Forecast of BCCs crisis, the results of an empirical analysis

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Extended abstract

In recent years, as a result of corporate crises, many small Italian banks have been subjected to the special procedures prescribed by law to heal the ailing banks. The adoption of legislative measures is a traumatic event in the life of a bank: it determines the removal of directors and their replacement with the commissioners, appointed by the financial authorities, to restore the bank.

Most of the measures have been taken mainly against small banks, i.e. typically characterized by traditional operations and smaller customers. Those banks have particularly suffered from the effects of the ongoing recession, which has led to the deterioration of the quality of the banking assets, and, in particular, of the credit to the customer, as well as the funding.

This study uses a data set containing the typical items represented in the Financial Statements of all the Italian cooperative credit banks (BCC): those more frequently subjected to the procedures prescribed by law as a result of serious corporate crisis in the years considered (2009-2012). The attempt is to study the causes of the latter.

As per by-laws, the operations of BCCs should be mainly carried out with shareholders; also they should predominantly refer to management of traditional activities: low investments held for trading; loans granted almost exclusively to families and small businesses, established and operating in the same territory in which the bank is sited; funding mainly to retail customers; limited recourse to securitization of assets. Those banks adopt critical methodologies in the measurement of the credit risk, the governance conditioned by the structure of the cooperatives, as well as the difficulty to raise capital, in consequence of the prohibition of the capital subscription from the other financial institutions.

For years from 2009 to 2012, we have calculated no. 34 early warning ratios under various corporate profiles of all Italian BCC's (profitability, net assets, management efficiency, asset quality, interest rate risk, liquidity). Therefore, we have determined its

average annual values and other descriptive statistics. We have then compared the average values of those indicators with the calculated values, for the same indicators, of the BCCs (No. 25) subjected to the administrative procedures laid out by public authorities. That comparison has allowed us to observe whether the indicators have - or not – provided information able to anticipate the crisis and which, of the many calculated, have definitely played the role of better predictors.

For each ratio, and in several years, we have identified the position of the measured value in the banks later gone into crisis, and compared it with those of all the Italian BCCs. We have then calculated the percentile obtained from each of those banks. That comparison has provided further indications of the most effective predictors of the crisis.

The calculated ratios are the following:

1. Profit (Loss) on Equity without profit (loss);
2. Profit (Loss) on Total assets;
3. Operating expenses on Net interest income;
4. Operating expenses on Operating income;
5. Operating income on Net interest income;
6. Net fees and commissions on Operating income;
7. Net interest income on Total assets;
8. Operating income on Total assets;
9. Impairment losses on Profit (Loss) Before Tax;
10. Equity on Commercial loans;
11. Equity on Deposits from customers and debt securities in issue;
12. Net non-performing loans on Equity;
13. Net Impaired assets on Equity;
14. Customer Loans on Total assets;
15. Deposits from customers and debt securities in issue on Total assets;
16. Debt securities in issue on Total assets;
17. Equity on Customer loans;
18. Loan on Deposit;
19. Equity on Total assets;
20. Customer loans on Deposits from customers and debt securities in issue;
21. Liquidity on Deposits from customers and debt securities in issue;
22. Impaired loans on Gross loans and receivables with customers;
23. Non-performing loans on Gross loans and receivables with customers;

24. Gross doubtful loans on Gross loans and receivables with customers;

25. Gross loans and receivables with customers on Net loans and receivables with customers;

26. Net non-performing loans on Net loans and receivables with customers;

27. Doubtful loans on Net loans and receivables with customers;

28. Net non-performing loans on Gross non-performing loans;

29. Funding interbank market on Deposits from customers and debt securities in issue;

30. Administrative expenses on Net interest;

31. Administrative expenses on Operating income;

32. Incomes on Expenses;

33. Operating expenses on Total asset;

34. Gross operating profit on Equity

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