

# Market Concentration and Profitability: Empirical Evidence from the Jordanian and Saudi Arabia Insurance Industries

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**Abstract:** The influence of market concentration on profitability is one of the most intriguing issues for financial organization researchers. Therefore, the purpose of the study is to investigate this potential impact in the context of insurance businesses operating in Jordan and Saudi Arabia. The research's main hypothesis is that increased market concentration boosts market profitability as a result of collaboration between dominant firms. We test this hypothesis by developing, estimating, and testing the model describing the impact of structural and other control variables on profitability using secondary panel data for 42 insurance firms between 2009 and 2019. We gathered information from 462 financial reports from insurance companies. As a consequence, multiple regressions were used to estimate the parameters of the model. The empirical results suggest that concentration indices and profitability have a bi-directional relationship, suggesting that past insurance industry concentration indices can explain current levels of profitability in Jordanian and Saudi insurance companies, and vice versa. Furthermore, the results of the research show that in Jordan and Saudi Arabia, there is a negative relationship between insurance concentration and profitability levels.

**Keywords:** Market concentration; Profitability; insurance industries.

## INTRODUCTION

In the early 1940s, Insurance as an industry did not have a tangible presence in Jordan, largely due to the limited geographical scope of which the population at the time was less than 400,000 people. However, as time passed, the country saw an increase in commercial activity through Jordan to neighboring countries, resulting in the birth of the Jordanian insurance sector, with the first insurance agency opening in 1946. It was only focused on the life insurance ([www.joif.org](http://www.joif.org))

In the early 1950s, Jordan's insurance industry grew significantly, notably in the sectors of shipping activities and accidental. In 1956, the Jordanian government considered forming a Jordanian insurance manufacturers' association to oversee the insurance sector in Jordan, in response to the growing number of these insurance firms. The number of insurance companies grew steadily during the 1960s, peaking at 23 in the mid-1980s (Jaloudi & Bakir, 2019).

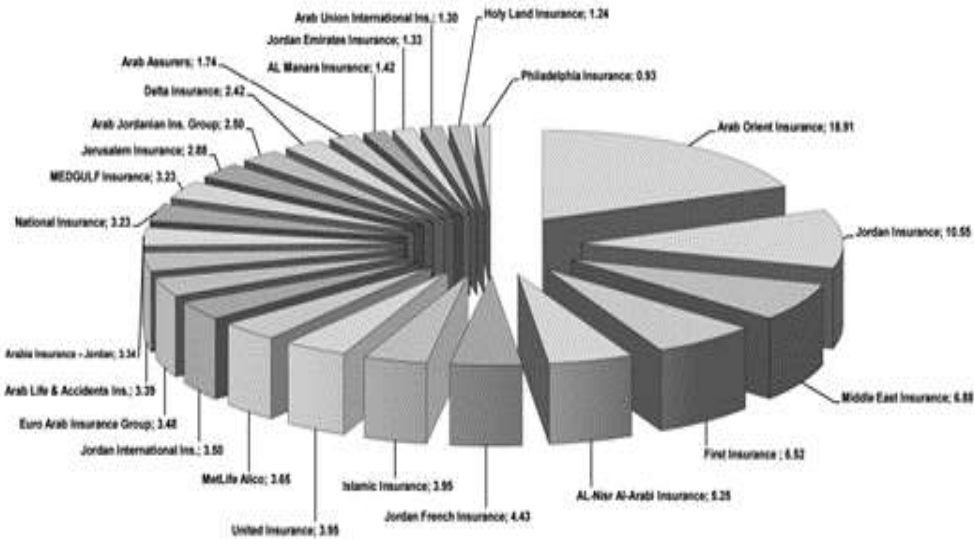
The Jordanian insurance sector is clearly unable to absorb this increase in insurance companies, as random competition among those companies has resulted in the deterioration of the insurance sector, resulting in large losses incurred by Jordanian insurance companies. As a consequence of that, at the start of the 1980s, the government passed legislation restricting the granting of new insurance company licenses and raising capital requirements for existing companies in order to encourage companies to merge. As a result of the law,

some insurance businesses were obliged to combine with other companies or leave the market, reducing the number of insurance companies to 17 in 1987. Until 1994, the number of businesses remained steady (Singlawi and Aladuan, 2016).

