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Research Article

Onerousity Analysis and PAA Eligibility Assessment Model in a Non-Life Insurance Company in Albania

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Abstract: *Although the phrase "onerous contract test" is not used in the new standard, we would like to utilize it to determine if a set of contracts that are taken into account by the Premium Allocation Approach (PAA) is onerous. Unlike the general measurement model, which is used in the regular assessment of the Liability for Remaining Coverage (LRC) to establish whether a collection of contracts is or has become onerous, the PAA does not have such automatism. By deducting the insurance acquisition expenses of the group of contracts that are released over the coverage period, the LRC, under this method, indicates the deferred premium receipts. For contracts of this type, an onerous contract test must be derived from a comparison between the LRC under the PAA and the fulfillment cash flows determined based on the general measurement model.*

Keywords: *Insurance, IFRS 17, Onerous Contract, Financial Reporting.*

I. INTRODUCTION

Financial reporting in the insurance industry is more complex than in any other industry due to the difficulties in identifying ' revenue', the length of insurance contracts, and their unique characteristics. Since 2004, insurance businesses have prepared financial statements using IFRS 4. However, this standard featured two major flows. The first is that IFRS 4 supports a wide range of accounting principles that are linked to local jurisdictions. This results in accounts that are difficult to compare with others. Furthermore, IFRS 4 specifically specifies that the information provided does not have to be economically relevant. It resulted in a fractured image of the insurance contracts, reflecting solely the company's expectations of what the contract was.

As a result, the data was incomplete, making it difficult to compare again. (International Accounting Standard Board, 2020). These issues also raise a logical third, as noted in the IASB information sheet on IFRS 17 (IASB, 2020). When a group produces its consolidated financial accounts, the potentially disparate accounting policies of its subsidiaries don't need to be unified. It assures that different accounting procedures under IFRS are used for the same type of contract, which is not the goal of IFRS standards [4].

The purpose of IFRS 17 is to address these gaps in financial statement openness and comparability. The impact of this new standard will be determined by an entity's existing reporting consistency as well as the degree of difference between its actual accounting policy(ies) and those that are now required by IFRS 17. Regardless, the new standard is projected to require affected organizations to collect additional data and train employees enough to generate comparable overall, economically relevant, and transparent financial statements for insurance accounting

Beside the comparability aspect of things, one thing that should be enhanced is the relevance of the information compared to IFRS 4 by including elements such as up-to-date information, time value of money as well as information regarding profitability. Interested third parties, such as investors and auditors, should be helped by these changes. That is the objective of the IASB when issuing this standard, as shown in their effect analysis (IASB, 2020).

The combination of short timelines, complexities and frequencies of the various reporting requirements makes these challenges even more acute. In these conditions, when the standardization of insurance accounting globally was necessary, a new standard was issued by the International Accounting Standards Board in May 2020.

II. LITERATURE REVIEW

In theory, no specific onerous contract test is required as contracts are measured using fulfillment cash flows at inception. When subsequent unfavorable changes in the fulfillment cash flows of a group of contracts exceed the carrying amount of the CSM, the group of contracts automatically becomes onerous.

In practice, a determination of whether a contract (or set of contracts) is onerous will need to be made prior to initial recognition in order to allocate contracts to groups correctly. An entity should apply the recognition and measurement model requirements of IFRS 17 to onerous contract testing. An entity may identify the group of onerous contracts by measuring a set of contracts rather than individual contracts if an entity has reasonable and supportable information to conclude that a set of contracts will all be in the same group [2].

Run-off triangles (or delay triangles) are an essential topic in the everyday duties of actuaries working in general insurance. They utilize spreadsheets and other software programs to anticipate future claim numbers and amounts [5][6].

