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Mobile Credit: The Effect of Credit Cards on Consumer Spending in the United States in the Second Half of the Twentieth Century

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Credit has been a defining staple of commerce and transactions since antiquity and “buy now pay later” schemes date back to biblical times. Benjamin Franklin illustrated the paramount significance of credit when he once remarked, “remember that credit is money,” and President Herbert Hoover echoed this sentiment when he exclaimed, “let me remind you that credit is the lifeblood of business, prices, and jobs.”¹,² Perhaps the most significant development in the history of consumer credit to date
was the emergence of the bank issued credit card. The bank credit card has assumed a substantial role in contemporary consumer theory and personal finance. As of 2010, bank issued credit card transactions for U.S. households totaled 15.25 billion in volume and exceeded $1.2 trillion in value. The growing prominence and proliferation of bank credit cards has promoted increased consumer spending. The data show an unequivocal correlation between augmented personal consumption and credit card usage. The percentage of households using credit cards increased from 16 percent in 1970 to 64 percent in 1995, with average monthly charges surging from $125 to $500 inflation adjusted dollars over that same period. Likewise, during that same interval, average household expenditure accelerated rapidly from an inflation adjusted approximately $10,000 to $35,000.

Credit cards have encouraged increased consumer spending in the United States in the final three decades of the 20th century because they have served two distinct functions: they were—and remain—a convenient means of paying for goods with a universally accepted charge card as well as a mechanism for borrowing money to finance short term purchases. The card’s payment function was made possible by the establishment of a comprehensive network that provided the requisite organizational structure to elicit the participation of all the major sources.
market players: banks, merchants, and consumers. Among other properties, this collaborative enterprise provided the convenience, universal accessibility and psychological underpinnings to significantly alter and aggrandize consumer expenditures. With respect to borrowing, the credit components associated with the card afforded consumers new avenues to finance purchases on credit. Specifically, the borrowing features of the card allowed cardholders to pay for goods with loaned money, which encouraged more spending with greater efficiency, synchronized cash flows with spending, and eased liquidity constraints that induced future spending. The credit card was innovative because, as a whole, it functioned as a versatile and unrestricted mobile credit vehicle. Bank issued credit cards and the underlying credit networks upon which they relied revolutionized and catalyzed the increase in consumer spending in the United States during the late-twentieth century by combining effective payment mechanisms with unique borrowing features.

The Payment Side—Universal Processing:

Perhaps the greatest legacy of the unrestricted bank issued credit card remains its universal properties. Although some stores in the United States offered individual, store specific charge accounts before the advent of credit cards—a topic that will be discussed later in greater detail—the bank issued card could be used to purchase goods at any of the vast number of merchants affiliated with the credit card network. In essence, the credit card introduced portable and transferable credit spending capabilities. With the universal bank issued card, credit cards functioned as a virtual currency honored at all network affiliated merchants. Under this arrangement, consumers enjoyed the many benefits associated with both the payment and borrowing features of the credit card, which dramatically altered both the manner and extent to which American consumers spent their discretionary income. However, to a large degree, the unique structure of the credit card network served as a vital prerequisite
for the introduction and proliferation of credit cards in the U.S. market. In short, “the banks that issued the card did so because they believed they would profit from fees and interest, the merchants that accepted them believed that customers would make additional and larger transactions with the cards, and consumers thought the cards were the best vehicle for payment or borrowing relative to alternatives.”  

7 The card brought the banks, merchants, and consumers under one umbrella. Without this distinct organizational payment structure, the credit card would have remained economically unviable, the borrowing and payment features would have been severely restricted, and consumers would not have realized the consumption gains that credit cards induced.

At the onset, the bank credit card fell far short of being universal by contemporary standards. After the introduction of the first credit card in 1950, over 100 small banks began to issue credit cards, most of which floundered immediately, but the most notable was Bank of America’s BankAmericard. At its inception in 1958, the BankAmericard operated under a fundamentally different framework than do contemporary credit card companies. The card could be issued exclusively through Bank of America, then the nation’s largest bank, and could be used to charge purchases on 30-day lines of credit only at merchants with whom San Francisco based Bank of America had contracted directly. However, longstanding federal regulations dating from Andrew Jackson’s crusade against the Second National Bank restricted banks from operating across state lines. The McFadden-Pepper Act of 1927 and the Banking Act of 1933 granted states the authority to prohibit interstate branch banking. These laws had prevented the rise of a nationally issued and accepted card. The legislative environment became even more hostile towards national banking institutions at the very moment charge payment cards were taking hold in America. Previously, some banks circumvented geographical restrictions through a legal loophole that allowed holding companies to own
banks in several states. In 1956 the Bank Holding Company Act prohibited this sort of interstate branching unless both the states involved explicitly permitted it.\textsuperscript{10}

