

RUSSIAN BANKS PROBABILITY OF DEFAULT MODELS: MONEY LAUNDERING VS. FINANCIAL INSOLVENCY

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Abstract

Martin [4] was first who applied logit-model to forecast bank defaults at the period 1975-1976 in US. Logit models are used for the bank defaults prediction in US in Altman and Rajken [1], Cole and Gunther [2]; Godlewski [3] use the data for the banks in emerging market economies (Russia not included).

Peresetsky et al. [5] apply binary logit models to predict Russian bank failures in 1997-2003. At that time period all defaults were related to poor bank financial conditions. The objective of this research is to reveal factors which are related to the probability of failure in the Russian banking sector over the last years (2003-2009). At this period CB RF formulated in its orders various reasons for the bank license withdrawal. They include "money laundering schemes", "on a voluntary basis", "fraud accounting" and "federal law violation". Most of the orders include more than one reason.

This paper use binary logit and multinomial logit models to model the reason of license withdrawal. Models use bank-specific explanatory variables taken from banks' balance sheets one year ahead the bank status observation and macroeconomic indicators since during the period macroeconomic environment changed significantly. The points of interest are: 1) is it possible to discriminate between different license withdrawals reasons, one year ahead of the CB RF order? 2) what is predictive power of such models? 3) do multinomial models outperform binary logit model in accuracy of prediction of bank failure due to economic reason, which is of special interest of the Deposit Insurance Agency.

References

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