

# **THE EVALUATION OF MACROECONOMIC FACTORS INFLUENCE ON THE FINANCIAL PERFORMANCE OF GENERAL INSURANCE COMPANIES LISTED AT THE KUWAIT STOCK EXCHANGE**

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## **ABSTRACT**

The insurance sector which is a part of the financial system in Kuwait plays a crucial role in transferring risk among entities to limit their losses through risk pooling mechanism. As a results, practitioners and policy makers should be aware of the factors, both internal and external, affecting that sector and identify their impacts. This study aims to examine the effect of macroeconomic factors which includes gross domestic product, growth in gross domestic product, inflation rate, interest rate, and GDP per capita on the profitability of general insurance companies listed at the Kuwait stock exchange over the period

2011-2017. A panel data collected from the financial statements of the six general insurance companies listed at the stock market were used to examine the effect of the macroeconomic factors on the profitability of these companies. Using ordinary least squares (OLS) multiple regression method, the results showed that macroeconomic factors did not have any significant effect on the profitability of the Kuwaiti insurance companies during the study period.

**Key Words:** *Kuwaiti insurance companies, profitability, Kuwait stock exchange, macroeconomic factors*

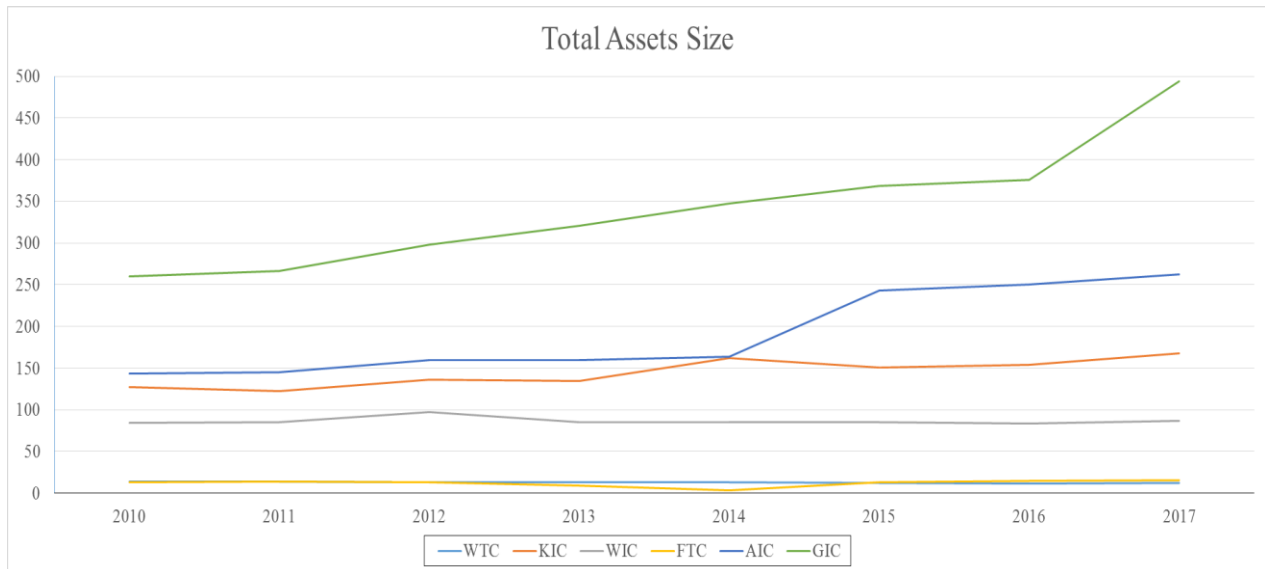
## **INTRODUCTION**

The insurance industry in Kuwait can be traced back to the year 1960 where the first insurance company was established. Now there are 40 insurance companies working in Kuwait, but only seven of them are listed at the stock exchange as seen in table 1. Out of the seven insurance companies listed at the Kuwait stock exchange, 6 of them are general insurance companies and one reinsurance company. In the year 1960 Kuwait insurance company was the first insurance company established in Kuwait.

**Table 1: Insurance Companies listed at Kuwait Stock Exchange**

No.	Company Name	Type	Establishing Year
1	Kuwait Insurance company (KIS)	General	1960
2	Gulf Insurance Company (GIC)	General	1962
3	AlAhlia Insurance Company (AIC)	General	1962
4	Kuwait Reinsurance Company (KRC)	Reinsurance	1972
5	Warba Insurance Company (WIC)	General	1976
6	First Takaful Company (FTC)	General	2000
7	Wethaq Takaful Company (WTC)	General	2000

The size of the general insurance companies showed a rapid growth during the study period as seen in figure 1. The assets size of the general insurance companies listed at the Kuwait stock exchange grew by 85% during the study period from 266.773 million KWD (1 KWD = 3.28 USD) in 2011 to 494.097 million KWD in 2017 with an average annual growth rate of 14.2%.



