Opinion Article

Measuring the impact of collections on consumer term loans

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DESCRIPTION

We offer a technique for determining the importance and estimating the size of collection effects on consumer term loan accounts by modelling state transitions of loan accounts as Markov transition matrices. Making the best selections for loan account collection can be supported theoretically by quantifying the collection effect. To cut down on the amount of parameters needed to estimate, a parameterization approach is described. There are two processes involved in the quantification process. The transition probability distributions with and without collection are first compared using the Chi-square test to see if there is a significant difference. Second, to determine the size of the collection effect, regression and a t-test are utilized. The method's use to quantify collection effects in a Chinese auto loan financing organization demonstrates its capacity to understand the scope and importance of collection impacts. This study also offers recommendations for designing experiments to gather the necessary data.

Consumer loans are also referred to as consumer credit or retail loans, and in this work, these terms specifically refer to money loaned to individuals for personal, family, or household use; such loans are not secured. We focus on consumer loans that are granted for the purchase of durable goods; these loans have limited term and are thus called consumer term loans throughout this paper. The widespread usage of consumer loans over the past 50 years has greatly benefited consumers, and the consumer loan industry is expanding quickly. For instance, according to the Federal Reserve Statistical Release, the amount of outstanding U.S. consumer credit grew from \$2.55 to \$3.09 trillion between 2008 and 2012. The Chinese consumer financing market is still in its infancy. However, over the past ten years, the growth of consumer credit in China has been quite rapid. For instance, China's outstanding consumer loans (including mortgages) grew from RMB 3.28 to RMB 10.27 trillion between 2007 and 2012. The consumer credit markets in China and the United States differ in a number of ways. Even though the specifics may vary, collection actions are nevertheless performed in both nations. We present an approach that does not depend on the precise collection activities utilized and the precise impacts of those actions for the problem examined in this research, i.e., to quantify the collection effect. To show how the model can function, we utilize data from a Chinese auto finance firm. Basically, our model does not depend on the data it uses.

Consumer term loans have been widely and extensively disseminated, hastening economic growth and enhancing quality of life. However, this raises the likelihood that credit companies would suffer losses because the risk of a default increases with the quantity of consumer credit issued. In the credit industry, risk management for consumer loans has grown more crucial. As a result, credit companies frequently view credit loss prevention as a crucial task and dedicate considerable resources for loan management, such as choosing whether and how to take legal action against unpaid debt. Once signs that an account may default start to appear, credit companies typically start taking collection activity to either prevent default or lessen its likelihood. For instance, the likelihood that an account will default in subsequent periods is significantly high if it has been past due for three periods. The creditor may take a number of collection measures against the defaulting customer, including sending an email, calling them, or, in more serious cases, seizing the products they bought with the loan. Since early abandonment of many loans that do not transition to current status would result from an ideal collection strategy, losses from default loans would be reduced, which is commonly recognized and thought to be the case. Demonstrate how the best collection strategies may increase the amount of money recovered from past-due accounts or reduce the expense of managing collections demonstrate how the effectiveness and expense of any collection operations can significantly impact the final financial impact in the event that a consumer defaults on a lease. Understanding the collection effects, or how various collection methods affect customer payment behaviour and loan account status, is essential for a credit firm. This is due to the fact that determining the best collecting approach requires first knowing the collection effect.

Unfortunately, despite the importance of optimal collections for credit businesses being acknowledged by numerous authors, quantifying the effects of collection operations has not received much attention in the literature. For each consumer/account type in each state, the current work makes an effort to quantify the collection effects of collection activities on consumer payment behaviour and the states of loan accounts; this establishes a theoretical foundation for determining an ideal collection strategy.

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