
**ANALYZING MARKET PERFORMANCE OF INSURANCE COMPANIES DURING
THE GLOBAL FINANCIAL CRISIS**

MUKDAD IBRAHIM

American University of Ras Al Khaimah

DOI: <https://doi.org/10.63452/IJAFSSR.2025.3301>

ABSTRACT

The objective of this research paper is to analyze the effect of the global financial crisis 2007-2008 on market indicators of three insurance companies operating in United Arab Emirates, using four market indicators, market value, earnings per share, market to book value, and share yield. Several statistical analyses consisting of descriptive analysis, coefficient of variation, correlation analysis and ANOVA analysis were used. Coefficient of variation analysis shows varying levels of stability for the four indicators across the three companies, indicating a lack of uniformity in effects of the crisis on each company. Moreover, correlation analyses of these four market indicators reveal a mostly weak and at times negative relationship. This can largely be attributed to the effects of external economic factors and the degree of uniqueness in how each insurance company responded to such adversarial forces. Finally, Anova analysis of market price indicator supports the occasional existence of similarities among the three variables. Furthermore, Anova analysis of the earnings per share indicator shows little variation in mean performance across the three companies over the period. Similarly, Anova analysis of market value to book value indicates diversity in the means across the groups. The analysis of Anova on share yield reveals an insignificant similarity between the means across the insurance companies. The results of this research analyses reveal that the financial crisis imposed diverse range of effects on the market performance of these insurance companies. Moreover, the findings highlight the significant market risk exposure that occurred during the financial crisis. The implications of elevated market risk exposure for insurers are highly pertinent and should not be overlooked. Insurers prioritizing long term growth should follow the path of sustainability by reducing risk exposure by putting into place stringent risk mitigation strategies.

KEYWORDS: - Insurance, Market Performance, Financial Crisis;

Jel Codes: G22; L10; G01;

1.0 INTRODUCTION

The scope of the financial Crisis of 2008 has been likened to the Great Depression of 1929 both in breadth and severity, as demonstrated in the substantial loss of asset liquidity in the financial markets, the outright bankruptcy of well-known financial institutions including banks and

manufacturers, with a fortunate few requiring restructuring and government intervention. It also led to a severe evaporation in the value of stocks and bonds, leading to widespread chaos in the financial markets.

The recent financial crisis of 2008, widely considered to be one of the most severe shock-waves to hit the economy since the Great Depression of 1929. One differentiating factor that makes the recession of 2008 unique is the worldwide extent of the damage that it has inflicted. Whereas the great depression was primarily an American phenomenon, the recent recession of 2008 has surpassed its predecessor in scope, as it has affected not only financial markets and institutions within the United States, but impacted the world economy on an unprecedented scale, which was considerably less exposed in 1929. The 2008 financial crisis led to dramatic contractions in the dollar value of the financial sector, severely undermining the willingness and ability of financial institutions to take risk on lending.

The timeline of the 2008 financial crisis can be described in distinct five stages:

1. Initial warning signs came in the form of foreshocks that began in the spring 2007 with the bankruptcy of New Century Financial; a lender specialized in so called “subprime mortgages”, that is, the financing of mortgages to borrowers who traditionally would not have been eligible for home loans, namely those with bad credit histories. In the case of New Century Financial, many of these home buyers later defaulted on their loans, causing irreparable damage to the institution.
2. Following the downfall of New Century Financial, other industry heavyweights such as Bear Stearns and the Federal National Mortgage Association also collapsed under the weight of their own losses. All in all, ten major financial institutions, including brokerage firm Lehman Brothers, were doomed to fail.
3. This financial contagion rapidly triggered widespread panic in the financial markets, leading to consequent contraction in the world economy during the second half of 2008.
4. The widespread selloffs, bankruptcies and stock portfolio diversification that occurred led to a slowdown in the pace of the contraction, the government was able to properly assess the situation and accordingly conceive of and put into place a multifaceted rescue plan in the first half of 2009.
5. Post 2009: While an economic slowdown is still in force and aftershocks are widespread, analysts and observers widely accept that both the American economy and the world economy are on the path to financial stability and entering a period where both surviving institutions and investors alike can begin to recover from their previous losses.

