## Analysis Carmel in the companies in Kosovo

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#### Abstract

Researching the chronology to the development of the insurance companies in Kosovo, especially since 1999 onwards, we have to accept that they have managed to provide large capital. On the contrary, problems and difficulties have become evident in these companies, which directly or indirectly affect their development, but in order to be realistic despite these developments, insurance companies in Kosovo have been taken as a model by many neighboring countries.

The first and the most important element that allows us the usage of the CARMEL analysis is precisely the provision of sufficient capital. Due to the exit from the last war, there is a small number of insurance companies in Kosovo which have developed under a full presence of the international companies from a technical point of view, including management and supervision trainings, all of which have led to the development of these organizations based on international standards.

On the other hand, reinsurance is considered as a growing process, but the insurance companies continue to maintain their image in front of customers, aware that they can lose them very easy in times of fierce competition between insurance companies. While, every insurance company in Kosovo selects the best people in management, operational management, marketing management, IT management and human resource management.

On the contrary, the insurance companies are aware of the competition and the risk that arises in the domestic market, so they have identified the most appropriate methods and methodologies for their development and operation. There is one similar methodology in the operation of all insurance companies working in our country, because it is a small country. The efforts of these companies to introduce a different model for development and operation have never disappeared, which has led to full vitality, so this has been best used by the clients of the insurance companies.

Keywords: CARMEL analysis, companies, Kosovo.

### Introduction

The CARMEL indicator set consists of 6 groups: Capital adequacy Asset quality Reinsurance and actuarial issues Management soundness Earnings and profitability Liquidity

## Capital adequacy in insurance companies - KC "Siguria"

CARMEL model in insurance companies The CARMEL indicator set consists of 6 groups: Capital adequacy Asset quality Reinsurance and actuarial issues Management soundness Earnings and profitability Liquidity

### I.Basic 4 CARMEL Capital Adequacy Indicators are:

C1	Premium in self-insured retention	Total capital	(5844-380) / 12338 = 44.29%
C2	Total Capital reduced for loss	Total assets	200/12338 = 1.62%
C3	Total Capital reduced for loss	Technical reserves	(200 / (7554 + 2802) = 1.93%
C4	Guarantee of a Reserve	Margin of solvency	

# 1.Self-Insured Retention Premium / Total Capital (C1)

This indicator measures the ratio of premium in self-insured retention and total capital.

DO.(SO – refers to an insurance company).

As a premium in the self-insured retention is the approximation of risks taken under insurance contracts by "TO" that perform non-life insurance operations.

This indicator reflects the ability of the "TO" to absorb inadequate premium price levels and possibly unforeseen damages covered by insurance, i.e. it measures the insurance risk.

## 2. Total Capital reduced for loss / Total assets

This indicator measures the ratio between the total capital reduced on an annual and quarterly basis for the loss and the total activated TO's.

## 3. Total Capital reduced for loss / Technical reserves

This indicator represents the ratio between the total Capital decrease on annual and quarterly level of loss and technical reserves of DO.

## 4. Guarantee of a Reserve / Margin of solvency

This indicator represents the ratio between the guarantees of reserves and the margin of solvency.

## The quality of the property of insurance companies II.Basic CARMEL quality indicators of the property are:

A1	Non-material Investments + real estate + placements in HoV that are not tradable on the market + receivables	Total assets	(12338-6629-73) / 12338 = 45.68%
A2	Premium approvals	Total agreed premium	(5844-380) / 5844 = 93.50%
A3	Share in the capital	Total assets	200/12338 = 1.62%
A4	Coverage of technical reserves prescribed	Forms of assets	10356/6473 = 159.99%
A5	Coverage of technical provisions prescribed	Forms of assets	1: 10356/6473 = 159.99%

# 1.(Non-material Investments + real estate + placements in HoV that are not tradable on the market + receivables) / Total assets

This indicator measures the ratio of the sum of intangible investments, real estate, placements in HOV that are not tradable on the market and receivables from one and from the total assets on the other hand.

## 2. Premium approvals / Total agreed premium (A2)

This indicator measures the ratio between premium demands and the total agreed premium.

## 3. Share in the capital / Total assets (A3)

This indicator measures the relation of participation into the capital of other legal entities and the total assets.

## 4. Coverage of technical reserves prescribed forms of assets (A4)

This indicator measures the ratio of investments of technical reserves in forms established by law.

## 5. Coverage of technical provisions prescribed forms of assets 1 (A5)

This indicator measures the ratio of investments of technical reserves in forms established by law.

## Reinsurance and actuarial positions of insurance companies III. The basic 3 CARMEL indicators of insurance and actuarial positions are:

R1	Authoritative premium funds in self-retention	Authoritative total premium funds	(5844-380) / 5844 = 93.50%
R2	Technical reserves in self-retention	Average solved damages in self-retention in the last 3 years	7554/3639 = 207.58% year 2019
R3	Technical reserves in the self-retention	Average premium in the self-retention in the last 3 years	2802/5844 = 47.95% year 2019

1. Authoritative premium funds in self-retention / Authoritative total premium funds (R1)

This indicator measures the ratio of authoritative premiums in self-retention and total authoritative premium DO.

2.Technical reserves in self-retention / Average solved damages in self-retention in the last 3 years (R2)

This indicator measures the ratio of technical reserves in self-insured retention and average resolved damages in self-insured retention in the last 3 years.

3. Technical reserves in the self-insured retention / Average premium in the self-insured retention in the last 3 years (R3)

This indicator measures the ratio of technical reserves in self-insured retention and average premium in self-insured retention in the last 3 years.