Existing legislation not only limited the sphere of influence of large credit issuing institutions such as Bank of America, but also precluded most consumers in semi-urban and rural markets from the credit card industry. Banks restricted card operations to densely populated cities where they could justify the high cost of investing in infrastructure to service and market their cards. Moreover, merchants would accept discounted compensation from consumers using the cards only in markets that offered high sales volume. Likely as a result of the unfavorable legislative climate, at the midpoint of the 20\textsuperscript{th} century, no single bank retained significant market share of the American consumer banking industry. As such, each lacked the resources and infrastructure to launch a nationally issued and recognized card brand. Under this backdrop, Bank of America faced the most auspicious circumstances relative to its peer institutions. Not only was San Francisco-based Bank of America the nation’s largest bank at the time, but California remained one of a few states that permitted intrastate branching operations, which gave the bank quick access to a large, affluent, and loyal customer base.\textsuperscript{11}

Beginning in 1965, Bank of America took the first significant step to provide a national base for its credit card and pioneered the operational structure that has remained largely intact as the present day industry standard. The bank launched the BankAmerica Service Corporation, which served as a national licensing organization to franchise the BankAmericard to local banks, which were henceforth authorized to issue a card that carried the nationally recognized BankAmericard trademark. In 1970, at the behest of its franchise holders,\textsuperscript{12} Bank of America spun off the Bank Americard operation and formed what is known as a “network joint venture.”\textsuperscript{13} A joint venture is an economic term that denotes a legally binding agreement in
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which the parties agree to participate in a specified enterprise by contributing equity, sharing control, and each assuming a specified portion of profits and losses.\textsuperscript{14} Under the terms of this cooperative, Bank of America and the other banks, credit unions, and traditional money lending institutions that had licensed the rights to the BankAmericard became members of the joint venture, called National Bank Americard Inc. and Visa from 1976 onwards.\textsuperscript{15} Each member institution would be responsible to issue charge cards to consumers, sign up merchants to accept the cards, or do both. As such, the credit card company—the brand logo that appears on the card such as Visa or MasterCard—is not an entity that directly lends money on credit to consumers. Rather, the credit card company is an administrative arm of this joint venture of cooperating, but separate, banking institutions, each of which assumes its own credit risk in full when issuing cards. While the credit card company represents the interests of its member institutions, it operates independently and performs mostly centralized functions to manage individual accounts, settle disputes between consumers and merchants, market and advertise member services, innovate instruments for credit lending for members, protect against fraud, and regulate internal policies that govern protocol for member institutions.\textsuperscript{16} This network solved the problems of early independent attempts to provide mass universal credit, which faced inhibiting fixed costs and undiversified risk. The networks diffused the costs and uncertainty amongst all member banks, which also provided additional incentives for even smaller banks that lacked the capital to spend large sums to join.\textsuperscript{17} Thus, the networks transformed the customer’s local card into a national card that could—and would—be used ubiquitously.

In the wake of BankAmericard’s success, another group of financial institutions collaborated to form the Interbank card Association in 1966, which changed its name to MasterCard in 1980 and operates employing an almost identical structure to Visa. The Credit Card industry failed to collect much data during
its nascent years—the late 1950’s and early 1960’s—but the number of banking institutions that joined the BankAmericard network serves as a testament to the rising popularity of the credit card. From just one institution at its commencement in 1958, the card had 6 issuers in 1966, 243 in 1970, and over 6,500 in 1998.18 In general, this influx of banks provided even more credit options for consumers, even in the most remote markets, and ultimately boosted credit card usage. The credit card lending institution grew to such an extent that a number of monoline banks—issuers that engage wholly or primarily in issuing credit cards—emerged, such as MBNA and Capital One. The monoline banks accounted for a significant portion of the new credit available and among the 50 largest issuers in 1997, monoline banks accounted for approximately 16 percent of charge volume.19

