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How Is The Implementation of IFRS 17/PSAK 117 And Its Impact on Risk Based Capital of Life Insurance Companies?

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Abstract: The implementation of IFRS 17 in 2025 will impact the reporting of insurance contracts and potentially affect the calculation of Risk Based Capital (RBC) for insurance companies. This study evaluates how IFRS 17 affects insurance contract liabilities and solvency ratios in insurance companies, using a sizeable Indonesian life insurance company as a case study. The research covers traditional products, health insurance, and unit-linked products, with findings validated through interviews with actuarial or accounting heads from five other life insurance companies. The study reveals that liabilities for traditional insurance contracts increase, unit-linked product liabilities decrease, and short-term health insurance liabilities remain unchanged. These changes will impact RBC calculations even though IFRS 17 does not alter the inherent business risks of insurance companies. The study recommends that regulators adjust RBC calculations to ensure financial statements accurately reflect insurance companies' financial health and risks.

Keyword: IFRS 17, Insurance Contract, RBC, Financial Statement, Life Insurance.

INTRODUCTION

Capital adequacy in insurance companies refers to the adequacy of capital to cope with potential losses and meet long-term financial obligations, including claims and benefits to policyholders. Capital adequacy is an essential measure of financial strength, ensuring the company can withstand economic fluctuations and other risks without jeopardizing its operations. Harrington (2003) highlights the importance of RBC in assessing the solvency of insurance companies and explains that RBC provides a framework to measure risk more accurately and ensure that companies have sufficient capital to cover potential losses. As such, RBC can improve insurance companies' financial stability and reduce the likelihood of default, increasing the confidence of policyholders and other stakeholders. The Financial Services Authority sets the minimum capital requirement for insurance companies at 120% to protect policyholders and maintain market stability. The minimum capital requirement is measured using Risk-Based Capital (RBC).

The adoption of IFRS 17 is an important milestone in improving the financial reporting standards of the insurance industry globally, including Indonesia. This standard

aims to improve transparency and comparability in financial reporting. The previous standard, IFRS 4, allowed various approaches to recognize and measure insurance contracts in different jurisdictions. This creates complexities that prevent stakeholders, including investors, policyholders, and regulators, from accurately assessing the financial health of insurance companies and making meaningful comparisons across insurance companies.

Several studies have found that IFRS 17 increases transparency, comparability, and usefulness of information for stakeholders. According to (Muskitta & Safitri 2019)(Muskitta & Safitri, 2019), IFRS 17 will be increasingly aligned with the reporting formats of other industries, such as banks or securities companies, which is a positive development for insurance companies operating in Indonesia. In fact, according to Longoni (2019), the market reaction to the introduction of IFRS 17 shows a relationship between the event and adverse abnormal event returns for insurance companies that follow IFRS. This negative impact is more significant for large insurance companies with low growth opportunities.

Lali (2019) highlights the challenges of implementing this standard on the performance of insurance companies in Bosnia and Herzwgovina. The biggest challenge in implementing IFRS 17, according to Owais & Dahiyat (2021), is the data challenge, followed by the first-time implementation challenge, the system and its impact on financial statements, and the preparation of human resources. Dahiyat & Owais (2021) found during a study on the case of Jordanian insurance companies that there is an expected, statistically significant, and positive influence between the adoption of standards and the quality of financial statements in general and the expected influence of the adoption of standards and their respective comparability, appropriate representation, relevance, verifiability, timeliness, and understandability. Lee (2022)also investigated the impact of IFRS17 implementation on the insurance industry. The application of IFRS17 is expected to increase volatility in financial statements due to fluctuations in the value of insurance liabilities and increased volatility in income. Alhawtmeh (2023) also concluded that IFRS 17 helps develop accounting measurements and disclosures and improves the quality of financial statements for Jordanian insurance companies. In addition, a substantial overhaul of the company's accounting information system is required to meet all IFRS 17 requirements.

