

“Statistical Analysis of a Financial Risk Element”

Prof. Nachiket Deodhar¹

¹Assist. Professor, DVVPPF's IBMRD, Ahmednagar

ABSTRACT

The purpose of this study is to investigate the factors influencing financial risk management in Indian banks during the period of 2006 to 2011 as banks are considered as trust worthy institutions for depositors and investors. This study investigates the significance of return on assets, return on equity, capital adequacy ratio, operating efficiency ratio, gearing ratio, networking capital, loan loss reserves, bank size, ownership and cash with liquidity, credit, and capital risk management in Indian banks. The study found out that ownership structure of the banks is not an influencing factor on financial risk management. In addition, the size of the banks is the major factor influencing financial risk system in India.

Keywords: Capital Risk, Credit Risk, India, Liquidity Risk, Risk Management

1. Introduction

The first-rate slowdown in 1930's that added approximately the worldwide recession in 2007 resulted to worldwide tribulation to nearly all essential banks inclusive of banks in India inculcating shortage of capital. As an end result of this recession, banks with better chance publicity had much less capital, more reliance on quick time period marketplace financing and competitive credit score growth. As a end result, a few elements of threats in banks consisting of operational chance, credit score chance and liquidity chance are affected. A demonstration of the final results of the recession on operational chance may be visible from Bernard Madoff who as a CEO of a safety organization in US were given arrested for securities fraud and cash laundering really well worth of \$50 hundreds of thousands in December 2008 (Seal 2009). The recession additionally had extreme surprise on financial institution liquidity wherein many banks had been not able to create enough liquidity and needed to get hold of authorities' useful resource or in all likelihood face default. To generalize, the recession had a extreme effect on essential financial institution threats in special elements and it's far very critical for banks in India to reform their worldwide chance control system for you to keep away from such catastrophe affecting them.

2. Objective of the study

The middle goal of this take a look at is to discover the factors which can be substantially affecting monetary chance, proof of liquidity, capital, and credit score worthiness of the banks of India for duration of 2006 to 2011 and additionally to decide if the dimensions of the banks are a not unusual place detail influencing monetary chance. This take a look at may also check out the final results of control performance additives consisting of marketplace chance, hobby touchy hole, working performance, profitability and credit score publicity within side the Indian banking enterprise through figuring out the special forms of threats that could get up in addition to the regulating concepts and techniques in mitigating such threats. Also, this paintings will rely upon Indian banks to put into effect an powerful control system through making sure that banks simplest interact the ones threats which can be accept a position and good enough to its present belongings in addition to forming the appropriate banks portfolio of belongings and liabilities.

3. Scope of the study

It could be primarily based totally on monetary facts of 12 banks made from regionally owned banks and overseas owned banks taking into account their chance performance decided through the financial institution-unique factors. This chance performance could be analyzed the usage of the panel facts version to analyze if the control performance is good enough to conquer its capital, credit score and liquidity necessities of the financial institution.

4. The Regulatory Authorities

The cash area in India is regulated through each financial institution and non- financial institution monetary establishments consisting of Reserve Bank of India (RBI), National Credit Regulation (NCR) and Financial Service Board (FSB).

5. Reserve Bank of India

Reserve Bank of India (RBI) is the significant financial institution of the republic of India, and performs an critical function in banking law and preserving of rate balance and the fee of the Indian forex within side the hobbies of stability and sustainable financial growth. RBI turned into hooked up in 1921 in phrases of a unique ACT of parliament the forex and the banking Act in 1920 (Act No 31 of 1920). Before RBI turned into hooked up, business banks in India had been answerable for issuing the financial institution notes to the general public with the simplest requirement of changing the financial institution notes held through the general public into gold while those financial institution notes had been desk at their branches. However after the First World War the industrial banks whose income had been made through changing financial institution notes into gold in India and promoting the gold in London ought to no longer. Make income because of the growth in rate of the gold As a end result the industrial banks as a way of protective their monetary viability asked the authorities to launch them from this responsibility of changing financial institution notes into gold which later result in the advent of the Indian reserve financial institution that open its door for commercial enterprise for the primary time in June 1921. Since the yr 1921, RBI presently has a few 650 Shareholders and has been served through eight Governors with the present day governor. GILL Marcus turned into the primary female to guide the financial institution. Reserve Bank of India (RBI) is answerable for; assisting the Indian authorities, providing records on financial coverage and troubles regarding the financial to the Indian population. Ensuring that the banking and monetary structures meets the necessities, of the want of the Indian people. In preserving a minimal reserve balances the ones Indian banks need to preserve on account with the reserve financial institution.

6. National credit regulation

National credit regulation is some other regulatory authority in India hooked up below the countrywide Act 34 of 2005 answerable for the law of the Indian credit score enterprise. It makes a specialty of academic studies coverage, improvement registration of enterprise and research of complaints. National credit score regulator is likewise answerable for the registration of credit score providers credit score bureau and debt counselors. It is answerable for getting to know the credit score marketplace and tracking the price of credit score to perceive factors that could undermine get right of entry to to credit score and client safety in addition to re-implementing the Act and advising the authorities on coverage and legislation. The goals of National credit score Act (NCA) are to adjust credit score records and sell a regular enforcement body paintings to client credit score and to keep away from unfair Credit and credit score-marketplace practices.

7. Financial Service Board (FSB)

The Financial Service Board (FSB) is the Indian authorities' regulatory frame accountable especially for non-banking monetary carrier enterprise in India. FSB hooked up in 1990 with head quarters in Pretoria, India with about 450 personnel as of 2009 (Wikipedia) is answerable for non banking monetary intermediaries consisting of retirement funds, monetary offerings provider, capital markets and pleasant societies.

