

TRANSUNION WHITE PAPER

The Importance of Credit Scoring for Economic Growth

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Credit reporting and credit scores can fuel economic growth, increase consumer access to essential resources and enable more efficient allocation of risk, costs and financial reserves. The reason for this is simple: where access to information is asymmetrical or unavailable, access to lending and credit resources becomes more difficult, expensive and inefficient.¹ In contrast, the availability of credit information and the free flow of objective data are the cornerstones of a modern, successful market economy.² Credit reporting and credit scores enable consumers and private companies to freely transact with each other because the more objective information the business has, the more accurately it can meet consumer needs and preferences.³

In the United States of America, consumer credit reporting is a \$3 billion industry—not counting the billions of dollars that are created and redistributed between consumers and financial services companies, such as banks and lenders—as a result of the credit reporting industry. Credit histories are available for more than 200 million consumers, helping them achieve their financial and personal goals. Businesses use automated quantification of consumer credit histories—in the form of credit scores—to make more efficient, objective decisions about whether to extend credit and on what terms for such services as credit cards, consumer loans, mortgages and even insurance policies.

According to one study, credit reporting and credit scores are vital throughout Latin America to help solve three specific economic problems: (a) improving the inefficiency of the financial sector; (b) expanding private sector lending in Latin America, which has been relatively stagnant; and (c) reducing the risk of financial crises, which often stem in part from adverse selection and moral hazard problems in the banking sector.⁵

This white paper surveys the many benefits that credit scoring has brought to the United States and how these benefits could also be enjoyed in other nations' markets. Part I explains what a credit score is, how it is calculated and how the use of such scores has developed within the United States. Part II describes how different market segments use different types of credit scores. Finally, Part III examines the many benefits that credit scoring and reporting confers on consumers, businesses and the economy as a whole.

Credit Score Primer

Credit scoring is a relatively new innovation that replaced burdensome, error-prone manual reviews with neutral, statistically-sound results. A credit score is the result of advanced analytical models that take a "snapshot" of the consumer's credit report and translate it into a three-digit number representing the amount of risk a consumer brings to a particular transaction, such as financial, insurance or even employment. As a result of credit scoring, lenders can make faster, more objective decisions. Lenders retain complete control over their lending decisions and set their own score levels.

In the United States, credit reporting began as a diverse collection of local information sharing arrangements between community merchants and banks. In the latter half of the twentieth century, the large numbers of Americans returning home from World War II generated an unprecedented demand for housing and mortgages. Over the next few decades, this demand led to rapid consolidation and technological improvement creating credit reporting companies that operate at the national, rather than provincial, level. Where there were once hundreds, perhaps thousands, of small, local bureaus in the United States, today there are three national credit reporting companies, each maintaining centralized, sophisticated databases processing billions of updates every day. And advanced modeling techniques and objective credit scores that enable businesses to assess risk and make faster, less expensive, and more statisticallysound decisions have replaced manual, subjective decision-making processes.

A credit score or rating is a numerical calculation intended to represent the specific level of risk that a person or entity brings to a particular transaction.6 Credit scores are calculated by applying advanced algorithms or statistical formulas to the information contained within a credit report at a particular moment in time. By assigning statistical weights to certain types of data, such as outstanding debt-to-available credit ratios, number of late payments and debt-to-income ratios, credit scoring models use mathematical algorithms to produce a simple threedigit numerical score. Lenders then set their own levels above which a credit application will be approved and below which it will be rejected. By providing a neutral, objective measurement for lenders to use in their own decisionmaking processes, credit scores help predict specific consumer behaviors, such as likelihood of default or repayment.

When a consumer applies for credit or extension of financial services, lenders can use credit scores to make faster. more consistent decisions. In addition, credit scores can be combined with decision-making technologies that can be programmed with pre-established rules and score "cut-off" levels to automate the decision-making process, thereby eliminating much of the risk of human error and subjectivity. As a result, credit decisioning processes now take seconds or minutes instead of days or weeks, opening practically unlimited opportunities for consumers at every level. It is important to note that a credit score does not include a decision. It simply provides an objective measurement that the lender can use as part of its own decision-making process.

