with regulatory inaction in most places. If the governments of developing countries such as China, Brazil and India fail to establish regimes to regulate payment cards and, in Prof. Mann’s words, “redress an imbalance of leverage,” then the question is whether the payment card industry can be expected to do so itself as a set of private lawmakers.

Whether an imbalance of leverage with respect to reversibility will be redressed voluntarily depends to some degree on the relationship between the perceived difficulty of obtaining new merchants for the payment card association and the perceived difficulty of attracting consumers to apply for and to use their cards.

There has been little difficulty in most countries in attracting consumers to obtain debit and prepaid cards, as discussed above. In China, the process has been hastened by government intervention. With respect to credit cards, a key limiting factor in most parts of the developing world, with the notable exception of the South Korean credit card debacle, has been banks’ unwillingness to issue them, largely due to the lack of credit information systems. Moreover, as discussed above, consumers in most countries, and even the majority of consumers in the U.S., tend to use credit cards for convenience rather than run up an unpaid balance. Debit and prepaid cards do not present (at least, not in the absence of an overdraft line of credit) an opportunity to indulge in overindebtedness.

The primary limitation on the use of debit cards is the reluctance of merchants to make the investment in equipment necessary to accept payment cards. That is why there are so many “sleeping cards” in China; that is why South Koreans used their sudden credit card wealth to take cash advances and spent the cash; that is why the proliferation of debit cards in Brazil has not reduced the use of cash to the same extent as the proliferation of credit cards did in the United States.

As long as private lawmakers in banks and card associations perceive that, on a global level, consumers are more anxious to obtain and use payment cards than merchants are to sign up and install the necessary equipment, their tendency will be to make private laws that are favorable to merchants rather than consumers.

Another major factor is that it is banks and merchants, not consumers, that comprise the membership of card associations, and the private lawmakers are bankers and their attorneys. It is not surprising that association rules favor members of the association over consumers, who are outsiders to the network.

The status of consumers as outsiders to the card association damages both the transparency and legitimacy of self-regulation. Because the Visa and MasterCard

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200 EC Study on Consumer Law and the Information Society, supra, at 75. The EC Distance Selling Directive, Directive 97/7EC of the European Parliament and of the Council of 20 May 1997 on the Protection of Consumers in respect of Distance Contracts, gives a limited right of withdrawal for a period of days, but does not address the broader issues of preservation of claims and defenses and dispute resolution through the chargeback system.

201 EC Study on Consumer Law and the Information Society, supra, at 75.
associations regard chargeback procedures as ways of allocating losses between banks, and not between consumers and merchants, they decline to disclose the rules to that govern chargeback procedures to anyone not affiliated with a member financial institution or regulatory agency. The rationale given by Visa USA is that the rules are “proprietary and confidential information” in the nature of trade secrets, valuable to someone who might want to start a competing system.

This rationale is both implausible and insufficient. It is implausible, because there are not likely to be any major new credit and debit card networks coming on the scene that would significantly benefit from copying Visa’s and MasterCard’s chargeback procedures. Other network associations such as the National Automated Clearing House Association publish their rules and procedures and freely sell copies to non-members. It is insufficient, because consumers have an interest in the rules that govern chargebacks, since they affect the willingness of card issuers to recredit consumers’ accounts. Issuers frequently recredit accounts even when not obligated to do so by consumer protection laws, but it is important that such recrediting be done in a fair and non-discriminatory fashion in accordance with rules and following adequate investigation of the consumer’s complaint.

Besides lack of transparency, another defect in chargeback procedures is their unfairness to the consumer. Again, because network associations regard chargeback procedures as a private matter between their member banks rather than a consumer protection system, the procedures are not designed to ensure that the consumer’s voice is heard or that her interests are adequately represented.

The primary unfairness of the chargeback system to consumers lies in the fact that in case of a dispute, nothing requires the issuer to do more than take the merchant’s word for what happened. As a practical matter, this means that if the facts are in material dispute, the issuer is likely to restore the charge to the consumer’s bill, on the theory that the consumer has no defense to liability to the merchant, and leave it to the consumer to pursue other remedies against the merchant – not an effective means of redress in many cases.

Although American consumers have the right under TILA §170, subject to certain limitations, to withhold payment from the issuing bank if they have paid with a credit card and have a defense against the merchant, it is the unusual consumer who would risk losing as much as 100 points in her credit score, as well as loss of credit card charging privileges, by doing so. For these reasons, the volume of chargebacks in the United States, which Prof. Mann characterizes as “quite small,” cannot be considered evidence that consumers are overwhelmingly satisfied with the goods and services they purchase, or that unauthorized transactions or other grounds for reversal of transactions are de minimis. The high volume of complaints to the Federal Trade Commission about identity theft in credit card transactions and the stagnant indices of consumer satisfaction in

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202 Email from Russell W. Schrader, Senior Vice President and Assistant General Counsel of Visa USA, Inc., to the author, April 12, 2005; telephone interview of the author with Lyn Boxall, Executive Vice President and Regional Legal Counsel of Visa International, Asia Pacific Region, April 13, 2005 (notes on file with the author).

203 Mann, supra, at 665.

market research studies\textsuperscript{205} are evidence to the contrary.

Moreover, although chargeback rules generally provide for arbitration of disputes between issuing banks and merchant acquirers, e.g., if the merchant is insolvent so that one of the banks will bear the loss, this procedure only becomes applicable if the issuing bank initiates a chargeback, and it is has no incentive to do so unless compelled by public law to recredit the consumer’s account. The consumer lacks any right to initiate or participate in the arbitration process – no right to invoke a hearing, no right to be present or ask questions, no right even to know what the rules are.

That is not to say that the bodies of private law created by banks to govern payment networks are entirely one-sided. For instance, the Operating Rules of the National Automated Clearing House Association (“NACHA”), which govern ACH payments in the U.S. and Canada, provide consumers the right to be “promptly credited” with the amount of an unauthorized debit entry upon submittal of an affidavit demanding the money.\textsuperscript{206} In contrast, the U.S. Electronic Funds Transfer Act (“EFTA”) gives banks ten business days to complete an investigation and recredit the consumer’s account in case of an unauthorized electronic funds transfer.\textsuperscript{207}

Banks and bank networks that operate payment systems have a number of reasons to promulgate private rules that are not one-sided. First, banks and bank networks generally have an interest in avoiding or minimizing the extent of government regulation of new payment systems. When they have been regarded as being greedy and unfair in treating consumers, legislatures have been prodded into enacting prophylactic legislation to remedy the perceived abuses. A good example is the Expedited Funds Availability Act,\textsuperscript{208} enacted by the U.S. Congress in 1987 in response to an outcry over banks’ placing extended and unwarranted holds on deposits into customer accounts.

Second, banks and bank networks have an interest in uniformity. As networks become global in scope, the risk of attracting adverse regulatory action by overreaching is compounded. A network that spans five countries must keep five governments happy. If any one is aroused to act, the network will have to change its rules accordingly, not just in that single country, but network-wide. The widespread consequences of a misstep in self-regulation that makes the system appear too unfair toward consumers mean that banks and bank networks have an interest in maintaining a margin of safety. They not only have an interest in being perceived as staying off the toes of consumers, but in appearing to remain at least a few inches away from them.

At the same time, however, banks and bank networks have less need to be concerned about governmental regulation in countries with small domestic markets. For example, Visa International and its regional cooperatives, in designing its policies for Africa, are likely to be guided more by a desire to satisfy merchants in South Africa, the largest African market, than by concern about adverse regulation in Burundi. Visa might credibly threaten to curtail operations in a small, impoverished country, but not in a larger market.

It has been argued that private lawmaking may be more likely to yield rules that

\textsuperscript{205} See \url{http://www.theacsi.org/national_scores.htm}. The American Customer Satisfaction Index National Quarterly Score is significantly lower as of second quarter 2005 than it was in 1994. \textit{Id.}


\textsuperscript{208} 12 U.S.C. §§4001 \textit{et seq.}
promote efficiency where there is “regulatory competition.” However, Visa and MasterCard as private lawmakers are more likely to compete to attract merchants than consumers. Indeed, Visa has cited competition as its reason for keeping its chargeback rules secret from the public.

