

EXPLORING THE VALUATION OF INSURANCE CONTRACTS UNDER IFRS 17- CASE STUDY

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Abstract

The objective of this article is to examine the valuation of insurance contracts under IFRS 17 standard and to provide an exact instance of how to value insurance contracts using various valuation methods under this IFRS 17. We discuss the various methods on the theoretical level, explain and apply it using actuarial calculations on a selected example. The transition from IFRS 4's deferral-and-match approach to IFRS 17's current value-based model enhances transparency and comparability in financial reporting. This examples on the initial measurement of insurance contracts under two general models namely, one is non-onerous insurance policies and second one is Onerous insurance policies for evaluating the insurance contracts under the IFRS 17 We identified various valuation methods under IFRS 17, including the General Measurement Model (GMM) and the Premium Allocation Approach (PAA), which provide a more accurate reflection of insurers' financial positions.

Keywords: *IFRS4, IFRS17, IFRSVs IFRS17, and Insurance Model*

INTRODUCTION

IFRS 17 could undoubtedly epitomize the utmost noteworthy modification to insurance necessities in completed twenty years and it would probably be the biggest insurance modification to our daily lives. The International Accounting Standards Board (IASB) initially issued IFRS 17 as a comprehensive global standard for insurance contracts (Source, www.ifts.org.com). IASB has issued new standard i.e., IFRS 17 on May 18, 2017 insurance contract, earlier called as IFRS 4. IFRS 17 supersedes IFRS4. On or after 1st January 2023. This standard in active execution for annual periods IFRS 17's primary purpose is to establish guidelines for insurance contracts within its scope. These guidelines cover the measurement, recognition, presentation, and disclosure aspects of such agreements. The standard aims to provide a comprehensive framework for handling insurance-related financial reporting. (www.iasplus.com)

Even though the following objectives are given below:

- a. to improve the comparability of financial statements of insurance firms
- b. To improve the quality of information towards global financial reporting
- c. To guarantee that companies offer the relevant data in such a technique that positively denotes assurance contracts. Insurance organizations' statements of affairs shall clearly assess the impact of these contracts on the business's financial health, achievement, and cash flows, offering end users with clear and comprehensive data.

2. THEORETICAL BACKGROUND /LITERTURE REVIEW

2.1 SCOPE OF IFRS 17

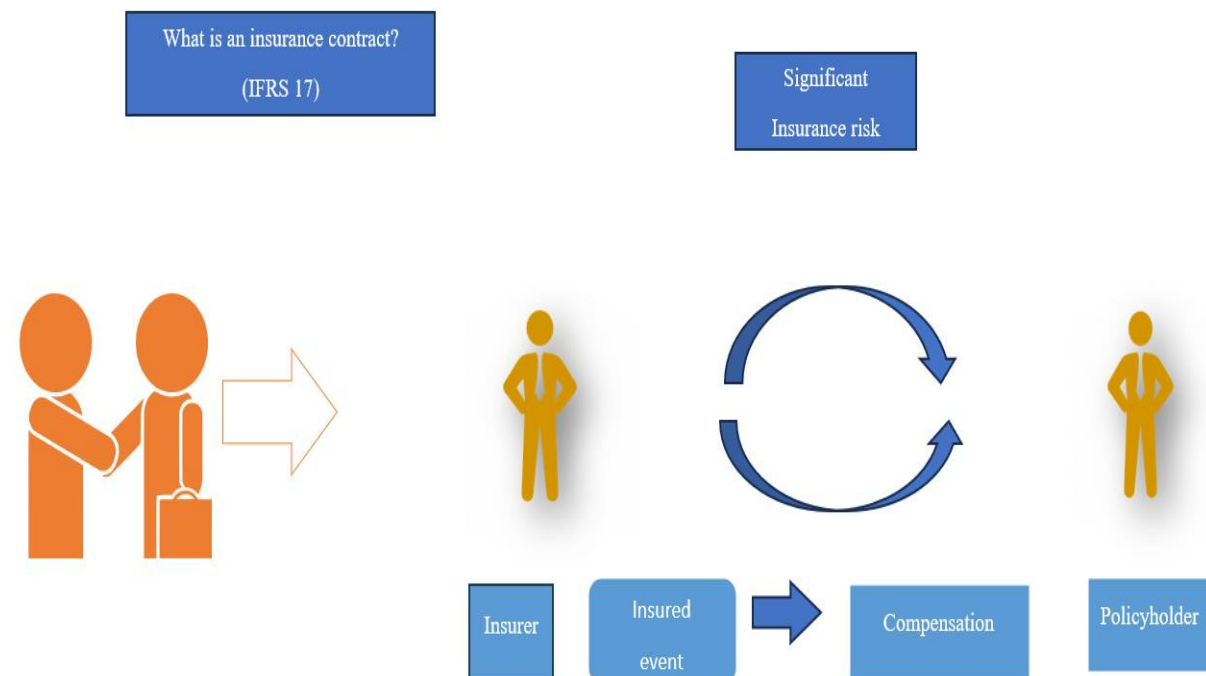
IFRS 17 is a versatile and can be utilized across various types of contracts, categorised as follows:

- A. Insurance contracts, together with reinsurance contracts, announced by the firm: and
- B. Reinsurance agreement that the organisation holds; and
- C. Investment contracts with discretionary participation features (DPF) that it issues.
Provided that the firm similarly problems assurance agreements.

This section will examine specific definitions of insurance and reinsurance agreements according to IFRS 17.

“ An insurance contract is a contract under which one party (the issuer) accepts significant insurance risk from another party (the policy holder) by agreeing to compensate the policy holder id a specific uncertain future event (the insured event) adversely affect the policyholders”

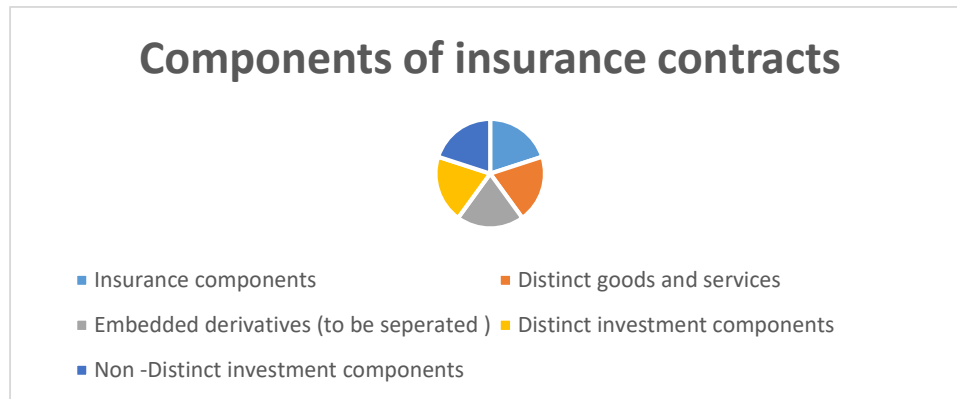
“ Reinsurance contracts is an insurance contract issued by one firm (the reinsurer) to compensate another firm (the cedant) for claims arising from one or more insurance contracts issued by cedent“



Source: Authors work

2.2 components of insurance contracts

there are several components generally comprise of insurance contracts (see pie chart). The companies ought to recognise which of the components necessity to be divided from the novel contracts under IFRS17.



- As per IFRS 17 non-distinct investment and insurance are not divided and these are measured under IFRS 17.
- And also, according to IFRS 17 embedded derivatives then separate speculation mechanisms ought to be divided then remain evaluated under IFRS 17.
- As per IFRS 17 Different commodities and facilities ought to remain divided then remain evaluated by IFRS 17.