How Credit Scores Are Used in the United States

A wide range of industries take advantage of credit scores to improve fairness, effectiveness and efficiency. Financial companies use credit scores to predict the risk of delinquencies and losses, which enables them to better allocate costs. Insurance companies use specialized credit scores to make fairer underwriting decisions. Credit scores even provide benefits at the macroeconomic level by helping small enterprises attain the funds they need and by facilitating the securitization and sale of financial products in the secondary markets, substantially increasing the influx of capital into a country.

Credit scoring is one of the most important innovations generated by the credit-reporting industry.7 A credit score is a "3-digit number that represents a 'snapshot of that individual's risk level' based on a person's credit history at a particular point in time."8 In the United States, virtually any business that extends credit or financial resources can use a score to predict risk more accurately, fairly and cost-effectively. Unlike manual underwriting or prescreening methods, credit scores help eliminate the risk of manual bias or human error by providing lenders with an objective, neutral metric on which to base their decisions.9

Consumers

Credit scores are primarily used by financial institutions, such as banks, credit card issuers and other lenders to predict the specific level of risk that an individual consumer brings to a particular transaction.10 In the United States, three national credit reporting companies maintain credit histories for every credit-active adult in the United States: TransUnion, Experian and Equifax.11 These histories are compiled into credit reports. Credit scores are calculated by applying scoring models to the information contained within the consumer's credit report at the time the credit score is requested.12 Credit scores do not generate accept or reject decisions. Even in cases where a lender bases its decision solely on a consumer's credit score, the individual lender still sets its specific score "cut-offs" based on its own business strategies, considered analysis and prior experience.13

Insurance

An insurance score predicts the likelihood that the insured will file a claim within a specific window of time.¹⁴ Underwriters have used credit information "for decades to help ... decide whether to accept or reject applications for insurance."15 The Fair Credit Reporting Act (FCRA) specifically authorized the use of insurance credit scores in 1970.16 The practice has only become widespread within the past few years as the result of advances in scoring technologies.¹⁷ Today, insurance companies use the scores as one factor in "determining if (a carrier) will offer a consumer an ... insurance policy and how much to charge for the policy offered."18

Insurers use insurance scores "in a variety of ways: for underwriting (including rating tier selection), rating (or premium development), coverage liability, marketing, and payment plan eligibility."¹⁹ Under the FCRA and its successor, the Fair and Accurate Credit Transactions Act (FACTA), insurers may only use insurance scores as one factor among many, including motor vehicle record, loss reports, and driver characteristics such as age, marital status and vehicle usage.²⁰

Secondary Markets

There are several ways in which credit scores connect consumers to secondary markets. Specific types of credit scores can be used to rate businesses and financial institutions and predict such factors as financial stability, solvency and risk of liquidation. This is especially useful for evaluating small and medium enterprises. In Latin America, small and medium enterprises employ more than two-thirds of the workforce, but access to financing remains a common problem.21 In the United States, enterprise credit scoring enables small and medium sized businesses to access credit more efficiently and inexpensively. The average application and underwriting cost for a small and medium enterprise loan without scoring is between US\$500 and US\$1000. With credit scoring, the same small and medium enterprise loan costs only US\$48-US\$95.22

Credit scores are also essential for the existence of a mature, robust secondary capital market. By using credit scores to determine risk, lenders can create securitized derivative products by bundling different types of consumer debt and selling them in bundles in secondary markets, such as the Chicago Board of Trade or the New York Mercantile Exchange.²³ This sale of securitized derivatives provides the lender with additional capital, which it then uses to extend more loans to consumers.24 This better disperses risk, and makes more capital available to consumers and small and medium enterprises.

Economic Benefits of Credit Reporting and Scoring

Credit scoring offers multiple benefits at every level of the economy. Credit scores have enabled lenders to extend into historically underserved market segments. In addition, decisions are now faster and more objective with the majority of applicants receiving answers within minutes, rather than days. Finally, by using credit scores to predict risk more effectively, lenders have been able to reduce the cost of such vital services as mortgages, personal loans and credit cards. Despite this expansion into traditionally underserved markets, moral hazard rates are actually lower with credit scores because lenders can more proactively monitor risk and maintain it at more appropriate levels.