In this paper, the assessment of whether a contract (or set of contracts) is onerous will be made using the actuarial cash flow models used for measurement purposes. This will ensure consistency with the recorded amount and avoid the need for a separate assessment tool. Also, using profitability metrics, such as new business margins, produced by existing profit-testing models will help to determine whether a contract (or set of contracts) is onerous. Furthermore, the paper analyzes aggregated efficiency reports for non-life insurance companies in Albania. Quantitative and comparative analysis was used by examining profitability ratios, ratios of activity efficiency and interdependence ratios for a time period 4 years, 2020-2023.

III. CLASSIFICATION OF INSURANCE CONTRACTS

The division of insurance contracts into onerous and non-onerous contracts is a key idea brought about by IFRS 17. According to IFRS 17, organizations must separate an issued portfolio of insurance contracts into at least three kinds of contracts:

- Onerous contracts (if any).
- Contracts without significant risk of becoming onerous subsequently (if any).
- All remaining contracts (if any)

A contract for insurance is burdensome at the time of initial recognition if the whole of the contract's fulfilment cash flows, comprising any previously acknowledged insurance acquisition cash flows and any contract-related cash flows, is a net outflow. When a collection of insurance contracts is onerous, the entity must identify the loss component and record the associated loss in profit or loss for the net outflow for the onerous contracts. As a result, the contractual service margin of the group is zero, and the amount that is carried out of the liability for the remainder of the coverage of the group is equal to the fulfillment cash flows [3].

This grouping is considered a minimum requirement. Whilst an entity may divide a portfolio into additional groups or sub-groups provided that its internal reporting provides information at a more detailed level, in general, a further sub-division of the three minimum groups is highly unlikely to be necessary and would create additional complexity and should, therefore, be avoided.

A group may be as small as an individual contract and, by definition, cannot be larger than the portfolio (where an entity is able to justify that all contracts within a portfolio are appropriately allocated to a single group).

Once established on initial recognition, the composition of specific groups is not subsequently reassessed. However, an entity may add new contracts to the group in the reporting period in which they are issued. Therefore, if an individual contract becomes onerous, it is not reallocated from Group B or c to Group A.

The groups, once established, become "the unit of account to which the entity applies the requirements of IFRS 17". Subsequent measurement of contracts is done at the level of the group. However, when measuring an assortment of agreements, an entity can calculate the fulfilment cash flows at a greater degree of aggregation than the group or portfolio, as long as the entity is able to incorporate the appropriate fulfilment cash flows in the group evaluation by allocating such estimates to groups of contracts. This applies to both the liability for remaining coverage and the liability for incurred claims. This is likely to be the case in measuring the liability for incurred claims for example.

A) Determining Onerous Contracts

a. Initial recognition

If the agreement's fulfillment cash flows, any previously recorded acquisition cash flows, and any revenue resulting from the contract at the time of initial recognition add up to a net outflow, the insurance agreement is considered onerous at the time of initial recognition.

As a result, when deciding whether a contract (or set of contracts) is onerous, the fulfillment cash flows shall also include the adjustment for non-financial risk (the risk adjustment) and should reflect the time value of money. Consequently, it can be seen that for contracts with a higher risk adjustment, the likelihood of a contract being onerous is also higher. The inclusion of the risk adjustment is particularly relevant for contracts measured using the PAA, where the use of existing metrics such as combined ratios may not include an adjustment for risk.

b. Subsequent measurement

When a company's share of a decline in the fair value of the underlying items exceeds the carrying amount of the CSM, a group of contracts is deemed onerous (or more onerous) upon subsequent measurement if there are any unfavorable changes in the group's fulfilment cash flows resulting from adjustments in estimates of future cash flows relating to future services; this also applies to groups of contracts with direct participation features.

A group of contracts measured using the Premium Allocation Approach becomes onerous (or more onerous) on subsequent measurement if facts and circumstances indicate that the remaining fulfilment cash flows exceed the carrying amount of the liability for remaining coverage.