The fundamental factors behind the financial crisis

While the crisis imposed a great deal of pain and misfortune for investors, businesses and employees alike, it also provided a significant opportunity for leading academics and regulators alike to investigate the reasons behind the seemingly sudden and unforeseen nature of the financial crisis. The findings of the wealth literature that is now available on this subject all paint a similar picture. They all point to a significant credit crunch that took place in the years prior to the crisis. This predisposed the market behavior towards malinvestment. The following is a

simplified breakdown of how credit bubbles are formed, the secondary negative behaviors that occur as a consequence, along with why this credit bubble hit global markets particularly hard.

Credit bubble as a result of lowered lending standards: Easy credit that once was out of reach for investors with poor credit history suddenly became available due to the deterioration in lending standards that took place over the preceding years. This absence of lending standards, when combined with the low interest rates in the early 2000's made financing both affordable and possible in the minds of home buyers. Additionally, large levels of foreign investment pouring in from fast growing economies such as China and the oil producing states only exacerbated the situation.

This surplus of credit led to a housing bubble, where house prices were reaching new highs, far above the historical averages that existed in the 1990's. The appreciation in housing values led to widespread speculation as investors, in addition to prospective homeowners began to see the lucrative potential of the housing market, further putting upward pressure on housing prices.

Nontraditional investment vehicles such as mortgage-backed securities led major banking and financial firms to be dangerously exposed to any potential real estate bubble. This led to liquidity risks as managers of many financial institutions extended credit to individuals and investors that were, holding as minimal current assets as possible. This ultimately led to a liquidity crunch when investors and home-buyers defaulted on their loans and these industries could not cover their day-to-day operations to stay afloat.

Susceptibility to contagion: The increasing interconnectedness of the global economy, along with the fact that the lines between once distinct, separate industries were being increasingly eradicated, made industries that were once relatively safe from financial contagion suddenly become dangerously vulnerable. For example, while the fortunes of the real estate industry, developers, personal banks and investment banks were being increasingly intertwined during the growth, this very dependence ultimately sealed their fate when crisis took hold.

Dubai, a fast-growing global financial hub, was not immune from the financial contagion that was quickly and unrelentingly spreading across the rest of the world at the time, triggering a wave of acquisitions, mass layoffs and bankruptcies in its wake. The growing financial and technological integration of gulf economies with that of western economies provided great benefits, opening up both markets to foreign investment. Yet few overlooked the reality that these benefits also came at the expense of significant risks, of which the UAE was suddenly exposed to in 2008. The insurance industry in the UAE, while not as mature as and established as that of its peers in the west, is an important and integral part of the UAE economy, affording clients a significant degree of financial security in the form of loss protection due to unforeseen events. While a successful and lucrative player within the UAE economy in contemporary times, it was, at the onset of 2008 financial crisis, untested in terms of its financial and structural resiliency. Question markets were raised as to whether the insurance sector in the UAE would see the same fate that had befallen many of its peers in Europe and Asia. This study aims to fill in a critical gap in the research literature by examining just how well the insurance sector fared during the crisis.

2.0 LITERATURE REVIEW

Aktas and Unal (2015) examine the relationship between financial efficiency ratios and stock prices across seven insurance firms publicly traded in Borsa Istanbul. They analyzed quarterly data related to cost, revenue, and profit efficiency ratios of seven companies for the period of 2005 to 2012. Regression analysis was conducted using efficiency ratios as explanatory variables and stock price as dependent variable. The results of analysis confirm the presence of a statistically significant relationship between a firm's ratio performance and its corresponding stock price.

Al-Arif and Firmansyah (2021) examine the relationship between market structure and profitability of Islamic life insurance industry in Indonesia. They used data pertaining to ten Islamic life insurance companies for the period 2012 to 2019. Fixed effect model of regression analysis was used to estimate the relationship between the two respective variables. The results of their analysis show that the market structure affected the profitability of the Islamic insurance industry.