Study after study has shown that credit scoring is a vital part of a well-functioning, modern financial system.²⁵ The unimpeded flow of objective, neutral information between legitimate parties enables credit lenders to make fast, accurate, and competitive decisions to approve more applicants and expand access to credit, especially into underserved groups that would otherwise have no access to these financial resources. In addition, credit scoring facilitates the fair pricing of financial products. Without objective credit scores, it is much more difficult for lenders to price products according to individual risk levels. Instead lenders set prices according to average risk levels or using subjective, less precise, and potentially arbitrary methods to make decisions. This results in products that are excessively expensive for low-risk consumers and unfairly inexpensive for high-risk consumers, thus restricting access to financial resources.

Financial Services and Lending

The use of credit scores has played a critical role in extending credit to market segments that have been historically underserved.²⁶ In 2001, 75% of U.S. households participated in the consumer and mortgage credit market.²⁷ Seventy-three percent of households owned at least one general purpose credit card.²⁸ And nearly one third of households had an automobile lease or loan.²⁹

Since 1970, the year that saw the enactment of the FCRA, the primary law that enables credit reporting and scoring in the United States, consumers have enjoyed significantly increased access to credit. This is especially true for traditionally underserved market segments. Access to credit among consumers in the lowest 20% of income jumped by 70% between 1970 and 2001.³⁰ (See chart below)



Source: Federal Reserve Board, Survey of Consumer Finances.

Credit scoring has made lending decisions faster and more equitable. Even significant lending decisions can now be made in a matter of hours or minutes rather than days or weeks. In a study conducted in 2001:³¹

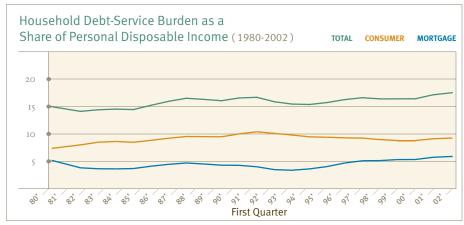
84% of automobile loans received a decision within an hour

23% of automobile loans received a decision within 10 minutes

The majority of retailers open all charge accounts in less than 2 minutes

In addition to speed and convenience, scoring makes credit cheaper, which means lower costs and greater access for consumers. By making the costs of extending credit lower, credit scoring enables lenders to extend credit to as many as 11,000 extra customers per 100,000 applicants.³² As a result, more than 90% of U.S. cardholders report being satisfied with their credit opportunities.³³

With such increased access to credit, one might expect a risk of overextension or moral hazard, particularly in lower income groups. Due to the increased accuracy and predictiveness of credit scoring, however, this is not the case. Despite the significant steps made by credit scoring toward increasing consumers' access to credit, national debt burdens have remained relatively constant for the past 20 years at between 11.8% and 14.4%.³⁴ (See chart above)



Source: Federal Reserve Board, Updated May 26, 2003.

In fact, credit scoring enables lenders to be more proactive in preventing overextension and moral hazard. Because credit scoring gives lenders the ability to evaluate risk constantly and make timely corrections, U.S. delinquency rates are extremely low. In the fourth quarter of 2002, only 3.9% of all mortgage borrowers were 30 days or more delinquent, only 4.6% of all credit card borrowers were 30 days or more delinquent, and 60% of U.S. borrowers have never been delinquent in the previous seven years.³⁵

Consumers also benefit from increased competition as a result of credit scoring. Credit scores make it possible for lenders to prescreen and qualify applicants cost-effectively, thereby facilitating more efficient competition among lenders. Credit scores enable lenders to better predict risk, which reduces the "premium" a lender needs to charge to cover its potential losses. In conjunction with this and the increased competition, credit scores have dramatically increased consumer choice and credit card interest rates have plummeted. In 1990, 73% of credit cards had interest rates higher than 18%. In 2002, 71% of credit cards had interest rates of 16.49% or lower. And only 26% were 18% or higher.36 (See chart below)

| Distribution of Account Balances by Interest Rate | | | | |
|--|--------------|--|--|---------------------------------------|
| < 5.5% | 5.5 - 10.99% | 11 - 16.49% | 16.5 - 17.99% | 18% > |
| 6 | 6 | 6 | 20 | 73 |
| 15 | 31 | 25 | 3 | 26 |
| | < 5.5% 6 | ces by Interest Rate < 5.5% 5.5 - 10.99% 6 6 | ces by Interest Rate < 5.5% 5.5 - 10.99% 11 - 16.49% 6 6 | ces by Interest Rate < 5.5% |