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Merchants:
In evaluating the role of the universal credit card on consumers, there likely exists a natural propensity to circumvent or marginalize the crucial role of the merchant. However, all transactions require the participation of at least two parties. To date, consumers can use their credit cards only at merchants who accept the card. Conversely, merchants, who must surrender a merchant’s discount that averages approximately 3 percent on every purchase, will not accept 97 cents on the dollar unless they believe they will lose more money in forgone sales revenue than the merchant discount. This phenomenon led to the chicken and the egg problem or a bandwagon effect as credit cards were first introduced. Consumers did not want a card that merchants did not accept, and merchants refused to pay a premium for cards that were not yet popular. Accordingly, credit card usage is considered a positive externality because the cards are more valuable to each party in the system when the number of people using and accepting them grows.\(^{20}\) The emergence of the universal bank issued card proved to be the solution that broke the vicious cycle.\(^{21}\) The structure of the joint venture meant that the individual banks had to sign up relatively fewer consumers to expand the network quickly enough to entice both merchants and consumers to join. Moreover, to encourage spending and achieve market penetration, many of the individual banks assumed unconventional levels of credit risk by mailing free credit cards to thousands of customers, many of whom were traditionally non-creditworthy.

This campaign to create an entirely new payment market using the universal features of the joint venture succeeded spectacularly. The percentage of households with at least one credit card increased from 15 to approximately 40 percent from 1970-1977. Moreover, consumers were actually using their cards, as the percentage of total consumer debt made up by credit card debt spiked from roughly 3 to 17 percent in that same period.\(^{22}\) Merchants responded in kind, and the number of Visa
merchant locations doubled in that period from 1970-1977 and quadrupled by 1997. Additionally, although merchants were receiving slightly less revenue for each product sold because of the merchant discount, experimental studies by researchers Drazen Prelec and Duncan Simester suggest that consumer willingness to offer substantially more when sellers accept credit cards made up for the difference and actually increased revenue. According to economist David Evans, by 1997, “credit cards had established themselves as an essential payment mechanism among most merchant segments. At gas stations, apparel shops, department stores, electronics outlets and many other retailers, credit cards had even become the dominant form of payment.”

Consumers:

Of course, as a payment mechanism, the universal bank issued credit card has provided innumerable and valuable benefits to consumers that have revolutionized both the method by which consumers spend and the quantity they consume. As means of payment, the bank issued credit card, which eventually could be used at most stores nationally, became a substitute for cash. In fact, historical data substantiate this proposition and illustrate that indeed increased bank credit card usage remains highly correlated with decreased cash usage. For example, in 1984, paying with cash was still more prevalent than paying with credit cards. Yet, by 2003, as the percentage of all transactions involving a credit card increased significantly from 20 to 40 percent, the percentage change for transactions using cash dipped by 33 percent.

As consumers began tendering payment with credit cards with increased regularity, the payment structure underlying credit card usage facilitated spending that was otherwise limited when cash or checks were the only payment options. Foremost, the physical convenience the credit card provided should not be understated. Bank notes must be carried en masse to purchase items in bulk if one hopes to avoid multiple trips. Because most
consumers felt uncomfortable carrying so much money at one time, they simply made smaller purchases. A study by Visa in 1996 corroborated this conclusion, illustrating that consumers tended to use cash for small purchases under $60 and credit to tender larger amounts.\textsuperscript{27} Though consumers can always pay by check, the typical checkbook weighs 14 times more than a credit card, and according to a survey of American adults in the 1990’s, approximately 40 percent of Americans preferred not to carry a checkbook.\textsuperscript{28} Similarly, a Gallup poll confirmed that consumers preferred credit cards to checks because writing checks at checkouts counters is inconvenient and takes too long. Thus, credit cards expedited the checkout process and accelerated the flow of business, which encouraged more purchases in a given period.\textsuperscript{29} Furthermore, the credit card provided additional security features that aided consumers. Drafted in 1968 in response to tremendous losses due to credit card fraud, Title IX section 901 of the FDIC consumer protection regulatory code limited consumer liability to $50 if a credit card was misused fraudulently. By contrast, cash carries full liability and is difficult to trace, and checks are subject to an intricate web of highly technical legal statues that would likely tax the consumer’s time, if not also his wallet. Moreover, credit card usage increased commerce, as checks were often difficult to use outside of one’s local community. Merchants, wary of bounced or forged checks, frequently refused to honor unfamiliar checks, as opposed to the credit card, each of which displayed a nationally recognized brand name. The credit card particularly facilitated consumer spending by allowing people greater accessibility to purchase goods outside of local communities.\textsuperscript{30}

In fact, the notion that credit cards could be used to guarantee payment triggered explosive sales growth for expenditures on common goods that required a system of insuring payment. For example, hotel room and car rental sales accelerated as companies lowered prices because they could obligate customers to present credit cards to reduce the
risk that customers would shirk reservations or damage rented merchandise. The mail order industry, which typically required the customer to first mail a check and then wait for the product, benefited fabulously in the form of lowered costs, improved service, decreased waiting times between orders and delivered goods, more cash receipts, and increased sales. In addition, consumers could now buy tickets for movies, sporting events, plays, concerts, and other venues over the phone by using their cards. Eventually, the card opened up the door for second-hand markets where individual, non-retail sellers could exchange with individual buyers using services such as eBay. 31 As the Internet became more prevalent in commercial and personal life, it added even more value and flexibility to payment card purchasing.