Overall, it is unlikely under present conditions that banks and card associations will voluntarily adopt a reversibility regime that grants global consumers effective chargeback rights. The fact is, for example, that their interest in uniformity has not been strong enough to result in the universal extension of chargeback rights to product- and service-related disputes, as TILA §170 did for many American consumers who purchase with credit cards. The economic power of the U.S. market makes it worthwhile for banks and card associations to comply with §170, but the rights granted by that section are treated as idiosyncratic rights of consumers in the U.S. and those few other countries with parallel legislation, not as a model to be followed globally.

This evidence raises troubling inferences for consumers in emerging economies where debit and prepaid cards are proliferating. In many places these consumers may face greater risk of merchant misconduct than consumers in the developed world, due to the lack of effective law enforcement and unfamiliarity with modern payment systems. Yet, overwhelmingly payment card issuers and card associations are self-regulating in emerging economies, more so than in the U.S. and Western Europe where consumer protection has a longer history. Nowhere is there a greater need for legislation to redress the imbalance of leverage between consumers and merchants than in emerging economies.

B. Reversibility of Debit and Prepaid Card Transactions

1. Transparency and Reversibility: a Proposal

Transparency in the chargeback system could play an important role in redressing the existing imbalance of leverage between consumer and merchant. Private lawmaking by card associations has rejected transparency, yet little thought seems to have been given to date to legislation that would mandate a degree of transparency for the benefit of consumers.

Private lawmaking by payment card associations has eschewed transparency for at least two reasons. First, as discussed above, competition for merchants is more keen than competition for consumers, especially in global markets in which payment cards are proliferating faster than merchants equipped to accept them. Second, as behavioral economists have observed, consumers tend not to consider the possibility of something going wrong at the time when they enter into a transaction, let alone when they apply for

209 David Snyder, Private Lawmaking, 64 Ohio St. L.J. 371, 441 (2003): “More choices, at least initially, are better; assuming the parties behave as the economists would have them do, a competitive rulemaking environment will allow not only the most efficient rules but also an efficient degree of uniformity or diversity. In other words, molecular federalism, in the presence of competition and an efficient market, should lead not only to relatively efficient rules but also to an appropriate number of regulatory choices.” In fairness, the author goes on to acknowledge that “the assumptions may not hold…[R]ealists must temper their optimism with knowledge of potential market failure and the occasional emergence of markets for lemons.” Id.

210 See supra, n. 202 (interviews with Russell Schrader and Lynn Boxall).
a payment card that will facilitate future transactions; therefore, a transparent system for resolving disputes would not confer any significant advantage on card issuers in competing for consumer accounts.

The chargeback system lacks transparency in two particularly important respects. First, the rules of the system, and the right to participate in chargeback arbitrations, are open only to card association members. Second, perhaps more importantly, data about the chargeback experience of individual merchants is kept confidential.

The card associations’ claim that chargeback rules are a trade secret has been discussed above. However, more important is the unavailability of information about the chargeback experience of individual merchants. If a specific merchant has engaged in misrepresentation of its merchandise or sold poor quality merchandise, resulting in a high number of chargebacks, this is information that consumers should have available to them when they are shopping.

Because card associations compete, through merchant acquirers, for merchant memberships, and because merchants presumably prefer to keep negative information about themselves confidential, it is in the interest of the associations to promise merchants that chargeback information will be kept secret from the public.

Compare the card associations’ incentives with those of eBay, the online auction service. eBay posts data about online merchants, including consumer ratings and complaints, that is available to consumers when they make a purchase. Online merchants have to overcome the remoteness of the transaction – consumers often are unfamiliar with the merchant, yet have to rely on the merchant’s representations about merchandise they cannot hold in their hands – in gaining consumers’ trust. eBay, anticipating this problem, chose to require merchants to consent to release of data about them.

Visa and MasterCard could compile the same data as eBay, but they do not, or at least, they do not make such data accessible to the public. It is in consumers’ interests to have access to such information. Most merchants would ultimately benefit from ratings based on chargeback experience, even if they do not perceive the release of the information positively, because most have relatively few complaints.

What performs the same function as eBay’s ratings in consumer transactions with most retailers is trade names and trademarks. Overloaded with information from advertising, and confronted with choices frequently too complex for rational decision-making within their limited time available, consumers rely on the reputation of the retailer to select where to shop, and on brand loyalty to choose products. As available time for consumer decision-making becomes more limited, assuming a similar volume of input of relevant information, reliance on brand loyalty increases.

Regulatory intervention to mandate compilation and release of relevant chargeback statistics for merchants that accept payment cards would be in the interests of consumers, and would not present an insurmountable cost to issuers, merchant acquirers or the card associations. Chargebacks are already coded according to the reason for

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211 See supra, text at n. 202.

212 Cf. J. Edward Russo, “More Information is Better: A Reevaluation of Jacoby, Speller and Kohn,” 1 J. Consumer Res. 68, 71-72 (1974). Russo took issue with the theory of information overload, but his research, showing that confusion decreased with increased data, was predicated on the assumption that the subjects took enough time to process the information. Information is not overload if consumers have enough time to process it, but the accelerated pace of life in the 21st century gives consumers less processing time.
reversal of each transaction. Codes that simply reflect voluntary exchange or return of merchandise, for example, would not be held against a merchant; a merchant that behaved properly in making an exchange would not incur negative consequences. Only those codes reflecting culpable conduct by the merchant would be compiled. Chargeback reason codes might have to be revised to clearly distinguish chargebacks that count toward a merchant’s rating and chargebacks that are irrelevant to it.

For example, Visa U.S.A. currently has 24 chargeback reason codes, down from 44 codes with 59 subcodes that were in use prior to October, 2004. One, Visa Reason Code 53, Merchandise/Service Not As Described or Defective Merchandise, is defined on the Wells Fargo Online Merchant Services website as “[e]ither the customer claims the goods or services received did not match the description/picture on your [the merchant’s] Web site or other documentation/information they received from you, or the merchandise arrived damaged, defective or otherwise unsuitable for the purpose sold. Additionally, the customer claims the merchandise was returned, the service was cancelled, or they attempted to resolve the dispute with you.” MasterCard Reason Code 53 and Discover Reason Code RM are similar. In all chargeback systems, the merchant is given an opportunity to credit the customer’s account or to explain why a credit is inappropriate.

It is proposed here that if the issuer rejects the merchant’s explanation, or receives no explanation, or alternatively if the merchant does not credit the customer’s account until the customer has had to complain to the issuer, a chargeback coded as Visa Reason Code 53 or its equivalent MasterCard or Discover code would be counted in statistics disclosed to the public regarding that merchant by the card association.

Other chargeback reason codes can readily be classified as countable or not countable in the statistics, depending on whether they may reflect culpable conduct by the merchant. Thus, for example, codes reflecting that items were illegible, that presentment was late or that a card was declined obviously do not reflect on the merchant’s conduct.

213 Chase Merchant Services lists the ten most common reasons for chargebacks as follows, with the first being the most frequent (see www.chase.com/cm/cs?pagename=Chase/Href&urlname=chase/sh/merchantservices/custservice/resolve):
1. Business fails to respond to a retrieval request [i.e., a request for documentation of a disputed charge] (reason codes 01/26/79)
2. Customer was billed more than once for a single transaction (reason codes 25/34/82)
3. Customer denies making or authorizing a transaction (reason codes 23/43/61)
4. Failure of business to follow correct procedures or complete the sales slip at the point-of-sale (reason codes 23/43/61)
5. Account numbers don’t match (reason codes 12/25/77)
6. A credit/refund was not processed properly (reason codes 24/60/85)
7. Failure to obtain proper authorization (reason codes 08/20/72)
8. The card was used either before or after the valid dates (reason codes: 22/23/32/35/58/73)
9. Merchandise or service not received by cardholder (reason codes 24/55/90).


216 Id.
while codes for “altered amount” or “non-receipt of goods” may well reflect misconduct by the merchant or its employees.217

If compilation of, and public access to, chargeback data were mandated by law, a consumer interested in buying a washer-dryer could identify merchants carrying the desired products, then research the merchants’ respective chargeback records, perhaps by visiting a website where the data is posted. If one merchant has a poor record and the other has a good record, consumers would benefit by being able to take those data into account in choosing where to shop. However, it is highly unlikely that this proposal would be effectuated through private lawmaking.