Mortgages

Over the past 10 years, credit scoring has also become a prevalent factor in mortgage lending. In 1996, only 25% of mortgage lenders used credit scores as a part of their underwriting procedures. By 2002, more than 90% of mortgage lenders used credit scoring and automated underwriting technologies.³⁷ Before credit scoring, mortgage underwriting took an average of three weeks. By 2002, credit scoring enabled lenders to underwrite and approve 75% of mortgage applications in less than three minutes.³⁸ Additionally, a Fannie Mae survey showed that the use of credit scoring reduces mortgage origination costs by about \$1,500 per loan.39 As a result, more equity is available for home owners who can now extract up to 90% of their homes' value under Fannie Mae's underwriting guidelines, as opposed to just 75% in 1993.40

A Tower Group study concluded that U.S. mortgage rates were on average two full percentage points lower than those in Europe because credit scores make it possible to securitize and sell mortgage loans in the secondary market.⁴¹
As a result, this study estimated that U.S. consumers save as much as \$120,000,000,000 annually in mortgage interest payments.⁴²

In total, it is estimated that credit scoring enabled homeowners to extract more than \$700,000,000,000 of accumulated equity from their homes, which was then infused back into the national economy.⁴³

Insurance

Multiple studies have proven that consumers significantly benefit as a result of the use of credit scores by insurance underwriters. One study sampled 2.7 million auto insurance policies to determine that credit-based insurance scores were among the top three most predictive risk factors and that as insurance scores increased, the average dollar amount of insurance claims decreased.⁴⁴ Another government-funded study discovered that the 10% of consumers with the worst credit histories filed twice as many claims as those with scores in the top 10%.45 A third study found that losses for those with the lowest credit ratings were 33% higher than the average losses of all groups combined, while losses for those with the highest credit ratings were 25% lower than the combined average.46

By using credit scores, insurers can more accurately set rates and distribute the risk of loss. As a result, more than 70% of U.S. consumers receive a discount because of their credit scores.⁴⁷ Without credit scores, "many good drivers and homeowners would pay more—sometimes much more—for coverage."48 The rationale is that without credit scores, applicants for insurance may be placed in the wrong category, meaning good drivers would end up subsidizing bad drivers and paying more for coverage."49 Without credit scores, policies would "not be priced according to the risk of the individual... but to average risk."50 As a result, insurance "would be too expensive for low-risk [customers] and very cheap for high-risk [customers]."51

Macroeconomic Benefits

Credit scoring has several benefits for the economy as a whole. First, credit scoring helps families break the generational cycle of low economic status by increasing access to home ownership, which is one of the most important steps in the accumulation of wealth.⁵² Second, credit scoring helps promote economic expansion and protect against recession by reducing liquidity restraints. By increasing access to consumer credit and reducing credit costs, credit scoring helps consumers smooth consumption between periods of high and low income. This provides a bridge to tens of millions of consumers during economic downturns or declines in income, thus neutralizing or mitigating the macroeconomic drag associated with such events and preventing recessions.53 And for small and medium enterprises, access to consumer credit can provide financial resources for entrepreneurial activity when business loans are unavailable or flexibility and speed are of the essence. This is especially true in Latin America, which has been the most financial crisis prone region in the world in the last 30 years, averaging 1.25 crises per country. Moreover, a greater share of countries in Latin America have experienced recurrent financial crises in the same period (35%) than have countries in any other region.⁵⁴

Credit scoring plays a vital role in economic growth by helping expand access to credit markets, lowering the price of credit and reducing delinquencies and defaults. In the United States, credit scoring helps drive the American economy and makes credit affordable.

For consumers, scoring is the key to homeownership and consumer credit. It increases competition among lenders, which drives down prices. Decisions can be made faster and cheaper and more consumers can be approved. It helps spread risk more fairly so vital resources, such as insurance and mortgages, are priced more fairly.

For businesses, especially small and medium-sized enterprises, credit scoring increases access to financial resources, reduces costs and helps manage risk.

For the national economy, credit scoring helps smooth consumption during cyclical periods of unemployment and reduces the swings of the business cycle. By enabling loans and credit products to be bundled according to risk and sold as securitized derivatives, credit scoring connects consumers to secondary capital markets and increases the amount of capital that is available to be extended or invested in economic growth.

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