2.3 Development of IFRS 17

Why does IFRS 17 replace IFRS 4

- To establish a global accounting language, IASB developed the IFRS standards so it is easy to understand and compared from entity to entity and from nation to nation.
- How to disclose insurance contracts explains by formal IFRS 4, but placed it humble, there are various problems or issues through IFRS 4 to variety a respectable contrast amid the assurance firms and compare an insurance firm to a non-protection firm, consequently IFRS 17 is required.
- IFRS 17 presents a financial statements framework for end users to evaluate the impact on assurance deals upon the business's financial health, efficiency, including cash flows.
- IFRS issued in 2004 as an interim standard, made only minor adjustments with current insurer processes for accounting
- Assurance firms were currently allowed towards evaluate equivalent assurance agreements using diverse accounting methods.

2.4 RECOGNITION OF INSURANCE CONTRACTS

The following dates are used to recognize insurance contracts as per IFRS 17 (IFRS 17.25).

First date

Opening of protection duration or once the 1st remittance (payment) becomes due;

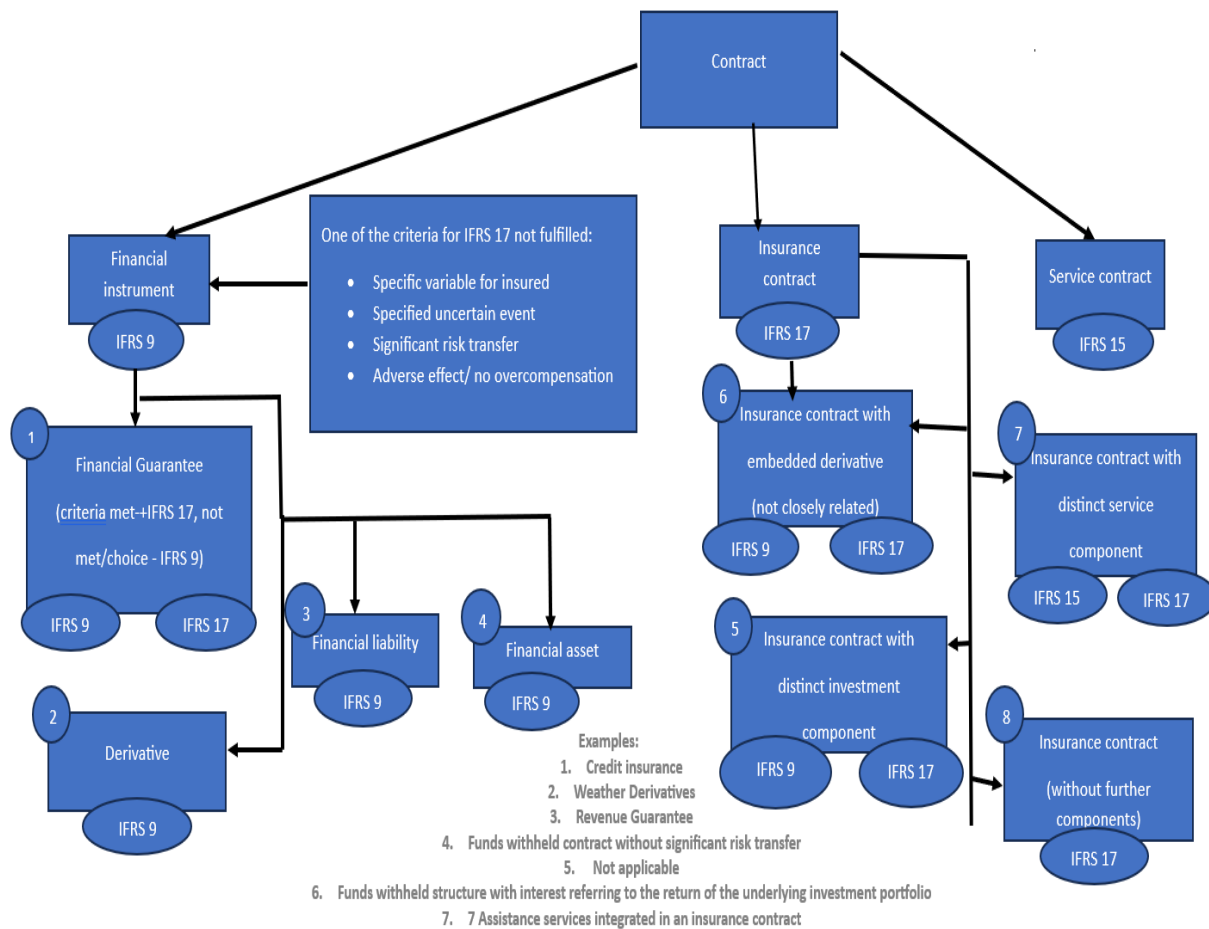
Second date

The date whenever insurers or policyholders' payments becomes due

Third date

For the teams of cumbersome agreements, the date whenever the team becomes burdensome or a loss-making.

2.5 Classification of Insurance contracts



2.5 LITERATURE REVIEW

Philip Longoni (2020) discovered that regression analyses show that abnormal event returns correlate negatively with insurer size, implying that IFRS 17 is abnormally expensive for major insurance companies, possibly due to high expenses for implementation. Insurers' book-to-market ratio is adversely correlated with anomalous incident earnings, implying that a lack of development possibilities causes the bad returns associated with the implementation of IFRS 17 (Longoni. Philip, 2019). Walid Omar OWAISI, Ahmad Abdelrahim DAHIYAT (2021) they found that IFRS 17 has become critical for Jordanian insurance businesses and regulatory organizations. Multiple moves are being made to improve their readiness for the implementation of IFRS 17 within the period of time specified. These processes involve running models to meet IFRS 17 criteria and evaluating the impact on financial reports.