Since the assessment of whether a contract is onerous depends on the fulfilment cash flows, it follows that this shall include all fulfilment cash flows within the contract boundary and exclude those cash flows which are not fulfilment cash flows within the contract boundary. As a result, for example, policy administration and maintenance costs which directly relate to the fulfilment of the contract are considered. In contrast, cash flows which cannot be attributed to the relevant portfolio, such as some product development and training costs, are not considered.

B) Granularity of Assessment

An entity can assess a set of agreements to see if they are onerous and evaluate the set to see if there is no significant chance that the contracts will become onerous in the future if it has reasonable and substantiated information to determine that a set of agreements will all fall in the same group. The entity will identify the group to which agreements belong by taking into account each agreement if it lacks reasonable and substantiating facts to determine that a set of agreements is going to be in the same group.

Under normal circumstances, contracts within a single portfolio that are priced on the same basis by the same entity would usually be grouped together.

The same data that the business has access to for pricing purposes will also be used to determine the groupings. Contracts that are burdensome from the outset are usually the consequence of a deliberate pricing plan, which is probably not going to happen very often.

Consequently, it is expected that contracts issued by an entity that has been priced on the same basis (e.g. an individual tariff level) can usually be regarded as a "set of contracts" for the purposes of assessing which if any, contracts should be considered onerous. In some cases, even for contracts priced on the same basis, it may be obvious from information readily available to the entity that there are sets of contracts that would not fall within the same group.

C) Testing for Onerous Contracts

IFRS 17 does not specifically refer to an onerous contract test. This onerous contract test will be a significant change in comparison to the liability adequacy test (LAT) under IFRS 4. In addition to the level of granularity, there will be differences in the methodology and the timing of the testing for onerous contracts.

Examples of the facts and circumstances to be considered might include:

Existing KPIs used by management such as combined ratios ("CoR"). This information should generally be available currently on a gross of reinsurance basis. The ratios used should be planned or projected combined ratios rather than historical (although where products, pricing and market conditions are stable, the difference may not be significant). However, existing CoRs will require some adjustment in order to properly approximate the measurement of fulfilment cash flows. As can be seen from these adjustments, the fact that historical CoRs are above 100% is not in itself evidence that a set of contracts is onerous. Conversely, a historical CoR of below 100% does not provide a definitive indication that the set of contracts is not onerous:

Existing CoRs may not be applied at a sufficiently granular level.

In most cases, existing CoRs are currently calculated using undiscounted claims and expenses. An adjustment will need to be made to estimate the impact of discounting claims and expense cash flows. The rate used to discount incurred claims for LIC purposes would be a suitable basis.

Existing CoR calculations may not include a risk adjustment. Consequently, an adjustment will need to be made for the additional consideration required to cover non-financial risk.

Similarly, some of the cash flows currently used in determining CoR may not meet the definition of fulfilment cash flows under IFRS 17 (e.g. certain overhead costs which are not directly attributable to fulfilling insurance contracts)

As guidance, Group policy allows an entity to consider a CoR of less than [95%] (gross and at a similar level of granularity) as indicative evidence that a contract (or set of contracts) is not onerous. A CoR (under the same conditions) of [105%] or over shall prima facie be indicative that a contract (or set of contracts) is onerous. For cases where the CoR is between [95-105%], further analysis of the impact of an adjustment for risk, the effect of discounting and the inclusion of consistent cash flows is required.

Pricing and underwriting models: Pricing models used by the entity provide information regarding the facts and circumstances as to whether a contract (or set of contracts) is onerous.

It may be assumed that the information that is used to determine the groups (i.e. whether onerous) will be the same information that is available to the entity for pricing purposes.

Such models may require adjustment for factors above and beyond the determination of a technical price, e.g. discretionary discounts or rebates granted by agents or certain attributable fixed expenses.

III. RESULTS AND DISCUSSION

A) Are there onerous contracts in the Albanian non-life insurance market?

The main purpose of this paper is to identify in the Albanian non-life insurance market if there are contracts classified as onerous. A contract to be classified as onerous must complete at least 3 basic conditions:

1. Combined ratio should be calculated in business lines of insurance classes, not on a single product.
2. Combined ratio must be greater than 105%.
3. This level of combined ratio must be at least 3 years in a row.