Batool and Sahi (2019) analyze determinants of financial performance during financial crisis 2007-2008. They used quarterly financial data of 24 insurance companies, 12 operating in the USA with the remaining 12 operating in the UK market. Correlation analysis was conducted for ROA, ROE along with other accounting and economic variables to test the nature of the relationship between each two variables. Additionally, descriptive analysis was employed to be able to determine the normality of distribution. Finally, they used pooled ordinary least squares model and then fixed and random effect regression model. The results of their analysis reveal that in regards to the United States, size of firm, liquidity, leverage, assets turnover, GDP, and WTI have a positive impact, while CPI and interest rate, on the other hand, was exhibited to have significant negative impact on financial performance. These results appear to diverge from those gained from the the UK where variables such as size of firm, liquidity, GDP, CPI and WTI were found to have a positive impact but leverage, assets turnover and interest rate, strong predictors of financial performance in the United States, were not found have a positive impact on performance in the case of the United Kingdom.

Bouzouita and Craioveanu(2019)By analyzing the daily stock returns on a sample of 208 insurance companies for the period of 1990 to 2011 using DCC GARCH Model to examine the impact of the 2007-2009 financial crisis on the volatility of insurance stock and on the correlation of the insurance stock returns with those of the wider stock market. Their findings showed that the volatility of stock returns increased in intensity during the financial crisis and the crisis also increased the correlation between insurance stock returns and stock market returns.

Ibrahim (2023) measures the financial performance of three UAE insurance companies for the years 2006 to 2009 to assess the effect of financial crisis on their performance. The analysis covered profitability, liquidity, capital structure, and market performance indicators. Descriptive analysis and coefficient of variation were used to measure the variability and instability levels over the years. The findings reveal that profitability and earnings per share indicators hold a high level of variability and instability during the financial crisis.

Kiptoo *et al* (2021) examine the relationship between risk management and financial performance of insurance companies in Kenya covering the period 2013-2020. They used regression analysis on 51 insurance firms operating in Kenya to determine the relationship between return on assets as a dependent variable and four risk management variables, credit risk management, market risk management, operation risk, and liquidity risk as independent variables. The results of their analysis demonstrated that risk management had a significant impact upon financial performance. Similarly, their analysis also showed that the subcategory of risk management that deals with minimizing exposure to market risks, also known as market risk management had a positively and decisive impact on a firm's corresponding financial performance.

Lee (2023) analyzes the impact of the economic crisis on the financial stability of the property-liability insurance industry in Taiwan. The researcher used Z-score and solvency ratio analysis on publicly derived data corresponding to the years 2006 to 2016 to measure the insurer's financial stability. Correlation and regression analysis were used to determine the sensitivity of the property-liability insurance industry to the wider macroeconomic conditions of the time. The results of the analysis reveal that the economic crisis has a clear, substantial and negative effect on the P-L insurance's financial stability.

To analyze elements that determine financial performance of Kenyan insurance companies, Morara and Sibindi (2021) used data from 37 general insurers and 16 life insurers spanning the period 2009 to 2018. The researchers used several methods, pooled Ols; fixed effects and random effect models to estimate the effect of several factors on the return on assets or return on equity. The results of their analysis revealed that financial performance and size factor were positively related, while the performance variable was negatively related to the age factor.

3.0 RESEARCH METHODOLOGY

This research is going to analyze the effect of financial crisis 2007-2008 on the market performance of three insurance companies operating in UAE. Secondary data was obtained from the Local Shares Directory 2010, issued by National Bank of Abu Dhabi. The first section of the analysis is dedicated to conducting descriptive analysis, that is, measuring the level of stability-variability of the indicators using coefficient of variation and correlation analysis to measure the degree of association between each two indicators. Moreover, a comparison between the average performance of 2006 and 2007 and the performance of each 2008 and 2009 will be carried out in order to assess the effect of the crisis on performance. The second section of the analysis will aim to determine whether a significant difference exists between the means of the four groups of indicators using one-way ANOVA and post hoc test. Finally, Tukey's HSD will be employed to see which differences between pairs of groups are statistically significant. This is highly beneficial when conducting multiple comparisons between variables as it reduces the burden of error when comparing differences in means, allowing the arrival of reasonable and evidence-based interpretation of the findings.