Another prominent manifestation of the universal joint network venture that influenced consumer spending substantially is the ability to offer reward and affinity programs. In fact, commercial law and electronic commerce scholar Ronald Mann states explicitly that “both [rewards and affinity programs] encouraged consumers to spend or borrow more than they otherwise would.” 32 In 1978, Visa introduced the first affinity program which allowed a non-member’s (non-bank’s) logo to be displayed on the face of the card. The program partnered member banks with large non-financial institutions that, in exchange for a percentage of the profits, offered affinity cardholders significant discounts and special offers for their products and services. Alternatively, some affinity programs promoted spending by promising to donate a percentage of all transactions to a charity or a favored institution, such as the Democratic or Republican Parties, the NAACP, or even the New York Yankees. 33,34 The affinity cards generated additional card usage and sales predominantly from customers loyal to the affinity institutions or those seeking the affinity discounts and promotions. 35 But, the affinity programs would have been neither economically viable nor would they have attracted such popular non-member sponsors without the large customer base
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and high sales volumes that the credit card networks afforded. Affinity cards achieved a sizeable market share relatively quickly. By 1986, 296 associations had developed affinity programs, this number swelled to 4,500 organizations by 1998, and from 2000-2006 the share of loyalty cards in the credit card market grew from 10 percent to 25 percent.\(^{36}\) Beginning in the 1990’s, credit card companies instituted a reward system to entice prospective cardholders. Once again, because credit card networks generated such high sales volume card companies could partner with other organizations to offer attractive amenities such as frequent flyer miles, favorable insurance policies, rental discounts, and some companies even offered cash back.\(^{37}\) The credit card industry invested tremendous sums to promote their rewards programs; for example, in 1996 MasterCard spent $102 million and Visa $227 million to operate these initiatives. These marketing campaigns paid dividends as customers increased their credit card spending to earn rewards. Recent data suggest that the average monthly expenditure on a rewards card is $943, compared to $360 on a card that does not offer a reward.\(^{38}\)

Perhaps the most significant impact of the credit card’s payment functions on consumer spending was simply the idea of a universal credit card. Conceptually, the quarter of an ounce credit card served as a virtual wallet capable of purchasing thousands of dollars of merchandise. The almost instantaneous, mobile access to vast sums of money induced consumers to spend more liberally. Certainly, part of what caused consumers to spend more with credit cards was the physical ability to do so. This pattern of increased spending associated with a preference for credit card use led psychologist Richard Feinberg to propose what other authors have termed the credit card effect. Feinberg analyzed consumer spending data and conducted experimental case studies where participants who used a credit card exhibited a greater willingness to pay higher sums. Based on the results of these studies, author Juliet Schor suggested that consumers were somehow conditioned to spend more with credit cards,
describing the results of one case study where “participants exhibited an almost Pavlovian response to spending more after exposure to a MasterCard logo.” Feinberg simply referred to the cards as “spending facilitating stimuli” and attributed this conditioning to the notion that credit card users experience only an indirect sense of loss that psychologically masks the full extent of the void after tendering payment. When shoppers pay by cash or check, they must physically surrender one good, the cash or check, in exchange for the merchandise they purchase, which generates either a sense of mutual exchange or forfeiture. The loss is immediately tangible and palpable. Whereas one had $40 in her wallet beforehand, she now has only $25, and thus she feels poorer and less able to spend. Conversely, following each card-based transaction consumers feel only an indirect loss as they retain their charge cards, and with credit cards they face the charges only later. Finally, psychologists—including Feinberg—have pointed to the industry’s effective marketing techniques. Networks have buttressed the spending effect by using “colorful logos and schemes associated in the minds of their customers with increased gratification and financial empowerment. The American Express logo- a Roman centurion in full regalia has obvious connotations of mastery and control.” Furthermore, aggressive advertising campaigns and card designs have branded credit cards as sleek, sexy and fashionable instruments—indispensable accessory for leading a comfortable lifestyle. Of course, the credit features of the card, which will be discussed next, also contributed significantly to heightened spending.