In a sense, it is odd that Visa and MasterCard have not chosen to pursue this idea in the United States. Competition to acquire merchants for the network is considerably lessened by the ubiquity of payment cards in this country. A merchant that does not accept cards is likely to be very small, and most businesses that accept Visa, also accept MasterCard and, for the most part, American Express.218 As debit and prepaid cards gain market share in the U.S., there is proportionately greater need for card associations and card issuers to compete for consumers and to try to steer them to more lucrative credit card use, while there is less need to compete for merchants. The provision of chargeback data could be restricted to consumers who own or use payment cards, increasing consumer goodwill. Indeed, the data could be offered for a fee, with the fee waived for consumers who use their cards regularly.

One function that greater transparency in the chargeback system would perform is to deter merchant misconduct. Transparency seems to have had a beneficial effect in deterring misconduct by merchants that do regular business on eBay. eBay maintains ratings of online merchants by consumers, and displays the frequency of complaints.219 Merchants are given the opportunity to respond to particular complaints, and their responses are also posted.

Another means of deterring merchant misconduct would be experience rating of the discounts that are deducted from what merchants collect from credit and debit card issuers. Currently, discount rates are standardized depending on whether the merchant engages in remote transactions, in which the card is not presented by the customer. Mail order-telephone order (“MOTO”) and Internet merchants, now collectively called “card-not-present” or “MO/TO/EC” merchants,220 are at high risk for unauthorized charges, and hence incur a higher discount rate than the roughly 1.6% discount that is deducted from what “card-present” merchants receive from card issuers for transactions with customers.

217 The Wells Fargo Online Merchant Services website includes a convenient list of 18 Visa reason codes, 18 MasterCard codes and 14 Discover codes, with links to the definition of each. See http://www.wellsfargosecure.com/customer/chargebacks/3.htm.
218 American Express cards technically are “charge cards” rather than “credit cards,” since the balance due, apart from the “Blue” or “Optima” card, must be paid in full each month.
using credit and debit cards.

Differentiation of discount rates according to card acceptance procedure will not deter merchants from engaging in fraudulent practices or selling shoddy merchandise. Currently the only sanction against merchant misconduct is to threaten to terminate a merchant’s membership in the card association and access to the card network. This is rarely used, and is not a nuanced approach to the problem.

An alternative would be to set discount rates according to a chargeback experience rating system. Merchants that incur a higher proportion of certain types of chargebacks that may indicate misconduct, relative to the total volume of transactions, than other merchants would have a higher percentage discounted from what they collect from card issuers. The types of chargebacks that would count in setting discount rates would be determined by chargeback reason code.

Experience rating has been used or considered in many different contexts: Workers’ Compensation systems for determining employer premiums for insurance against employee injuries; medical malpractice insurance; disability insurance in the Netherlands; Unemployment Insurance, and even ticket raffles. Banks, too, are rated in the United States. The “CAMELS” rating is used by the Federal Reserve, Office of the Comptroller of the Currency, and Federal Deposit Insurance Corp. to determine the extent of supervisory activity and the levels of premiums charged to banks for federal deposit insurance.

The problem with using experience rating in setting discount rates for individual merchants is that after Wal-Mart, discount rates may be subject to negotiation based on considerations that may have little to do with chargeback experience. Even if Wal-Mart had a higher percentage of chargebacks than other merchants, its high volume of payment card business strengthens its hand in negotiating a lower discount rate. In contrast, small merchants are likely to be charged a higher discount rate despite favorable chargeback experience. Public disclosure of merchants with adverse chargeback experience would be more effective, and would not necessitate a retreat from negotiated discount rates.

2. Grounds for Reversal of Transactions

In most countries that have adopted regulatory regimes for payment cards, provisions have been made for the correction of billing errors. Card association chargeback rules permit chargebacks in cases of billing error. However, only in North America and a few European countries are consumers permitted to initiate chargebacks based on contract disputes between consumer and merchant, such as non-conformity of

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225 CAMELS is an acronym for capital, asset quality, management, earnings, liquidity, and sensitivity to interest-rate risk.
the goods with the contract, non-delivery or delayed delivery of goods, and defective goods. In addition, bank statement rules – rules regarding the time and procedure for giving notice of billing errors, and the effect of failure to do so – differ from country to country.

One key issue regarding reversibility of debit and prepaid card transactions is whether consumers should be entitled to reversal of transactions based on claims and defenses arising out of the underlying contract between consumer and merchant. Prior to 1974, when TILA §170 was enacted, it was a subject of considerable debate in the United States whether credit card issuers should be regarded as if they were holders in due course (“HDC’s”), like finance companies that financed consumer purchases of automobiles, washing machines or other consumer goods based on a negotiable note or chattel paper. If card issuers were HDC’s, they would have the right to recover from the cardholder regardless of most types of defenses or claims in recoupment, such as breach of warranty or fraud.227

A consumer who purchased a car or a washing machine that was a “lemon” normally would have to pay the finance company that financed the purchase due to its HDC status, and would be left with a claim against the merchant that sold her the machine. Exceptions were made for lenders that purchased the note or chattel paper with notice of a defense or claim, so-called “real” defenses such as illegality, incapacity, bankruptcy discharge, and “fraud in factum,” and cases in which the lender was so related to the merchant as to have constructive notice of consumer claims or defenses. It was much debated in American law reviews whether charge slips on a credit card account would be regarded as the equivalent of negotiable chattel paper or promissory notes, or whether instead, consumer claims and defenses should be preserved.228

The debate of the early 1970’s over preservation of consumer claims and defenses in payment card transactions was resolved in favor of the consumer with the enactment of TILA §170.229 That section, in the nature of an anti-holder in due course rule, preserves against the issuer any claims a consumer has against the merchant such as breach of warranty, or defenses against the merchant’s right to payment for goods and services, if (a) the consumer first made a good faith attempt to resolve the dispute, (b) the transaction occurred within the same state as, or within 100 miles of, the consumer’s mailing

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227 See UCC §3-305.
229 The debate went on for two more years regarding whether a holder of a consumer credit contract for the purchase of goods or services should be subject to the same claims and defenses as the merchant, until, in 1976, the Federal Trade Commission promulgated a rule requiring consumer credit contracts to contain a legend requiring any holder to be subject to the same claims and defenses as the merchant. 16 C.F.R. §433.2.
address, and (c) the chargeback does not exceed the account balance when the consumer first notifies the card issuer of the claim or defense. Whether a remote transaction over the Internet or telephone occurred within the geographic limit is a question that has received inconsistent answers from the American courts.\(^{230}\)

No equivalent provision regarding preservation of claims and defenses exists in the Electronic Fund Transfer Act with respect to debit card transactions, and none exists regarding purchases with prepaid cards. Thus, authorized debit and prepaid card transactions are final, as if they were cash transactions.\(^{231}\)

Several non-U.S. jurisdictions have enacted laws enabling consumers to assert against card issuers defenses or claims they have against merchants, other than duplicate or erroneous entries and unauthorized transactions. These countries include Finland, Greece, Israel, Japan, Korea, Norway and the UK.\(^{232}\) However, with the exception of Israel,\(^{233}\) these countries’ laws universally draw a distinction between credit and debit card holders, affording credit card holders the right to assert defenses and claims against the issuer but not debit card holders.

In the 1970’s debate over preservation of claims and defenses, the banking industry asserted that it was unfair to place liability on the issuer for merchant misconduct, and that because the issuer is not able to limit its risk on debit cards by placing a ceiling on the amount that can be withdrawn, the issuer’s risk is potentially unlimited. On the other hand, consumer groups and a number of legal scholars raised two counterarguments: (1) banks are in a position to “police” merchants that engage in frequent misconduct and to prevent them from having access to the card network;\(^{234}\) and (2) banks are in a better position to allocate risks through chargebacks and to pass on losses through the discount rates imposed on merchants and in the case of credit cards, through interest rates charged to consumers.\(^{235}\)

Since the early 1980’s, excluding Professor Mann’s recent article,\(^{236}\) little has been written on the subject of preservation of consumer claims and defenses against card issuers, yet in countries that have yet to adopt consumer protection regimes, this is an issue that should be decided. Since the early 1980’s, too, changes in conditions have strengthened some of the policy arguments on the subject of preservation of claims and defenses and weakened others. When EFTA was enacted in 1978, bankers were concerned that consumer protection laws might restrain the growth of the debit card networks or deter consumers from using the system.\(^{237}\) The opposite occurred; the networks grew more because consumers had greater confidence.\(^{238}\)

Instead, it is now the odd merchant in the United States that refuses to accept any


\(^{231}\) EFTA §908(f), 15 U.S.C. §1693(f), lists types of “errors” that are subject to required error resolution procedures. These are limited to unauthorized and incorrect entries on bank statements and to receipt of an incorrect sum of money from an ATM.