In relation to the first point, the paper considers all insurance classes in the non-life insurance market and aggregated efficiency reports based on the publications of the Financial Supervisory Authority.

For the second point, for all classes of insurance combined ratio is calculated.

To fulfill the third point, the time taken in the study is the last 4 years, 2020-2023.

A) Accident and Health Insurance

The first insurance class is accidents and health insurance, which consists of 2 insurance products: Personal accidents and Health insurance. Occupational illness and industrial accidents are covered by accident insurance. Sickness insurance pays for medical treatment costs and fixed economic incomes resulting from medical incapacity. The table below shows for each year the gross claims ratio, acquisitions costs ratio, administrative expenses ratio and gross operating ratio. Based on this data, it is calculated Gross Combined Ratio as follows:

Gross Combined Ratio = Gross claims ratio + Acquisition costs ratio + Administrative expenses ratio

Table 1: Gross combined ratio for Accident and Health Insurance

Ratio	Accident and Health Insurance			
	2020	**2021**	**2022**	**2023**
Ratios based on technical accounts				
Gross claims ratio	55%	46%	48%	50%
Acquisition costs ratio	36%	35%	33%	29%
Administrative expenses ratio	14%	14%	14%	14%
Gross operating expenses ratio	49%	49%	47%	43%
Gross Combined Ratio	**105%**	**95%**	**95%**	**93%**

The following chart shows the trend of the Gross Combined Ratio for Accident and Health Insurance during 2020-2023.

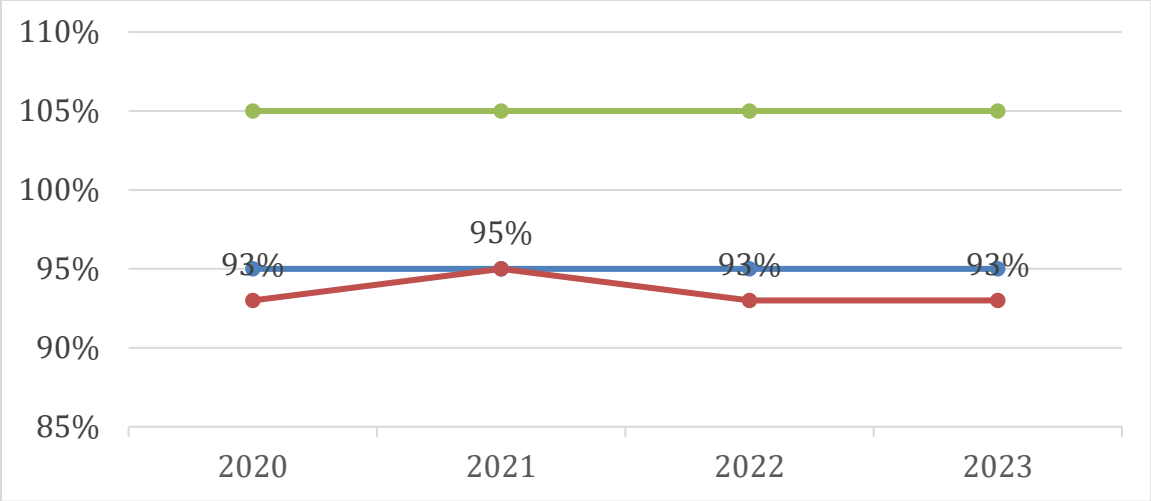

Fig. 1 Gross combined ratio for Accident and Health Insurance

The Gross combined ratio for Accident and Health Insurance is not stable only for 2020 but stable for 2021-2023 in regard to the threshold. Given that for a period of 3 years in a row, the CoR has been between 95% and 105%, a more detailed analysis is required according to the requirements of IFRS 17.

