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Over the last two decades, we have witnessed what can arguably be called a revolution in retail consumer finance. Perhaps the hallmark of this revolution has been the dramatic expansion of unsecured lending through the proliferation of credit cards. This growth has not been limited to unsecured credit, but also includes mortgage and home equity lending. One of my themes this morning will be that these trends are the result of a wave of innovation, largely related to information technology, that has brought widespread change to financial services and other industries. At the same time, as retail credit extension has grown we have also seen a significant expansion of regulations pertaining to the extension of such credit, and a growing concern in some quarters that American households have lost control of their finances to a dizzying array of new products and options. My second theme concerns the relationship between these two broad developments. I will argue that there is a natural tendency for credit expansions like the one we've seen to lead to calls for new regulation. My hope is that understanding this relationship will better equip us to assess current conditions in retail credit markets, including legislative and regulatory proposals, and to think clearly about the industry's future direction.

I should say at the outset that I will not be speaking from the perspective you might expect from a banking agency official. A regulatory official's usual approach on an occasion like this, especially at this point in the credit cycle, is to warn industry executives about the "unique risks" embedded in emerging banking practice, and to encourage them to make better efforts in various risk management nooks and compliance crannies. Instead, I will speak from the perspective of a hypothetical outsider observing the joint evolution of both the banking business and regulatory practice. In this, I am being true to my roots as an academic economist. But I also believe that such a perspective is essential for understanding the long-run evolution of the banking industry, which has been both shaped by the regulatory environment and has in turn shaped that environment. In other words, it has been a two-way street; regulations obviously have influenced banking practice, but developments in retail banking have themselves been a major influence on regulatory trends. This perspective implies that, perhaps to an even greater extent than usual, the views expressed are my own and not necessarily those of my bank regulatory colleagues.

The Technology-Driven Expansion in Retail Credit

The expansion of consumer credit in the United States over the last decade and a half has been truly astonishing. The expansion occurred across a number of product lines. Probably most prominent has been the expansion of credit card lending. Home mortgage lending, including home equity credit, has also seen robust growth. An especially prominent feature of the secular expansion of consumer credit has been the growth in lending to lower-income consumers, many of whom had in the past been unable to obtain credit on as favorable terms from the financial sector. Indeed, many had been unable to obtain credit except from fringe lenders such as pawnbrokers or through informal arrangements with friends and family.

For the most part, this expansion was driven by advances in information and communications technologies, which reduced the cost of gathering, processing and retaining consumer account information. At a basic level, this dramatically increased the productivity of the back-office functions associated with all phases of the banking business. Payments processing and the associated book-keeping tasks became much cheaper. The result was a general decline in the intermediation costs that lenders ultimately must recover on top of their funding costs. Competition forced lenders to pass on these cost savings to borrowers in the form of lower lending rates. More consumers could afford to borrow, and the market expanded.[1]

Perhaps the most profound effect of new technologies, and the effect most relevant to retail lending, was the automation of underwriting. Lower communication and data storage costs led to a proliferation of large electronic databases of consumer information, and allowed the collation and integration of such information from multiple sources. Specialized intermediaries such as credit bureaus took advantage of economies of scale in the assembly of such information. Lenders were able to access a far more comprehensive array of information about any given consumer. And reliable information is essential to effective underwriting. The key was the creation of databases on a large enough number of consumers to allow reliable statistical inference regarding their behavior.

Lower computing costs also allowed the development of new software to exploit these extensive databases by automating a broad array of underwriting decisions. Credit scoring is one such technique. [Mester, 1997] Quantitative analysis of past repayment behavior by a large number of consumers can be used to create a simple statistic – a credit score – that summarizes any given consumer's creditworthiness. Calculating a credit score is a parsimonious way to assess the likelihood of repayment by a consumer with a given set of characteristics and credit history.