By passing a new law to increase capital requirements in 1995, the government attempted a second time to limit the entry of new insurance companies into the Jordanian market. Despite this, eight new insurance companies entered the Jordanian market, and the number of operating companies increased to 25 local companies before reaching a total of 27 companies in 2000. 2019; (Jaloudi and Bakir 2019). The structure of Jordan's insurance market changed significantly between 2000 and 2016, mostly as a result of the entry of new companies, mergers, and the withdrawal and liquidation of existing companies. In terms of random competition between insurers, however, the difficulties that the insurance business faces remain the same. However, the challenges that the insurance business faces in terms of random competition between insurers remain the same.

Furthermore, (Jaloudi, 2019; Singlawi and Aladuan, 2016; Alomari and Azzam, 2017) discovered high concentration in the Jordanian insurance market, with a (H-H) index of 529, a median market share of 2.8%, and only four companies with a market share of more than 5%, with the seven largest insurance providers accounting for roughly half of all premiums in 2009. As a result, net profit margins are particularly low, averaging 1.9 percent. Because of increased competition in Jordan's insurance sector. Figure 1.1 below shows the high concentration in the Jordanian insurance market. ([www.joif.org](http://www.joif.org))

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**Fig. (1).** The High Concentricity in The Jordanian Insurance Market (Jordan Insurance Federation (Jif) 2019).

The problem in this study stems from changes (ups and downs) in the number of insurance businesses, with some of these companies suffering losses in recent years, forcing them to shut down and quit the market. In addition, insurance company profits fell by -88.5 percent in 2018. According to (Jaloudi, 2019), insurance businesses in Jordan are currently facing the most difficult economic conditions, with losses in the insurance sector totaling more than 120 million Jordanian dinars over the last decade.

Certain Jordanian insurance businesses have experienced losses, which led to the exit of some companies from the market. The remaining firms suffered from low profitability as a result of fierce rivalry among insurance firms operating in a relatively limited market at all levels as compared to other emerging and established countries. This has a significant impact on the formation of savings volume, which accurately represents this sector. In addition to the unpredictable external environment caused by the political situation in Jordan's neighbouring nations, which had a significant impact on the Jordanian economy as a whole (Alkhatib and Mohamed, 2019).

The insurance business in Jordan is confronted with a number of obstacles that necessitate our attention; as a result, it is imperative that we find solutions to these issues. The severe rivalry between insurance firms, as well as the low profitability of insurance businesses, are among the challenges. Insurance businesses have a poor level of solvency; in addition, the insurance sector has been impacted by the global financial crisis and the ramifications of regional political unrest.

## LITERATURE REVIEW

The nature of the relationship between market structure (market concentration) and market performance (profitability) has been the subject of many studies, although the exact nature of this relationship is still up for discussion. Mason (1939) was one of the first scholars to investigate the link

between market concentration and profitability, and they expected that the two factors would be positively correlated.

Since the 1930s, (Mason 1939, 1949; Bain 1951, 1956; Demsetz, 1973), other researchers have produced hypotheses to explain the relationship between concentration and profitability. However, the positive effect is often described by one of two opposing theories: structure-conduct performance (SCP) industrial organization paradigm theory by Bain (1951) or efficiency theory which was established by Demsetz (1973).

In 1951, Bain expanded on Mason's concept by proposing structure-conduct performance (SCP), which explains why concentration and profitability have a positive connection and has since gained widespread acceptance. When it comes to strategy, it is thought that the structure of the market will dictate how businesses should act, and how businesses act will affect how well they do.

According to the (SCP) theory, market performance is determined by market behavior, which is influenced by market structure both directly and indirectly. In this model, the term structure refers to industry structure, which is determined by factors such as the number of competitors in a given industry, entry barriers, and demand price elasticity. In an industry, conduct refers to specific firm actions that can range from collusive to competitive. The S-C-P model defines performance in two ways: as the performance of individual firms and as the performance of the economy as a whole. Market performance is indicated by factors such as profitability, efficiency and market growth.

