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Risk-based capital adequacy in assessing on insolvency-risk and financial performances in Taiwan's banking industry

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Abstract

This study applies the index of insolvency-risk (IR) to the failure risk in Taiwan's banking industry during 1993–2000, to explore the relationship between capital adequacy (CA) in assessing on IR and financial performances. Specifically, the current work is to indicate the diverse effects before and after the revision of capital-adequacy regulation in Taiwan, that is, at the end of 1998.

The empirical results show a positive relationship between the CA and the IR index, and a significantly positive relationship exists between the CA and various financial performances. Alternatively, it shows a significantly negative relationship between IR and financial performances. This work provides sound and safe suggestions about risk management for all the stakeholders, government, banking and financial industry.

JEL classification: G21; G28

Keywords: Capital adequacy ratio (CA); Insolvency risk (IR); Return on asset (ROA); Return on equity (ROE); Profit margin; Earnings before interest and tax (EBIT)

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1. Introduction

In the 1980s, the global banking system began a series of transformations from being ‘closed’ to being ‘open’. This led to the gradual loss of the competitive edge internationally held by many countries whose banking and finance had strict controls, due to the continual loosening of regulations in the international banking industry. Strict controls arose from the numerous laws and restrictions governing the banking industry in each country, indirect subsidization, and administrative standards, which were inconsistent with the loosening of regulations or full deregulation. For example, the Taiwanese Taiwan’s banking environment adjusted to rapid economic growth as industry demanded for better and more banking services, as well as the establishment of more branch offices, when Taiwan joined the World Trade Organization. Financial management authorities accelerated the pace of financial reforms, and implemented liberalization of interest and exchange rates along with capital accounts and securities. In addition, they have deregulated financial services, and passed legislation such as the Financial Institutions Merger Act and the Financial Holding Company Act, as well as encouraged mergers among financial institutions and branching into new business arenas so as to remain internationally competitive.

Due to the downturn in the Taiwan’s real estate and stock markets recently, traditional businesses have shrunk in size, and many companies have moved abroad basing their decision primarily on profitability, which has resulted in higher unemployment rates. As a result, the total economic growth for 2001 was −1%. On the other hand, as the banking industry was over-saturated, it led to the merging of financial institutions and vicious competition in the marketplace. An increase in the riskiness of loans, and a continued increase in the ratio of overdue loans, arose because of the increase in the proportion of marginal customers. Should we be unable to quickly address this banking issue, the situation could possibly worsen and become like the Japanese financial crisis, thereby imperiling Taiwan’s economic gains overnight. In view of this, the Taiwanese Legislative Yuan quickly passed The Six Financial Laws giving government officials the legal basis to promote the restructuring of banking. The financial risk of the banking industry has increased greatly over recent years partly due to the capitalist market being looming, as well as increasingly more dubious loans by banks to enterprises. Dubious loans and accelerating bank withdrawals have increased to almost surpass the loss from non-performing loans, so the bank’s credit adequacy is still worsening and confirming the need for a focus on the safety of bank capital.

The banking industry is an industry with high financial leveraging and high risk. If management is overly conservative, they will not only inhibit the functions and growth of the organization, but will also be unable to satisfy the credit needs of society. On the other hand, if they wantonly expand the sales base and assume a great deal of risk; they may sustain serious loss, which may include management crisis or even bankruptcy. As such, risk management is a key part of the banking industry. Recently international banking losses and bankruptcies have become more frequent. For example in 1991 there were one thousand US commercial banks listed as problematic banks by the FDIC, and in 1992 two thousand savings institutions went out of business. In 1995, Japan’s largest credit union, The Credit Union of Mu Jin, went out of business and the second largest local bank, Hyogo Bank, closed and liquidated its assets. England’s Barings Bank filed for bankruptcy in February 1995 – and was subsequently purchased by ING Bank – due to Nick Lesson’s manipulation