The new technologies did not change the fundamental nature of underwriting, however; they just made it more effective. Underwriting is about making distinctions between people in order to decide whether to lend, and if so, how much to charge. When lenders were limited to eyeballing paper loan applications and old-fashioned credit reports, they could only sort potential borrowers into a few broad categories. New technologies allowed lenders to bring more and more consumer-specific information to bear on the lending and pricing decision, and thus make finer distinctions between consumers. The

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[1] For technological advancement to translate into market growth, some changes in regulatory environment were required. The 1978 Marquette decision, for instance, allowing the export of credit card interest rates across state lines.

result was that the lending decision and loan terms could be more closely tailored to individual borrowers. For example, credit cards used to be available at fairly high interest rates for those who could obtain them. Automated underwriting allowed credit card lenders to offer lower interest rates to more creditworthy customers, and to pluck out the creditworthy from among the group of customers that formerly were unable to qualify for credit.

Advances in information technology also contributed to the development and growth of loan securitization. Automated underwriting simplified the analysis necessary to create securities of unambiguous quality from a portfolio of loans to numerous heterogeneous borrowers. By allowing investors other than the originator to hold loans, securitization dispersed risks more widely and reduced the spreads associated with consumer lending. And again, reduced lending rates expanded the market.

Somewhat surprisingly, perhaps, the development of quantitative methods for pricing options also contributed to the expansion of retail credit markets. While at first blush these innovations seem only tangentially related to retail credit, in fact they were fairly important to the growth of securitization. Accurately valuing puts and calls required combining the massive computing power that came online in the late 1980s with the models that finance theorists pioneered in the mid-1970s. These techniques opened the door for banks and other financial intermediaries to properly price the put feature inherent in a long-term mortgage, and the option value of loan commitments such as home equity lines of credit and credit cards. Such techniques were essential to the liquidity of markets for securitized loans, which again helped reduce the cost of borrowing and thus expand retail credit markets.

The technology-driven expansion of retail credit is evident in the growth of household debt, but it also is evident in the proliferation of entirely new credit products. For example, high loan-to-value ratio mortgages, including zero-down-payment mortgages, would not have been economically feasible without the new, more effective underwriting techniques. Likewise, home equity lines of credit became more widely available in part because of the lower cost of accurately assessing creditworthiness.

The Benefits of Expanded Retail Credit

The expansion of retail credit has brought distinct benefits to American consumers. At a fundamental level, the purpose of credit is to allow people to choose a spending pattern that is smoother over time than their income stream. Broadly speaking, households face two types of income variation. One type stems from the fact that people’s income usually rises at first then falls over their lifetimes. As a result, individuals typically borrow more when they are young and their incomes are low, and repay borrowings as they advance in their careers. Doing so allows them to spread the benefits of their peak earning years over a greater portion of their lives. This life cycle pattern of household financial behavior also allows households to purchase homes, cars, and other “big-ticket” durables without first accumulating the savings that would be necessary without access to credit. Accordingly, the increased availability of low-down-payment mortgages has improved the ability of young households to make the initial transition from renting to homeownership. This has been of particular help for low-income households that might not otherwise have had the wealth to get into a home.

The other type of variation in income that a household faces is that associated with employment disruptions or other shocks to earning ability. Funding such shocks entirely out of current resources can require large changes in current living standards or else large savings buffers. And adjusting one's consumption habits in response to every change in income can be costly in its own right. By borrowing against future resources, adjustments can be spread out over time, ultimately resulting in less sacrifice in well-being. This enhances consumers' ability to smooth over temporary financial shocks – and this includes shocks like unexpected, uninsured health costs as well as changes in employment or income.

Finally, research on entrepreneurship indicates that many small startup businesses make significant use of consumer credit products such as credit cards and home equity lines of credit. The expansion of retail credit thus brings with it the added benefit of encouraging entrepreneurial innovation.

In short, credit is an important tool in household risk management and in the process of building wealth for households all across the income distribution. And the evidence suggests that the expansion of credit over the last two decades has indeed yielded positive net benefits for American consumers.