4.0 RESEARCH ANALYSIS.

In this research, four types of market indicators, widely used by stakeholders owing to their agreed upon validity as indicators, are used to achieve the objective of this research. The first one is the market value which indicates to a current nominal price per share for a stock that is trading in the market. It is a product of the bidding process, defined as the agreed upon price that buyers are willing to pay and sellers are willing to sell at. The second indicator is earnings per share, which shows the earnings per outstanding share of common stock. It is a measure of profitability from a shareholder's perspective. It can be calculated by subtracting the net income from preferred stock dividends and then divide the result by the outstanding number of common shares. The third indicator is known as market value to book value ratio. It can be calculated by dividing the market value by the book value per share of any given asset or security. The fourth indicator is the share yield. It can be calculated by dividing cash dividend by market value. A high ratio indicates the high yield of a given stock.

Descriptive Analysis of the Oman Insurance Company for the four years 2006 to 2009. The coefficient of variation is used to indicate the level of stability over the years. A high coefficient of variation means high level of variability and instability, while the low percentage of it shows a good level of stability. The coefficient of variation related to market value %25.93, market value to book value ratio is %32.47 and to share yield is %33.24. these three variables hold a high level of instability. The earnings per share coefficient of variation is %74.53 indicating to very high level of instability. A correlation coefficient is used to measure the degree of relationship between each two indicators. A high correlation coefficient means a high degree of association, while low coefficient indicates a low level of relationship. The market value has a weak negative relationship with earnings per share where the correlation coefficient is -0.266, while it has moderate relationship with market value to book value ratio, as reflected in the correlation coefficient is 0.578 and negative relationship with share yield where the correlation coefficient is -0.841. Earnings per share has a negative strong relationship with market value to book value ratio, as shown in the correlation coefficient of -0.936 and negative low level of association with share yield where the coefficient is -0.295. Moreover, the market value to book value ratio was negatively correlated with share yield, highlighted in the correlation coefficient of -0.053. The average performance of pre-crisis, 2006-2007 is 13.55% while the performance for the crisis year 2008 10.50% indicating a negative effect of the crisis. In 2009 year, the market value increase to 11% shows a recovery year. For earnings per share, the average performance before crisis 2006-07 is 1.53 AED declined to 0.66 AED in crisis year of 2008. The indicator declined again in 2009 to 0.50 AED indicating that earnings, while not recovering to pre-crisis levels, had begun to stabilize. The average performance of market value to book value for pre-crisis year 2006-07 is 2.06 times, increasing to 2.41 times in 2008 and to 2.73 times in 2009 showing that the crisis, while proving to be financial detrimental on a whole, saw an increase on the performance of this indicator during the crisis. 2009 saw further increases in performance of this, as reflected in its rise to 2.73. Lastly, the average performance of share yield indicator across the years prior to the crisis (2006-2007) is 1.75%, increasing in 2008 to 4.76% before declined to 4.55% in the year 2009.