The Borrowing Side—The Use of Credit in Consumerism:

The credit card is a double-edged sword. While the benefits of the universal payment features and payment functions have been heretofore discussed extensively, the bank issued credit card also pioneered and popularized an easily accessible mechanism for borrowing on credit to finance purchases. Prior to the advent of the credit card, with few exceptions, consumers
had to render payment immediately upon purchase. Although in small towns and rural areas many local merchants operated informal tabs for loyal patrons, the institution of credit in America until the 1940s was reserved primarily for commercial enterprises and qualified or highly collateralized individual borrowers. Historian Lewis Mandell characterizes the consumer credit landscape in the beginning of the 1950s as follows: “if a bank had a consumer loan department it was often found in the basement where no one could see the furtive borrower.” Although Mandell’s humorous caricature likely underscores a degree of economic reality, credit cards were by no means the first form of consumer credit in America. The earliest instances of large scale credit issuing were programs in the late 18th-19th century for farmers who needed loans to purchase land and capital to grow their produce far in advance of when they would receive revenue from the harvest. As such, they borrowed against expected future income. The other major historical development that eased consumer credit constraints was the growing popularity of high priced household durable goods, commencing with Singer’s sowing machine in the mid-nineteenth century and gaining traction in the early 20th century with the advent of automobiles, washing machines, vacuum cleaners and other pricy household durables. Accordingly, hotels and large retail stores began issuing “charga plates” to mostly upscale loyal customers. The charga plate, an embossed metal address plate that identified the account holder, allowed the consumer to finance purchases at that particular store on 30-day credit. Subsequently, oil companies issued equivalent instruments called courtesy cards that limited sales on credit to gas stations owned and operated by the firm. Nevertheless, to obtain any type of non-store or company specific credit, consumers relied primarily on the conventional closed end bank loan. These secured collateralized loans required extensive background checks, a visit to the bank for an interview, and copious amounts of paperwork. Indeed, because they were so tedious to obtain, people
“Charga Plates” with accompanying cases. These “Charga Plates” are relatively modern. The older versions were completely metal and contained engravings with the customer’s personal account information.
sought them predominantly to finance significant purchases or service pre-existing debt.\textsuperscript{46}

The credit card served as an innovative vehicle for mass consumer credit that combined two essential credit features: it was an unsecured line of revolving credit. An unsecured line of credit is a non-collateralized or non-asset-backed agreement in which the borrower can draw up to a predetermined credit limits at any time and pays interest only on money actually withdrawn. A line of credit facilitates borrowing- and therefore spending as well—because the borrower needn’t approach the bank (lender) each time he needs money. Unlike a term loan, which grants the borrower a lump sum to be paid back with interest at a contractually agreed upon later date, the unsecured line of credit allows the borrower to segment the loan and doesn’t require him to specify the amount upfront. The unsecured line of credit was integral to the credit card market. Risk adverse consumers had no reason to assume debt and incur interest expenses before making routine purchases. For the most part, they would make only as many purchases as they could finance with existing, predominantly liquid assets. As the unsecured line of credit proliferated with the rise of store and then credit cards, consumers could now make purchases by simply assuming a conditionally interest-free debt at the time of purchase.\textsuperscript{47} In essence, Consumers were making the decision to borrow a fractional sum of their credit limit each time they made a small purchase.\textsuperscript{48} Satisfied with this arrangement, consumers began paying by credit more frequently. According to a report from the Federal Reserve’s board of governors, outstanding credit card debt vaulted from a mere $828 million dollars in 1967 to over $14.2 billion dollars in 1977, an astounding average annual growth rate of nearly 35 percent over a 10 year period.\textsuperscript{49} The Federal Reserve’s annual Survey of Consumer Finance reports from 1970-1995 reveal that charge volume on credit cards surged from approximately 3 percent of household income in 1970 to almost 20 percent in 1995.\textsuperscript{50}
The second and perhaps more radical breakthrough of the bank issued credit card was the nature of the unsecured credit line – revolving credit functionality. Until the emergence of the BankAmericard in 1958, institutions that provided consumer credit, such as hotels and restaurants, offered only installment credit where outstanding balances must be repaid by the contractually agreed upon date in one lump sum or pursuant to a predetermined amortization schedule. Even the first so called “credit cards,” such as the Diner’s club card introduced in 1949-50 and the American Express card of 1958, required cardholders to repay outstanding balances in full at the end of each month. Revolving credit allowed consumers to defer payments indefinitely. However, outstanding balances beyond a certain period—typically the end of the month for a credit card—were subject to high interest charges averaging 18 percent. Bank of America did not introduce the first 30-day interest-free revolving credit scheme; that distinction belongs to J. L. Hudson’s of Detroit in 1956. However, only two years later, the BankAmericard accumulated a tremendous market share of the revolving credit market, and by 1980 credit card debt accounted for 98.57 percent of all outstanding revolving consumer debt. Moreover, revolving credit card debt began to displace other forms of consumer debt. Between 1980 and 1996, the share of revolving credit card debt leaped from 25 to nearly 70 percent of total consumer debt, as installment credit skidded from 25 to 10 percent and all other forms dived from 50 to 20 percent in that same period. Consumers began using revolving debt to finance purchases with increased frequency. The average household monthly card balances increased from less than 1 percent of household income to just over 5 percent between 1970 and 1995. Furthermore, the fraction of households carrying any monthly balances rose from 40 to 65 percent in those years and average balances more than quadrupled in the same period from $700 to over $3000.

