

SYSTEMATIC AND UNSYSTEMATIC RISK: IMPACT TO THE STOCK RETURNS AND DIVIDENDS IN AMMAN STOCK EXCHANGE

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ABSTRACT

This study aimed to investigate the impact of systematic and unsystematic risk on the stock returns and dividends in Amman Stock Exchange during the period (2002-2018). To achieve the study goal, an annual data has been used for a sample consists 38 Jordanian industrial companies. The regression analysis revealed that both inflation and size has a negative statistical impact toward the stock returns in Jordanian Companies. It was found also that profitability has a positive statistical impact toward the stock returns and dividends in Jordanian Companies. The study recommended the investors to take into their considerations the annual reports of the company that they invest in; in order to keep continues follow-up its performance, and thus, make their own judgments and decisions.

Keywords: Systematic Risk, Unsystematic Risk, Stock Returns, Dividends

INTRODUCTION

The relationship between risk and returns has long interested economists. This relationship is recognized in different financial theories, specially: (a) the Capital Asset Pricing Model (CAPM) theory which developed by Sharpe (1964); Lintner (1965); Mossin (1966), and used to determine appropriate required rate of return of an asset in theoretical model, to make decisions about adding assets to a well-diversified portfolio. (b) Arbitrage Pricing Theory (APT) that developed by Ross (1976) and states that an asset's returns can be predicting using the linear relationship between the asset's expected return and a number of macroeconomic factors that affect the asset's risk.

On the other hand, the relationship between dividend distributions and stock returns has become one of the most studied topics by researchers since the theory of Modigliani & Miller (1959) use to determine the importance of dividend distributions and its impact on stock returns. This theory states that dividend distributions have no effect on market value of the stock market. While the theory of Gordon (1963) came with alternative ideas different from the theory of Modigliani & Miller (1959), to suggest that there is a relationship between dividends and stock prices. The issue of the current study focuses on the nature of the risks that can be faced by the company and surrounding them, which affected the stock returns of the company and then affect the decisions of distribute the dividends through the cash flow as a moderator variable. This study will investigate the impact of both systematic and unsystematic risk on the stock returns and dividends in Jordan.

Problem Statement

Like most financial markets in developing countries, the Amman Stock Exchange suffers from the lack of clarity related to the impact of systematic and unsystematic risk, on the dividend distribution and stock returns. Many studies investigated the risk- return relationship in Amman Stock Exchange, but these studies didn't take into consideration both type of risk (systematic and unsystematic) in the same time and ignore the effect of risk on the stock dividends. For example, Haddad & Shabeta (2010) studied the effect of systematic risk on stock

return and stock dividend in Amman Stock Exchange, but they didn't take into consideration the unsystematic risk. On the other hand, most of the studies interested in finding the impact of one type of systematic risk on the stock return, such as Almawed (2005) whom investigated the effect of the inflation on the stock price in Amman Stock Exchange.

In addition to that; the investors in different sectors find difficulties in determined the risk factors that affect their stock returns and dividends, which may lead to choose wrong investment decisions, so there is a need to determine the impact of systematic and unsystematic risk on the stock return and stock dividends in order to help investors in protecting their investments and how to choose the best investment in the suitable sector according to the trade-off between return and risk.

Stock Returns

Stock returns are one of the most complex and multifaceted accounting concepts that are closely related to profit, value and price standards (Ghasempour & Ghasempour, 2013). Stock return defined as an amount or percentage of profits earned from investment as well as incentive force or power behind every investment. It is also the primary motivation for every investor, and one of the main factors behind the movement of capital and its transfer from one region to another or from one country to another, where the capital is always directed towards the best profit (Alany, 2002).

Moreover, stock returns are defined as the change in the value of the Company's stock over a certain period of time. This is due to the change in stock prices in addition to the change in interest rates, which mean that the return on investment in common stock is realized over a certain period of time based on the current market value of the shareholders' stocks (Yousefi, et al, 2013).

Xu (2007) documents that stock returns could be predictable due to time-varying expected returns. According to Zhang (2006), the greater price drift, the greater information uncertainty will be, where, greater information uncertainty will lead to higher expected returns following good news and vice versa lower expected returns following bad news. Accordingly, it is very important to study the risk factors that affect the expectations of investors about future stock prices, and then affected their stock returns.