Table 1: Oman Insurance Company

Year	Market Value: AED	Earnings per Share: AED	Market Value to Book Value: Times	Share Yield %
2006	16.85	0.83	2.88	2.08
2007	10.25	2.23	1.23	3.41
2008	10.50	0.66	2.41	4.76
2009	11.00	0.50	2.73	4.55
Mean	12.15	1.06	2.31	3.70
Standard Deviation	3.15	0.79	0.75	1.23
Coefficient of Variation %	25.93	74.53	32.47	33.24
Minimum Value	10.25	0.50	1.23	2.08
Maximum Value	16.85	2.23	2.88	4.76
Correlation Analysis				
Market Value	1	-0.266	0.578	-0.841
Earnings per Share	-0.266	1	-0.936	-0.295
Market Value to Book Value	0.578	-0.936	1	-0.053
Share Yield	-0.841	-0.295	-0.053	1

Descriptive Analysis of the United Insurance Company for the four years 2006 to 2009. The coefficient of variation is used to indicate the level of stability over the years. A high coefficient of variation means a high level of variability and instability, while the low percentage translates to relatively higher level of stability. The coefficient of variation related to market value is 21.47%, while the market value to book value ratio is 26.50% and to share yield is 44.65%. These three variables clearly exhibit a high level of instability, pointing to the volatility that was commonplace in the market at the time. The earnings per share coefficient of variation was calculated at 82.50% indicating a very high level of instability. This shows that financial crisis yielded mixed results when pertaining to the stability levels of the four main market indicators. A correlation coefficient is used to measure the strength and character of relationship between each

two indicators. A high coefficient means a high degree of association, while low coefficient indicates a low level of relationship. The market value showed a weak relationship with earnings per share, as highlighted in the correlation coefficient of 0.028. In contrast, market value showed a strong relationship with the market value to book value ratio, where the correlation coefficient was calculated to be 0.914. A negative relationship was detected between market value and share yield however, as seen in the correlation coefficient of -0.485. Earnings per share was found to possess a strong but negative relationship with market value to book value ratio, as seen in the correlation coefficient of -0.380 and to be moderately associated with share yield, where the coefficient was calculated at 0.817. Moreover, the market value to book value ratio was demonstrated to be negatively associated with share yield, resulting in a correlation coefficient of -0.782. The average performance of pre-crisis, 2006-2007 is 5.50% increasing during the crisis year 2008 to 6.50% indicating a possible delay of the overall effects of crisis with regards in the case of Oman insurance. In the 2009 year, the market value finally began to decrease to 3.75% implying that the damaging effects of the crisis had finally begun to make a noticeable dent in the market value of the company. For earnings per share, the average performance across the two years prior to official onset of the crisis (2006-07) is 0.51 AED, declining to 0.26 AED in the crisis year of 2008. This indicator rebounded in 2009 to 0.30 AED indicating the possible resumption of profitability and consequently recovery for the company. The average performance of market value to book value during the pre-crisis years (2006-07) is 1.64 times, increasing to 2.15 times in 2008 before falling to 1.16 times in 2009 showing that the crisis had a possible delayed effect on the performance of this indicator. Lastly, the average performance of share yield indicator prior to crisis 2006-2007 is 5.22% decreasing in 2008 to 3.85% before rebounding to 6.67% in the year of 2009.

Table 2: United Insurance Company

Year	Market Value: AED	Earnings per Share: AED	Market Value to Book Value: Times	Share Yield %
2006	5.50	0.14	1.87	2.73
2007	5.50	0.88	1.47	7.72
2008	6.50	0.26	2.15	3.85
2009	3.75	0.30	1.16	6.67
Mean	5.31	0.40	1.66	5.24
Standard Deviation	1.14	0.33	0.44	2.34
Coefficient of Variation %	21.47	82.50	26.50	44.65

Minimum Value	3.75	0.14	1.16	2.73
Maximum Value	6.50	0.88	2.15	7.72
Correlation Analysis				
Market Value	1	0.028	0.914	-0.485
Earnings per Share	0.028	1	-0.380	0.817
Market Value to Book Value	0.914	-0.380	1	-0.782
Share Yield	-0.485	0.817	-0.782	1

Descriptive Analysis of the Emirates Insurance Company for the four years 2006 to 2009.