In terms of the connection between concentration and performance, according to the SCP theory, high seller concentration fosters collusive behavior among firms, and firms in highly concentrated markets should earn positive economic profits (Bain, 1951). according to SCP theory, exogenous market structure determines endogenous conduct through variables such as pricing policies, R&D, and marketing strategies, which in turn determine firm performance through

variables such as profitability, efficiency, product quality, and technical progress. This is because the structure has an impact on conduct, and both have an impact on performance.

As an alternative to the (SCP) theory, the efficient-structure hypothesis (ESH), developed by Demsetz (1973), asserts that the relationship between market concentration and profitability is spurious because the positive correlation between market concentration and profitability is due to the efficiency of the company rather than corporate collusion. The ability to charge lower prices than their competitors allow more efficient companies to get a bigger share of the market, which leads to more market concentration and, as a result, more economic profit.

A negative link between market concentration and profitability is predicted by the X-inefficiency hypothesis, developed by Harvey Eisenstein in 1966, which differs from the other hypotheses discussed so far. According to the X-efficiency theory, in a highly competitive market, firms are compelled to be as efficient as possible in order to ensure strong profits and survival. On the other hand, in monopolistic situations, firms are compelled to be as inefficient as possible in order to ensure strong profits and survival. In other words, in the scenario of imperfect competition, the firm will be unable to attain high growth efficiency at an acceptable cost (Stevens, 1983). The extent to which actual output falls short of the maximum output.

In contrast to theories that support a positive association between market concentration and profitability, as well as theories that suggest a negative relationship between market concentration and profitability. Brozen (1970; 1971) was one of the first to argue that there is no clear link between market structure and profitability. Brozen contends that the positive and statistically significant link shown by previous research is the product of a sample size that is far too small. Brazen believes that when the sample size of Bain's study is increased from 42 to 78 sectors, there is no link between seller concentration and profit margins.

As with the theoretical literature, empirical research on the link between market concentration and profitability has yielded conflicting results when compared to the theoretical literature. The bulk of the studies indicates that there is a negative impact. A smaller number of research, on the other hand, have demonstrated that market concentration has a positive influence on profitability. According to Bukowski and Lament (2021), in the Polish insurance market, they performed research between 2004 and 2019 to determine whether or not market concentration influenced the financial stability of Polish insurance businesses. Having a significant market share, as measured by gross written premium, has a positive influence on insurance businesses' return on equity. Njegomir and Stojić (2011) performed research in Eastern European nations to evaluate the influence of market concentration on insurance firm performance, and the study indicated that there is a minor but positive association between market concentration and profitability. On the other hand, Shim, (2017) found a negative effect between market concentration and financial stability of insurance companies in the United States in a study he conducted between 1992 and

2010. The findings revealed that higher market concentration is linked to insurance firms' financial stability. In addition, (Ajide and Ajileye, 2015; Ghosh and Maji, 2019): Mukhopadhyay and Chakraborty, 2017; Bolarinwa and Obembe, 2017) supported the negative relationship between market concentration and profitability.

## DATA AND METHODOLOGY

Regression analysis is applied to panel data in this study. The data for this study was derived from the income statements and balance sheets of insurance firms operating in the Jordanian and Saudi markets from 2009 to 2019, by incorporating 42 out of 54 insurance firms. Some firms were excluded from the study owing to a merger or withdrawal from the market during the study period, as well as a lack of annual reports for some. The major purpose of this study is to evaluate the relationship between market concentration and insurance industry performance. Therefore, the dependent variable was estimated using the ROE (return on equity) and ROA (return on assets) returns. In contrast, the independent variable was estimated using the following methods: (MS) market share of the insured, (HHI) measures the concentration, and (CR) concentration ratio of the largest companies in the market. Furthermore, inflation and sales growth were included as control variables.

## ESTIMATION TECHNIQUES

In this study the effect of the market Concentration on company performance was assessed via regression analysis, for empirical management research, multivariate regression analysis is a useful technique. Regression analysis is a whole collection of statistical methods and procedures which enable the relationship between the dependent variable and several independent variables to be explored (Hünernund and Louw 2020). Regression analysis employs a variety of statistical methods to model and investigates multiple variables involving the interaction of a reference factor (Y) and one or more independent variables (X1 X2 Xn). Multiple regression (with multiple predictor variables) allows us to control multiple independent variables that affect the dependent variables at the same time (Abadie, et al.2020). Multiple regressions are utilized in this study and can be shown as:

$$Y = \alpha + \beta_1 X + e$$

Where Y = measure of performance (ROE and ROA);  $\alpha$  = intercept / constant; X = independent variables;  $\beta_1$  = the Coefficients; e = Residual Error.