\(^{233}\) Littlefield, supra, at 493.

\(^{234}\) Geva, supra, at 55.

\(^{235}\) Mann, supra, 93 Geo. L.J. at 656.

\(^{236}\) Taffer, supra, at 235.

\(^{237}\) Id., at 234, citing the example of Wisconsin, which adopted an EFT statute in 1976.
kind of payment cards in face-to-face transactions. The same is true in Japan, parts of Europe and the UK. Moreover, the merchant acquirer business – the banks that acquire merchants for the network and handle their accounts – has developed into a highly concentrated specialty in banking in which a small number of large banks and card data processors handle vast numbers of merchant accounts, all of which are linked to and contractually bound by the chargeback system. Additionally, in the United States, at least, many bank debit card networks are linked to each other, further linking merchants and banks regardless of which network they are on.

At the same time, due to the massively greater number of merchants that are part of the payment card networks, “policing” merchants is no small job. The idea that card issuers should be responsible for policing merchants within a limited geographic area, that was incorporated into the Truth-in-Lending Act provisions on preservation of claims and defenses, now seems quaintly archaic, as the Internet has made geography almost irrelevant.

The argument raised by the banking industry that a bank’s liability on a debit card transaction would be limited only by the amount in the card holder’s bank account also seems dated, and made little sense to begin with. Credit card limits are commonly higher than the cardholder’s bank account balance. Also, with merchants overwhelmingly being linked to the chargeback system in the United States, it is unusual – though certainly not unheard of – for a bank to be left without recourse to the merchant’s account when a chargeback is found to be justified. However, the bank’s exposure is dependent on the merchant’s solvency, not the solvency of the consumer, and merchant acquirers are capable of screening out those merchants whose solvency is questionable.

In countries in which networks are just being established and in which merchants may be reluctant to participate in the system and may be at greater risk of insolvency than typical merchants in the United States, the arguments against preservation of consumer claims and defenses have greater force. However, at the same time, the vast growth in debit cards suggests that merchants even in those countries will prefer to participate in payment card networks to remain competitive. Consumers, meanwhile, will use debit cards more frequently if they have recourse to the chargeback system in case of problems with the merchants with which they deal. As remote transactions grow with improvements in telecommunications, consumer confidence is at a premium.


240 See http://www.greensheet.com/PriorIssues-030701-/6.htm. According to the Nilson Report, the five largest merchant acquirers represented 68.7% of the total market as of the end of 2002. The largest, First Data Corporation, controlled 31.4% of the market.

241 Truth-in-Lending Act §170 (preserving defenses if transaction occurred in the same state or within 100 miles of the consumer’s billing address).

242 Airline failures, such as ANZAC in Australia, are good examples of situations in which banks have wound up with significant liability and without recourse to the merchant. Author’s telephone interview with Lyn Boxall, Executive Vice President and Regional Legal Counsel of Visa International, Asia Pacific Region, April 13, 2005. (Transcript on file with the author.)
B. Problems of Loss Allocation

1. Fraudulent and Unauthorized Transactions

In the United States, the consumer problem of greatest concern in payment systems – indeed, the problem of greatest concern overall - is fraudulent transactions, and particularly identity theft. 39% of consumer complaints to the U.S. Federal Trade Commission in 2003 were for identity theft, and U.S. consumers rate it as their highest priority among consumer issues, although the incidence of identity theft in credit cards actually has begun to level off.243 On the other hand, debit card fraud in the U.S. is growing rapidly.244 Debit card fraud is already at high levels in Canada.245

The high level of fraud in Canada occurs despite the fact that Canadian debit cards are entirely PIN (online) debit. The linkage of all ATM’s to a single network, Interac, in Canada and more frequent use of debit cards there are related causes. By comparison, in the United States there are 25 different networks.246 On the other hand, signature debit, unique to the United States, with a two- to three-day delay in clearance and settlement, entails greater risk of loss due to non-payment in cases of insufficient funds and closed bank accounts.

The problems of debit card users are similar to those of users of credit cards and checks, particularly with respect to the allocation of loss due to unauthorized use, identity theft and fraud. However, laws in many countries establish divergent rules and standards for debit card users and the users of credit cards, checks and cash.

If a consumer in the United States loses a blank check on the bus, and a thief forges the consumer’s signature, the loss normally falls on the payor bank absent fault on the part of the consumer, but if the loss of the check was caused by the consumer’s negligence, the consumer bears at least part of the loss on comparative fault principles.247

However, if the same consumer lost a credit card along with the check, and the same thief used the credit card to make a purchase, the consumer’s liability would be limited by law to a maximum of $50, regardless of the amount of the purchase, regardless of the consumer’s negligence in losing the card, and regardless of the consumer’s further

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243 Toronto Globe and Mail, February 18, 2005, reported on www.globeandmail.com, citing a survey conducted by Ipsos Financial Services. However, an estimated 5.7 million Americans were victims of credit card fraud in 2004. www.usnews.com, February 28, 2005, “Charged Up.”

Identity theft and hacker attacks against U.S. targets are often perpetrated by non-U.S. nationals. It makes sense that the targets of identity theft would be users of payment systems in the world’s wealthiest nation, and that the perpetrators would be located in countries such as China, Russia and the Philippines where law enforcement may be more lax and less equipped to find and prosecute high-tech offenders.

244 www.usnews.com, February 28, 2005, “Charged Up.” However, according to Visa USA, payment fraud in the U.S. is at an all-time low of five cents per $100 spent. Id. See also ATM & Debit News, February 3, 2005, infra (U.S. financial institutions in 2003 lost $145.3 million in 522,327 cases of debit card fraud, of which signature debit card losses constituted $102.2 million in 452,958 cases.)

245 “Canada Appears to Have High PIN-Debit Losses,” ATM & Debit News, February 3, 2005, Vol. 6, Issue 4, Westlaw 2005 WLNR 1709490 (“Canadian banks on average are losing much more per card with a PIN-debit function than their U.S. counterparts.”) Canadians use debit cards 76 times per year, on average, compared with 54 times per year for Americans. Id. This is so despite higher fees for debit card use in Canada.

246 Ibid.

247 U.C.C. §3-406.
negligence in failing to review credit card statements. In the case of a credit card, the loss ultimately would fall on the merchant, barring the merchant’s insolvency, assuming that the card issuer pursued its right of chargeback under association (Visa or MasterCard) rules.

Legal scholars have rationalized the $50 “small-dollar exclusion” as an attempt to achieve optimal efficiency of the system by placing the obligation on the party who can avoid the loss at the lowest cost. Professor Mann continues to argue for the small-dollar exclusion on the ground that in small transactions “claims to reverse payment would more commonly be abusive than in the context of more significant purchases, if only because it is difficult to imagine a legitimate basis for reversing payment in that context.” This argument is incoherent. There is no logical reason why small-dollar transactions would be more prone to abusive claims by consumers than large-dollar transactions; in fact, the cost in terms of time and effort necessary to make a claim for reversal of payment and the risk of being found out if the claim is abusive would likely deter scoundrels from making fraudulent claims unless the dollar amount made it worthwhile to do so.

The $50 ceiling was originally put forth in a seminal article in the Michigan Law Review in 1971 as an “arbitrary” figure selected as a boundary between small purchases in which credit cards normally would be used for convenience as a cash substitute, and larger purchases which a consumer normally might expect to carry as a revolving credit balance. The $50 ceiling was translated into a £50 ceiling in UK law, in §84 of the Consumer Credit Act adopted in 1974. Again, however, transfers from deposit accounts were excluded. Section 84 was said to be an exception to the general rule of §83 of the Consumer Credit Act that a debtor under a regulated consumer credit agreement is not liable for loss “arising from use of the credit facility by another person…”

In the case of debit cards, American law attempts to have it both ways. The consumer’s liability for unauthorized debit card transactions is limited to $50 – but only if he or she reports the loss to the issuer within two business days after discovery. For the consumer who fails to report promptly, the ceiling is raised to $500 for charges beyond the two business days, and to unlimited liability for charges on the lost card once a consumer has had 60 days to review a credit card statement reflecting unauthorized charges and still has failed to report the loss. The consumer’s duty is to be a prompt reporter and careful reader of statements from her bank, but not (apart from the now-minor risk of a $50 liability, which may be waived by the issuer) to prevent the loss or theft of the card. The merchant’s duty is left entirely up to contract with the merchant’s bank and to association rule.