The coefficient of variation is used to indicate the level of stability over the years. A high coefficient of variation indicates a high level of variability and instability, while a low coefficient indicates relatively higher levels of stability. The coefficient of variation related to market value is 28.39%, earnings per share 32.93% market value to book value ratio is 24.27% and lastly the coefficient for share yield was measured at 40.46%, indicating the crisis had varying outcomes for the stability of these indicators. A correlation coefficient is used to ascertain the strength and direction of a relationship between two indicators. A high coefficient infers the existence of a high degree of association, while low coefficient indicates the presence of a weak relationship. Market value was found to have a negative but weak relationship with earnings per share, with the correlation coefficient measuring at -0.222, while a moderate relationship was found with market value to book value ratio, as represented in the correlation coefficient of 0.587 and negative relationship with share yield where the correlation coefficient is -0.847. Earnings per share has a strong, inverse relationship with market value to book value ratio, as highlighted by the correlation coefficient of -0.830 as well as being moderately associated with share yield, with a coefficient of 0.632. Moreover, the market value to book value ratio is negatively associated with share yield, as reflected in the correlation coefficient of -0.721. The average performance for market value of pre-crisis, 2006-2007 is 10.27%, decreasing during the crisis year of 2008 to 6.50%, a deterioration indicating that the negative effects of the crisis had by then begun to take root. In the 2009 operating year, however, market value had rebounded to 7.48%, showing a slight improvement of performance for this indicator. For earnings per share, the average performance in the crisis years (2006-07) was calculated at 0.91 AED, slightly increasing to 0.94 AED in crisis year of 2008, before decreasing in 2009 to 0.53 AED. This indicates that, in the case of earnings per share, the firm displayed a delayed response to the negative effects of the crisis. The average performance of market value to book value for in pre-crisis years 2006-07 is 1.02 times, before decreasing to 0.97 times in 2008, followed by an increase to 1.12 times in 2009, showing that this indicator had quickly rebounded in performance following its initial decline. Finally, the average performance of the share yield indicator prior to the crisis years of

2006-2007 is 6.51%, before markedly rising in 2008 to 11.54%. By 2009 however, the 2009, however, the effects of the crisis had begun to drastically hit its share yield, noticeably declining to 6.68%. This suggests that while the negative effects of the crisis were inevitable, there company was experiencing markedly strong performance immediately prior to the eventual impact of the crisis.

Table 3: Emirates Insurance Companies

Year	Market Value: AED	Earnings per Share: AED	Market Value to Book Value: Times	Share Yield %
2006	12.10	0.69	1.32	4.13
2007	8.44	1.13	0.72	8.89
2008	6.50	0.94	0.97	11.54
2009	7.48	0.53	1.12	6.68
Mean	8.63	0.82	1.03	7.81
Standard Deviation	2.45	0.27	0.25	3.16
Coefficient of Variation %	28.39	32.93	24.27	40.46
Minimum Value	6.50	0.53	0.72	4.13
Maximum Value	12.10	1.13	1.32	11.54
Correlation Analysis				
Market Value	1.00	-0.222	0.587	-0.847
Earnings per Share	-0.222	1.00	-0.830	0.632
Market Value to Book Value	0.587	-0.830	1.00	-0.721
Share Yield	-0.847	0.632	-0.721	1.00

1. ANOVA Analysis of Market Values. Table 4 below shows analysis findings for the market value indicator across the three insurance companies. The f-test value is 8.24 with a significance of 0.009 indicating that there is a difference between the means. Levene test of

homogeneity of variance is used to see if the significance of Levene Statistic value is less than 0.05, then there is a significant difference between the variances in the population. Levene's test results show a value of 1.48 with significance of 0.279. The analysis of Tukey HSD indicates that there is a different between the means of the Oman company and United Insurance Company with a significance of 0.007. There is no significant difference in the means between Oman company and Emirates Insurance Company, as proven in the significance of 0.146. Moreover, a comparative analysis between the means of United insurance company and Emirates insurance company revealed a lack of any statistically significant similarity.

