



## International Journal of Financial Management and Economics

P-ISSN: 2617-9210  
E-ISSN: 2617-9229  
IJFME 2023; 6(1): 137-143  
[www.theeconomicsjournal.com](http://www.theeconomicsjournal.com)  
Received: 19-01-2023  
Accepted: 24-03-2023

**Mukdad Ibrahim**  
American University of Ras Al  
Khaimah, UAE

### Measuring the financial performance of insurance companies during the financial crisis

**Mukdad Ibrahim**

DOI: <https://doi.org/10.33545/26179210.2023.v6.i1.184>

#### Abstract

Assessing the financial performance of insurance firms during periods of global economic difficulty has been a topic of great importance to the insurance industry. Interest in sound finance practices peaked in the years following the recession of 2008. Yet, there has been relatively little analysis of the UAE insurance industry and its performance during the financial crisis.

The aim of this study is to measure the financial performance of three insurance companies operating in United Arab Emirates during the financial years 2006 to 2009, with the specific goal being to measure the impact of the financial crisis on performance. The analysis examines company performance on key performance indicators such as profitability, liquidity, capital structure and market performance indicators over the years 2006 to 2009. The findings show generally high levels of instability for profitability indicators. Regarding both liquidity and capital structure indicators, the firms in question experienced lower levels of variability and instability across the board. Performance on the earnings per share measure experienced a higher level of volatility, in contrast to the market value per share indicator which remained relatively stable throughout the period in question. Furthermore, profitability levels showed a systemic & notable decline in the crisis year 2008.

**Keywords:** Financial performance, financial crisis, insurance sector, financial analysis, business fluctuations

#### 1. Introduction

The financial crisis of 2008 was an event that generated widespread devastation to financial markets around the world. In the banking industry, the turmoil in financial markets led to a wiping out of bank equity and ultimately to a substantial amount of bank failures within the financial sector. It is in times of financial difficulty when the performance of the insurance industry can be critical to the recovery of the economy. Not only do insurance companies conduct a high level of risk management in order to remain financially sound, but insurers can also raise standards for individuals and businesses wishing to mitigate some of the risks of engaging in specific business activities. This client-side diligence is accomplished by subjecting clients to stringent eligibility criteria and insurance premiums that correspond to the specific risk profile of the business or investment that the client wishes to secure protection for. For clients, insurers can protect clients against the kind of catastrophic loss that businesses are typically faced with during a financial crisis or recession. Insurance companies can thus play a pivotal role in the properly functioning economy. Interest in the financial resilience of insurance companies peaked in the years following the global financial crisis of 2008. Yet, there has been relatively little analysis of the UAE insurance industry and its corresponding performance during the financial crisis. In light of the recent global Coronavirus pandemic of 2020, the question of insurer resilience remains ever pertinent.

#### 2. Literature Review

Baluch *et al*, (2011) <sup>[15]</sup> assess the impact of the financial crisis on insurance markets and discuss the role of the insurance in the crisis itself. Their analysis of the performance cover different markets of insurers and banks for the financial years 2007-2009. Their findings indicates that the impact of crisis on insurance markets has been uneven. Moreover, many banks breached their solvency capital requirements during the crisis period, while most insurance companies remained within their solvency margin.

**Corresponding Author:**  
**Mukdad Ibrahim**  
American University of Ras Al  
Khaimah, UAE

As a result, systemic risk remains low in insurance in relation to the banking sector.

Rauch & Wende (2015) <sup>[16]</sup> examine the reliability of regulators in forecasting the financial strength of insurance companies. They use data derived from German property-liability insurers for the period 2004-2011 to examine factors that affect the insurer's regulatory solvency ratio. Their findings indicate that German regulators can be used to detect insurers in financial distress early enough to take appropriate actions to protect policyholders' interest.

Pulawska (2021) <sup>[11]</sup> evaluate the effect of COVID-12 pandemic on European insurance companies. The researcher analyzed financial statements spanning the years 2010 to 2020 using regression analysis. Their analysis showed a demonstrable and negative impact on the functioning of the insurance sector, which the authors attributed to a significant decrease in the average insurer's ROA.

Bouzouita & Craioveanu (2019) <sup>[6]</sup> study the impact of the 2007-2009 financial crisis on the volatility of 208 insurance companies' stock returns for the period of 1990 to 2011. The researchers used the GARCH model to analyze stock return volatility and conducted correlation analysis of the insurance stock returns with the overall stock market returns during financial crisis years. Their findings reveal that stock market return volatility increased significantly during the financial crisis. The crisis also increased the correlation of insurance stock return with stock market returns.