Additionally, efforts are being made to assist employees in becoming familiar with and successfully employing IFRS 17 (Walid Omar Owaisi, Ahmad Abdelrahim Dahiyat 2021).

3. Objectives of the study

1. To assess the differences between IFRS 4 and IFRS 17
2. To examine the methods of valuation of insurance contracts under IFRS 17
3. To evaluate the valuation of insurance contracts under IFRS 17

3.1 Research Questions

1. What are the primary differences between IFRS 4 and IFRS 17 in terms of accounting for insurance contracts, and what implications do these differences have for insurers?
2. What are the various methods used for valuing insurance contracts under IFRS 17, and how do these methods ensure a more accurate representation of an insurer's financial position?
3. How effective is the valuation approach under IFRS 17 in reflecting the true economic value of insurance contracts, and what challenges do insurers face in implementing these valuation methods?

RESEARCH METHODS

DIFFERENCES AMONG IFRS4 VS IFRS 17

s.no	IFRS 4	IFRS 17
1.	Diverse accounting rules each insurance contract	For all insurance contracts only one accounting policy as per IFRS 17
2.	There is a lack comparability of insurance firms across the nations	Better comparability
3.	For assurance and non – assurance organisation there was a deficiency of comparability	Likewise accounting methods for assurance and non- assurance organisations
4.	According to these standard predictions are not needed to be updated	For each financial reporting period prediction would be updated as per this standard
5.	There is a challenge to understand main motorists of income	The important thing causes of income (investment against underwriting become explicit)
6.	As per this standard discount rates depend on speculation or investment	Discount rates depend on cash flows of assurance agreement