Qadri, Sari, Andriani, and Kusumawati (2022)concluded that the insurance sector in Indonesia experienced significant obstacles related to accountant competence and company accounting systems during preparation for IFRS 17 implementation. Hartojo & Purnamasari (2023) even stated that insurance companies in Indonesia had been declared ready to implement IFRS 17 and found no challenges when IFRS 17 is effectively applied in Indonesia. This readiness is inseparable from the role of the Financial Services Authority (OJK) as the supervisor of the insurance industry in overseeing the implementation of IFRS 17 in insurance companies in Indonesia to date.

In addition to significant changes in the presentation and disclosure of financial statements, IFRS 17 significant changes are mainly in measuring insurance contract liabilities and revenue recognition. (Arduini, 2019) concluded that this new standard can effectively affect the quality of insurance companies' earnings. The introduction of contractual service margin (CSM) as a deferred future expected profit is a crucial element that will significantly impact insurance company liabilities. Amortization of CSM will be recognized over the contract period. (Palmborg, Lindholm, & Lindskog, 2021) Found that when a group contract is highly profitable, it will result in a positive CSM throughout the period. However, when a Group contract is unprofitable from its recognition, this loss must be realized immediately, and any subsequent changes will directly impact profit or loss, leading to higher volatility in financial performance.

How does the impact of IFRS 17 implementation on insurance contract liabilities in insurance companies affect the calculation of RBC, a vital indicator of insurance company health measures?

Globally, two approaches are observed: maintaining the current solvency measurement or aligning it with IFRS 17. According to (KPMG, 2024), countries such as Canada, Malaysia, and Australia have revised their solvency frameworks to align with IFRS 17, avoiding inefficiencies and ensuring consistency in assessing the financial health of insurance companies. This alignment helps prevent discrepancies between financial reporting and solvency calculations, facilitating a more accurate evaluation of the financial position of insurance companies. In contrast to the European Union, according to (PwC, 2023), despite implementing IFRS 17, Solvency II continues to be used because its measurements are closely aligned with IFRS 17. This continuity minimizes disruption and maintains regulatory stability. For example, Solvency II's principles of risk-based capital and market-consistent valuation are similar to those under IFRS 17, which helps harmonize financial and regulatory reporting.

The study aims to evaluate the implications of changes in insurance contract liabilities from IFRS and their impact on the RBC of life insurance companies, especially with traditional product portfolios, unit links, and short-term health insurance. This research is expected to bring benefits, increase awareness, and better understand the impact on the company's RBC so that it can take strategic steps to manage and maintain capital at the limits required by regulators. Other benefits are expected to add valuable knowledge to the academic literature, providing a basis for future studies in insurance accounting and financial reporting of insurance companies.

IFRS 17 was implemented internationally in 2023 and in Indonesia in 2025 through PSAK 117. While there is much general guidance on implementing IFRS 17, publicly available detailed case studies on specific insurance industries, especially life insurance, still need to be improved. As IFRS 17 is still in the implementation process, there needs to be more literature regarding post-implementation reviews that can provide insights into the actual versus expected impact and the effectiveness of various strategies.

LITERATURE STUDY

Most of the literature focuses on compliance and transition challenges. There needs to be more emphasis on how companies can create long-term value from IFRS 17 beyond compliance and immediate operational improvements. Tucker, Tan, & Wood (2022) Milliman's publication discusses critical points of focus for rapid IFRS 17 implementation, including understanding the Contractual Service Margin (CSM) and its role in profit realization over time, as well as addressing the complexity of the models and systems used to calculate CSM, which require rigorous testing and validation. Changes in the presentation of financial statements, including the Statement of Financial Performance, will now include a new presentation of profit and loss. These changes require careful consideration of various assumptions, grouping of insurance contracts, and selection of an appropriate transition approach. In the study, Yousuf et al. (2020) explained again the purpose of IFRS 17: to improve the usefulness, comparability, transparency, and quality of insurance companies' financial statements. IFRS 17 introduces a globally applicable way to measure liabilities and the concept of CSM. Further, Palmborg et al. (2021) examined that when the contract group is highly favorable, it will result in a positive CSM over the entire period so that the insurance company will be protected from losses because CSM acts as a *buffer*against unfavorable developments during the contract period. CSM is not only an essential element for life or loss insurance companies; even from research results, Parwitasari, Sensi SE, & Sensi Wondabio (2023) found that determining the correct assumptions and measurement models in

calculating CSM is a critical accounting issue faced by social insurance management bodies in implementing IFRS 17.