Other countries have taken a variety of approaches to the consumer’s liability for unauthorized debit card transactions. In some, a negligence standard applies, and in

250 Mann, supra, at 667.
254 Ibid.
others, a combination of rules and standards is applied. For example, in Australia, under codes of practice adopted by the banking industry and enforced through the Australian Banking Ombudsman, a cardholder is absolved of liability beyond Aus$50 for unauthorized transactions occurring before notification of the issuer that a card has been lost or stolen, provided that the cardholder was neither negligent nor contributory to the loss of the card.\(^{255}\)

The European Commission issued a recommendation in 1997 on the subject of electronic payment instruments which applies to debit cards.\(^{256}\) The REP recommended that member states adopt a liability ceiling for the holder in case of loss or theft of the card for unauthorized transactions prior to the holder’s reporting the loss or theft to the issuer, “except where he acted with extreme negligence or fraudulently.” The REP included a recommendation that in case of a dispute, the issuer should have the burden of proving that a transaction was accurately recorded and entered into accounts.\(^{257}\) However, only two member states of the EU had adopted laws following that recommendation as of 2002.\(^{258}\) A proposed EC Payments Directive would establish a ceiling of 150 euros for a consumer’s liability for unauthorized use of any payment card, credit or debit.

In 1968 when the Truth-in-Lending Act was originally enacted in the United States, credit cards were seen as an instrument not of access to cash, but access to credit,\(^{259}\) and therefore the Act was drafted on the assumption that credit cardholders must be treated as borrowers. A purported borrower is not ordinarily liable to repay a loan that he or she did not authorize and from which he or she did not benefit. Something more serious than presentation of a plastic card to the merchant is necessary to commit the borrower to a loan, and even failure to report the loss of the card is insufficient to ratify the unauthorized loan transaction.

Debit cards, on the other hand, confer access to cash. The liability ceiling for unauthorized use of a debit card in EFTA was a compromise, the outcome of a battle between advocates of a negligence standard, including the banking industry, and consumer advocates who advocated the same $50 ceiling that applied to credit cards.\(^{260}\) Consumer advocates argued that the $50 ceiling was adequate incentive to consumers to exercise sufficient care with respect to their cards, and that making the issuer liable for losses over $50, it would have sufficient incentive to implement security measures to minimize its losses.\(^{261}\) Banks, on the other hand, argued that unlike credit cards, which have a fixed credit limit, debit card losses depended entirely on the amount of money the.

\(^{255}\) OECD Chargebacks Study, at 59.
\(^{256}\) EC recommendation of 30 July 1997 concerning transactions by electronic payment instruments and in particular the relationship between issuer and holder (“REP”).
\(^{257}\) REP Article 7(e).
\(^{259}\) See Roland E. Brandel & Carl A. Leonard, “Bank Charge Cards: New Cash or New Credit,” 69 Mich. L. Rev. 1033, 1059 (1971) (“[C]onsultants predicted to the banking industry…that the ratio of persons purchasing goods and services and extending repayment over a period of time would be high in relation to those using the card as a new technique for immediate payment in lieu of checks or cash. The public proved the banks and their consultants to be incorrect in their estimates.”)
\(^{261}\) Id., at 238.
consumer had in his bank account. However, at that time debit cards were only usable to access ATM’s, which have dollar limits for cash withdrawals.

Compare these rules to the rules pertaining to cash. Under American law, a consumer has no recourse with respect to stolen cash, except to sue for conversion if he or she can identify the perpetrator. A merchant who receives payment in lost or stolen cash has no duty to the consumer who owns the cash, even if the circumstances of payment were such as should have reasonably prompted suspicion. The reason for this misallocation of loss is primarily the anonymity of cash and secondarily the cost of time. If cash were identified by owner—e.g., if a dollar bill had an electronic tag stating in bright neon letters who owned it at any given moment—then would the merchant, receiving tagged cash from the thief, still be held to no duty with respect to the identified owner of the cash? Possibly not, but only if the legislature considered the transactions costs in terms of time that would be incurred by the merchant in examining the bills and asking for identification to be too significant.

For purposes deemed sufficiently important and amounts sufficiently significant, the legislature has imposed duties on the recipient of cash. For example, money laundering rules adopted pursuant to the Bank Secrecy Act require banks to file Currency Transaction Reports for cash transactions of $10,000 or more. Cash transactions of $5,000 or more under suspicious circumstances require the filing of Suspicious Activity Reports.

American consumer law thus incorporates divergent rules and standards of loss allocation for four instrumentalities of payment, all of which are usually used by consumers as cash or cash equivalents.

This divergence has drawn the attention of legal scholars. In 1996, Professor Clayton P. Gillette criticized Cooter and Rubin, on the theory that an attempt to achieve optimal efficiency could not adequately explain the choices of legislatures to treat loss allocation rules for checks and payment cards differently. “It is curious,” he wrote, “that the [American] law concerning fraud in payment systems varies among payment devices.” He assumed that “in designing payment rules, the legislature was seeking to allocate risks optimally,” but concluded that the “difficult issues of classification” posed by regulated activities, for example, that are “susceptible to significant variance in precautions or losses” and externalities such as politics and historical accident can result in sub-optimal levels of precision in legislation and motivate courts to intervene by creating exceptions or treating rules as guidelines. He further pointed out that in payment systems regulation, the identification of superior risk-bearers may be incapable of being done cost-effectively except through generalizations or the use of surrogates.

The Visa and MasterCard associations ultimately decided to waive the $50 in all

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262 Id., at 238-239.
264 31 C.F.R. §103.22.
265 31 C.F.R. §103.18.
266 Gillette, supra, at 184.
267 Id., at 188.
268 Id., at 251.
269 Ibid.
Presumably the transaction costs and loss of goodwill incurred by card issuers in collecting the $50 from card holders who had been the victims of loss or theft proved to be more costly than the amounts collected.

This action by Visa and MasterCard speaks eloquently to the folly of attempting to infer in rules and standards adopted at different times under different political conditions precise legislative judgments about optimal loss allocation. $50 was picked as an “arbitrary figure” to establish a boundary between transactions intended by the credit cardholder as convenience transactions and transactions intended as credit transactions, not as an attempt to optimize anything. This “arbitrary figure” was established on the theory that up to that amount the lost or stolen card would have been used as a “convenience card” in place of cash, so that the loss should be treated as if cash had been lost. The differences in the liability ceilings for debit and credit cards reflected a political compromise between those who wanted to treat credit cards and debit cards the same, and those dissatisfied with the low credit card liability ceiling who wanted to import a fault concept into the rule. With credit cards increasingly being used as convenience cards even in the United States, and the functional differences between debit and credit cards correspondingly being diminished, the rationale for the small-dollar exclusion is further weakened.

Once the consumer charges back an unauthorized debit card transaction to the issuer, as between the issuer and the merchant, which party bears the loss? In this regard, the loss allocation in debit card transactions is different from credit cards. Card association rules generally allocate the loss to the issuer, on the theory that the issuer is better situated to adopt security measures than the merchant. Unlike credit card transactions, the consumer using a PIN debit card may remain anonymous to the merchant as long as the consumer possesses the correct PIN.