The Consumer Credit Backlash

New technologies, then, have led to dramatic increases in the productivity of the retail credit industry that have greatly benefited many consumers. Borrowing costs have been lowered for many households. New products have given consumers a much wider array of choices in retail credit. And access to credit has been opened up for a vast array of consumers who formerly could not have qualified. Consumers can borrow in new ways, and a new set of consumers can borrow.

The usual presumption about an industry experiencing technological progress is that more choice and more access are good things and that competition spreads those benefits broadly to the industry's customers. But despite the evident benefits, the expansion of credit and the growth of new credit products have not been universally welcomed. The popular media regularly recount horror stories of unsuspecting consumers who find themselves in dire straits following an encounter with the retail credit industry. Consumer advocates have publicized accounts of abusive practices by lenders and have charged regulators with lax enforcement of existing consumer protections. It appears that a significant constituency now favors tighter legislative and regulatory constraints on retail credit providers of all types, from banks to payday lenders.

This consumer credit backlash has contributed to the adoption or proposal of several legislative or regulatory changes in recent years. In North Carolina, path-breaking legislation was aimed at curbing predatory lending by limiting certain practices in the subprime market, and several other states have adopted or are considering such laws. At the national level, the data that lenders are required to submit under the Home Mortgage Disclosure Act now must include information on interest rates if they exceed a certain spread over funding costs. Some advocates have recently proposed expanding credit card disclosure requirements to include, for example, the time it would take to repay the bill while just making the minimum payments − and there are discussions of imposing strict rules for minimum payments on credit card debt. Payday lending – short-term loans typically secured by post-dated checks – has come under fire as an encouragement to irresponsible borrowing. And in the last few months some critics have expressed anxiety about the popularity of interest-only mortgage loans. Federal banking agencies have recently issued guidance on underwriting mortgage and home equity products.

This broad regulatory movement is aimed at rectifying the perceived failings of consumer credit markets and generally reining in retail lenders. It has arisen in direct response to the strong expansion in retail credit. This cycle of credit expansion and regulatory reaction has occurred before. The 1920s saw an explosion of installment lending for the purchase of emerging consumer durables like automobiles and electric refrigerators. Many states responded with regulations in the 1930s, mainly dealing with disclosure. [Olney, 1991] Earlier still, in response to growing concerns about abusive and deceptive practices among non-bank lenders extending small short-term credits (resembling payday loans), the Russell Sage Foundation began in 1916 to promote “Uniform Small Loan Laws.” [Carruthers, Guinnane and Lee, 2005] Ultimately passed by most states, these laws created a class of lenders who, in exchange for being explicitly permitted to lend at rates in excess of usury ceilings, agreed to certain practices, most notable of which was a standardized, single-number disclosure of interest costs. This pattern of credit expansion and political response in the United States may derive in part from a long-standing strain of populist aversion to financial institutions.

This type of regulatory countercurrent should be expected as part of a significant credit expansion like the one we have seen, quite apart from whether or not any specific proposal is advisable on public policy grounds. Credit extension is at times associated with outcomes people view negatively: delinquency, default, or bankruptcy. Fraudulent transactions are another class of adverse outcomes that occur in credit markets, as in other consumer markets. A credit expansion naturally brings with it an increase in the incidence of such “bad” outcomes. As credit becomes more widely available there is an inevitable increase in the number of delinquencies, defaults and bankruptcies. Moreover, the new borrowers being drawn in to credit markets are likely to be, on average, less financially savvy and more vulnerable to the unscrupulous as they struggle to learn about unfamiliar credit products. The popular focus on cases of fraud and financial distress often drives the politics of consumer finance. These compelling stories are powerful motivators for attempts to regulate or restrain new practices.

Proposed restraints often are intended to protect consumers from their own poor judgment, which makes them vulnerable to abusive lending practices. In fact, in every historical episode of expanding credit, the desire to regulate has been accompanied by a popular belief that growing debt is a sign of decaying values and thrift. One historian has referred to this persistent belief as the "myth of lost economic virtue." [Calder, 1999] Belief in this myth can easily hide from view the positive economic role of credit in household financial management and the benefits that come from expanded access to credit.