Batool and Sahi (2019) <sup>[17]</sup> sought to identify and examine the factors that were the strongest determinants of financial performance in the American insurance industry during the financial recession. Of 24 insurance companies that were selected, 12 were from the USA and 12 were from the UK. They used quarterly data from 2007 to 2016 to see the effect of several internal and external factors on both return on assets and return on equity indicators. Descriptive and regression analysis were used. They found that different factors have varying degrees of impact on each profitability indicator and that US insurance companies are generally more efficient than their U.K counterparts.

Akhter *et al*, (2017) <sup>[18]</sup> make a comparison between Islamic and conventional insurance companies using data from 14 countries for the period of 2005 to 2014. The researchers used regression analysis to find the difference in the demand of insurance between the two types of insurance. Moreover, they investigate whether Islamic insurance demand has been boosted in crisis time. Their sample include data related to parts of South Asia, ASEAN, and Middle East. Descriptive and regression analysis were used to test their research objective. The result of their analysis shows that both Islamic and conventional insurance demand negatively affected by GDP/Capital.

Lament and Bukowski (2021) <sup>[10]</sup> analyze the impact of 13 financial variables on the return on equity for 20 life insurance companies and 23 non-life insurance companies in Poland for the period of 2004-2019. The authors used weighted last square regression analysis to assess the impact of the variables on the return on equity. The results of their analysis indicated that financial performance has been affected significantly by wide variety of factors for both life insurance and non-life insurance companies.

Asadullah *et al*, (2021) <sup>[19]</sup> examine the determinants of profitability of Takaful and Non-Takaful insurance companies in Pakistan during pre-crisis (2003-2006), during crisis (2007-2009), and post crisis (2010-2013). The

researchers used a panel regression analysis to study the effect of several variables on profitability levels. Their findings shows that macro variables in Pakistan had not negatively influenced both the sub-insurance sector's profitability in all three periods as the country's economic system is still in development and thus normal macroeconomic relationships with profitability do not readily apply.

Kozmenko and Kravchuk (2010) <sup>[8]</sup> study the development history of insurance across a number of countries and compare the impact of the financial crisis 2007-2008 on the Ukrainian insurance sector with that of other countries. During the investigation, the authors employed a combination of both empirical and theoretical research (analysis and synthesis, modeling) formalization. The authors analyzed Major macroeconomic indicators of Ukrainian insurance market for the years 2002-2009 and Indicators of insurance market activity in Ukraine for the years 2001 to 2009. They found that the instability of the financial system at the time impacted negatively on the development of the world insurance market but that by 2009 the system market corrections took place that largely stabilized the system via increased market capitalization and solvency. They conclude that the global financial crisis deprived the Ukrainian financial and insurance markets of a significant part of the potential and opportunities of the insurance sector.

Afzal *et al*, (2013) <sup>[20]</sup> examine the impact of the financial crisis 2008 on three financial institutions in USA. Their analysis was based on the trend study of debt-to-equity ratio over the years 2006 to 2011. The results of their analysis show an increase in this ratio during the financial crisis year 2008 for the three companies in comparison with the previous year. This increase surely created an increase in the level of risk, since these companies are depending more on the outside sources in running their businesses. The analysis also shows declining in this ratio over the years 2009 to 2011 indicating the increasing of financial strength of these companies.

Kilic *et al*, (2014) <sup>[21]</sup> study the impact of the 2008 financial crisis on the transmission of contagion to the Turkish financial sector. They use data for daily prices of Turkish financial service sector from January 2007 to September 2010 for seventy-eight firms related to banking, mutual funds, real estate, insurance and leasing industries. Correlation analysis was conducted to measure the strength of relationship between the returns of individual firms and the returns of representative U.S indices for the pre-crisis and the post crisis period. Moreover, the increase in the correlation was tested by transforming the difference using Fisher Z transformation. Their finding show that both Turkish banks and insurance companies had been affected by cross-border financial contagion stemming from the 2008 financial crisis.

Saymeh *et al*, (2014) <sup>[14]</sup> measure the effect of global financial crisis on the Jordanian insurance sector. Their study mainly examines the impact of the crisis on total assets, shareholders' equity, liability and investment. The study also measures the changes of these variables on profitability levels. Several types of analysis were conducted, including t-test, correlation and regression analysis. The researchers found that the financial crisis had a distinct negative effect on insurance industry profitability levels.