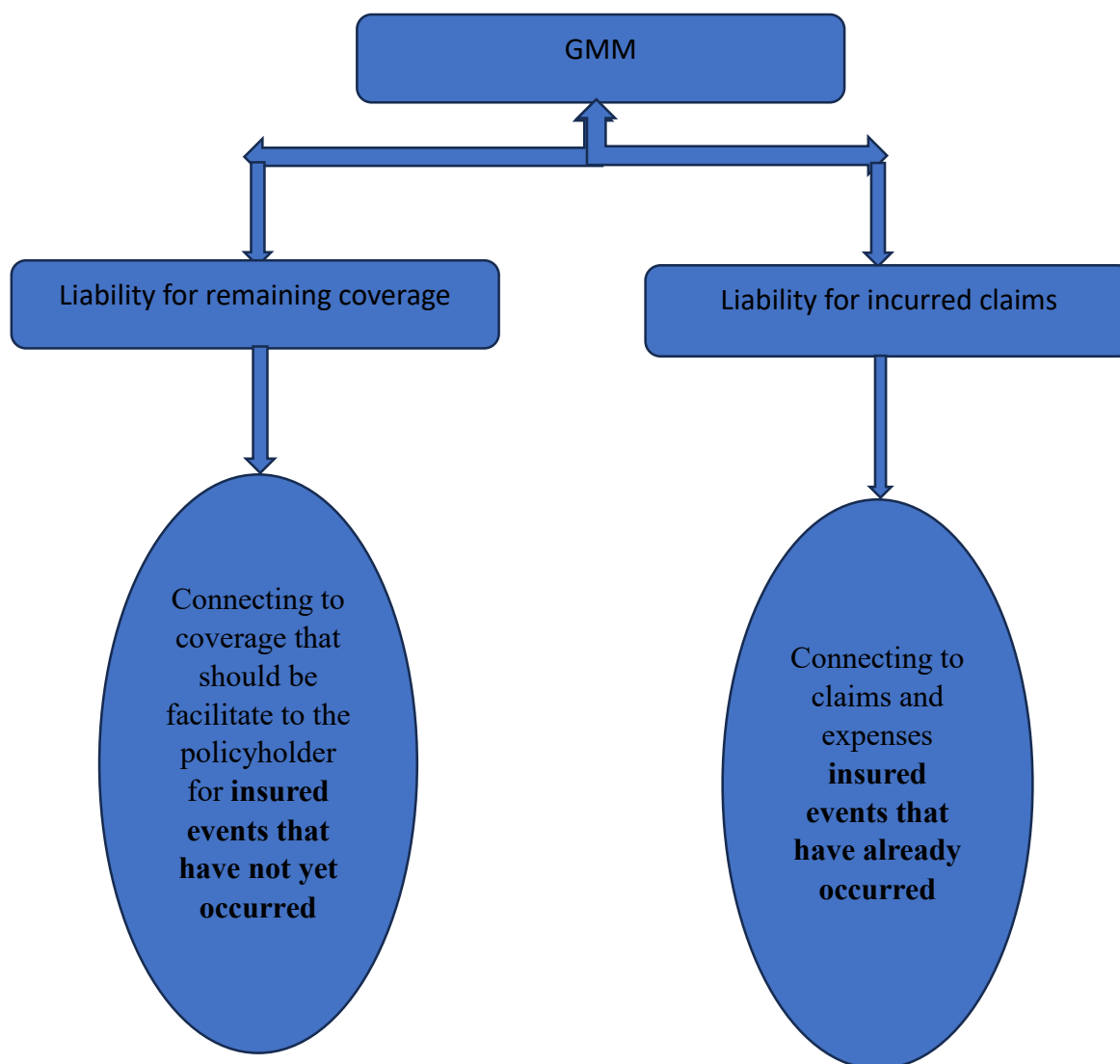
Source: Authors work

IFRS 17 MEASUREMENT MODELS/APPROACHES/VALUATION METHODS

The General Measurement Model, the Premium Allocation Approach /Model and Variable Fee Approach /Model are classified as measurement models under IFRS 17. The bellow chart easy to understand the IFRS 17 models (www.munichre.com)

1. General Measurement Model (GMM)

This model also called as BBA (Building Block Approach), under this standard, the General Measurement Model serves as the primary accounting approach for measuring insurance contracts. As per this GMM the whole carrying amount of a cluster of assurance agreement is made up of the following two basic components;



Source: Authors Work

After knowing the above information regarding GMM we ought to know four definitions of the building block approach.