This study develops the following equations to assess the connection between market Concentration and performance.

### Model 1

$$ROE = \alpha + \beta_1 MS + \beta_2 Growth + \beta_3 GDP + \beta_4 iR + e$$

$$ROA = \alpha + \beta_1 MS + \beta_2 Growth + \beta_3 GDP + \beta_4 iR + e$$

### Model 2

$$ROE = \alpha + \beta_1 HHI + \beta_2 Growth + \beta_3 GDP + \beta_4 iR + e$$

$$ROA = \alpha + \beta_1 HHI + \beta_2 Growth + \beta_3 GDP + \beta_4 iR + e$$

**Model 3**

$$ROE = \alpha + \beta_1 CR + \beta_2 Growth + \beta_3 GDP + \beta_4 iR + e$$

$$ROA = \alpha + \beta_1 CR + \beta_2 Growth + \beta_3 GDP + \beta_4 iR + e$$

Where: (ROE) = Return on equity, (ROA) = Return on assets, (MS) = Market share of the insurer. (HHI) = Herfindahl- Hirschma Index, (CR) = The market's largest companies' concentration ratio. (iR) inflation rate, (growth) Sales growth, (GDP) Gross domestic product.

**STATIC PLATE DATA**

Within multiple regression, there are a variety of statistical techniques, one of which is static panel data. Static panel data was employed for this research because it enables the identification of influences that would be difficult to identify using exclusively cross-sectional or time-series data. Therefore, panel data consists of researchers' observations of a variety of events, collected over a number of time periods for the same set of units or entities (Lin and Sambasivan, 2019).

In the current study, the static panel data approach aids in controlling the heterogeneity of the insurance firm and reducing collinearity between the independent variables. According to Baltagi (2008), panel data analysis is an ideal method of financial modelling for such datasets, since it provides more consistent results and eliminates the chance of collinearity between the variables. Because some variable relationships cannot be detected using time-series or cross-sectional data, panel data analysis is the most efficient method.

There are three forms of static panel data: pooled-OLS models, fixed-effects models, and random-effects model. In attempt to discover the suitable model for this study, we ran various unique tests in the Stata software. First, we did perform a test named (Breusch and Pagan Lagrangian multiplier test (BP-LM) (BP-LM) To identify which model is most appropriate among the (OLS) model or (RE) model. The random effect will be better if the P-value looks to be less than 0.05, but the OLS will be better if the P-value appears to be more than 0.05. Second, we will compare the fixed effects (FE) and random effects (RE) models via (Hausman test) (Hausman test). If this value of P looked to be less than 0.05, the fixed effects model (FE) would be better, but the quantity of P would appear to be larger than 0.05 the (RE) it will be more appropriate.

**DIAGNOSTIC CHECKS**

Second, after obtaining an appropriate model, we should perform various diagnostic checks, including multicollinearity test, Serial correlation test, and heteroscedasticity.

**MULTICOLLINEARITY**

One of the primary challenges occurs in multiple regression model is that explanatory variables being evaluated for the multiple regression model are highly correlated among themselves. Multicollinearity can lead to distorted or misleading results and erroneous variances that affects confidence intervals and hypothesis testing. in other words, that is, the statistical inferences from a model with multicollinearity may not

be dependable Senaviratna & Cooray (2019). The problem of multicollinearity emerges when the vif is bigger than 10. The results of the table below demonstrate that vif is less than 10; this indicating that there is no multicollinearity.

**Table 1. Variation Inflation Factor (VIF) Test.**

Variable: for Jordanian insurance companies	VIF	1/VIF	Variable: for Saudi Arabia insurance companies	VIF	1/VIF
MS	2.09	0.478688	MS	2.31	0.432089
HHI	1.76	0.566969	HHI	2.02	0.494113
CR	1.68	0.595110	growth	1.51	0.660787
Growth	1.55	0.643866	CR	1.13	0.881774
GDP	1.21	0.826408	inflation	1.10	0.909146
Inflation	1.11	0.899975	GDP	1.04	0.958395
Mean VIF	1.33		Mean VIF	1.52	

**HETEROSKEDASTICITY**

Heteroscedasticity testing is a more rigorous approach, which evaluates if all variances in your data are same if they are not normally distributed. Breusch Pagan Test used to test for heteroskedasticity in a linear regression model and assumes that the error components are normally distributed. It evaluates whether the variance of the errors from a regression is dependent on the values of the independent variables.