K. V. (2011) <sup>[9]</sup> analyze the performance of life insurance sector in India using secondary data for the years 2004-05 to 2010-11. The study approach was to compare the premium collected by the life insurance corporation (LIC), a public sector company, with those collections by the private sector life insurance industry. The research expands further by comparing the first-year premium and renewal for the singular life insurance corporation and private industry life insurers over the above years. The author concluded that the crisis made insurance companies more competitive in their product offerings and efficient in controlling overhead, leading to better product availability to consumers.

### 3. Research Methodology

The aim of this paper is to measure the financial performance of three UAE insurance companies during the financial years 2006 to 2009 with aiming to compare the performance before crisis 2006-2007, and during crisis 2008-2009. Four groups of indicators are going to be used to assess financial performance namely profitability, liquidity, capital structure and market performance indicators.

Financial data related to income statements and balance sheets for the years 2006 to 2009 were pulled from the widely available UAE share directory published by the National Bank of Abu Dhabi in annual report format. The first stage of analysis begins by measuring the stability of each financial indicator using coefficient of variation, a statistical method widely used to determine variability. The secondary stage of analysis consists of comparative descriptive analysis in order to analyze performance on each individual indicator with the objective of examining the behavior of these indicators over the years of 2006 to 2009.

### 4. Data Analysis

#### 4.1 Profitability Analysis

Table 1 shows a higher level of instability measured by higher coefficient of variation for all three insurance companies. In addition, there was growth in all ratios for both Al Buhairah and Al Sagr national companies in the year 2007 when compared to previous year. For Abu Dhabi national insurance company, all three profitability indicators experienced a decline in the year 2007. In the crisis year of 2008, all profitability indicators fell in comparison to the previous year. It indicates that the initial effects of the crisis really began to take hold in the year of 2008. ADNIC's return on equity ratio declined from 14.86% in 2007 to 11.68% in 2008. This decline on the return on equity indicator came as a direct consequence of a clear and noticeable drop in ADNIC's net profit over the prior year, where net profits fell from a net profit of 330.24 million dirhams in 2007 down to 210.27 million dirhams in 2008, while the total equity declined for the same period from 2222.27 million dirhams to 1800.04 million dirhams in 2008. Regarding the return on assets indicator, which declined to 6.59% in 2008, this can be explained by the significant downward trend in the company's net profits over the previous year, falling from of a net profit from 330.24 million dirhams in 2007 to 210.27 million dirhams in 2008, while the total assets decreased from 3480.50 million dirhams to 3191.02 million dirhams in 2008. The last indicator related to Abu Dhabi national insurance company is net profit to total premium written. This

indicator forms 15.50% in 2008. It is the result of decreasing of net profit from of net profit from 330.24 million dirhams in 2007 to 210.27 million dirhams in 2008, and increased in the total premium written for the same period from 1157.83 to 1356.90. For ADNIC, it becomes immediately evident that by 2009 that the effects of the crisis had by 2009 deepened further. The return on equity declined from 11.68% in 2008 to 2.56% in 2009 and from 6.59% to 1.48% for return on assets for the same period. For the net profit to total premium the declining was 15.50% in 2008 to 3.35% in 2009.

For Al Buhairah insurance company, table 1 shows an improvement in the performance for all three indicators in 2007 over the previous year. This positive trend was partially short lived however, as 2008, saw a drop in the Return on equity indicator. The ROE, which measured at 21.81% in year 2007, had declined to 7.86% in the year 2008, possibly signaling that the full scope and reach of the global financial crisis was finally in effect. This is due to a decline in the net profit of the company, whose profits had hit a peak of 160.72 million dirhams in 2007 before falling to 50.21 million dirhams, and declining in total equity for the same years from 736.91 million dirhams to 638.53 million dirhams. Return on assets analysis shows a huge decline in 2008, which was declined from 10.52% in 2007 to 2.43% in 2008. With regard to Net Profit to Total Premium Written, shows declining in performance from 30.71% in 2007 to 7.74% in 2008. This is due to the reduction in net profit from 160.72 million dirhams in 2007 to 50.21 million dirhams, in combination with the total written premium decline, from 523.44 thousand in 2007 to 648.36 thousand in 2008. For 2009, Al Buhairah managed to improve its performance on all three indicators. Return on equity increased from 7.86% in 2008 to 15.09% in 2009, return on assets increased from 2.43% to 5.12% and net profit to total premium written increased from 7.74% to 14.30% for the same period.