Overview of IFRS 17/PSAK 117 and IFRS 4/PSAK 62

PSAK 62 is an adoption of IFRS 4, which is the primary rule insurance companies use to report their insurance contracts in financial statements. This standard is called an "interim standard" because it is designed to provide essential guidance while awaiting the development of a more comprehensive standard. The main objective of PSAK 62 is to ensure that insurance companies disclose relevant and reliable information in their financial statements. However, it does not change how companies calculate insurance contract liabilities/reserves. IFRS 4 also allows insurance companies to continue the application of liability calculation and reporting in each country. So, in addition to not providing clear information, it is not easy to compare the financial statements of insurance companies even between countries because each country has a different treatment of its insurance contracts.

Meanwhile, IFRS 17 (IASB, 2020) is a new rule that replaces IFRS 4 and provides more detailed guidance on how insurance companies should report their contracts. The aim is to improve the transparency and consistency of insurance companies' financial statements, thus providing a more precise and more accurate picture of their financial performance. IFRS 17 also introduces the concept of Contractual Service Margin (CSM), which helps ensure that profits from insurance contracts are recognized gradually throughout the service period rather than all at once at the beginning.

IFRS 17 aims to improve the consistency, comparability, and transparency of insurance contract accounting. The three focus areas of IFRS 17 are (1) Recognition: Insurance contracts are recognized whichever comes first, the beginning of the coverage period (risk inception date), or the first payment due under the policy. (2) Measurement: Three measurement models are the General Measurement Model (GMM) or Building Block Approach (BBA), the Variable Fee Approach (VFA), and the Premium Allocation Approach (PAA). (3) Presentation and Disclosure: Several significant new disclosures will make actuarial modeling more relevant to the financial statements, such as new income statement format and mutation of insurance contract liabilities (IASB, 2020).

The main difference between PSAK 62 and IFRS 17 is the financial statements' level of detail and transparency. PSAK 62 provides essential information with little additional detail and serves as an interim standard. For example, the amount of insurance liabilities is recorded only in the "Liability for future policy benefits/Reserve" account in the Balance Sheet, and changes are presented in the "Increase/Decrease in liability for future policy benefits/Reserve" account in the income statement, making it incomprehensible to non-actuaries and other users of financial statements.

IFRS 17, on the other hand, asks insurers to provide more details on how they calculate and use premiums received and how profits are recognized gradually over the contract's life. In this way, IFRS 17 aims to provide a more accurate picture of the financial health of insurance companies and the risks they face.

Pelsser et al. (n.d.) Overall profitability (the present value of future profits) will likely be similar under the current and proposed IFRS 17 approaches. However, the timing will be different under the two approaches. The timing difference for earnings releases will mainly depend on how the margin release compares to the CSM amortization method used under IFRS 17. Although the total emerging earnings are the same under IFRS 4 and 17, the expectation is that the earnings reported under IFRS 17 will be more volatile than the current reporting regime.

Dufrasne (2020) conducted an in-depth investigation into the differences between applying IFRS 4 and IFRS 17. His study concluded that applying IFRS 17 requires a more

refined application than the previous standard. IFRS 17 increases the comparability of financial statements across insurance companies. In addition, the new standard requires consistent recording of contracts in the financial statements. Therefore, the presentation and disclosure requirements under the new standard are critical to ensure stakeholders can adequately understand and interpret these changes.

Impact of Risk-Based Capital

Research conducted on life insurance in Taiwan by Chan, Peng, and Tsai (2021) concluded that the application of IFRS 17 impacts the liabilities of life insurance companies, and equity fluctuations will increase significantly, impacting insurance companies' profitability and survival. Therefore, the supervisory authority needs to consider the characteristics of the Taiwanese life insurance market when formulating the long-term interest rate curve in the future and adopt a more localized supervisory strategy to reduce the impact of interest rate fluctuations.

