THEORETICAL APPROACH OF CAPITAL ADEQUACY IN INVESTMENT BANK: REGULATION, RISK AND MANAGEMENT

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1 INTRODUCTION

Capital adequacy is a core element of financial health, especially for investment banking, where operational and market exposures are high. Capital adequacy refers to the minimum capital buffers that a bank must have in order to absorb losses without suspending operations under financial stress. Also, directly related is the notion of capital solvency, referring to a bank‘s ability to meet long-term commitments, considering both quality and quantity of its capital. While adequacy is guided by regulatory frameworks like Basel III, solvency is a broader, more flexible gauge of financial solidity. Commercial banks and investment banks have different risk profiles and hence differ in how capital requirements are structured and enforced. Commercial banks are most concerned with credit and liquidity risk, while investment banks must deal with market and trading risk and hence need more flexible capital solutions.

This literature review explores the theoretical basis of capital solvency and its integration in risk management. It contrasts capital requirements across models of banking, methods of quantifying capital buffers, and how buffers interact with solvency. The paper also highlights significant gaps in literature, particularly in the modelling methodologies and the application of capital frameworks in real-life settings across different banking environments.

2 MATERIAL AND METHODS

This review paper adopts a meta-analytical approach to examining the theoretical dimensions of the contribution of solvency capital to the business and stability of investment banks. The meta-analysis pools evidence from a sequence of peer-reviewed research papers, regulatory reports, and empirical papers published between 2000 and 2024.These sources were found from a systematic literature search of databases such as JSTOR, Scopus, and ScienceDirect. The keywords that were employed are “capital adequacy”, “investment

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banking", "solvency risk", "Basel regulations", and "financial stability". The primary aim of this approach is to identify recurring trends, varying viewpoints, and evolving regulatory and strategic paradigm on capital adequacy in investment banking. Literature was scanned for conceptual consistency, regulatory data, and empirical evidence to develop a consensual theoretical framework for the topic.

Capital plays a central role in regulatory compliance. Investment banks are subject to strict capital adequacy requirements, which require them to maintain a minimum level of capital to cover potential losses. The aim of this regulatory framework is to prevent bank failures and protect the financial system as a whole from systemic risks. By maintaining adequate capital, banks demonstrate their ability to withstand financial shocks and maintain investor confidence [2]. For example, Basel III regulations tightened capital adequacy requirements by requiring banks to hold a higher proportion of common equity, which is the most loss-absorbing form of capital. The change aims to strengthen the financial resilience of banks and protect depositors and investors [3].

3 RESULTS

Several studies have shown that banks may not be able to adequately address all risks with the capital adequacy ratios and buffers set by central banks. The complex relationship between capital requirements and bank liquidity management is highlighted in the study realized by Andersen and Juelsrud [1] on the optimal capital adequacy ratio. This indicates that while the capital adequacy ratio is an important regulatory tool to ensure that banks have sufficient capital to cover potential losses, it does not in itself address all liquidity risks for the banks. The research indicates that liquidity problems, especially during financial crisis periods, tend to magnify solvency problems since banks that are short of liquidity cannot pay their short-term obligations. They suggest that the regulatory framework should include a capital adequacy ratio and micro-liquidity buffers such that banks will be prepared to absorb losses without falling prey to surprise liquidity shocks. The paper highlights the systemic risk generated by scarcity of liquidity, which could be translated into macroeconomic volatility if banks suffer from liquidity shocks. As one means of better preparing banks for potential future financial shocks, it proposes that policymakers and regulators place utmost emphasis on liquidity management practices and integrate liquidity-related issues into scenario planning and stress testing. Evidence suggests that banks with superior liquidity management practices are more resilient to market turmoil or economic downturns [1].

4 CONCLUSIONS

This paper has established the evolving role of capital requirements, especially in the light of more stringent regulatory environments and increased use of stress testing. However, there remain huge gaps in the literature, namely in capital adequacy modelling under dynamic conditions and in the interaction between regulatory capital and internal risk approaches

The future lies in having progressively more adaptive, institution-specific models of capital solvency that reflect the realities of markets and regulatory needs. Enlarging the theory and evidence upon which capital adequacy is based will be crucial to making investment banks resilient in an environment of economic volatility and systemic risk.

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