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The Framework for Estimating the Discount Rate of Insurance Contracts Based on the International[1]

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Research Paper

INTRODUCTION

In May 2017, the International Accounting Standards Board published International Financial Reporting Standard No. 17, entitled *Insurance Contracts*. IFRS 17 establishes principles for the recognition, measurement, presentation, and disclosure of insurance contracts, reinsurance contracts, and investment contracts with discretionary participation features. The implementation of IFRS 17 can significantly impact the financial management framework, profit, equity, reserves, financial reporting processes, and actuarial models. IFRS 17 introduces a new approach to determining the discount rate for insurance liabilities, which is a key component in calculating the present value of future cash flows associated with insurance contracts.

As one of the largest economies in the Middle East, Iran plays a central role in the global insurance industry. In Iran, determining the discount rate presents significant challenges. First, Iranian financial markets have experienced fluctuations in recent years due to geopolitical tensions and economic sanctions imposed by international bodies. These uncertainties have led to irregular changes in interest rates, making it difficult for Iranian insurers to establish stable discount rates. Second, Iran's regulatory environment has undergone significant changes in accordance with

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financial reporting standards. Adopting IFRS 17 requires insurers to re-evaluate their existing procedures and align them with international standards. This transition demands careful consideration of domestic market conditions while ensuring compliance with global accounting principles. Third, Iran's unique cultural factors may influence the determination of the discount rate. Cultural norms surrounding risk perception and investment behavior can indirectly affect market interest rates. Understanding these differences is critical to accurately assessing discount rates that reflect both economic realities and cultural dynamics. Therefore, the successful implementation of IFRS 17 in Iran is of great importance for the insurance industry, as it enhances transparency, comparability, and accountability in financial reporting, ultimately strengthening investor confidence and attracting foreign investment. However, the challenges associated with determining the discount rate must be effectively addressed to ensure an accurate valuation of insurance liabilities and avoid potential distortions in financial statements.

Discount rates play an important role in determining the present value of future cash flows and are used to measure the financial performance and liabilities of insurance companies. The discount rate should accurately reflect the time value of money and adequately account for inflation, currency fluctuations, and other related factors. Iran's economy is exposed to various macroeconomic uncertainties, including high inflation and fluctuating exchange rates, which can significantly affect discount rates and, consequently, the measurement of insurance liabilities. Therefore, it is necessary for insurance companies to carefully consider these issues when determining their discount rates in accordance with IFRS 17. To address these challenges, the following questions must be answered:

- How does the discount rate affect the financial statements of insurance companies?
- What is the framework for determining the discount rate of insurance contracts in Iran, and what factors affect it?
- To what extent is the determination of the discount rate according to IFRS 17 appropriate to Iran's environmental conditions?
- What are the requirements and prerequisites for determining the discount rate of insurance contracts according to IFRS 17?

The main goal of this research is to develop a framework for determining the discount rate according to IFRS 17. So far, various studies have been conducted on IFRS and the challenges of implementing IFRS 17 in Iran (e.g., Asadzadeh, 2017; Skaffi Asl and Heydarpour, 2020; Rahmani and Rasouli, 2022; Rahmani et al., 2022); however, none of them have addressed the framework for determining the discount rate according to IFRS 17. This research aims to fill this research gap by developing a discount rate framework tailored to IFRS 17 in Iran.

MATERIALS AND METHODS

This research is practical in nature and, in terms of data collection, is descriptive and survey based. The data collection tool was a questionnaire. The statistical population consists of financial managers, actuaries, internal auditors, and risk managers. The questionnaire was sent to all insurance companies in both written and electronic forms. The research sample was selected based on the statistical population and ease of access to respondents; out of 91 questionnaires collected, a total of 85 were deemed acceptable. A Likert scale with five degrees, ranging from "very low" to "very high," was used to evaluate responses. Comparisons of group means, variance analysis, and Tukey and Levin tests were employed to assess the opinions of different respondent groups regarding the research objectives.

RESULTS AND DISCUSSION

The results of the comparison of means show that, except for the propositions of choosing the rate of government debt bonds as the market rate and selecting the reference portfolio according to theoretical assets, the inclusion of liquidity features in insurance contracts, the existence of affordable price observations in financial instruments, the use of market-based inputs to determine the discount rate, the use of the top-down and bottom-up approaches in determining the discount rate, the annual determination of the discount rate for insurance contracts, the sensitivity of the results of the assessment of insurance liabilities, determining the discount rate by the board of directors, and other propositions were significant. Additionally, the results of the variance analysis and Tukey’s test indicated a meaningful difference between the opinions of different respondent groups regarding the liquidation of health insurance, property insurance, and liability insurance claims; the use of a customized portfolio as a reference portfolio; compatibility between the real asset maturity time in the reference portfolio and the liabilities of insurance contracts; and the use of the technical interest rate or accrual rate to calculate the insurance premium in life insurance.

CONCLUSION

Iran’s insurance industry supervisor, Bimeh Markazi, can use the findings of this research to formulate guidelines on how to determine the discount rate. Additionally, these findings can significantly aid in the successful application of IFRS 17 to estimate the discount rate in Iran. In

future research, a qualitative study could be conducted to determine the framework for the discount rate and investigate its challenges in greater depth. Just as there are challenges in predicting the discount rate, there are also challenges in predicting cash flows. It is suggested that future research examine the challenges of predicting cash flows.

Keywords: Discount Rate, International Financial Reporting Standard No. 17 (IFRS 17), Top-Down Approach, Bottom-Up Approach, Insurance Industry.

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