1. CSM: IFRS 17 introduces the contractual service margin (CSM), a critical mechanism for deferring and recognizing insurance contract profits over time.

(www.Cambridge.org.)

While the measurement procedure for a set of insurance contracts comprises of many components required to compute the Contractual Service Margin (CSM), a term introduced in the IFRS 17 standard. As per IFRS 17 this CSM is a key component of GMM. Contractual service margin (CSM) measures the undeserved income (in excess of the Risk adjustment) the protected assumes to get as accomplishes the contract -abolition of gain at initiation.

2. RA: As per this IFRS17 clearly predict of the impacts of ambiguity regarding the amount and timing of future cash flows
3. Discounting: Adjust cash flows of discount rates for time value of money, normally usage of present rebate rates
4. Expected Cash Flows: as per this standard prediction of entirely forthcoming inflows and outflows of cash

2. PREMIUM ALLOCATION APPROACH (PAA)

This is the second method for measuring IFRS 17. This method is a very simplified approach (PAA) for the evaluation of the financial obligation for the LRC (liability for remaining coverage). This model is a simplified version of the general model and applies specifically to insurance contracts that provide coverage for less than one year (www.cnp.fr).

The following condition should be followed before measuring the LRC by this method:

- The coverage period of the assurance agreement at opening acknowledgment is 1 year or less.

The below table shows liability for the remaining coverage by PAA.

Table 1. The simplified measurement (PAA)

Particulars	Amount
Premium received	XXX
(-) insurance revenue recognised	(XXX)
(+) additional adjustments	XXX
Liability for remaining coverage	XXX

3. VARIABLE FEE APPROACH (VFA)

The Variable Fee Approach (VFA) represents the third methodology for assessing IFRS 17 across all global insurance contracts. This approach modifies the general method of valuing insurance contracts where payments fluctuate based on underlying item returns. For instance, this model incorporates the returns from assets underpinning these contracts as a component of the fee charged by the entity to policyholders for services rendered. Under the VFA, the Contractual Service Margin (CSM) cannot be calculated prospectively. A key benefit of the VFA is its ability to mitigate significant volatility in the income statement.

HOW TO MEASURE INSURANCE CONTRACT INITIALLY

IFRS 17 core tenet for initial insurance contract measurement entails promptly acknowledging losses on burdensome contracts, whilst profits from non-burdensome contracts are gradually recognised throughout the coverage duration. Upon initial recognition, non-burdensome

contracts are valued at nil, whereas burdensome contracts are recorded as liabilities equivalent to net cash outflows.

Illustration 1: Non-onerous insurance contracts under IFRS 17

Our first illustration demonstrates the initial measurement of a non-burdensome insurance contract group under IFRS 17.

Consider AB Insurance, an insurer that issues 300 insurance policies with a four-year coverage term commencing on the date of issuance. For each agreement, a 20 CU fee is charged for the full duration of coverage, due over a month of the date of issuance. The anticipated yearly outflows of cash are calculated at 3 CU per agreement. A discount rate of 5% is utilised. At the time of recognition, the projected risk adjustment for non-financial risk was 300 CU. The given scenario assumes that no policies will be terminated prematurely during the coverage period.

Source: www.cpdbox.com

Solution

IFRS 17 mandates that the initial valuation of insurance contracts be based on the sum of fulfilment cash flows. This includes expected premium inflows from policyholders, which are 20 CU per contract, totalling 6,000 CU for a group of 300 contracts. Future outflows, such as claim payments and service expenses, are projected at 3 CU per contract annually, amounting to 900 CU yearly for years 1-4. Cash flows are then adjusted to present values using a 5% discount rate. A risk adjustment of 300 CU is applied for non-financial risks. For non-onerous contracts, the contractual service margin is determined by taking the negative of the total of the previously mentioned components. The evaluation is proved in the following table (www.cpdbox.com).