Economists David Evans and Richard Schmalensee
argue that the revolving credit feature became so widely accepted because it allowed households to borrow against future income. Typically, a wage earner’s income increases until middle age and then remains relatively stable, or even slowly recedes, until retirement. Because people try to distribute their wealth uniformly over their lifetime, younger people with lower current wages borrowed against the higher levels of income they expected to earn in their middle years. Traditional bank loans heavily restricted this behavior and eschewed loans to younger people because they lacked extensive credit histories. Moreover, these traditional lenders faced an adverse selection problem, whereby the most avid customers for debt tended to be the least creditworthy.\textsuperscript{55} While credit cards did not provide a panacea to these liquidity constraints, they served as an effective mechanism for consumers to spend more by borrowing against future income. The cards diffused the risk of default among many predominantly creditworthy consumers and limited an individual bank’s (lender’s) liabilities. Empirical data support these findings. Between 1989 and 1995, as the amount of credit available to US households increased from $515 to $900 billion dollars, younger people levered up. Those between the ages of 18 and 24 amassed credit card balances that were on average 50 percent of their income, up from only 20 percent just 6 years earlier. A jarring, more recent study in 2004 concluded that only 8 percent of graduate students paid their bills in full each month and typically carry roughly $10,000 in debt on average.\textsuperscript{56} Conversely, although all age groups experienced increased credit card debt—a function of greater usage across the board—50-year-olds and up owed only approximately 20 percent of their income in 1995.\textsuperscript{57} As such, Robert Mann asserts that “empirical research by psychologists suggests that credit cards play an important role in fostering compulsive buying by university students in particular.”\textsuperscript{58}

The credit card market has become segmented predominantly into two classes of users: transactors and
revolvers. A significant portion of credit card holders make little or no use of the revolving credit features. In fact, the phenomenon of not carrying a balance became so prevalent that it has earned those who do so the moniker “transactors,” as opposed to the “revolvers” who regularly accrue interest charges. To meet the demands of both constituencies, credit companies offer both transaction and finance oriented cards.\(^{59}\) Revolving credit disproportionately benefits the lower-middle class by allowing them to spend even in times of need, and therefore revolvers tend to be more indigent. According to a consumer survey report, in 2009, 56 percent of households with active credit cards were considered revolvers who regularly financed purchases using credit.\(^{60}\) The credit card has facilitated spending for this group by providing a reliable line of credit of last resort even as traditional banking institutions, which offer significantly lower interest rates, frequently reject their loan applications.\(^{61}\) The persistent inability of low-income households to obtain traditional loans has in turn inflated the perception among the poor that credit cards are their only recourse for borrowing non-collateralized cash.\(^{62}\) Because lower-class households tend to subsist on a meager, likely uncertain, and often irregular stream of payments, they utilize credit cards to finance the purchase of such necessities as food, clothing, rent and other basic staples. Consequently, between 1977 and 1997 the percentage of lower income households that owned credit cards grew the fastest relative to other income groups. The two lowest income quintiles started with only 5 percent of households owning credit cards, and by the end of 1997 the respective percentages were sixty and thirty percent.\(^{63}\) It should be noted, however, that credit does not provide a limitless supply of free money. Impoverished families who use credit cards consistently but never receive additional revenue or sell significant assets to meet their growing liabilities will ultimately default, which will diminish their credit score precipitously and preclude them from future credit opportunities. Nevertheless, even those not yet struggling financially but facing
uncertain prospects or current liquidity constraints rely heavily on revolving credit. In the short run, most households cannot dramatically alter their spending habits because they incur regular fixed costs such as mortgage payments or child rearing expenses and many assets they own are highly illiquid. As such, when primary wage earners lose their main source of income and the bank refuses to extend a traditional loan, they can support themselves using the credit card debt before liquidating significant assets such a car or house, potentially for pennies on the dollar.