**Figure 1: Total Assets Size for Insurance Companies**

The insurance sector is an integrated component of the financial system, it plays a critical role in transferring risk from one entity to another to hedge against any unexpected losses resulting in a safer environment for companies to work in. Beck and Webb (2003) stated that the performance of the insurance sector in any country has a significant effect on the economic performance of that country. Naveed et al (2011) demonstrated that the efficiency of the insurance sector in transferring risk can affect economic growth while at the same time institutional insolvencies can result in systemic crises which have unfavorable consequences for the economy as a whole. Profitability is considered to be one of the most used proxies in determining the financial soundness of any company and there for any industry such as insurance. Koller (2011) argued that profitability is the most important and reliable indicator to measure the risk of insolvency of insurance companies. While Malik (2011) states that profitability is one of the main determinants of the performance of a company. Panayotis et al. (2008) stated that there are many ways to measure financial performance, such as return on invested capital (ROIC), return on equity (ROE) and return on assets (ROA), but return on assets (ROA) emerges as the key ratio for the evaluation of profitability of any company. Hardwick and Adams (1999), Malik (2011) and others, proposed that despite being many different methods to measure profitability it is better to use return on assets (ROA).

The effect of the macroeconomic factors might change from one country to another and from one time period to another resulting in conflicted results from researchers. The conflict in results does not necessarily mean that some results are wrong and the others are right but as Claudiu-marian (2011) stated, "Financial performance of companies varies among economic sectors, countries and regions over time. It is influenced by a very large number of factors. Profits are different from one year to another and from one company to another. Some companies obtain increases in profit; others record decreases and some even losses".

Kanwal and Nadeem (2013) conducted a study on the impact of macroeconomic variables on the profitability of financial institutions in Pakistan over the period 2001 to 2011 and found that GDP has a significant positive effect on ROA, while IR has a significant negative relationship with ROA. Hailegebreal (2016) concluded in his study on insurance companies in Ethiopia that GDP has statically positive and significant relationship with profitability. Anbar and Alper (2011) found that GDP and CPI have a positive and significant effect on Turkish banks profitability, which were measured by ROA and ROE. On the other hand, Ismail et al. (2018) conducted a study on the macroeconomic factors affecting the profitability of insurance companies in Malaysia over the period 1996-2015 and concluded that GDP and interest rate had a statistically significant negative effect on the profitability of insurance companies while inflation did not have an effect. Rashid and Kamal (2018) studied the effect of macroeconomic factors affecting the profitability of Pakistani insurance companies over the period 2006-2016 and concluded that interest rate had a statistically significant negative effect on profitability while GDP did not have an effect.

Ali et al. (2011) stated that profitability, which is refers to the degree to which a business generates profit is an indicator of company's success. Economic growth in terms of GDP growth is one of the factors that significantly affect the company's profitability. Lee (2014) found that economic growth, measured by change in GDP, had a significant impact on the profitability of Taiwanese property-liability insurance companies during the period 1999-2009. Shiu (2004) found that interest rate had a statistically significant effect on the financial performance of U.K. insurance companies during his study that covered general insurance companies operating in the U.K. over the period 1986 to 1999. Kramaric et al. (2017) conducted a study on the factors affecting the insurance companies operating in Croatia, Slovenia, Hungary and Poland over the period 2010-2014. They concluded that the growth in GDP per capita did not have any significant effect on the ROA of insurance companies. While Burca and Batrinca (2014) concluded that there is a statistically significant inverse relation between GDP per capita and the financial performance of Romanian insurance companies during the period 2008-2012.

## **RESEARCH METHODOLOGY**

The aim of this study is to examine the effect of macroeconomic factors that includes consumer price index (CPI), gross domestic product (GDP), growth in GDP (chnG GDP), inflation rate (inf), interest rate (IR), and GDP per capita (GPC) as independent variables against the profitability of Kuwaiti general insurance companies that is measured by return on assets (ROA). The data used in this study were obtained from the Kuwait stock exchange website and the database of the Kuwait institute of banking studies. The data used in this research expands over the period 2011 to 2017. Descriptive analysis in table 2 shows that Kuwaiti insurance companies had an average negative ROA during the period 2011-2017 of -2%. In terms of inflation, Kuwait had an average inflation of 3.2%, and growth in GDP by 2.20% over the study period.