A more detailed analysis is suggested initially by classifying the insurance in the 2 component products. So, to calculate the CoR for personal accidents for the years 2020-2022 and to calculate the CoR for health insurance for the same period 2020-2022. Then, an in-depth analysis is necessary to be done at the company level.

B) Casco Insurance

The second class of insurance that is taken into study is Casco Insurance. "Casco" insurance of land vehicles other than railway rolling stock covers damage or loss of motor vehicles and land vehicles other than motor vehicles. "Casco" insurance of railway rolling stock includes the damage or losses from the rolling vehicles on the rails. "Casco" insurance of aeroplanes includes the damages or losses suffered by the aircrafts.

The table below shows for each year the gross claims ratio, acquisitions costs ratio, administrative expenses ratio and gross operating ratio. Based on this data, it is calculated Gross Combined Ratio as follows:

Gross Combined Ratio = Gross claims ratio + Acquisition costs ratio + Administrative expenses ratio

Table 1: Gross combined ratio for Casco Insurance

Ratio	**Casco Insurance**			
	2020	**2021**	**2022**	**2023**
Gross claims ratio	85%	83%	69%	72%
Acquisition costs ratio	31%	34%	33%	27%
Administrative expenses ratio	12%	12%	16%	12%
Gross operating expenses ratio	44%	48%	50%	39%
Gross Combined Ratio	**128%**	**128%**	**118%**	**111%**

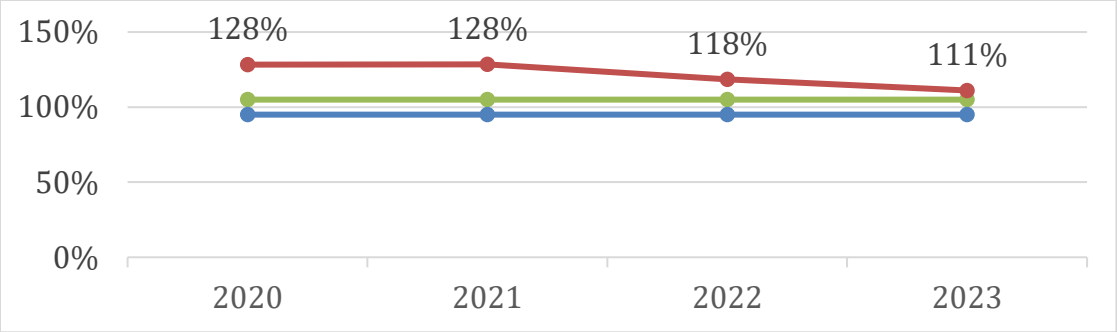

Fig. 2 Gross combined ratio for Casco

The Gross combined ratio for Casco Insurance is higher than the threshold for all the periods that are under analysis. Nevertheless, based on the Gross Combined ratios for the period 2020-2023, this insurance class is classified as Onerous at initial recognition.

C) DMTPL Insurance

The most important product in non-life insurance companies is the TPL product, which brings the companies the highest revenue. The table below shows for each year the gross claims ratio, acquisitions costs ratio, administrative expenses ratio and gross operating ratio. Based on this data, it is calculated Gross Combined Ratio as follows:

Gross Combined Ratio = Gross claims ratio + Acquisition costs ratio + Administrative expenses ratio

Table 3: Gross combined ratio for DMTPL Insurance

Ratio	DMTPL Insurance			
	2020	**2021**	**2022**	**2023**
Gross claims ratio	37%	41%	34%	28%
Acquisition costs ratio	29%	26%	26%	30%
Administrative expenses ratio	22%	21%	21%	23%
Gross operating expenses ratio	46%	41%	48%	52%
Gross Combined Ratio	**88%**	**89%**	**82%**	**81%**