**Table 2. Breusch-Pagan Test.**

Variable:		ROE	ROA
Variable: for Jordanian insurance companies	Prob>chi2	0.0029	0.0541
Variable: for Saudi Arabia insurance companies	Prob>chi2	0.0144	0.0311

If this P-value appears less than 0.05, reject the H0. This means that the variances are not constant (there is Heteroscedasticity problem)

H0: Heteroscedasticity (variances are constant)

H1: Heteroscedasticity (variances are not constant)

According to the above table reject the null since p-value <0.05 and conclude there is a heteroscedasticity problem for (ROA) model, and to rectify heteroscedasticity problem this study uses the option robust.

**SERIAL CORRELATION**

In statistics, the serial correlation can be used to characterize the relation between observations of the same variable over specific periods. Repeat trends also display serial association when a variable's level influences its potential level. The test results in serial correlation shown in Table (3) below that the p-value is higher than 0.05 that leading to accept H0. This means that there is no serial correlation problem

**Table 3. Estat bgodfrey Test.**

		ROE	ROA
Variable: for Jordanian insurance companies	Prob > F	0.1743	0.1855
Variable: for Saudi Arabia insurance companies	Prob > F	0.2281	0.2129

**DESCRIPTIVE STATISTICS**

Tables 1 and 2 show the descriptive statistics for the variables utilized in this study. The statistics show that the mean profits of Saudi insurance companies are higher compared to Jordanian insurance companies, Although the maximum (ROA) and (ROE) for Jordanian insurance companies is higher than for Saudi insurance companies. Statistics show that the standard deviation of (MS) is 0.218, (HHI) is 0.243, (CR) is 0.142 for Jordanian insurance companies, as it is higher than the standard deviation of Saudi insurance companies, and this indicates a higher concentration of some Jordanian insurance companies over the rest Insurance. Regarding the rate of inflation, it is considered equal in both countries, but it shows a significant difference in GDP, as it reached a minimum of 4291 in Saudi Arabia, compared to 1691 in Jordan, indicating the significant difference in the economies of both countries.

**Table 4. Descriptive Statistics for Jordanian Insurance Companies.**

Variable	Obs	Mean	Std. Dev	Min	Max	Skewness	Kurtosis
ROE	231	8.121782	7.606252	-3.993	26.5295	.6871689	2.408337
ROA	231	5.293843	4.505219	-4.9981	15.8995	.5885664	2.610844
MS	231	0.3279348	.2180392	.0161	.96	.5406347	2.519989
HHI	231	0.3613225	.2436691	.0714	.8714	.5555029	2.070681
CR	231	0.2731425	.1425472	.05025	.49491	.3010918	1.707228
growth	231	0.2914697	.1959549	.0081	.885	.6620487	2.489819
inflation	231	3.118182	1.904279	.3	5	-.4519638	1.350005
GDP	231	249558	47259.13	1691	3159	-.2398459	1.757617

**Table 5. Descriptive Statistics for Saudi Arabia Insurance Companies.**

Variable	Obs	Mean	Std. Dev	Min	Max	Skewness	Kurtosis
ROE	231	10.37971	4.941405	-1.542	20.939	-.1182188	3.11817
ROA	231	7.115991	3.983265	-3.216	13.997	-.1659289	2.540971
MS	231	.2439784	.0879225	.1	.39	-.5010035	1.731937
HHI	231	.2589351	.0889823	.116	.447	.5791602	1.833076
CR	231	.361	.1017048	.246	.504	.3142456	1.46691
Growth	231	2852944	.1178509	.101	.498	.0078621	1.774137
inflation	231	3.2	1.251712	1.7	5.5	.3754053	1.768245
GDP	231	6850.273	1172.817	4291	8564	-.7374696	2.920535

**EMPIRICAL MODEL AND PANEL DATA REGRESSION ANALYSIS**

This research employed a static panel data model to examine the influence of market concentration on performance. in order to choose the most appropriate model among (OLS), (FE) fixed effects model and (RE) random-effects mode, two tests were performed: Hausman test and (BP-LM) Breusch and Pagan Lagrangian Multiplier Test, Where the test results in Table No. 6, 7 indicate that the random effect model is the most appropriate for most models, but with regard to (ROA) for insurance companies in Saudi Arabia, the fixed effect model was chosen.