Imposing liability on the consumer for unauthorized debit card transactions in most cases makes no sense. In general, the loss of cash is final only because cash can be spent anonymously, not the case with cards that are used at the point of sale. In 1972, in a Note in the Harvard Law Review written when credit cards were the only payment cards in the marketplace, the author wrote:

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271 In their seminal article on the subject, Brandel & Leonard, addressing the use of cards for convenience transactions as if they were cash rather than an extension of credit, advocated picking “an arbitrary dollar figure” as a liability ceiling. “As to transactions involving a sum greater than that figure, the cardholder should be given the ability to assert against banks defenses he has against a merchant. As to transactions involving a sum less than that figure, it should be assumed that the charge card was used as a payment mechanism to replace cash, and the cardholder should have recourse only against the merchant. The figure chosen could be seventy-five dollars; it could be fifty dollars.” Roland E. Brandel and Carl A. Leonard, “Bank Charge Cards: New Cash or New Credit,” 69 Mich. L. Rev. 1033, 1062 (1971).
272 EFTA, the statute containing the liability ceilings for debit cards, was passed by Congress in the wee hours of the night during a marathon legislative session. See Roland E. Brandel & Eustace A. Olliff III, “The Electronic Fund Transfer Act: a Primer,” 40 Ohio St. L. J. 531 (1979).
273 See Mann, supra, at 656.
275
It is contended that bank cards are predominantly used as convenience cards and that consumers tend to pay for their purchases as they are billed for them rather than on an installment basis. [Footnote omitted.] But for the purposes of furthering the two goals which were posited in section II [reducing seller misconduct and internalizing seller misconduct costs], any similarity between credit card purchases and cash sales is irrelevant. The costs of seller misconduct in cash sales fall on the buyer by necessity rather than by design. Indeed, if a convenient device were available in cash sales to shift these costs to a third party who was in a better position to minimize the cost of seller misconduct and to reflect the remaining costs in the explicit price of goods, it would be desirable to do so. The fact that such a mechanism is infeasible in actual cash sales, therefore, does not support its exclusion in other transactions, no matter how similar.  

In other words, the physical limitations of cash itself result in a misallocation of the costs of merchant misconduct and encourage such misconduct. Currency and coin, once received by a merchant, cannot be charged back to that merchant by a consumer if the merchant is engaged in fraud or does not agree to the return of defective merchandise, for example, while electronic payments can. It is strange yet true to regard even the simplest face-to-face cash transaction as containing the seed of market failure.

The use of payment cards makes it feasible in most cases to correct this misallocation through the intervention of the financial institutions that operate the payment system. Those institutions are capable of protecting themselves through security procedures. Since most debit cards do, or should, require use of a PIN, allocation of loss to the consumer should be limited to cases in which the PIN is negligently or culpably divulged by the consumer to the wrongdoer or in which the consumer’s negligent or culpable conduct otherwise compromises a security system implemented by the issuer to protect against unauthorized use of the card. If American banks want to promote signature debit because the interchange fees are higher, they, and not the consumer or merchant, should bear the losses that could have been prevented by the use of a PIN.

2. Inconsistency in Loss Allocation Rules

Several countries have adopted statutory rules on consumer protection of debit and credit cardholders. In many respects they treat credit and debit cardholders the same. However, there are two principal differences:

1. Rules regarding liability of the cardholder for unauthorized use of the card are different in most countries, with debit cardholders bearing greater risk than credit

276 Note: Direct Loan Financing of Consumer Purchases, 85 Harv. L. Rev. 1409, 1421 (1972).
277 Imposing the risk of loss on the debit card issuer would be consistent with the policy of Article 4A of the UCC concerning unauthorized wire transfers. Section 4A-205 generally allocates losses to the receiving bank if the bank and the originator, its customer, agree on a commercially reasonable security procedure for preventing unauthorized transfers and the bank fails to comply with that procedure, while the originator bears the loss if it voluntarily gives an unauthorized person access to its transmitting facilities.
2. The claims and defenses the cardholder has based on breach of the contract by the merchant, e.g., by supplying defective or non-conforming goods, may be asserted against the bank that issued the card (the “issuer”) by a credit cardholder but not by a debit cardholder.

Prepaid cards are generally treated as equivalent to cash with respect to loss allocation; thus, if an employee paid on a payroll card loses the card, the employee may have no recourse, and chargeback rules applicable to credit cards do not apply. However, the U.S. Federal Reserve has recently issued a proposed rulemaking that would extend Regulation E coverage to certain payroll card accounts. The proposed rule would extend to the holders of payroll cards the same disclosure and error resolution procedures and limitations of liability for unauthorized use that currently cover the holders of debit cards.

Outside North America, the UK, Western Europe and the EU, Australia, Israel and a handful of East Asian countries, laws specifically addressing consumer protection with respect to payment cards generally do not yet exist. Thus, in China, Russia, Brazil and other emerging economies in which debit cards are spreading rapidly the consumer’s liability would be determined based on general standards and on rules of contract law.

In the United States, where credit cards continue to predominate over debit cards and most consumers own both kinds of cards, these forms of discrimination against debit cardholders in favor of credit cardholders have not, to date, been controversial, Professor Mann’s recent article notwithstanding. However, in countries such as China and Russia where relatively few people own credit cards while many millions own and use debit cards, drawing distinctions between them adverse to debit cardholders would have a number of disadvantages in public policy.

First, as Professor Mann has argued, there is not a clear rationale for distinguishing between credit and debit cards on functional grounds. “[T]hese payment devices serve similar functions. Checks and ATM cards are equivalents for the purpose of gaining access to the customer’s account at the bank, and checks and credit cards are equivalents for the purpose of incurring obligations to pay third-party providers of goods

279 The only exceptions are Denmark and Israel. In Denmark, under §11 of the Act on Certain Payment Instruments, Act No. 414 of May 31, 2000, the holder of any “payment instrument,” broadly defined to include both credit and debit cards as well as other electronic means of payment and access to cash, is not liable for unauthorized use after notice to the issuer that the card has been lost, an access code has been obtained by an unauthorized person, or the holder requests a stop on the card. The holder also is relieved of liability if the payee knew or should have known of the unauthorized use or if a payment card has been used fraudulently in a distance transaction. However, the holder is subject to unlimited liability if a PIN is used by someone to whom the holder disclosed it and if the holder realized or should have realized the circumstances created a risk of abuse. See Geva, supra, 38 C.B.L.J. at 252. In Israel, §§5 and 9 of the Debit Card Law, 5746-1986, accord both debit and credit cardholders equal rights to redress.


281 Electronic Funds Transfers, 69 Fed. Reg. 55,996 (Sept. 17, 2004). Payroll cards would be covered by Regulation E if the employer, directly or indirectly, established a payroll card account on behalf of a consumer into which wages, salary or other employee compensation are deposited by electronic funds transfer on a recurring basis. See www.federalreserve.gov/boarddocs/press/bcreg/2004/20040913/attachment.pdf.

282 See Mann, supra.

283 Mann, supra, at 656.
and services. Efforts to allocate the risk of loss for use of these payment devices also would appear to share the same objectives...to allocate losses in a manner that induces each party involved in a payment transaction to take cost-effective precautions against loss.”

The functions of credit and debit cards are even more similar in societies like Japan where credit cards are used primarily for convenience rather than revolving credit, and as convenience use increases as a proportion of total credit card charges in the United States, arguments for treating American debit cardholders like users of cash rather than like credit cardholders become weaker.

Second, issues of equity would be raised by laws or policies that discriminate against debit cardholders in societies in which credit cards are limited to a small economic elite capable of qualifying for them. While in the United States the differences between consumers’ rights under TILA and EFTA can be attributed to perceived functional differences between credit and debit cards, in countries where a few businessmen and politicians who are able to purchase with credit cards can return shoddy merchandise and obtain a refund while ordinary customers who use debit cards or cash cannot, the public is likely to perceive this difference as an assertion of class privilege.

Third, because of the presumable socioeconomic differences between credit and debit cardholders, it is likely that debit and prepaid card users in most countries will be less sophisticated consumers than credit cardholders and therefore more in need of access to means of recourse in cases of fraud, seller misconduct, and breach of contract. Indeed, it could also be asserted that consumers using stored value cards should be accorded such rights, as they are often likely to be the “unbanked” and least sophisticated among payment card users; however, some stored value cards share with cash the problem of anonymity and the risk of fraudulent claims.