For Al Sagr insurance company, table 1, reveals a growth in the three indicators in year 2007 over the year 2006. The analysis of 2007 and 2008 indicate a decline in 2008 coping with the crisis. For return on equity indicator, it declined from 26.72% in 2007 to 11.82% in 2008. In 2009, the negative affect can be seen where this ratio declined from 11.82% in 2008 to 5.01% in 2009. The root causes of this decline are a combination of the reduction in net profit from 123.29 million dirhams in 2007 to 67.14 million dirhams in 2008 and the growth in total equity from 453.93 million dirhams to 567.84 million dirhams for the same period. For the return on total assets indicator, the analysis showed strong growth between 2006 to 2007. This ratio was however negatively affected over the years 2008 and 2009, where a hard decline was observed, falling from 10.41% in 2007 to 5.37% in 2008, ultimately falling further to 2.35% in 2009. The reduction in net profit for the years 2007 and 2008 was by 44.65% and increasing in total assets from 1165.48 in 2007 to 1250.72 in 2008. For net profit to total premium written indicator, it declined from 27.95% in 2007 to 14.68% in 2008. This decline came as a result of the reduction in the net profit outlined above as well as the increase the total premiums written from 433.91 in 2007 to 457.43 in 2008.

**Table 1: Profitability Analysis**

<b>Abu Dhabi National Insurance Company</b>					
<b>Indicator %</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Coefficient of Variation %</b>
Return on equity	16.57	14.86	11.68	2.56	54.64
Return on Assets	10.05	9.49	6.59	1.48	87.95
Net Profit to Total Premium Written	30.58	28.52	15.50	3.35	64.95
<b>Al Buhairah Insurance Company</b>					
<b>Indicator %</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Coefficient of Variation %</b>
Return on equity	19.69	21.81	7.86	15.09	38.36
Return on Assets	9.58	10.52	2.43	5.12	55.13
Net Profit to Total Premium Written	29.04	30.71	7.74	14.30	54.91
<b>Al Sagr National Insurance</b>					
<b>Indicator %</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Coefficient of Variation %</b>
Return on equity	3.46	26.72	11.82	5.01	90.38
Return on Assets	1.54	10.41	5.37	2.35	81.70
Net Profit to Total premium Written	3.89	27.95	14.68	6.74	80.85

#### 4.2 Liquidity Analysis

The coefficient of variation measures the stability-variability of an indicator. A higher coefficient translates to a higher level of instability and variability of the variable. Table II shows that current ratio indicator has low coefficient for all three companies revealing the existence of a good level of stability and indicating similar change in the component of both current assets and current liability. The lowest scoring coefficient for cash to total assets indicator is 12.63% related to Abu Dhabi Company indicating minimal variability in both cash and total assets over the years. The highest coefficient score regarding the cash to total assets indicator is 30.35% related to Al Sagr insurance company indicating high degree of variability in both cash and asset components.

Current ratio scores for Abu Dhabi and Al Buhairah insurance companies between 2006 and 2007 both saw increases, while there was slight reduction in this ratio for Al Sagr from 1.59 times to 1.56 times.

Similarly, table 2 shows that the cash to total assets indicator has increased for all three companies in year 2007 over the year 2006 indicating that all insurance firms maintained healthy levels of cash in relation to total assets.

During the crisis year of 2008, Abu Dhabi Company increased their liquidity levels, possibly as a response to the financial crisis, as eliminating unproductive assets and converting them into more liquid assets would help them cover their current liabilities. The current ratio has increased from a ratio of 1.63 times in 2007 to 1.66 times in 2008. Cash to total assets increased from 28.95% to 33.17% for the same period, enhancing the level of cash available. In 2009, Abu Dhabi Company, an increase in liquidity was witnessed, as seen in the improvement in the company's current ratio, increasing from a ratio score of 1.66 in 2008 to 1.78 in 2009.

With respect to liquidity levels, Al Buhairah Company, was alone in seeing their liquidity levels decline in 2008. Specifically, a significant decline in both current ratio and cash to total assets ratio occurred in 2008. Expressed in real terms, current ratio was reduced from 1.22 times in 2007 to 1.03 in 2008, and the cash to total assets indicator reduction was from 16.79% in 2007 to 14.21% in 2008. The underlying cause behind this decline was the increase in cash holdings from a balance of 256.62 thousand dirhams in 2007 to 294.23 thousand dirhams in 2008 and increase of total assets from 1.528. 01 million dirhams in 2007 to 2.070.16 million dirhams in 2008.