**Table 6. Hausman Test.**

	Variable	ROE	ROA
Jordanian insurance companies	P-value	0.7274	0.0452
Saudi Arabia insurance companies	P-value	0.7094	0.2886

**Table 7. (Bp-Lm) Breusch and Pagan Lagrangian Multiplier Test.**

	Variable	ROE	ROA
Jordanian insurance companies	P-value	0.0000	0.0000
Saudi Arabia insurance companies	P-value	0.0000	0.0000

**EMPIRICAL RESULTS**

This section presents the analysis of the relationship between the dependent variables, independent variables control variables.

The tables above show the regression results between (ROE) return on equity and (ROA) return on assets (as the depend-

ent variable), (MS) insurer market share, (HHI) Herfindahl-Hirschma Index, (CR) The market's largest companies' concentration ratio (as the independent variables), and sales growth, GDP, and (IR) inflation rate (as the control variables). The research's major results demonstrated that, with the exception of specifications 11 and 12, all market

**Table 8. Panel Regression Results of Six Empirical Models (Jordanian Insurance Companies).**

VARIABLES	(ROE)	(ROA)	(ROE)	(ROA)	(ROE)	(ROA)
	RE	RE	RE	RE	RE	RE
	(1)	(2)	(3)	(4)	(5)	(6)
MS	16.28***	8.860***				
	(0.000)	(0.000)				
HHI			-10.70***	8.860***		
			(0.000)	(0.000)		
CR					-18.14***	-13.13***
					(0.000)	(0.000)
Growth	7.164***	3.339*	9.513***	3.339*	8.175***	2.468*
	(0.000)	(0.004)	(0.000)	(0.000)	(0.000)	(0.038)
GDP	-0.0000249***	-0.00000446	-0.0000170*	-0.00000446	-0.00000888	0.00000684
	(0.000)	(0.564)	(0.016)	(0.968)	(0.210)	(0.384)
Inflation	0.310	0.286**	0.203	0.286**	0.123	0.156*
	(0.051)	(0.002)	(0.243)	(0.008)	(0.469)	(0.022)
Constant	5.950**	1.638	12.81***	1.638	12.52***	5.968**
	(0.006)	(0.343)	(0.000)	(0.014)	(0.000)	(0.003)
Observations	231	231	231	231	231	231
R-squared	0.4015	0.2918	0.2884	0.2272	0.3330	0.3360

t statistics in parentheses.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

**Table 9. Panel Regression Results of Six Empirical Models (Saudi Arabia Insurance Companies).**

VARIABLES	(ROE)	(ROA)	(ROE)	(ROA)	(ROE)	(ROA)
	RE	RE	RE	RE	RE	RE
	(7)	(8)	(9)	(10)	(11)	(12)
MS	21.85***	22.73***				
	(0.000)	(0.000)				
HHI			-20.94***	-19.41***		
			(0.000)	(0.000)		
CR					-0.817 *	-2.661*
					(0.030)	(0.046)
Growth	8.850***	7.578*	10.69***	10.25**	18.58***	17.01***