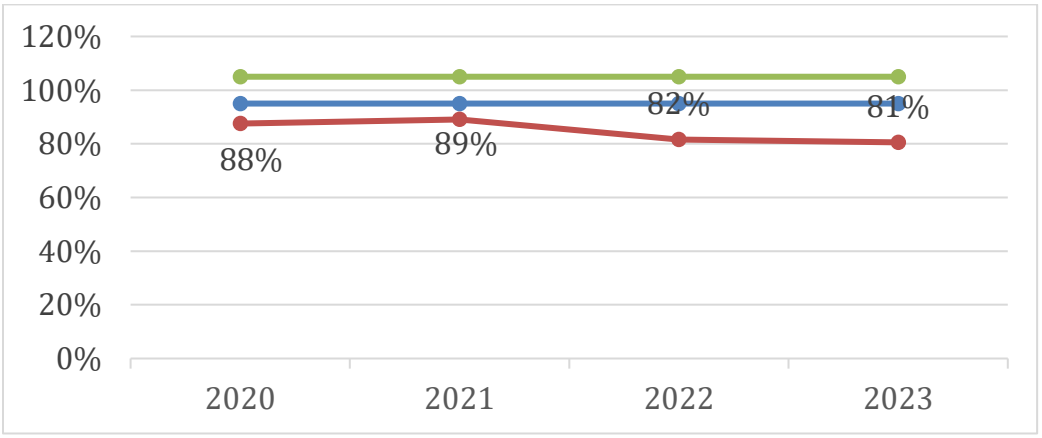

Fig. 3 Gross combined ratio for DMTPL Insurance

The Gross combined ratio for DMTPL is stable and lower than the threshold for all the periods that are under analysis. Throughout the period 2020-2023, the gross combined ratio is less than 95%, so DMTPL can be classified as non-onerous.

D) Fire and Property Insurance

Insurance against fire and natural forces covers damage to property caused by fire, explosion, storm, other natural forces, nuclear energy or land subsidence. This class of insurance is more analyzed in particular due to the behavior of the CoR in the years 2020-2023. Due to the catastrophic events that occurred in Albania in this period, it

was expected that the CoR would be higher than 105%, and in fact, the following table and graphic show the exact data for this.

Gross Combined Ratio = Gross claims ratio + Acquisition costs ratio + Administrative expenses ratio

Table 4: Gross combined ratio for Fire and Property Insurance

Ratio	Fire and Property Insurance			
	2020	**2021**	**2022**	**2023**
Gross claims ratio	38%	76%	283%	62%
Acquisition costs ratio	28%	26%	27%	30%
Administrative expenses ratio	19%	18%	16%	20%
Gross operating expenses ratio	43%	40%	40%	48%
Gross Combined Ratio	**86%**	**120%**	**326%**	**113%**