Both current ratio and cash to total assets indicators saw further declines saw a continuation of the downward trend for the year 2009. The company's current ratio declined from 1.03 times in 2008 to 1.01 times in 2009, while the reduction for cash to total assets indicator fell from 14.21% in 2008 to 9.87% in 2009.

Analysis of Al Sagr Company reveals that a slight decrease in the current ratio took place in 2007, which fell from a previous current ratio score of 1.59 in 2006 to 1.56 the following year. Several reasons could be attributed to this decline. For example, a notable reduction in net investment was witnessed between the two years, from a total investment value of 214.64 thousand dirhams in 2006, a value which by 2007 had shrunk to a total investment value of 183.78 thousand dirhams. Moreover, the current liabilities have increased from 408.29 thousand dirhams in 2006 to 673.42 thousand dirhams in 2007 might contributed to this decline. The cash to total assets indicator grew from 10.10% in 2006 to 20.71% in 2007 showing an improvement in the liquidity level for the company. This improvement is highlighted by the substantial increase in cash balance that the company enjoyed in 2007. Cash balances increased from 77.19 thousand dirhams in 2006 to 241.38 thousand dirhams 2007. Similarly, Al Sagr Company also saw its total assets increase from 763.65 thousand dirhams in 2006 to 1.165.48 million dirhams.

In crisis year 2008, there was an increase in the current ratio from 1.56 times in 2007 to 1.65 times in 2008, suggest that Al Sagr company had responded to the crisis by increasing their liquidity levels in order to cover the short term liabilities present within their balance sheet. This growth in the current ratio is due to the increase in current assets from 1.049.19 million dirhams in 2007 to 993.89 thousand dirhams in 2008 and change in the current liabilities from 673.42 thousand dirhams in 2007 to 601.65 thousand dirhams in 2008. For cash to total assets ratio, the analysis of 2008 shows a ratio of 16.53% while the indicator forms 20.71% in 2007. The main explanatory factor behind this reduction is the depletion of cash balances from a value of 241.38 thousand dirhams in 2007 to 206.75 thousand dirhams in 2008 as well as the change in total assets from 1.165.48 million dirhams in 2007 to 1.250.72 million dirhams in 2008. With respect to 2009, Al Sagr Company's current ratio saw a slight downtick, decreasing to a score of 1.61 from a ratio score of 1.65 the previous year. This is accounted for by the increase of current assets from 993.89 thousand dirhams in 2008 to 1.056.23 million dirhams and

increase in current liabilities from 601.65 thousand dirhams in 2008 to 656.94 thousand dirhams in 2009.

By 2009, the cash to total assets ratio for Al Sagr Company had from 16.53% in 2008 to 21.68%, indicating a significant improvement in the company's liquidity levels, which suggests that 2009 was a recovery year for the company,

where the cash balance increased from 206.75 thousand dirhams from 2008 to 277.47 thousand dirhams in 2009. Total assets increased from 1.250.72 million dirhams in 2008 to 1.280.13 million dirhams in 2009 to withstand the extra demand for liquidity.

**Table 2: Liquidity Analysis**

Abu Dhabi National Insurance Company					
Indicator	2006	2007	2008	2009	Coefficient of Variation %
Current ratio (times)	1.61	1.63	1.66	1.78	4.79
Cash to Total Assets	26.53%	28.95%	33.17%	35.13%	12.63
Al Buhairah Insurance Company					
Indicator	2006	2007	2008	2009	Coefficient of Variation %
Current ratio (times)	1.12	1.22	1.03	1.01	9.09
Cash to Total Assets	12.84%	16.79%	14.21%	9.87%	21.44
Al Sagr National Insurance					
Indicator	2006	2007	2008	2009	Coefficient of Variation %
Current ratio (times)	1.59	1.56	1.65	1.61	2.50
Cash to Total Assets	10.10%	20.71%	16.53%	21.68%	30.35

### 4.3 Capital Structure Analysis

The analysis shows that all the three companies have less coefficient of variation related total liabilities to total assets is 8.10%, for Abu Dhabi company, 15.71% for a Buhairah company and 5.30% for Al Sagr company indicating the presence of high stability and consequently lower levels of variability for this indicator.

