

 $\underbrace{\underbrace{\text{Center for Capital Markets}}_{\text{C o m p e t i t i v e n e s s}}$ 

## RISK-BASED PRICING IN CONSUMER LENDING

FALL 2014



RISK-BASED PRICING IN CONSUMER LENDING



 $\frac{\text{Center for Capital Markets}}{\text{C o m p e t i t i v e n e s s}}$ 

## **Executive Summary**

In the good old days, you could not get a loan unless you didn't need a loan! Most consumers could not build a credit history, had trouble accessing credit early in their careers, and found it difficult to finance major purchases—everything from a new refrigerator to their children's dental work. What changed this? Credit providers developed better tools to determine the risk of each consumer and price credit accordingly. This data-driven risk-based pricing approach has been largely responsible for expanding credit access to tens of millions of American consumers since its introduction in the late 1980s. And it enabled a growing number of credit providers to compete for that business—lowering costs and fueling responsible innovation.

Risk-based pricing in consumer finance tailors the price and terms of a loan to a borrower's likelihood of repayment, allowing lenders to extend credit to more consumers. All creditors face a risk spectrum of potential borrowers. Each borrower has unique characteristics

that influence the probability of default on a loan. Higher-risk borrowers are significantly more costly for lenders to serve than lower-risk borrowers. Risk-based pricing attempts to match the price a borrower pays to the cost incurred by the lender by adjusting the price of the loan to each borrower's probability of default. This paper describes how risk-based pricing has transformed consumer credit markets in the United States by increasing competition, lowering the price of credit for lower-risk borrowers, and broadening credit access to higher-risk borrowers.

Since the late 1980s, consumer lenders have relied on statistical credit scoring models to estimate a borrower's default risk and set loan interest rates appropriate for that risk. The dramatic expansion of credit to consumers in the United States over the past three decades occurred simultaneously with the widespread adoption of risk-based pricing by bank credit card Compared with the one price fits all practice that was common in consumer lending in earlier decades, riskbased pricing lowers the cost of credit for the majority of borrowers but also expands credit availability to higherrisk borrowers and leads to a broader array of loan products available to all income groups

issuer (beginning around 1988), automobile lenders (by 1992), and eventually mortgage lenders (starting in 1996). By tailoring its pricing to individual borrowers, a single creditor can effectively compete for low-risk customers at the same time it extends credit availability to higher-risk borrowers at higher prices. Compared with the one price fits all practice that was common in consumer lending in earlier decades, risk-based pricing lowers the cost of credit for the majority of borrowers but also expands credit availability to higher-risk borrowers and leads to a broader array of loan products available to all income groups.

Consumer lending markets that employ risk-based pricing display attributes benefiting consumers and the macro economy.

Fairness: The vast majority of credit decisions today are based on objective data regarding a borrower's own past payment history and current obligations. The use of credit scoring and risk-based pricing have dramatically increased the consistency of a creditor's lending decisions and the likelihood of equal treatment across tens of thousands of applicants. As a result, American consumers can get credit, insurance, and a host of other financial services based on their own credit records, not their family name or how long they have known their banker. In addition, they can rent apartments, purchase cell phones and cable television service, and rent automobiles without either large deposits or an established relationship with the service provider, all because their reputation for paying as agreed on is documented through their credit reports. Compared with a one-price-fits-all system, a borrower in a market characterized by risk-based pricing is also less likely to be paying for the costs imposed by someone else's behavior. Further, risk-based pricing rewards borrowers who adjust their behavior. Borrowers can qualify for a lower-priced loan by improving their financial position and credit behavior.

Financial Inclusion: Credit scoring and risk-based pricing triggered a massive expansion in credit opportunities for American consumers across the socioeconomic spectrum. Between the early 1980s and 2001, the lower half of the income distribution experienced 200%-300% increases in the percentage of households with access to general purpose credit cards and 30%-70% increases in access to other types of consumer loans. Broadly developed consumer loan markets are particularly important for householders early in the life cycle (ages 20-45) when the demand for housing, durable goods, and education is relatively high and incomes are relatively low but expected to rise over time. Yet access to credit is also important for households weathering temporary income disruptions or unexpected expense shocks. Over the past three decades, tens of millions of U.S. households have gained access to a credit "bridge" that can sustain them through temporary disruptions and declines in incomes.

## RISK-BASED PRICING IN CONSUMER LENDING

Innovation: One of the virtues of credit scoring as a decision assistance tool is that new data improve the ability of these models to fine-tune a lender's assessment and pricing of risk. And competitive lending markets encourage an ongoing "champion-challenger" evolution that increases the accuracy of these tools. An excellent example is the recent inclusion of alternative consumer payment data from apartment rentals and utility payments. Incorporating these data into scoring and loan pricing is dramatically expanding credit availability to 30–55 million American consumers who were previously underserved by conventional loan markets. Rather than shutting these individuals out of the market, scoring and risk-based pricing have given lenders the tools and incentives that they need to say yes to loan applications from a far wider cross-section of the population than ever before.

*Economic Growth:* Over the past three decades, tens of millions of U.S. households have gained access to credit, helping finance the purchase of a car to get to work, a home to raise a family, or an education to give a child the skills to succeed. Small business owners use credit, even personal credit, to finance equipment or materials purchases, or even use the "float" to make payroll in a pinch. Responsible consumption, often using credit, is a key driver of economic growth. And these benefits are a direct consequence of competitive pressure in the lending industry to find more efficient decision tools for making loans.

Restrictions in the form of regulation that would limit the use of either credit report information or the various scoring and pricing tools that have been built with that data, or enforcement doctrines like disparate impact that implicitly challenge the use of objective criteria in lending and pricing, would stifle innovation, reduce the potential for improved models to bring their enormous benefits to consumers across the credit spectrum, and roll back many of the benefits already obtained. In short, without sophisticated risk-based pricing, many higher-risk consumers would lose access to conventional loans altogether.