4 Predicting Bank Failures in Transition: Lessons from the Czech Bank Crisis of the mid-Nineties

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4.1 Motivation

Almost all countries in Central and Eastern Europe have experienced turbulence in their banking and financial sectors. In the early 1990s, for example, Poland’s banks experienced a crisis, followed in 1994-1996 by the failure of several small banks in the Czech Republic, and severe problems in Latvia in 1995 when four of its large banks fell. Bank regulators in transition countries have been searching for early warning signals that could be used to make bank supervision more efficient. Although several papers exist on modeling or predicting bank failure in mature market economies [See Looney, Wansley and Lane (1989), Lane, Looney and Wansley (1990), Barber, Chang and Thurston (1996), Hwang, Lee and Liaw (1997); among others], there are several problems connected with the direct use of these models in transition economies. First, these models depend almost exclusively on economic conditions and balance-sheet data based on accounting standards that are conceptually and significantly different from those in transition economies. For example, most transition economies still use accounting procedures carried over from central planning that reflect production rather than profit. Moreover, unlike stable economies, the transition period is typified by high uncertainty, the lack of standard bank behavior, and other problems carried forward from the communist era that only worsen the situation. Finally, the vast majority of banks in transition economies have a very short history, with balance sheets seldom if ever scrutinized by prudent auditors.

The transition from a centrally planned to a market oriented economy is
a complicated process with significant implications for the banking sec-
tor. In particular, it requires a separation of the central bank from com-
mercial banks, the creation of a number of commercial banks from the
single state bank, and the granting of licenses to new banks. The main
problem facing the newly-emerging banking sector is the lack of expert-
tise in credit evaluation under free-market conditions and the tendency
to favor borrowers with fixed assets as collateral. Earning potential is
largely ignored due to lack of ability to evaluate and proper accounting
techniques [see EBRD (1996/7)]. Given the problematic inherited loan
book and the high uncertainty typical of transition economies, banks are
faced with extremely high risk. This situation is further worsened by
the lack of three important factors: 1) experienced bank management;
2) market-enforced performance; and 3) standard measures to enforce
the spreading of risk and prudent bank behavior.

Although it is rarely admitted in public, the vast majority of bank
regulatory authorities of industrialized countries follow “too-big-to-fail”
(TBTF) policies (Roth (1994)). The negative macroeconomic conse-
quences generated by the failure of a large financial institution make
TBTF key issue to be considered in any country. Critics of TBTF argue
that the doctrine is unfair to smaller banks because it provides an incen-
tive for larger banks to increase risk, for example, by maintaining a lower
capital-to-asset ratio than smaller banks. There is another point about
TBTF policies when applied to transition economies: the largest banks
are still at least partly in state hands in many countries. Therefore, the
size of the bank is also a proxy for its ownership structure.

In the present paper we study models of bank failure in the context of
transition economies. Data from the Czech banking crisis (1994 to1996)
will be used to test our approach empirically. We expect that only a
small group of variables used to predict bank failure in mature markets
will actually help explain bank failures in transition economies. On the
other hand, we expect that the quality of auditor used (“Big Six” versus
local firms) will provide valuable additional information. It should be
in fact, an indicator of whether we can use the balance-sheet data from
the conventional models at all. Our central hypothesis is that the retail
deposit interest rate in transition economies could be used as a proxy to
reflect the default risk of a bank, and therefore this information should
improve the quality of bank failure prediction.

The paper is organized as follows: section 2 introduces additional vari-
ablees that should be used for predicting bank failure in transition eco-
nomies. Section 3 describes the emergence of the Czech banking sector;
section 4 present the results; and the final section contains conclusions
and policy prescriptions.