Some Implications for Credit Policy

Individual policy proposals should be evaluated on their own merits in order to disentangle the winners and losers. While in general we would expect that regulations ought to adapt to changing credit market practices, there is a very real danger here of throwing the baby out with the bathwater. As I argued above, the expansion of retail credit has been tremendously beneficial for U.S. consumers. We need to keep in mind that most measures designed to protect consumers from bad credit market outcomes also raise lending costs and can prevent them from obtaining credit in the first place. Such measures confront an inherent trade-off between preventing adverse effects for some and limiting the availability of credit to others for whom it would be beneficial. Sound judgment about such trade-offs requires quantitative understanding of the relative fractions in each respective group – that is, the likelihood of good and bad outcomes. This strikes me as the only way to ground policy in reality rather than fall victim to what I have referred to elsewhere as policymaking-by-anecdote. [Lacker, 2005]

Having said that, policymakers should be alert for opportunities to reduce adverse outcomes without harming credit availability – in other words, to improve the terms of the trade-off between credit availability and borrower protection. For example, efforts to improve the detection and prevention of fraudulent consumer financial transactions could enhance credit market efficiency. Improved disclosure can strengthen consumers' understanding of financial products and increase the odds of consumers getting the product that is best for them. Designing disclosure requirements is a delicate task, however. Too much disclosure can overload consumers and impede rather than enhance understanding. And an overly prescriptive approach can hinder banks' ability to craft informative and reader-friendly communications, something many institutions have been willing and able to do with the help of communications specialists.

But while better law enforcement and improved disclosure may enhance credit market performance, both economic reasoning and abundant practical experience have demonstrated that constraints on allowable interest rates are counterproductive, and generally reduce consumer well-being. Similarly, prohibitions of particular lending practices reduce the financial management options available to some households, and without reliable empirical evidence on the relative frequency of legitimate and abusive uses it is very difficult to determine the net costs or benefits of a prohibition. So while some policies that carefully target truly abusive practices are warranted, the broader risk is of a regulatory overreaction that stifles much of the benefit of the technology-driven expansion in consumer credit.

In summary then, the technology-driven expansion of retail credit has been very beneficial to U.S. consumers. And yet such dramatic improvements in credit availability are accompanied by predictable increases in the incidence of delinquencies and abuse, as new products proliferate and new borrowers are drawn into the market. The spread of adverse outcomes inevitably triggers calls for new regulatory constraints on lenders. But while truly abusive practices certainly deserve regulatory attention, policy measures that impede the functioning of credit markets need to be approached cautiously to avoid an overreaction that stymies much of the benefit of the innovations in retail credit practices.

But aside from regulatory intervention, what can we do to improve retail credit markets? It is clear that all those involved in the retail credit industry – policymakers, bankers, and industry critics alike – have an interest in increasing consumers' understanding of financial products and the management of their own financial affairs. Broad efforts to improve financial literacy may not add to a lender's near-term bottom line, but financial institutions, both individually and as a whole, depend critically on their customers' trust. And trust is built on understanding. As bankers, I am sure you recognize that you have an interest in your customers' ability to understand your products and to recognize when a scam artist's offer is too good to be true. You also have a wider interest in consumers' ability to choose and use financial products in a manner that is consistent with their long-run self-interest.

As the value of financial literacy has become apparent, and as its importance has grown along with the growing complexity of consumer finance options, the Federal Reserve System and the Richmond Fed have made a commitment to improve our understanding of how people learn to be good financial decision makers and to lend our support to efforts to raise the general level of financial awareness. Such efforts can, I believe, yield double benefits. They certainly contribute to improving the performance of credit markets. But even beyond that, an electorate that has a broad appreciation of the efficiency of credit markets will also have an easier time sorting out when any particular policy proposal is truly in their interests. In the long run, this is the path to better banking policy. After all, we in the United States have arguably one of the most efficient retail credit markets in the world. Let's not kill the goose that lays golden eggs.

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