	(0.000)	(0.011)	(0.000)	(0.001)	(0.000)	(0.000)
GDP	0.0000426	0.0000493	-0.0000395	-0.0000277	0.0000186	-0.00000595
	(0.775)	(0.715)	(0.786)	(0.828)	(0.914)	(0.967)
Inflation	-0.182	-0.499**	-0.411**	-0.750***	-0.506**	-0.827**
	(0.213)	(0.003)	(0.003)	(0.000)	(0.002)	(0.001)
Constant	2.817*	0.666	14.34***	11.81***	6.866***	5.912*
	(0.035)	(0.580)	(0.000)	(0.000)	(0.000)	(0.026)
Observations	231	231	231	231	231	231
R-squared	0.5291	0.5404	0.5535	0.2272	0.3929	0.4041

t statistics in parentheses.  
 \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

concentration indices employed in this study (MS, HHI, and CR) are a statistically significant component of market profitability at the 1 percent significance level in all specifications. However, only the insurer's (MS) market share has a major favorable influence on insurance company profitability. This implies that when the insurer expands and gains a greater market share, its competitive edge develops, boosting profitability as a consequence of higher advertising and R&D spending, which leads to the creation of a new product with the potential to boost sales and overall revenue. These findings support the theoretical expectations of the structure-market power and efficiency hypotheses. This result backed with the results of (Kastratović et al, 2019; Njegomir et al., 2011, and Bukowski, 2021).

Although prior findings suggest that growing an insurance company's market share (MS) boosts profitability, the situation is different in other market concentration indices (HHI) and other industries (CR). While the Herfindahl- Hirschma Index and (CR) The market's largest companies' concentration ratio has a negative impact on (ROE) and (ROA), these two measures represent industry market concentration. A highly concentrated industry is one in which a few numbers of firms control a substantial portion of the market, resulting in a near-monopolistic scenario. This, in turn, explains this negative relationship. Therefore, the concentration of insurance policies in the hands of a few Jordanian and Saudi insurance companies leads to lower profitability for the rest of these companies due to excessive concentration. The high concentration rate in the insurance market indicates the lack of competition between companies in that industry, which negatively affects the profits of other insurance companies. In other words, only a few firms with high concentration dominate the market. As for the rest of the firms, due to high competition, the actual output of these firms is less than the maximum output (Blois, 1972). Thus, the result supports the X-inefficiency theory by Harvey Eisenstein's 1966. This finding confirmed the findings of (Mukhopadhyay and Chakraborty, 2017; Bolarinwa, and Obembe, 2017; and Shim,2017)

Regarding the control factors, Sales growth has a considerable positive relationship with (ROE) and (ROA). This result means that insurance companies with high growth and low financial requirements usually have better competitiveness

and thus achieve greater profits compared to other companies. As for the (GDP), the results indicate a negative relationship and is not statistically significant in most models. (GDP) reflects the country's overall economic situation, as a healthy economy improves the business environment and lowers entry barriers, as a result of increased competition, insurance companies' profitability suffers. As for the inflation rate, the results showed mixed results, as the impact of inflation was positive on the profitability of Jordanian insurance companies. On the other hand, the results showed that the inflation rate negatively affects the profitability of Saudi insurance companies.

**CONCLUSION**

In any economy, market competition is required for efficient resource allocation. It is usually desirable because it promotes innovation, efficiency, and better meeting the needs of consumers. Because competition is difficult to measure in practice, one method of analyzing it is to look at market concentration. Thus, the study adds to the empirical evidence that can be used to answer the question of the effect of market structure on performance, which is still debatable given that results vary from study to study. From the major findings of this study; the following conclusions are drawn, results showed that the coefficients of (HHI) Herfindahl-Hirschma Index, (CR) concentration ratio of the largest companies in the market is negative in the (ROA)and (ROE) equation while the coefficients of (MS) market share of the insurer is positive in the same equation. This means that the concentration of insurance policies in the hand of the few Jordanians and Saudi insurance industry brings about reduction in the profitability level in the industry. This result indicates that in an oligopolistic market with a few sellers, which indicates the concentration of the market through the implementation of pricing policies and marketing policies, which ultimately leads to the profitability of the company. On the other hand, the more firms there are in the industry "highly concentrated markets" the higher their competitiveness, the lower their market share and, consequently, their profitability. This means that the more insurance companies increase their market share, they will become more competitive and thus will increase their profits. On the other hand, the highly concentrated markets limit the company's ability to compete, and thus this will negatively affect the profitability of insur-

ance companies. Future research on this topic should include a larger time dimension sample, allowing for the investigation of a dynamic relationship between market concentration and profitability. Furthermore, future research should compare between markets that have strict antitrust laws and regulations, such as preventing excessive concentration in certain sectors and those that suffer from monopolistic markets, and how they affect the company's ability to compete.

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