Table 4: ANOVA Analysis for Market Value

Details	Sum of squares	DF	Mean Square	F	Significance
Between Groups	94.15	2	47.08	8.24	0.009
Within groups	51.40	9	5.71		
Total	145.56	11			

- ANOVA Analysis of Earnings per Share. Table 5 below shows results of the analysis of the earnings per share indicator across the three insurance companies. The F-test value is 1.66 with significance 0.244 indicating that there is no difference between the means of earnings per share. The Levene's test of homogeneity of variance was employed to see if the significance of Levene Statistic, where a value greater than 0.05 infers that the variances are not significantly different from each other. Levene statistic shows a value 2.45 with significant 0.141 showing that the variances are not significantly different. The analysis of Tukey HSD supports the results of Anova analysis that there is no significant difference between the means of earnings per shares across the three companies, since the significance of the multiple comparisons stands above the threshold of 0.05.

Table 5: ANOVA Analysis of Earnings per Share

Details	Sum of squares	DF	Mean Square	F	Significant
Between Groups	0.90	2	0.45	1.66	0.244
Within groups	2.43	9	0.27		
Total	3.33	11			

- ANOVA Analysis of Market Value to Book Value. Table 6 below shows the analysis of market value to book value indicator across the three insurance companies. The f-test value is 6.04 with significance of 0.022, indicating that there is a statistically significant difference

between the means of market value to book value ratio across the three companies. Moreover, Levene test of homogeneity of variance is used to assess the existence of equality for variance, with a statistically significance of the Levene Statistic value greater than 0.05 inferring that the variances are not significantly different from each other. Levene statistic shows a value 1.75 with significant 0.228 indicating that there lacks any statistically significant difference between the variances. The analysis of Tukey HSD indicates that there is a significant difference between the means of market value to book value between Oman insurance and Emirates insurance company, since the significance of the multiple comparisons is 0.17.

Table 6: ANOVA Analysis of Market Value to Book Value

Details	Sum of squares	DF	Mean Square	F	Significance
Between Groups	3.28	2	1.64	6.04	0.022
Within groups	2.44	9	0.27		
Total	5.72	11			

- ANOVA Analysis of Share Yield. Table 7 below shows the analysis of share yield indicator across the three insurance companies. The f-test value is 3.05 with significant 0.097 indicating the absence of any statistically significant difference between the means. Levene test of homogeneity of variance is used to for equality in variance. If the significance of Levene Statistic value exceeds 0.05, then it can be said that there is no significant difference between these variances. Levene's testing shows a value of 2.24 with a significance of 0.162. The analysis of Tukey HSD indicates that there lacks any significant difference between the means of share yields across the three companies, as shown by the statistical significance of more than 0.05.

Table 7: ANOVA Analysis of Share Yield

Details	Sum of squares	DF	Mean Square	F	Significance
Between Groups	34.48	2	17.24	3.05	0.097
Within groups	50.88	9	5.65		
Total	85.37	11			

5.0 CONCLUSION

The aim of this research was to analyze for market indicators of three UAE insurance companies during financial crisis 2008. The coefficient of variation has varying levels of stability for the four indicators across the three companies, indicating a diverse range of effects were imposed by

the crisis upon market performance. Moreover, the correlation between these four market indicators reveals a largely weak and negative relationship. This is due to the effect of external economic factors and the highlights the individual responses of each insurance company to such forces. Finally, Anova analysis of market price indicator supports the existence of similarities among some of the three variables. Furthermore, Anova analysis of earnings per share indicates a lack of similarity between the means across the companies in question. In addition, Anova analysis of market value to book value indicates the presence of similarities in the means between the two variables. Finally, Anova analysis of share yield reveals a statistically insignificant similarity between the means across the insurance companies. The financial crisis of 2008 showed varying levels of effects on market performance indicators across the three companies, with a strong general downward trend being detected in company performance, as reflected in the noticeable increase in the level of market risk that these companies were exposed to. Importantly, the research also highlights the diverse range of responses that the insurance industry undertook in order to address the financial difficulties that were taking place at the time, with some companies rebounding relatively strongly in 2009, with others experiencing a slower recovery.

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