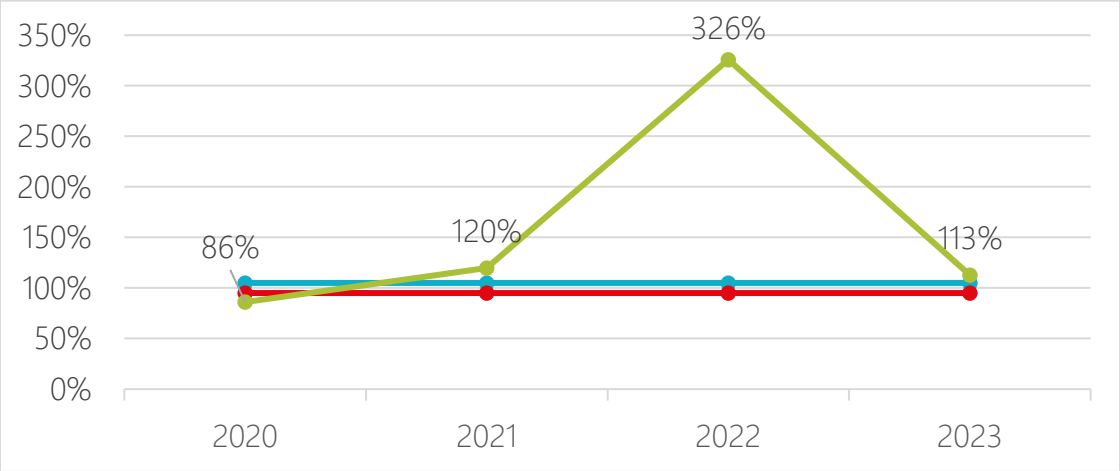

Fig. 4 Gross combined ratio for Fire and Property Insurance

The Gross combined ratio for Property Insurance is not stable in regard to the threshold for the period that is under analysis. The highest GCR is for the year 2022, were the country is faced with two natural catastrophic events (earthquakes), which raised the CR.

Nevertheless, based on the Gross Combined ratios for the period 2021-2023, this insurance class is classified as Onerous at initial recognition. The classification as Onerous belongs only to the following period. If it were considered a few years ago or later, this insurance class would not be classified as Onerous.

E) Green Card Insurance

The green card is an international insurance certificate that attests to a driver's possession of the minimal amount of coverage mandated by the laws of the nation they are visiting. This insurance covers accidents in the countries listed in the policy. The table below shows for each year the gross claims ratio, acquisitions costs ratio, administrative expenses ratio and gross operating ratio. Based on this data, it is calculated Gross Combined Ratio as follows:

Gross Combined Ratio = Gross claims ratio + Acquisition costs ratio + Administrative expenses ratio

Table 5: Gross combined ratio for Green Card Insurance

Ratio	Green Card Insurance			
	2020	**2021**	**2022**	**2023**
Gross claims ratio	38%	42%	42%	37%
Acquisition costs ratio	29%	23%	24%	30%
Administrative expenses ratio	18%	24%	23%	21%
Gross operating expenses ratio	45%	45%	43%	47%
Gross Combined Ratio	**85%**	**89%**	**88%**	**88%**

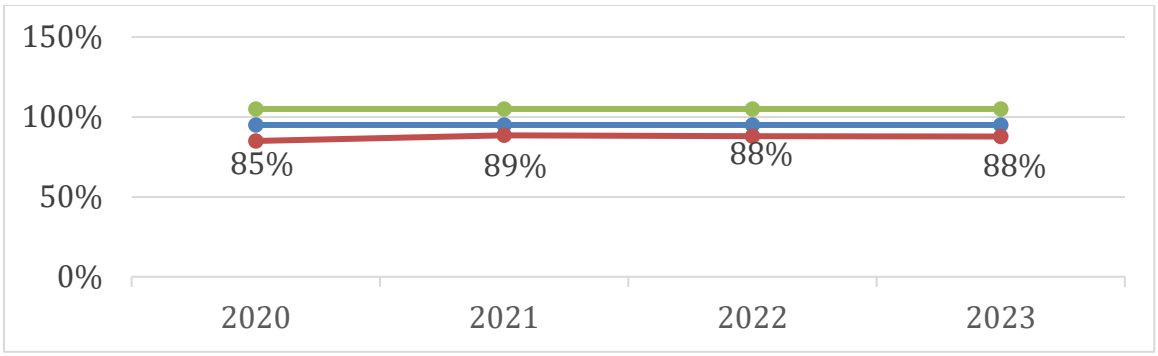

Fig. 5 Gross combined ratio for Green Card Insurance

The Gross combined ratio for Green Card is stable and lower than the threshold for all the periods that are under analysis. Throughout the period 2020-2023, the gross combined ratio is less than 95%, so the Green Card can be classified as non-onerous.