However, the interest-free thirty-day loan is the quintessential feature of the credit card that most significantly transformed consumer spending, and it exists principally for the benefit of transactors. Transactors, who tend to be upper-middle class consumers with access to more traditional avenues of obtaining credit that charge substantially lower interest, utilize credit cards primarily to float payment until the end of the month using interest-free debt. Float is the time period between when a payment is tendered and investible funds are made available to

Source David S. Evans, The Growth and Diffusion of Credit Cards in Society, pg. 69.
the payee.\textsuperscript{64} Transactors effectively substitute interest-free credit instead of paying out of pocket, allowing them to invest their own money in higher yielding accounts or securities, a portion of which can be liquidated or withdrawn to pay the bill at month’s end. Before the introduction of credit cards, consumers had to hold onto significant quantities of currency or highly liquid assets to meet their routine consumption demands. Furthermore, high balances of currency or checking accounts also resulted from a phenomenon John Maynard Keynes labeled the “precautionary motive,” a pattern whereby consumers preferred to hold an extra amount in currency or highly liquid accounts for emergencies and unexpected expenses.\textsuperscript{65} To the extent that those aforementioned expenditures and consumption demands could be charged to a credit card, balances held in currency or checking accounts could be reduced. As consumers enjoyed higher yields they had more disposable income with which to spend. For example, in 1995, households that had bank credit cards held approximately $815 or 25 percent less in checking account balances than card-less households. The reduction in checking account balances as a percentage of all financial assets was 3.5 percent or $54 billion, a shift that could have accounted for an added aggregate earned interest of $1.7 billion for households given the prevailing average savings rate of 3.1 percent.\textsuperscript{66}

The bank issued credit card’s unique integration and synthesis of the interest-free grace period, monthly billing, and revolving credit features have also served as an effective home accounting tool that has catalyzed increased spending. Credit cards helped consumers coordinate the timing of their consumption and income receipts by lifting the cash flow constraints of a periodic paycheck.\textsuperscript{67} If consumers saw a desirable item or a discounted limited time offer, they could purchase the good immediately and pay for it later with the arrival of their monthly statement. The genius of the credit card was the ability to purchase goods using money one did not yet own. The credit card fundamentally altered consumer spending patterns because
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it allowed shoppers to capitalize on sales and, more generally, shop with greater efficacy, efficiency, and therefore, frequency. In many instances, the payment and financing options enabled consumers to make purchases they otherwise could not have made. Another element rooted in the deferred payment scheme that appealed to consumers was the added security that accompanied the ability to contest charges. Contesting charges ensured quality control and protected the consumer from the abuses of crooked businessmen and faulty charges. Because the credit card user settled his account only at the end of the month, he could appeal to the credit card company and refuse to pay if deceived or exploited. Accordingly, consumers became less hesitant to make purchases with the knowledge that if the product was subpar they could contest the charges.

As with other forms of debt and consumer credit, psychological factors govern the prevailing attitudes and spending patterns associated with the credit card’s borrowing features. For example, consumer psychologist Robert Manning opined, “Consumer credit represents an erosion of the traditional cognitive connect or fiscal equilibrium between household income and consumption decisions… There is a wide disconnect between getting and spending that induces overspending.” Accordingly, the “get now, spend later” attitude increases spending because consumers employ what behavioral economists term “optimistic bias.” Optimistic bias is the tendency to give excessive weight to the conspicuous and immediate aspects of a relationship and less weight to those terms that are less noticeable or deferred. Consistent with these findings, another behavioral phenomenon called hyperbolic discounting alleges that consumers make valuations of future rewards or costs that are inconsistent over time. In tandem, these prejudices encourage consumers to borrow greater sums to reap the immediate benefits of spending while delaying the costs to some later date. Although these biases can precipitate grave financial disaster if practiced excessively, in moderation these attitudes merely shift the distribution of
disposable income from savings to consumption.\textsuperscript{71}