# Quality of the management structure of insurance companies IV. Quality of the management structure

Indicators of the quality of the management structure are mainly based on monitoring

the mutual relations of premium funds, the number of employees, the earning costs and assets DO, and the 3 basic CARMEL indicators in this group are:

M1	Total agreed premium funds in one thousand	Number of employees	(5884) / 160 = 3677.50%
M2	Total assets in thousand	Number of employees	12338/160 = 7711.25%
M3	Earnings costs	Premium funds for Self-insured retention	5844/509 = 1148.13%

## Earnings and profitability of insurance companies

V. Earnings and profitability

Basic CARMEL earnings and profitability indicators are:

E1: Authoritative damages in funds for self-insured retention / authoritative premium funds in self-insured retention: 38.78%

E2: Cost of insurance implementation / Current premium in self-government: 52.8%

E3: Investment profit / Authorized premium in self-insured retention: -47.65%

E4: Combined 1 indicator: E1 38.78% + E2 52.8% = 91.58%

E5: Combined 2 indicators: E1 38.78% + E2 52.8% - E3 47.65% = 43.93%

E6: Expenses for reconnaissance, assessment, liquidation and paid damages / Damages in funds for self-insured retention: 3639/7554 = 48.17%

E7: Investment profit / Average invested assets: 200 / (8445 + 359) = 2.27%

E8: Net result / Average total capital: 200/3200 = 6.25%

E9: Net result in thousand BC. / Number of employees: 200/160 125.00%

E10: Net result / Total assets: 200/12338 = 1.62%

E11: Net result / Total revenues: 200/5884 = 3.40%

1. Authoritative damages in funds for self-insured retention / authoritative premium funds in self-insured retention (E1)

This indicator (loss ratio) measures the relationship between valid damages in selfinsured retention funds and the valid premium in self-insured retention funds.

2.Cost of insurance implementation / Current premium in self-insured retention (E2) This cost ratio measures the ratio of insurance implementation costs and valid premium in self-insured retention funds.

3.Investment profit / Authorized premium in self-insured retention (E3)

This indicator measures the ratio of investment profit and relevant premium in selfinsured retention funds.

4.Combined 1 indicator (E4 = E1 + E2)

This indicator represents the sum of E1 and E2 indicators.

5.Combined 2 indicator (E5 = E1 + E2 - E3)

This indicator represents the difference of the total sum between the E1 and E2 indicators minus the E3 indicator.

6.Expenses for reconnaissance, assessment, liquidation and paid damages / Damages in funds for self-insured retention (E6)

This indicator measures the ratio of costs for inspection, assessment, liquidation and

payment of damages and also of damages in self-insured retention funds.

7.Investment profit / Average invested assets (E7)

This indicator measures the relation between investment profit and the average invested assets, and also takes into account the real estate investments and all long-term and short-term financial placements.

8.Net result / Average total capital (E8)

This indicator measures the relation between the net result and the average total capital. This indicator shows how much profit the company generates in terms of: money invested by the company owners, reserves, revaluation reserves and retained earnings.

9.Net result in thousand BC. / Number of employees (E9)

This indicator measures the relation between the net result and the number of employees.

10.Net result / Total assets (E10)

This indicator measures the relation between the net result and the total assets.

11.Net result / Total revenues (E11)

This indicator measures the relationship between the net result and the total revenue.

### Liquidity of insurance companies

VI. Liquidity

The liquidity is most often considered as a payable ability to settle its liabilities within a certain time frame, and that ability depends on the available liquid assets of the legal entity. In order to maintain the daily solvency of the economic-legal entity, it is necessary to have a synchronization between the inflows and outflows of funds, which is conditioned by the balance of liabilities and assets of the business entity according to its maturity. The large values of the liquidity indicators indicate the possibility for the business entity to respond to the unexpected needs for cash without the necessity to cash in its own long term placements. On the other hand, though, the excessively large values of this indicator may indicate and point to an inadequacy in the placement policy and to a reduced opportunity to generate the profit based on the placement of funds by the business entity.

Basic CARMEL indicators of this group are:

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T 1	First degree liquidity: Cash	Short-term	(73 + 6629) / (650 + 1132) = 376.09%
LI	and cash equivalents	liabilities	
L2	Second degrée liquidity (working assets - inventories)	Short-term liabilities	(930 + 3639) / (650 + 1132) = 256.40%
L3	Liquid assets	Short-term liabilities	(73) / (650 + 1132) = 4.10%
L4	Liquid assets 1	Short-term liabilities	(6629) / (650 + 1132) = 372.00%

The indicator L3 (liquid assets / short-term liabilities) measures the ratio of liquid assets and short-term liabilitieswhereas the liquid assets are consisted of shares tradable on the organized market, other securities available for sale traded on the organized market, Securities issued by the state, the central bank, international financial institutions, as well as securities guaranteed by some of the listed entities,

cash equivalents and cash. The indicator L4 (liquid assets 1 / short-term liabilities) measures the relation between liquid assets and short-term liabilities where the liquid assets, in addition to liquid assets indicator L3, represents part of the long-term investments which have maturity of up to one year, Securities being held to maturity (part maturing within one year) and other short-term financial investments. Indicators L3 and L4 should be considered conditionally and the bonds and shares of the legal entities traded on the securities market for which there is not enough data in order to have an objective assessment of the liquidity of those assets from should be excluded from the liquid assets. In indicator L4, it is necessary additionally to examine the liquid assets, in the part in which they differ from the assets of the liquid assets of the short time frame.

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