Liu, Jia, Zhao, and Sun (2019) reported large-scale inconsistencies among three solvency capital requirements (SCRs) - RBC, Solvency II, and C-ROSS standards. Indonesia uses the RBC standard; Solvency II is widely used mainly in the European Union and Canada, and C-ROSS in the United States. The inconsistency in risk assessment by regulators is driven by different portfolio structures among insurance markets. We construct three asset portfolios and an insurance portfolio to capture the three largest non-life insurance markets in the non-life insurance market-US, EU, and China. We estimate the SCR for each portfolio under the three solvency systems. The SCR inconsistency is economically huge.
SCR is economically significant regarding overall SCR, solvency ratio, and the weighting of SCR components to risk modules. Regulators tend to impose higher SCR for large asset classes and small insurance lines of business. The results suggest that an effective solvency system is market-oriented and attempts to move market-oriented SCR towards globally consistent SCR may distort local regulation at a high cost.

Even Windsor, Yong, Bell, and Jenkinson (2020) explored using IFRS 17 for insurance company solvency assessment based on a survey of 20 insurance supervisory authorities in Europe. IFRS 17 is a welcome development, but there will be implementation challenges. Only a few insurance supervisors currently intend to use IFRS 17 to assess insurance companies' solvency. The perceived shortcomings can be overcome by supervisors providing precise specifications where principle-based standards allow various approaches. Accounting standards can provide ready-made assessments for supervisors developing new solvency frameworks. According to Clark Jeremy Kent Ed Morgan (2020), based on a survey conducted in 20 jurisdictions, only a few jurisdictions surveyed plan to use IFRS 17 for solvency purposes. This is mainly because IFRS 17 is not considered to provide financial results that are sufficient or comparable to the desired solvency measurement needs. In countries with no plans to use IFRS 17 for solvency measurement, supervisors tend to believe that the costs of implementing the rule outweigh the benefits derived from aligning their valuation bases with IFRS 17. Jurisdictions that plan to adopt this standard for solvency purposes seek to benefit from audit controls, avoid potentially conflicting financial signals from different financial statements, and minimize costs for insurers.

METHOD

The research approach is a case study. Yin (2018) states that applying the case study method offers particular advantages when applied in situations where the following three conditions are met. First, it relates to how the research question is asked, especially when formulated with "how" or "why." Case studies are the preferred strategy for answering

descriptive or explanatory questions. Second, the study does not require control of behavioral events. Thirdly, the study focuses on contemporary events, not historical events.

These three conditions can be verified in this particular case:

1. It is verified because the research question is "How does the application of IFRS17 related to the measurement of liabilities of life insurance companies impact the company's Risk-Based Capital?".
2. It is verified because there is no influence or control over the introduction or implementation process of IFRS 17.
3. It is verified because the information used to develop the case comes from analyzing company practices.

The case study approach is well suited to examine the real-life implications of IFRS 17 on insurance companies, especially life insurance, due to the complexity and specificity of IFRS 17. The implementation of IFRS 17 varies significantly across organizations globally and in Indonesia. Case studies allow us to delve into specific implementation examples, providing a detailed view of how different insurance companies navigate these complexities. In addition, these case studies offer a practical perspective, showing how the theoretical principles of IFRS 17 are applied in real-world scenarios, including the challenges faced and strategies employed.

Given the varying impact of IFRS 17 based on factors such as company size and insurance product type, case studies are a powerful tool to illustrate these variations. With the global implementation of IFRS 17 still in its early stages, these case studies offer a unique learning opportunity from the experiences of early adopters. This not only provides valuable insights but also empowers other companies embarking on the IFRS 17 implementation journey, making them feel more prepared and informed.

According to Yin (2018), the method for developing a case study consists of three phases: (1) Define and design; (2) Prepare, collect, and analyze; and (3) Analyze and conclude. The purpose of the case study in this research is to understand the impact of IFRS 17 implementation on the measurement of insurance contract liabilities and the company's solvency ratio. The impact on solvency ratios will be analyzed at the company level.