The analysis of capital structure measures the financial strength of an organization. A higher ratio of total liabilities to total assets indicates a higher risk since it reveals that the company is using a higher proportion of borrowed money to finance its business operations. For Abu Dhabi Company the ratio saw a reduction from 39.34% in 2006 to 36.15% in 2007, contrastingly, Al Buhairah Company's current ratio remained largely consistent, albeit seeing a slight increase in its current ratio, from 51.31% in 2006 to 51.77% in the following year, indicating continued risk exposure throughout 2006 and 2007. Contrastingly, Al Sagr Company saw a significant increase in risk exposure as their total liabilities to total assets indicator rose from 53.75% in 2006 to 59.47% in 2007. With respect to total liability to shareholder's equity, a significant decrease was observed for Abu Dhabi Company, from 64.86% in 2006 to 56.62% in 2007 indicating a healthy decline and minimization in the company's level of financial risk. For Al Buhairah Company the ratio has increased from 105.38% in 2006 to 107.35% in 2007 and for Al Sagr Company from 121.33%

in 2006 to 152.69% in 2007 indicating the increased the level of financial risk for both companies.

As a coping strategy during the 2008 crisis, Abu Dhabi Company had to rely on a greater portion of debt to fund their assets. In real terms, Abu Dhabi Company increased the ratio of total debt to total assets from 36.15% in 2007 to 43.98% in 2008. In line with this trend, total liability to shareholders' equity also from 56.62% to 77.27% for the same period. For Al Buhairah insurance company, both ratios increased in 2008 over the previous year, with total debt increasing from 51.77% in 2007 to 69.16% in 2008 and total liabilities to shareholders' equity from 107.35% to 234.21% for the same two years. The results are a clear illustration of the widespread heightening of financial risk that took place in 2008. An exception to this general trend, Al Sagr company managed to reduce their debt to total assets ratio from 59.47% in 2007 to 54.60% in 2008. Similarly, the company saw a decrease in their total liabilities to shareholders' equity from 152.69% to 120.26% for the same period, indicating a successful mitigation of the danger posed by the high degree of risk exposure the company experienced the previous year. For the year 2009, the analysis show that all the three companies managed to strength their financial structure by reducing their debt in relation to total assets and equity resulting in low level of financial risk.

**Table 3: Capital Structure**

Abu Dhabi National Insurance Company					
Indicator %	2006	2007	2008	2009	Coefficient of Variation %
Total Liabilities to Total Assets	39.34	36.15	43.59	41.98	8.10
Total Liabilities to Shareholders' Equity	64.86	56.62	77.27	72.30	13.30
Al Buhairah Insurance Company					
Indicator %	2006	2007	2008	2009	Coefficient of Variation %
Total Liabilities to Total Assets	51.31	51.77	69.16	66.05	15.71
Total Liabilities to Shareholders' Equity	105.38	107.35	234.21	194.55	40.18
Al Sagr National Insurance					
Indicator %	2006	2007	2008	2009	Coefficient of Variation %
Total Liabilities to Total Assets	53.75	59.47	54.60	52.95	5.30
Total Liabilities to Shareholders' Equity	121.33	152.69	120.26	113.59	13.77

#### 4.4 Market Indicators Analysis

The coefficient of variation for the ratio of earnings per share over the years held a high degree of instability and variability levels over the years 2006 to 2009 for the three companies. Table IV shows that it is 62.85% for Abu Dhabi Company, 43.18% for Al Buhairah Company and 123.25% for Al Sagr Company. This is due to a high degree of fluctuation in both net income and the number of outstanding shares. For earnings per share ratio, all three companies under study experienced positive growth for the year 2007 over the year 2006 due to an increase in each company's net income.

Coefficient of variation analysis for market value per share shows a low level of instability and variability of this indicator over the years of study. The coefficient was 4.85% for Abu Dhabi Company, 4.53% for Al Buhairah Company and 17.91% for Al Sagr Company. The market value per share ratio remained relatively stable in the year 2007 when compared to the previous year. This relative stability remained short lived as the year 2008 emerged as a year of substantial negative impact for all three companies in question. This is reflected in the fact that all three companies saw their earnings per share ratio plummet, declining from 1.10 AED to 0.56 AED for Abu Dhabi, from 0.64 AED to 0.20 AED for Al Buhairah and from 1.21 AED to 0.24 AED for Al Sagr Company from the year 2007 to 2008. This can be explained by the notable decrease in net income for the year 2008 in contrast to 2007 as a result of the financial crisis. Abu Dhabi Company saw a continuation of this downward trend in 2009, where earnings per share declined from 0.56 AED to 0.14. A small uptick in the

market value per share was seen in 2009, climbing from an EPS of 8.30 dirhams in 2008 to 8.99 dirhams in 2009. This is due to the increase in demand for Abu Dhabi stock observed in 2009.