F) Liability Insurance

An insurance policy that shields an insured party from lawsuits stemming from harm or property damage to third parties is known as liability insurance. If an insured party is proven legally culpable, liability insurance policies pay for all associated legal fees and settlements. Liability insurance coverage typically does not cover intentional harm or contractual liabilities. Liability insurance plans, in contrast to other forms of insurance, compensate third parties rather than policyholders. The table below shows for each year the gross claims ratio, acquisitions costs ratio, administrative expenses ratio and gross operating ratio. Based on this data, it is calculated Gross Combined Ratio as follows:

Gross Combined Ratio = Gross claims ratio + Acquisition costs ratio + Administrative expenses ratio

Table 6: Gross combined ratio for Liability Insurance

Ratio	**Liability Insurance**			
	2020	**2021**	**2022**	**2023**
Gross claims ratio	4%	-4%	68%	-1%
Acquisition costs ratio	23%	22%	21%	16%
Administrative expenses ratio	21%	22%	21%	12%
Gross operating expenses ratio	41%	40%	38%	27%
Gross Combined Ratio	**48%**	**40%**	**110%**	**27%**

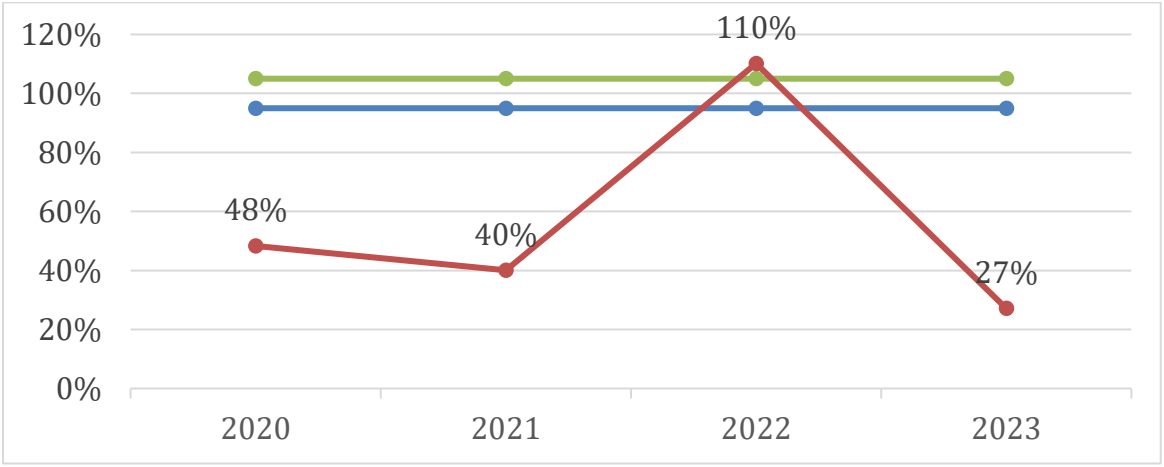

Fig. 6 Gross combined ratio for Liability Insurance

The Gross combined ratio for Liability Insurance is stable and lower than the threshold for 2020, 2021 and 2023. Although for 2022, the ratio is higher than the threshold, Liability Insurance can be classified as non-onerous.

IV. CONCLUSION

Even though onerous contracts might not make up a large portion of an entity's portfolio overall, the business should take this logic into account when developing its system to make sure the IFRS 17 reporting systems can handle the statement of comprehensive income and related disclosures. According to the study's findings, Casco Insurance has a negative profitability ratio of gross technical activity over a four-year period, making it an onerous contract. Two natural catastrophic events (earthquakes) elevated the CoR, so during the last three years of 2021–2023, the Gross Combined Ratio for Property Insurance was greater than the threshold [8]. However, going from a level below 80% to a level greater than 100% is owing to the unstable CoR of property insurance. This LoB shows signs of being categorized as an onerous contracts based on the COR's volatility. The market-level classification provides insurance firms with a good idea of which category of contracts is burdensome, but each insurance company must conduct its own analysis. The implementation of IFRS 17 will result in a substantial change in financial reporting for Albanian insurance businesses. Individual entities should also grasp the financial and operational implications of onerous contracts at the start of the implementation process [2]. The presence of this new term "onerous contract" will be represented in the financial statements, influencing KPIs and management information [1].

Interest Conflicts

We declare that there is no conflict of interest concerning the publishing of this paper.

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