Table 2. Non-onerous insurance contracts under IFRS 17

YEAR	CASH IN	CASH OUT	NET CASH FLOW	DISCOUNT FACTOR	PV OF CASH FLOWS
0	6000	0	6000	1.000	6000
1	0	-900	-900	0.952	-857
2	0	-900	-900	0.907	-816
3	0	-900	-900	0.864	-518
4	0	-900	-900	0.823	-778
TOTAL	6000	-3600	2400		872
LESS: risk adjustment					-200
The fulfilment cashflows					672
Contractual service margin					-672
Initial measurement of group of insurance contracts:					0

Source: www.cpdbox.com

The calculation process involves determining discount factors for each year using the formula $1/((1+5\%)^n$, where n represents the year. To determine the present value of expected future cash flows, apply the relevant discount factor to each projected net cash flow. The contractual service margin is derived by negating the fulfillment cash flows after incorporating risk adjustment. Consequently, the initial measurement for non-onerous insurance contracts equals zero, eliminating the need for a journal entry. When AB Insura receives 3,000 CU in premiums,

it is recorded as a debit to the bank account and a credit to the insurance contract liability, both for 3,000 CU. Following this entry, the insurance contract liability measurement post-initial recognition shows 3,000 CU in liabilities. The following table stays the same as the earlier version, except that future cash inflow estimates are now zero since no further premiums are anticipated.

Table 3. Non-onerous insurance contracts under IFRS 17

YEAR	CASH IN	CASH OUT	NET CASH FLOW	DISCOUNT FACTOR	PV OF CASH FLOWS
0	0	0	0	1.000	0
1	0	-600	-600	0.952	-571
2	0	-600	-600	0.907	-544
3	0	-600	-600	0.864	-518
4	0	-600	-600	0.823	-494
TOTAL	0	-2400	-2400		-2128
LESS: risk adjustment					-200
The fulfilment cashflows					-2328
Contractual service margin					-672
Initial measurement of group of insurance contracts:					-3000

Source: www.cpdbox.com

Illustration 2: Onerous insurance contracts under IFRS 17

The second scenario involves 200 insurance contracts spanning a four-year coverage period. Each contract commands a 15 CU premium for the entire duration, due within a month of issuance. Projected annual cash outflows are 5 CU per contract, with a 5% discount rate applied. 200 CU is the expected risk adjustment for non-monetary hazard at first identification, and it is presumed that no agreements will expire during the duration of protection. The key difference in this case is the increase in projected monetary outflows from 3 CU in the coming years to 5 CU. The objective is to ascertain the initial measurement of this contract group in line with IFRS 17.

Source: www.cpdbox.com

Solution

This scenario's initial measurement adheres to IFRS 17 guidelines, which necessitate contract assessment based on several components. Firstly, the fulfilment cash flows encompass future cash inflow and outflow estimates. The inflows constitute expected premiums from policyholders, totalling 3,000 CU for the 200-contract group. Conversely, the projected cash outflows amount to 1,000 CU annually for the entire group over four years. Secondly, these flows of cash are discounted to present value using the specified 5% rate. Thirdly, the risk adjustment for non-financial risks is set at 200 CU. Lastly, for onerous contracts, the contractual service margin is determined to be nil.