For Al Buhairah Company, earnings per share increased from 0.20 AED in 2008 to 0.40 AED in 2009. This is due to the increase in net profit from 50.21 million AED in 2008 to 100.73 million AED in 2009. These largely positive results lend credence to the possibility that by 2009, Al Buhairah, company was already on the path to recovery. In respect to the market value per share indicator, the market value per share remained stable at a level of 10.30 AED throughout 2008 and 2009. Concerning Al Sagr Company, earnings per share experienced a second consecutive drop in 2009, declining from 0.24 AED in 2008 to 0.13 the following year. This can be explained by the increase of the number of shares from 200 million to 230 million coupled with a significant evaporation in net profit from 67.12 million AED in 2008 to 30.05 million AED the following year. Thus, it can be ascertained that by 2009 Al Sagr Company was not yet at the point of recovery from the crisis. In addition, the market value per share grown from 3.55 AED in 2008 to 4.55 AED in 2009. This is due in large part to the increase in demand for this Al Sagr company stock by investors experienced in 2009. A likely causative factor in the market value per share movements is may be attributed to uncertainty on the part of investors, with some choosing to maintain their current holdings, and others largely choosing to sell a portion of their current assets and to diversify into other sectors that may have been perceived to be safer during the financial crisis period.

Table 4: Market Indicators

Abu Dhabi National Insurance Company					
Indicator (Dirhams)	2006	2007	2008	2009	Coefficient of Variation %
Earnings per Share	1.00	1.10	0.56	0.14	62.85
Market Value per share	8.50	8.02	8.30	8.99	4.85
Al Buhairah Insurance Company					
Indicator	2006	2007	2008	2009	Coefficient of Variation %
Earnings per Share	0.53	0.64	0.20	0.40	43.18
Market Value per share	9.68	9.42	10.30	10.30	4.53
Al Sagr National Insurance					
Indicator	2006	2007	2008	2009	Coefficient of Variation %
Earnings per Share	0.12	1.21	0.24	0.13	123.25
Market Value per share	5.33	5.33	3.55	4.55	17.91

#### 5. Conclusion

The objective of this research paper has been to measure the financial performance of three insurance companies working in United Arab Emirates during the years 2006 to 2009, particularly focusing on the effect of the financial crisis on their performance in relation to profitability, liquidity, capital structure and market performance. Several key findings emerged from the analysis.

The findings conclusively show that the crisis had a clear and definitive impact on the profitability of these companies in 2008. Crucially, Abu Dhabi and Al Sagr companies saw a continued upward decline in their profitability in 2009, however Al Buhairah Company managed to increase its profitability during 2009, perhaps signaling a sound revision of the company's investment portfolio. Following this pattern, both Abu Dhabi and Al Buhairah insurance companies maintained a higher level of liquidity in 2008 in

part to withstand extra demand for liquidity to cover short-term liability, while the level of liquidity declined in 2008 for Al Buhairah Company. For the year 2009, the level of liquidity has been grown for both Abu Dhabi and Al Sagr companies, in contrast to the decline that was observed with regard to Al Buhairah Company, indicating several possibilities, one being that the company is now free from the high liquidity requirements to pay off their short term liabilities, another being that the company is suffering from a cash flow crunch, for example that the company is allowing payments to be made in credit in relation to the crisis. However, the theory most within reason is that due to the liquid nature of the insurance industry, with most insurers receiving their premiums upfront before any claims are made, Al Buhairah deems the threat of a liquidity crunch as relatively benign and thus not of upmost priority for the company. This theory is further enhanced when looking at

the historical data trend for Al Buhairah Insurance Company, where little variability in liquidity levels can be observed between 2009 and the pre-crisis year of 2006. It thus appears to be a natural and comfortable state of the company to maintain levels relatively lower than their industry rivals.

The financial crisis weakened the financial structure of both Abu Dhabi and Al Buhairah companies as they increased their dependency on external funding in the running of their business operations in the year 2008, increasing the level of risk. On the other hand, Al Sagr Company reduced the level of risk by maintaining relatively better financial structure. In 2009, the three companies managed to reduce their dependence on external funding that might be considered as a recovery year.

For the three companies under study, the earnings per share heavily reduced in financial crisis year 2008. In 2009, persistent declines were observed for both Abu Dhabi and Al Sagr companies, pointing towards the continuous disastrous impact of the financial crisis. On the other hand, mixed results were seen for the market value per share indicator in 2009, increasing from the financial crisis year 2008 for Abu Dhabi Company, remaining stable for Al Buhairah Company, and notably declining for Al Sagr Company, indicating the market value per share indicator, while useful for indicating investor demand for company stock, shows minimal predictive potential as a measure of companies' financial position. Future research should seek to identify additional performance indicators that show strong predictive potential in measuring organizational resilience. Such findings may provide insurance companies with useful insight on how to better insulate the industry against the most damaging effect of financial crises and help ease the burden borne by investors and companies alike.