As the implementation of IFRS 17 is still in the preparation stage, it is not feasible to assess the impact by simply comparing financial statements. Therefore, an academic simulation was developed to analyze and assess the impact. While the simulation is academic in nature, every effort has been made to ensure it accurately reflects the reality of companies issuing or holding insurance contracts. This emphasis on accuracy instills confidence in the research findings, making the audience feel more assured and trustful of the results.

The research implementation procedure begins with building a simulation case of the insurance contract liability measurement model used in the first scenario of traditional products, the second scenario of health insurance products, and the third scenario of unit-linked insurance products. Then, the interviews conducted with the heads of actuarial and accounting of five insurance companies will be compared. The interview questions are presented in Table 1.

Table 1. Interview Questions

No.	Pertanyaan Utama
	Narasumber 1 - 5
1	Bagaimana Hasil dari run IFRS 17/PSAK 117 dibandingkan PSAK 62 yang disampaikan ke OJK terhadap total liabilitas kontrak asuransi?
2	Bagaimana hasil untuk produk-produk tradisional?
3	Bagaimana dengan produk Unit link?
4	Bagaimana dengan Produk kesehatan jangka pendek?
5	Apakah diakses dampaknya pada RBC?
	Pertanyaan tambahan
1	Mengapa secara total liabilitas kontrak asuransi IFRS 17 lebih besar dari PSAK 62, hal ini berbeda dengan hasil dari ke-empat asuransi yang diwawancara sebelumnya? (narasumber 2)
2	Mengapa liabilitas kontrak asuransi produk tradisional dapat lebih kecil walaupun sangat kecil dari standar sebelumnya? (narasumber 3)
3	Bagaimana dampak perubahan IFRS 17 ini pada RBC? (narasumber 1 dan 2).

RESULTS AND DISCUSSION

Based on the simulation results on traditional insurance products, health insurance products, and unit-linked insurance products, as well as the interviews conducted offline and online with the chief actuary and chief accountant of five life insurance companies, Table 2 summarizes the analysis results.

Table 2: Summary of Scenario Analysis Results

Dampak Yang diharapkan pada penerapan IFRS 17 dibandingkan PSAK 62 (Balance Sheet)		
Scenario	**Liabilitas Kontrak Asuransi**	**Equity**
Skenario 1 : Produk asuransi tradisional	lebih tinggi	lebih rendah
Skenario 2 : Produk asuransi kesehatan	Relatif sama	relatif sama
Skenario 3: Produk asuransi unit link	Lebih rendah	lebih tinggi

Table 3 illustrates how the company's RBC is calculated based on the applicable OJK regulations. In this simulation, researchers focus on calculating RBC in 2023 to simulate the impact of changes in the company's insurance contract liabilities under IFRS 17 on RBC.

Table 3. Risk Based Capital 2019 - 2023

Risk based Capital (RBC)		2019	2020	2021	2022	2023
Asset (Admitted)	a	**7.746.214**	**8.460.949**	**8.696.265**	**9.368.767**	**10.531.337**
Hutang Lain-lain		1.034.534	1.337.652	1.584.311	1.884.036	1.966.661
Cadangan Teknis		4.343.022	4.778.921	4.769.300	4.805.619	5.574.661
Total Liabilitas	b	**5.377.557**	**6.116.573**	**6.353.612**	**6.689.655**	**7.541.322**
Solvabilitas	c = a - b	**2.368.658**	**2.344.376**	**2.342.653**	**2.679.112**	**2.990.015**
Modal Minimum Berbasis Risiko (MMBR)	d	**402.030**	**437.007**	**553.703**	**560.973**	**575.840**
%RBC	c / d	**589%**	**536%**	**423%**	**478%**	**519%**

source: PT XYZ life insurance website

Researchers built two scenarios to simulate RBC calculations using IFRS 17 liability assumptions. Table 4 illustrates the first scenario without PAYDI-Unit Link products and the second scenario including PAYDI-Unit Link liabilities.

