Analysis of Conditional Probability of Default by the Major Private Debtors in the Colombian Financial System

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The private corporate sector is the primary debtor in the Colombian financial system (commercial loans account for 54.9% of the total gross portfolio). Consequently, it is extremely important to measure and monitor the risk this sector of the economy might pose to the financial system. Ever since the crisis in the late nineties, Colombian companies have not experienced a comparable situation. Today, the quality indicators for the commercial loan portfolio are at historic lows, and the portfolio has begun to grow, following the standstill in 2003-2005. The non-performing/total loan ratio for companies was 1.63% at June 2006, while real growth in the private commercial loan portfolio was 18.3%.

Coupled with a good economic situation and good corporate performance in recent years, the foregoing poses no imminent risk to financial stability. However, the mid-term risks are still out there, which means this type of risk must continue to be measured and monitored. For example, a hefty increase in commercial loans is good, as it helps to fund investment projects. Nonetheless, an unexpected shock to corporate creditworthiness might be a source of risk to the financial system, because of possible deterioration in the loan portfolio.

The objective of this paper is to discover the primary determinants of the risk rate1or conditional probability of default on financial obligations by companies in the Colombian private sector.2 Estimates of maximum partial verisimilitude were done with a duration model, using the Camel3 model variables as input.

The results indicate the size of the debt is the main determinant of conditional probability of default on corporate obligations to the financial system: specifically, the larger the corporate debt the greater the probability of corporate default. Profitability, size and belonging to certain sectors of the economy are other variables that determine this probability. Finally, probability of default on financial obligations was found to be negatively dependent on duration; that is, the longer a company’s time to default, the less it is likely to default.

This paper is divided into four parts, including this introduction. The second part contains a theoretical review of the duration model, with emphasis on the risk function proposed by Cox (1972), and a description of the estimation procedure. The figures and results of the estimate are presented in the third section and the conclusions, in the fourth.

Fuente: https://www.banrep.gov.co/en/estabilidad-tema-19