## 6. References

- Farman A, Aisha M, Khan S, Muhammad S. Impact of Financial Crisis 2008 on Financial Institutions, Research Journal of Finance and Accounting. 2013;4(2):127-135.
- Waheed A, Vasileios P, Khan SU. A comparison of Islamic and conventional insurance demand: Worldwide evidence during the Global Financial Crisis. Research in International Business and Finance. 2017;42:1401-1412.
- Muhammad A, Masood H, Zehra S. Comparison of Takaful and Non-Takaful Insurance Companies in Pakistan: under Pre, During and Post Economic Crisis 2008, Etikonomi. 2021;20(1):201-212.
- Faisal B, Stanley M, Chris P. Insurance Systemic Risk and Financial crisis, The Geneva Papers. 2011;36:126-163.
- Anam B, Chaudhry S. Determinants of Financial Performance of Insurance Companies of USA and UK During Global Financial Crisis (2007 – 2016), International Journal of Economics and Business Administration. 2019;5(1):23-33.
- Bouzouita R, Craioveanu. Insurance Industry Risk during the 2008 Financial Crisis, Academy of Accounting and Financial Studies Journal. 2019;23(1):1-12.
- Osman K, Chelikani S, Coe T. Financial Crisis and Contagion: The Effects of the 2008 Financial Crisis on the Turkish Financial Sector, International Journal of Applied Economics. 2014;11(2):19-37.
- Kozmenko O, Kravchuk H. Consequences of the Financial Crisis for the Insurance Markets of the World and Ukraine, Insurance Market and Companies. 2010;1(3):7-15
- Venugopalan KV. Global Financial Crisis and Life Insurance Sector in India: A Comparative Study of LIC with Private Sector, Indian Journal of Commerce & Management Studies. 2011;2(6):56-61.
- Lament M, Slawomir B. Business Model Impact on the Efficiency of Insurance Companies, European Research Studies Journal. 2021;24(4):237-247.
- Pulawska K. Financial Stability of European Insurance Companies during the COVID-19 pandemic, Journal of Risk and Financial Management. 2021;14(266):1-16.
- Rauch J, Wende S. Solvency Predication for Property-liability Insurance companies: Evidence from the Financial Crisis, The Geneva Papers. 2015;40:47-65.
- Saleh B, Fadail. The Influence of the Financial Crisis on the Activities of Insurance Companies in Russia, International Journal of Research in Social Sciences and Humanities. 2019;9(11):280-285.
- Saymeh AAF, Mohammad SJ, Orabi A, Mohammad M. The Effect of the Late Global Financial Crisis on the Jordanian Insurance Companies Profits, European Journal of Business and Management. 2014;6(38):113-120.
- Baluch F, Itti L. Mechanisms of top-down attention. Trends in neurosciences. 2011 Apr 1;34(4):210-24.
- Rauch J, Wende S. Solvency prediction for property-liability insurance companies: Evidence from the financial crisis. The Geneva Papers on Risk and Insurance-Issues and Practice. 2015 Jan 1;40:47-65.
- Batool A, Sahi A. Determinants of financial performance of insurance companies of USA and UK during global financial crisis (2007-2016). International Journal of Accounting Research. 2019;7(1):1-9.
- Huang Y, Bogo F, Lassner C, Kanazawa A, Gehler PV, Akhter I, *et al.* Towards accurate marker-less human shape and pose estimation over time. In 2017 international conference on 3D vision (3DV); c2017 Oct 10. p. 421-430. IEEE.
- Nazir S, Shafi A, Asadullah MA, Qun W, Khadim S. Linking paternalistic leadership to follower's innovative work behavior: the influence of leader-member exchange and employee voice. European Journal of Innovation Management. 2021 Jul 13;24(4):1354-78.
- Khan S, Afzal M, Iqbal S, Khan QM. Plant-bacteria partnerships for the remediation of hydrocarbon contaminated soils. Chemosphere. 2013 Jan 1;90(4):1317-32.
- Larson DF, Otsuka K, Matsumoto T, Kilic T. Should African rural development strategies depend on smallholder farms? An exploration of the inverse-productivity hypothesis. Agricultural Economics. 2014 May;45(3):355-67.