Fourth, there may be economic justifications for disparate treatment of debit and credit cards. On this point, Prof. Mann observes:

One obvious concern is that the extension of the reversibility rule to the debit card context will increase the costs of debit cards to those that use them. If so, the reform might alter the relative desirability of the products in significant ways. From one perspective, that is not a reason for concern. The only reason that it might alter the costs significantly is if there is a significant volume of chargeback activity, which suggests that there are a significant number of transactions in which consumers currently lack effective recourse. On the other hand, as discussed above, there is the empirical possibility that a significant level of chargebacks might reflect abusive consumer conduct rather than dishonest merchant conduct. For the reasons discussed above, however, I think it unlikely that there will be a sufficiently large volume of chargebacks to affect pricing significantly, largely because the volume of payment-reversing charge-backs in the credit-card system now is quite small.  

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284 Clayton P. Gillette, “Rules, Standards and Precautions in Payment Systems,” 82 Va. L. Rev. 181, 183 (1996). In a footnote, Gillette added, “The similarity of function between the three payment devices is increasing as ATM cards are increasingly usable to pay for goods at the point of sale.” Id., n. 8.

285 Mann, supra, at 656-658.

286 Mann, supra, 93 Geo. L.J. at 665.
D. Behavioral Issues in Disclosure of Card Fees

Most countries that regulate payment cards impose a disclosure regime on credit card issuers, requiring disclosure of various terms and conditions of the accounts. In the United States, TILA and Federal Reserve Regulation Z require elaborate and lengthy disclosures of the terms and conditions of credit card accounts to which consumers typically pay little attention, apart from a few key terms such as the annual percentage rate. Separate disclosures must be furnished to the cardholder in credit card applications and solicitations, at the time of establishing the account, in the cardholder’s periodic statements, and on an annual basis.287 Model forms for applications and solicitations included in an appendix to Regulation Z contain key credit terms in tabular form, followed by more voluminous detailed disclosures.288

The disclosures required for debit cards in the United States under EFTA and Federal Reserve Regulation E289 are somewhat less voluminous,290 and model forms are limited to the text of clauses and notices.291

Disclosure requirements as consumer protection policy must be evaluated in light of behavioral studies suggesting that disclosure, without more, is ineffective in affecting consumer choice.292 The 1970’s debate over simplification of Truth-in-Lending Act requirements that resulted in the Truth-in-Lending Simplification Act of 1980 was centered on cognitive psychology and the theory of information overload. The theory of

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288 Regulation Z, supra, Appendix G.

289 12 C.F.R. Part 205.

290 See Regulation E, supra, 12 C.F.R. §§205.4, 205.7-205.10, 205.16.

291 Id., Appendix A.

information overload posits that if too much information is disclosed to consumers, they are easily confused, are unable to use the information and do not make better decisions as a result.293

One solution, adopted in some of the TILA model forms published by the Federal Reserve Board, advocated by consumer groups in the U.S. and the U.K., and sometimes called the “Honesty Box” or the “Schumer Box” after Sen. Charles Schumer (D-NY), is “layered” disclosure that highlights a few key terms, e.g., in bold face type in a box, while more voluminous disclosures are set forth in fine print elsewhere on the document. There is no reason why layered disclosure should be used only in certain forms under TILA and not in debit card disclosures that are subject instead to EFTA.

If layered disclosure is to be used for debit cards, what terms should be “in the box”? The annual percentage rate and other terms disclosed “in the box” for credit cards are inapplicable to debit cards.

However, exorbitant and undisclosed fees for debit and prepaid card transactions remain a problem for consumers, and affect access for consumers who typically remit small amounts of money. In the United States, a significant percentage of prepaid cards include per-transaction POS fees.295 Moreover, although payroll cards may be usable at ATM’s, fees for such use are unregulated and are commonly imposed,296 apparently on the theory that payroll cardholders are not considered bank customers because the employer, not the cardholder, funds the account. Debit card fees may be imposed not only by banks, but often by merchants that accept PIN-based debit cards. Consumers who use debit cards at a point of sale in the United States often cannot be sure whether they will be charged no fees, one fee by their bank, or two fees, one by their bank and one by the merchant.

Moreover, the recent global proliferation of debit cards has made it easier for consumers to overdraw their bank accounts. In some countries, such as Russia, banks have been quick to grant small, fee-laden overdraft credit lines along with debit cards, so that consumers who use their new debit cards to overdraw their bank accounts pay heavy charges and interest. Elsewhere, as in China, banks have also issued secured credit cards to their customers, and established stiff penalties and interest for overdrafts.

Fees imposed on consumers for debit card use are often arbitrary. For example, ATM users are typically charged a fee for withdrawing cash from ATM’s in Germany but not in France, where ATM use is free.297 An EC study in 1999 found that member state debit card users who made purchases in other member states were charged no fee if the card was issued in Belgium, Ireland, Spain, Luxembourg or Finland, but were charged

295 Budnitz, supra, at 6-7.
296 Id.
297 , at 16.
fees by issuing banks in other countries, with German banks charging the most.\(^{298}\)

However, under EU Regulation 2560/2001, since July 2003 banks have been required to charge the same for small euro cross-border payments as for domestic payments. The effect is that, at least in theory, a French bank’s customer armed with a French debit card could withdraw cash from a German ATM without paying a fee – if the German ATM operator charges a fee, the French bank is supposed to bear it, not the customer - while the same person using a German debit card would have to pay a fee for withdrawing the same cash from the same ATM.\(^{299}\)

In the U.S., local governmental attempts to regulate abusive ATM surcharges by federally-chartered banks have been frustrated by federal preemption.\(^{300}\) The same has been true of judicial attempts to use “Little FTC Acts” and other state laws on unfair trade practices to strike down other bank fees, such as overdraft fees.\(^{301}\) A recent ruling of the Office of the Comptroller of the Currency held that the application of most state regulatory statutes to national banks is preempted by federal law.\(^{302}\) In contrast, the EU has taken an approach more favorable to substantive regulation of fees and charges, under the authority of its Unfair Contract Terms Directive.\(^{303}\)

Layered disclosure of debit and prepaid card fees should be required by issuers, so that consumers will be likely to pay attention to the disclosures. Merchants that charge fees for use of debit and prepaid cards should be required to disclose these fees in a


\(^{300}\) For a discussion of ATM surcharges in the U.S. and local governmental attempts to regulate them, see Note: The Legality of Local ATM Surcharge Bans: the Case for the Cities of Santa Monica and San Francisco, 74 S. Cal. L. Rev. 1353 (2001).


\(^{302}\) 69 Fed. Reg. 1895 (January 13, 2004). See also Julie R. Caggiano, “2004 Update on Residential Mortgage Lending (Including Preemption, RESPA),” 58 Consumer Fin. L. Q. Rep. 308, at n. 21 (Winter 2004); Bank of America v. City & County of San Francisco, 309 F.3d 551 (9th Cir. 2002) cert. denied, 123 S.Ct. 2220 (2003)(the National Bank Act and OCC regulations together preempt conflicting state limitations on the authority of national banks to collect fees for the provision of electronic services through ATMs; municipal ordinances prohibiting such fees are invalid under the Supremacy Clause); Wells Fargo Bank, Texas, N.A. v. James, 321 F.3d 488 (5th Cir. 2003) (Texas statute prohibiting certain check cashing fees is preempted by the National Bank Act); Metrobank v. Foster, 193 F. Supp. 2d 1156 (S.D. Iowa 2002) (national bank authority to charge fees for ATM use preempted the Iowa prohibition on such fees). See also, Bank One, Utah v. Guttau, 190 F.3d 844 (8th Cir. 1999), cert. denied sub nom Foster v. Bank One, Utah, 529 U.S. 1087 (2000) (holding that federal law preempted an Iowa restriction on ATM operation, location, and advertising).

meaningful fashion. Disclosure when one’s goods have already been rung up at the cash register is not meaningful; consumers are already psychologically committed to the transaction by that time. Rather, disclosure should be made on entry to the store, or on approaching the cash register, and in a manner calculated to catch one’s attention.

Even layered disclosure, however, is likely to be insufficient protection for consumers against behavioral manipulation. For example, consumers display behavioral biases that result in the underestimation of future borrowing, and an undue optimism that credit card balances can be paid currently, making interest rates seem unimportant. No amount of disclosure is likely to curb that optimism. Moreover, the subject-matter of disclosures lends itself to manipulation, viz. the meaninglessness of disclosure of annual percentage rates of variable loans that are based on initial promotional rates.