Table 4. Risk Based Capital Simulation

Simulasi Risk Based Capital (RBC) - FY2023		SAP	IFRS 17 tanpa PAYDI	IFRS 17 PAYDI
Asset (Admitted)		10.531.337	10.531.337	10.531.337
UL Assets		-		*28.526.959*
Total Aset	*a*	**10.531.337**	**10.531.337**	**39.058.296**
Hutang Lain-lain		1.966.661	1.966.661	1.966.661
Cadangan Teknis		5.574.661	6.175.932	6.175.932
Cadangan Premi UL		-	-	*27.388.485*
Total Liabilitas	*b*	***7.541.322***	***8.142.594***	***35.531.079***
Solvabilitas	c = a - b	**2.990.015**	**2.388.744**	**3.527.217**
Modal Minimum Berbasis Risiko (MMBR)	d	**575.840**	**575.840**	**575.840**
%RBC	c / d	**519%**	**415%**	**613%**
Kenaikan/Penurunan RBC			-20%	18%

In Table 4, the researchers compare the current RBC calculation based on SAP (Statutory et al.) by the applicable statutory provisions in the insurance business sector with two scenarios.

Scenario 1: This scenario involves the use of IFRS 17 insurance contract liabilities, excluding unit-linked products (PAYDI, investment-linked products). This calculation aligns with the current practice of including only insurance contract liabilities other than unit-linked products. However, the inclusion of only guaranteed PAYDI insurance contract liabilities renders the numbers insignificant, hence they can be disregarded.

Scenario 2: using total insurance contract liabilities, including liabilities from insurance contracts of unit-linked products (PAYDI). Consideration is needed because the insurance contract liabilities of IFRS 17 unit-linked products differ from the assets. So, it is also necessary to analyze the impact if it is included. Because the insurance contract liabilities were added, the researchers added unit-linked assets to the admitted assets.

Both scenarios use the same MMBR, assuming there is no change in company risk with the application of IFRS 17.In scenario 1, the company's RBC decreased by -20% from 519% to 415%. The decrease in RBC is due to increased liabilities in traditional products. Conversely, based on scenario 2, the company's RBC increased by 18% from 519% to 613%. This increase is because unit-linked products still dominate the company's product portfolio. Although the 2023 RBC, according to IFRS 17, is still above the 120% minimum RBC required by OJK, the 20% decrease or 18% increase in RBC impacts the company's capital strategy.

Based on the results in the scenario above, it is clear that the application of IFRS 17 will have a significant impact on the RBC of insurance companies. For companies with a large portfolio of traditional products, the application of IFRS 17 will reduce the company's RBC. Conversely, insurance companies that have an evenly distributed portfolio of traditional products, health insurance and unit links, the application of IFRS 17 is expected to increase their RBC. This potential shift in the RBC underscores the need for careful consideration by regulators in relation to solvency requirements. It can have a profound impact on the financial health and risk assessment of insurance companies, especially those with a large traditional product portfolio and currently have a minimum RBC. The time for proactive measures is now.

Changes to the RBC calculation are also useful for aligning with financial reporting. This alignment helps avoid mismatches between regulatory capital requirements and the company's reported financial health.

CONCLUSION

In the case analysis and interviews conducted, it is concluded that IFRS 17 changes insurance contract liabilities, which changes vary in each product segment, in traditional products to be higher than the measurement with PSAK 62; on the other hand, the insurance contract liabilities of unit-linked products in IFRS 17 are lower than the measurement in PSAK 62, while the measurement of health products which are generally short-term has no significant change. This study shows that changes in insurance contract liabilitiesunder IFRS 17 will impact the Risk-Based Capital (RBC) ratio. Implementing IFRS 17 is expected to reduce the company's RBC in 2023 by 20%. Although still well above the threshold required by OJK of 120%, the results of this study may provide new and essential insights for stakeholders. This is especially relevant for insurance companies whose capital adequacy ratio (RBC) is close to the minimum limit, as such conditions could potentially result in insolvency or categorize the company as unhealthy.

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