Table 4. Onerous insurance contracts under IFRS 17

YEAR	CASH IN	CASH OUT	NET CASH FLOW	DISCOUNT FACTOR	PV OF CASH FLOWS
0	0	0	0	1.000	3000
1	0	-1000	-1000	0.952	-952
2	0	-1000	-1000	0.907	-907
3	0	-1000	-1000	0.864	-864
4	0	-1000	-1000	0.823	-823
TOTAL	0	-4000	-1000		-546
LESS: risk adjustment					-200
The fulfilment cashflows					-746
Contractual service margin					0
Initial measurement of group of insurance contracts:					-746

Source: www.cpdbox.com

In accordance with IFRS 17's core principle, losses from onerous contracts must be recognised immediately upon initial recognition. This is reflected in a journal entry debiting profit or loss under insurance service expenses for 746 CU and crediting the insurance contracts liability for the same amount. Subsequently, when ABInsura collects the 3,000 CU in premiums from policyholders, the transaction is recorded by debiting the bank account and crediting the insurance contracts liability, both for 3,000 CU. Consequently, the insurance contracts liability measurement after initial recognition becomes 3,746 CU, as shown in the accompanying table.

Table. 5 Onerous insurance contracts under IFRS 17

YEAR	CASH IN	CASH OUT	NET CASH FLOW	DISCOUNT FACTOR	PV OF CASH FLOWS
0	0	0	0	1.000	0
1	0	-1000	-1000	0.952	-952
2	0	-1000	-1000	0.907	-907
3	0	-1000	-1000	0.864	-864
4	0	-1000	-1000	0.823	-823
TOTAL	0	-4000	-4000		-3546
LESS: risk adjustment					-200
The fulfilment cashflows					-3746
Contractual service margin					0
Initial measurement of group of insurance contracts:					-3746

Source: <https://www.cpdbox.com/ifrs-17-example-initial-measurement-insurance-contracts/>

Conclusion:

This study examined the key differences between IFRS 4 and IFRS 17, revealing significant changes in accounting for insurance contracts, particularly in recognition, measurement, and disclosure requirements. The transition from IFRS 4's deferral-and-match approach to IFRS 17's current value-based model enhances transparency and comparability in financial reporting. We identified various valuation methods under IFRS 17, including the General Measurement Model (GMM) and the Premium Allocation Approach (PAA), which provide a more accurate reflection of insurers' financial positions. Case studies demonstrated that while IFRS 17 improves consistency, insurers face challenges in implementation, such as data complexity and system upgrades. The findings suggest that IFRS 17 better aligns insurance contract valuations with economic reality, though practical hurdles remain. Overall, the new standard represents a substantial improvement over IFRS 4, promoting greater accountability in the insurance industry. Future research could explore long-term impacts on profitability and regulatory compliance as more insurers fully adopt IFRS 17.

References:

- [1.] www.ifts.org.com
- [2.] www.iasplus.com, <https://www.iasplus.com/en/standards/ifrs/ifrs17>
- [3.] Longoni, Philip. IFRS 17 Insurance Contracts and Firm Value (December 17, 2019). Available at SSRN: <https://ssrn.com/abstract=3589560> or <http://dx.doi.org/10.2139/ssrn.3589560>
- [4.] Walid Omar OWAISI, Ahmad Abdelrahim DAHIYAT (2021) "Readiness and Challenges for Applying IFRS 17 (Insurance Contracts)" *Journal of Asian Finance, Economics and Business* Vol 8 No 3 (2021) 0277-0286
- [5.] https://www.munichre.com/content/dam/munichre/contentlounge/websitepieces/documents/Introduction-to-IFRS-17-May2021-LIMA-MoG.pdf/_jer_content/renditions/original./Introduction-to-IFRS-17-May2021-LIMA-MoG.pdf
- [6.] <https://www.cambridge.org/core/journals/british-actuarial-journal/article/ifrs-17-contractual-service-margin-a-life-insurance-perspective/87830D0400867787F9048CE072E53E2B>
- [7.] <https://www.cnp.fr/en/cnp/content/download/10777/file/IFRS17-Presentation-12122022-EN.pdf>
- [8.] <https://www.cpdbox.com/ifrs-17-example-initial-measurement-insurance-contracts/>