8. Mitigations of Risks faced by banks

Mitigations of Risks confronted through banks A financial institution this is song at the precept of heading off all threats of as a lot of them as feasible could be a stagnant organization and could now no longer effectively serve the valid Credit wishes of its society whilst a financial institution that takes immoderate threats of credit score is greater likely (Malik Delaware). During the system of monetary intermediation, banks are confronted with special kind of monetary and non monetary threats. Thus banks must pay a number of significance in enhancing their cap potential in figuring out measuring and tracking all of the threats undertaken. The contemporary-day banking device may be confronted with the subsequent kind of threats:

Interest Rate Risk

Interest Rate Risk is the publicity of organization monetary situations to destructive moves in hobby quotes. The internet hobby earnings of internet hobby margin (NIM) of banks depends of those moves. Interest price chance may be measured through the usage of special technology consisting of adulthood hole evaluation length hole evaluation simulations and fee at chance. In a properly functioning chance control device the hedging and size of hobby price chance regularly depend upon the segmentation of the stability sheet. That is the financial institution must role the stability sheet into buying and selling and banking e book for you to gather an outcomes control.

GAP or Mismatch Risk

GAP or Mismatch Risk It arises from keeping belongings and liabilities with special foremost quantities maturing dates of reprising dates.

Basis Risk

This is the chance that the hobby price of various belongings liabilities and off-stability sheet gadgets may also alternate in special magnitude. That is that if the version in hobby quotes end result to NIL to make bigger the financial institution will enjoy favorable primary shifts in any other case the idea chance will pass towards the financial institution.

Price Risk

This chance arises while belongings are bought earlier than their adulthood dates.

Reinvestment Risk

Reinvestment Risk Any uncertainty with admires to hobby price in which destiny coins flows can be reinvested is referred to as reinvestment chance.

9. Liquidity risk

Liquidity risk arises in banks while long time belongings are funded through quick time period liabilities thereby ensuing to refinancing chance. Michitu Sawada (2009) executed a studies at the effect of a

liquidity surprise brought about through depositors conduct on financial institution portfolio control at some point of recession in a device missing deposit coverage and got here out with the belief that banks reacted to liquidity surprise sensitively via an growth within side the coins holdings now no longer through liquidating financial institution loans however through promoting securities within side the monetary marketplace Banks may be face with the subsequent kind of liquidity threats:

Funding Risk

It takes place because of an pressing want to update coins because of predicted withdrawal.

Time Risk

It arises while acting belongings are reworking into non - acting belongings.

Liquidity Risk

Within side the banking area may be measured the usage of any of those key ratios Loans / overall belongings loans / middle deposits buy funds / overall belongings.

10. Credit Risk

This is a chance wherein the borrower will now no longer be capable of pay off of meet his duties with admire to debt hedging and monetary transactions below the phrases of the unique agreement. Credit chance relies upon on each inner and outside factor. Some of those outside factors are forex quotes, hobby quotes the country of studies on credit score chance securitization and financial institution soundness in Europe and offer empirical proof that credit score chance securitization has a terrible effect at the issuing financial institution monetary soundness. They additionally got here out with the belief that there's a terrible effect of securitization on banks profitability and capital surroundings in addition to a fantastic dating among securitization the issuing banks go back volatility.

A top control system of credit score chance must involve:

Measuring the chance via credit score scoring.

Quantifying the chance via estimating predicted mortgage

11. Empirical Evaluation and outcomes

The analyses of the outcomes could be accomplished the usage of descriptive records Pearson correlation matrix and random final results version estimates. In order to verify usage of this version as our best version the Housman check could be carried out to verify this speculation through essentially trying out whether or not the precise errors. (μ_i) are correlated with the regressions. Hence out version could be widespread if the man or woman heterogeneity of the banks is uncorrelated with the explanatory variables. Looking on the outcomes of the Housman check it confirms the speculation that the discovered banks man or woman traits are uncorrelated with the 3 monetary threats (liquidity credit score and capital chance).

12. Conclusion

This take a look at examines monetary chance control in Indian banks using 12 banks inclusive of domestically and overseas managed banks. The take a look at protected the duration of 2006 to 2011 facts received from the financial institution scope. Descriptive records, correlation and regression evaluation turned into used to investigate the outcomes. . The monetary chance is measured with the liquidity, capital and credit score worthiness of the banks.

This take a look at has correctly diagnosed variables that substantially have an effect on monetary chance in Indian banks. The outcomes display health of each liquidity, capital and credit score chance version with possibility of F- records at 0% degree of importance respectively indicating the 3 fashions are first-rate fit. We discovered out that possession shape of the banks do now no longer have an effect on monetary threats in Indian banks. This take a look at factor out that financial institution length is the essential detail substantially and definitely affecting our 3 monetary threats used on this take a look at. Hence we are able to finish that financial institution length of Indian banks is an detail influencing monetary chance control in India. Independent variables which have fantastic and insignificant dating with monetary threats are go back on asset and working performance ratio. This take a look at famous a partial picture of monetary chance control in Indian banks as this take a look at does now no longer set up the final results of different monetary threats this is confronted through the banking enterprise. I advise the Indian banking enterprise to enhance their attention of monetary chance control through introducing Basel II guidelines in to their device that ensured that banks end up robust sufficient to welcome shocks from operation.

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