Conclusion:
The bank issued credit card has secured its place as an invaluable tool in the modern consumer’s spending arsenal. Total annual credit card charges across the nation increased from about $69 billion in 1989 to more than $1.8 trillion in 2006. By 2008, credit cards accounted for over $2.5 trillion in global transactions a year, and more than 24 million merchants in over 200 countries and territories accepted the cards.\textsuperscript{72} The bank-issued credit card’s most innovative component and lasting impact was that it introduced a sophisticated and effective payment system that injected the benefits of purchasing on credit and personal finance into routine, everyday purchasing decisions. In this respect, the credit card was not only a novel product but also represented a methodological paradigm shift that radically altered the manner by which consumers approached spending. Today, when a consumer uses cash to tender payment, he or she must pay a considerable opportunity cost in benefits, time, convenience, and spending flexibility. That consumer forgoes rewards and promotions that offset spending costs, the ability to earn higher returns on their money by using float, and the capacity to shop more efficiently by using interest-free 30-day loans to capitalize on current promotions or synchronize income receipts with payment obligations. Not only must the customer carry bulky checks or copious amounts of cash, if he or she is dissatisfied with the good or service purchased, he or she cannot contest the charges and can receive remuneration solely at the mercy and discretion of the merchant. Of course, the linchpin that made this enterprise feasible was the unique joint network venture structure that supported the universally recognized card. Moreover, the psychological framework governing the cards encouraged additional spending. The credit card is a complex, multi-faceted entity that revolutionized consumer spending and has become a fixture of everyday life. Even in an age of digital
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customerism with iPads, internet shopping, mobile banking, and virtual wallets, the legacy and ingenuity of the credit card persists.

1 Benjamin Franklin, “Advice to a Young Tradesman Written by an Old One” (Philadelphia: 1748), 1.
5 Bank Issued Cards in the United States include only Open-Networks such as VISA and MasterCard that involve banks. American Express, Discover, and Diner’s Clubs cards are NOT Bank Issued Cards.
6 Evans and Schmalensee, Paying with Plastic, 61.
9 Evans and Schmalensee, Paying with Plastic, 64.
10 Ibid, 43.
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13 Evans and Schmalensee, Paying with Plastic, 3.
14 Investopedia, “Joint Venture.”
15 Evans and Schmalensee, Paying with Plastic, 66.
16 Ibid., 67.
17 Ibid., 35.
18 Ibid., 66.
20 Mann, Charging Ahead, 82.
21 Evans and Schmalensee, Paying with Plastic, 65.
23 Evans and Schmalensee, Paying with Plastic, 133.
24 Mann, Charging Ahead, 48.
26 Mann, Charging Ahead, 17.
27 Evans and Schmalensee, Paying with Plastic 123.
28 Ibid., 31.
29 Ibid., 212.
30 Ibid., 31.
31 Ibid., 32.
32 Mann, Charging Ahead, 167.
33 Ibid., 167.
35 Evans and Schmalensee, Paying with Plastic, 74-75.
36 Evans and Schmalensee, Paying with Plastic, 74; Mann, Charging Ahead, 168.
37 Evans and Schmalensee, Paying with Plastic, 146.
38 Mann, Charging Ahead, 168.
39 Marron, Consumer Credit in the United States, 7.
40 Mann, Charging Ahead, 47.
41 Ibid., 47.
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42 Mandell, The Credit Card Industry, 29.
44 Mandell, The Credit Card Industry, 14.
46 Mann, Charging Ahead, 40.
47 Ibid., 89.
48 Ibid., 42.
50 Evans and Schmalensee, Paying with Plastic, 88.
54 Ibid., 87.
55 Ibid., 95.
56 Mann, Charging Ahead, 157.
57 Evans and Schmalensee, Paying with Plastic, 98.
58 Mann, Charging Ahead, 156.
61 This phenomenon is compounded during business cycles of stagnant growth, high unemployment, diminutive market confidence, and restrictive credit.
62 Evans and Schmalensee, Paying with Plastic, 70.
63 Ibid., 89.
64 Allen N. Berger and David B. Humphrey, Market Failure and Resource Use: Economic Incentives to Use Different Payment

65 Mandell, Credit Card Use in the United States, 103.
66 Evans and Schmalensee, Paying with Plastic, 91-94.
67 Mandell, Credit Card Use in the United States, 102; Evans and Schmalensee, Paying with Plastic, 92.
69 Ibid., 17.
70 Marron, Consumer Credit in the United States, 7.
71 Mann, Charging Ahead, 135.

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