**Table 2: Descriptive analysis**

	<i>ROA</i>	<i>CPI</i>	<i>GDP</i>	<i>Chng GDP</i>	<i>Inflation</i>	<i>Interest Rate</i>	<i>gdp per capita</i>
Mean	-0.020	133.171	144.357	0.022	0.032	0.019	36374.6
Median	0.033	133.000	154.030	0.001	0.032	0.020	36259.7
Standard Deviation	0.262	7.550	26.480	0.181	0.010	0.002	1910.343
Kurtosis	37.333	-1.385	-1.830	-0.121	0.082	-1.215	-0.666
Skewness	-5.991	-0.059	-0.152	-0.023	-0.078	-0.602	0.338
Range	1.711	21.400	63.250	0.630	0.034	0.006	6187.7
Minimum	-1.633	121.900	110.910	-0.296	0.015	0.016	33545.6
Maximum	0.078	143.300	174.160	0.335	0.049	0.022	39733.3
Count	42	42	42	42	42	42	42

The correlation analysis measures the strength and the nature of the relation between variables where it takes a value between -1 and 1. The correlation analysis can also be used to identify any multicollinearity in the data. Multicollinearity can cause unrealistically high standard error estimates of regression coefficients and in the end can cause false conclusion about the significance of independent variables in the model being evaluated.

From table 3 it can be seen that CPI showed a high correlation with GDP, interest rate, and GDP per capita that exceeds the threshold of 0.70 which indicated multicollinearity. To eliminate the possibility of multicollinearity CPI is omitted as one of the factors.

**Table 3: Pearson Correlation Matrix**

	<i>ROA</i>	<i>lnCPI</i>	<i>lnGDP</i>	<i>Chng GDP</i>	<i>Inf</i>	<i>IR</i>	<i>lnGPC</i>
ROA	1						
lnCPI	0.0259	1					
lnGDP	-0.1347	-0.8084	1				
Chng GDP	0.0728	-0.5894	0.4374	1			
Inf	0.0059	-0.6069	0.1108	0.2328	1		
IR	-0.1144	-0.9309	0.6006	0.3142	0.5825	1	
lnGPC	-0.0101	-0.8117	0.6376	0.3324	0.3275	0.6898	1

This study assumes that there is a relation between the profitability and the macroeconomic factors. To examine these relations a multi regression (OLS) model that is based on panel data is used. The equation is presented in equation 1.

$$ROA = \alpha + \beta_1 \ln GDP + \beta_2 \text{chngGDP} + \beta_3 \text{Inf} + \beta_4 \text{IR} + \beta_5 \ln GPC + \varepsilon \dots \dots \dots \text{Equation 1}$$

Where: ROA is the return on assets which measures profitability is the independent variable,  $\alpha$  is the intercept,  $\beta_1, \beta_2, \beta_3, \beta_4, \text{ and } \beta_5$  are the coefficients of the independent variables and  $\varepsilon$  is the error term. The independent variables are the natural log of GDP, GDP growth, inflation rate, interest rate, and the natural log of GDP per capita.

## EMPIRICAL RESULTS

By looking at the output of the OLS for the proposed model in table 4, it can be seen that the R-square is 0.3349 with a significance *F* of 0.4856 which is much greater than 0.05 indicating that the model cannot be labeled as a good fit. This would mean that macroeconomic factors do not have an effect on the profitability of Kuwaiti insurance company.

**Table 4: Regression output**

Model Statistical Values	
Measurement	Value
$R^2$	0.1122
Adjusted $R^2$	-0.0111
F-Statistics	0.9098
P-Value	04856

The results shown in the output of the regression show that non of the dependent variables had a significant effect on the profitability of the insurance companies as seen in table 5. The only factor that might have some effect on the profitability of the general insurance companies was GDP per capita. But when running a regression to examine that single variable against ROA, the result showed that this relation does not exist.

**Table 5: Coefficient Analysis**

Coefficient Analysis				
Variable	Coefficient	Std. Error	<i>t</i> -Statistic	<i>P</i> -Value
Intercept	-26.217	16.384	-1.600	0.118
Ln GDP	-1.625	0.997	-1.656	0.106
Chng GDP	0.460	0.312	1.477	0.148
Inflation	-12.561	11.067	-1.135	0.264
Interest rate	68.313	75.100	0.910	0.369
Ln GPC	3.188	1.862	1.712	0.095

## CONCLUSIONS

The effect of macroeconomic factors on the profitability of general insurance companies listed at the Kuwait exchange market was examined in this research. Using a multiple regression model to examine the relation showed that macroeconomic factors did not have any significant effect on the profitability of Kuwaiti insurance companies. The Kuwaiti insurance market can be labeled as primitive market and the consumers do not have the sufficient knowledge in insurance to make them more involved in that sector. The results obtained from this study implies that Kuwaiti insurance companies are not doing enough to educate the public in the importance of insurance.

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