Payment card fees charged by issuers are a good example of manipulable subject-matter, because they are a morass of cross-subsidization. Late- and over-limit fees and interest rates for credit cards are set well above marginal cost, while annual and per-transaction fees are set below marginal cost and usually, in the U.S., are non-existent. Bank issuers of credit cards effectively defray transaction processing costs by increased spreads between interest rates and their cost of funds, and by imposing late- and over-limit fees. In the U.S., point-of-sale (“POS”) fees and fees for use of other banks’ ATM’s have historically been common for PIN debit though POS fees have been cut back post-Wal-Mart.

In parts of Europe, however, such as Finland and Belgium, POS fees are uncommon. Do Finnish and Belgian banks subsidize processing costs, and if so, what charges do they impose on other services to offset this subsidy? Are banks in the U.S. charging above marginal cost and making a profit on POS fees that goes to subsidize credit card use, on which issuers earn high rates of interest? Most importantly, how can a consumer know the true cost of using a payment card when certain fees subsidize other fees? These questions require further study, but they illustrate the difficulty of formulating disclosure requirements that will be meaningful to consumers.

E. Problems of Access to Banking Services

Debit cards, unlike prepaid cards, require a bank account. This fact places a premium on the right to open a bank account. Banks may turn away customers they deem undesirable due to adverse credit history, immigration status or other reasons. It appears to be uncommon in the United States for customers to be denied the right to open a bank account, but not so in Europe. During 2004, Belgium enacted legislation guaranteeing all consumers the right to access to bank services. Other EU countries have enacted or considered enacting similar legislation.

Outside Western Europe and Scandinavia, however, laws of this kind are virtually non-existent. Although American law prohibits discrimination on the basis of certain invidious categories such as race and gender, there is no general right to a bank account in the United States, and nothing prevents banks from turning away customers who want to open a deposit account on grounds related to poverty, for example, that they have a past bankruptcy or foreclosure on their credit record, or have been evicted from their

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305 Id.
residence, or lack a permanent address.

In several countries, lack of physical access to banking services has been a prominent consumer issue, particularly the lack of branch banks in rural areas. In addition to promising technological solutions like m-banking, one creative attempt to provide geographic access is Banco Postal in Brazil, a joint venture between a major bank, Bradesco, and the Brazilian Postal and Telegraph Co. (Correios) to place branches in post offices in areas that previously lacked financial services.306 The post office banks have brought over 1.5 million previously “unbanked” people in Brazil into the banking system.

As discussed above, password-protected prepaid cards are another solution to the problem of the “unbanked.” Stored value cards present money laundering issues that are beyond the scope of this article but might limit the enthusiasm of law enforcement authorities for them as a solution. As the amount of value stored on cards grows, they also could pose economic issues regarding regulation of the money supply. The trend in the developed economies is toward stored value cards, particularly phone cards, being used for mobilemicro payments to vendors of goods and services apart from their use to pay for telephone calls.307 Stored value cards also are usable at ATM’s to obtain cash.

However, in emerging economies such as Russia, and to some extent in the U.S., stored value payroll cards, such as those now offered by Visa U.S.A., are becoming common. If one’s entire salary is paid by loading value onto a stored value card, it is likely that one will use the card for more than just micropayments or ATM transactions.

As payroll cards solve problems of access to banking services, and as merchants in the developing world acquire the necessary equipment to accept them in payment, the number of large-amount stored value card payment transactions can be expected to increase significantly. Also, with so much value stored on cards, problems of security and the risk of unauthorized transactions are magnified. Though payroll cards are usually password-protected, such protection has not always prevented fraudulent transactions, e.g., in Canada where sophisticated schemes have resulted in a high rate of theft and misuse of passwords for PIN debit cards.

F. Discharge of Obligations in Debit and Prepaid Card Transactions: the Insolvency Problem

Because most debit and prepaid card transactions, other than signature debit, clear in real time, discharge of obligations in debit and prepaid card consumer transactions is usually not an issue, except in the case of “signature” debit transactions where there is a delay before the merchant receives payment. Misdirected payments are not usually a problem because magnetic strip and chip technology on cards and the technology of card-reading equipment have made them unusual. In contrast, UCC Article 4A, applicable to wire transfers through commercial wire transfer systems such as the Federal Reserve’s FedWire system, devotes several sections to problems of discharge and misdirected

payments;\textsuperscript{308} wire transfers are more susceptible to error due to manual entry of payment instructions such as the beneficiary/payee’s account number.

Discharge rules can become an issue in case of insolvency, either the insolvency of financial institutions, payment service companies such as PayPal that maintain consumer accounts, or transaction processors such as First Data Corp. that process card transactions on behalf of financial institutions. Discharge also can be problematic in case of the insolvency of the payor or the merchant.

Financial institution insolvency continues to be a problem for consumers in Africa and elsewhere in the developing world. In the mid-1990’s nine banks in Zambia, representing over 23% of total commercial bank assets, failed.\textsuperscript{309} At roughly the same time Nigeria witnessed the failure of seventeen local banks, while Kenya and Uganda also experienced the failure of several local banks that represented significant percentages of commercial bank assets in those countries.\textsuperscript{310} A large number of these banks, particularly in Kenya and Nigeria, failed due to defaulted insider loans made to politicians to whom credit had apparently been extended in exchange for arranging to have the funds of governmental or parastatal organizations deposited in the bank.\textsuperscript{311} Bank failure was not confined to Africa; for example, another six banks failed in Turkey at about the same time.

As mobile telephone service providers and other intermediaries enter the market for payment services, insolvency of payment service providers and money remitters has become a consumer issue in the developed world as well. Numerous payment services have been dissolved or initiated bankruptcy cases in the United States, and the legal system has had to address issues regarding the entitlement of consumers and payees to funds deposited with the payment service. If mobile telephone service providers become major providers of payment services, the same issues may have to be addressed with respect to telephone service providers that become insolvent.

One solution is to extend governmental deposit insurance programs to cover funds deposited to add value to prepaid cards. For example, the Federal Deposit Insurance Corporation in the U.S. recently initiated a proposed rulemaking to extend deposit insurance to bank accounts established by employers to pay workers who are issued payroll cards linked to those accounts.\textsuperscript{312}

\textbf{VI. Conclusions}

The lack of a global focus of scholarship in payment systems law has flawed that scholarship. Americans’ use of payment cards has been treated as mainstream. It is not. America’s addiction to credit cards is an anomaly – perhaps one that is gradually disappearing, but an anomaly nonetheless.

Several conclusions can be drawn from this article:

\begin{itemize}
  \item \textsuperscript{308} See UCC §§4A-201 \textit{et seq.}
  \item \textsuperscript{310} \textit{Id.}
  \item \textsuperscript{311} \textit{Id.}, pp. 16-17.
  \item \textsuperscript{312} See Beth S. DeSimone & Carrie A. O’Brien, “Payroll Cards: Would you like your pay with those fries?” 9 N.C. Banking Inst. 35 (2005).
\end{itemize}
1. Debit and prepaid cards are proliferating in countries that lack an adequate regulatory regime for protecting the consumers who use them.

2. The billions of people of low to moderate incomes who are being hurled from a cash economy into the era of electronic payments in emerging economies by the proliferation of debit and prepaid cards are particularly vulnerable to abuses by banks and merchants.

3. Unregulated private lawmaking by payment card associations and card issuers will not ensure that consumers are treated fairly, due to their countervailing incentives to attract merchants into payment networks.

4. Technological solutions promote efficiency and limit abuse, but cannot ensure fair resolution of consumer disputes.

5. Nations with emerging economies should not uncritically emulate regimes of consumer protection adopted in the United States and Europe, which in many respects lack a consistent conceptual foundation and fail to address problems, such as bank fees, access to banking services and insolvency, that are poorly addressed in developed countries if they are addressed at all.

6. Debit and prepaid card transactions are both a convenient means of obtaining cash and a substitute for cash, but this does not justify treating consumers who use debit and prepaid cards as if they had paid in cash.

7. The lack of anonymity inherent in the use of payment cards entails risk for consumer privacy, but also makes possible greater transparency and disclosure to consumers of outcomes of the chargeback system such as merchant ratings.

8. Fees and charges imposed on consumers for payment card services are one of the most prolific sources of consumer complaints. Fee regulation should be regarded as a legitimate part of payments law in scholarship on the subject, and should not be ignored in establishing a regulatory system to govern debit and prepaid cards.