Dividends

Dividends are a source of shareholder's cash sources that reflect the current and future financial performance of the company. Through the value of dividends distributed, shareholders and investors can assess the market price and then make future investment decisions. The word dividend was derived from the Latin word "Dividendum" which implies something to be divided (Jacobv & Philip, 2016). It is means Allocation or distribution of profit to shareholders (Yiadom & Agyei, 2011).

According to Abdurahim (2008) dividend is the way of how the company distributes its realized profits, whether the company is holding and reinvesting them, or distributing them to shareholders. Accordingly, dividend policy represent as a crucial decision, where the company has to know the amount of money that it must paid to the investors and the amount that must allocated to reinvest (Livia, 2012).

Pamela (2010) see that the term dividend consider as a reward or an individual share of something that is distributed. While, Mukora (2014) from his point of view see that dividends are distribution of cash to shareholders in proportion to their equity holding. Dividends also defined as a way of a company in diverting its stock return to the shareholders, and they can be paid in the form of cash or additional shares (Hooi et al., 2015). A dividend policy refers to the strategy of action accepted by the company's managements every time there is a choice to be made (Aduda & Kimathi, 2011).

Monogbe (2015) illustrate that dividends decisions are not standardized, in another word, the distribution of dividends is depend on the type of company and industry, also it will not be same from year to year. And I advocate him because in decision of distribution dividends depend on many factors and the most important factor is financing factor, and here the company will decide choose it's finance source whether from debt (outside source) or from investors profit (inside source/ dividends).

Moreover, dividend policy refer to the management's practices in making profit distribution decisions, it is the volume of cash dividends or that portion of which is distributed to shareholders (Lease et al., 2000). So we can find that all the authors agree that dividend is the amount of money that given to the shareholders according to the company's policy in financing.

Systematic Risk

According to (Taylor, 2009) any definition of systematic risk must be based on three considerations. "The first is the risk of a large triggering event. The second is the risk of financial propagation of such an event through the financial sector by contagion or chain reaction. The third is the macroeconomic risk that the financial disruption will severely affect the whole economy". The general definition of systematic risk is the risk that cannot be diversified (Brealey & Meyers, 2000). Some authors define systematic risk as these risks usually occur when major events affecting the entire market, such as wars or some sudden external events, or a change in the political system, and there is no specific policy of protection. However, the investor should know in advance that there is a probability of facing such risk and affected his or her shares (Lutfe, 2006).

According to (Weber et al., 2016) Systemic risk refers to any type of risk that occurs to the financial system and leads it to failures due to the characteristics of the system itself. However, systematic risk cannot be diversified according to Moffett, et al., (2005) and is related to the risk of the market portfolio. From the researcher's point of view, systemic risks represent all external events that occur as a result of economic, natural or political changes and affect the business process of the company, while at the same time they are outside the control of the company.

In our study we concern about economic risk as one type of systematic risk. These are the risks related to the country's economic variables. The most important indicators of economic risk are: Gross Domestic Production, Inflation and interest rate. Allen & Carletti (2011) classified the systematic risk into six groups, namely:" (i) Common exposure to asset price bubbles, particularly real estate bubbles; (ii) Liquidity provision and mispricing of assets; (iii) Multiple equilibria and panics; (iv) Contagion; (v) Sovereign default; (vi) Currency mismatches in the banking system".

Unsystematic Risk

Mihai & Cristina (2015) define unsystematic risk as "that portion of complete risk, which is unique to a company (industry); frequently referred to as residual or specific risk, it relates to particular economic aspects, which influence individual industries, firms, securities and projects, for instance the quality of management or equipment failure".

The unsystematic risk is a risk that associated with the factors regarding the company or industry such as; management, capacity, consumer preferences and labor strikes, etc. these factors are largely independent of factors affecting the securities market (Karimnia & Malgharni, 2014). Unsystematic risk is also the company or industry specific risk, which can be arise from of strikes, or natural disaster hitting specific industries e.g. bad weather for example could be an industry specific risk for farmers, hence according to the CAPM theory, company specific risk is not included in the stock return and thus not rewarded (Korsgaard, 2009).

It is related to the specific factors of a particular company or sector and are independent from the factors affecting the overall economic activity. The company can avoid these risks by

diversifying investments in securities, which results in diversification of investment risks (Ramadan, 2002). Drew, et al., (2004) utilized from Fama and French method and investigated relationship between unsystematic risk and stock returns for listed companies in China's stock market in the period from 1995 to 2000. They calculate unsystematic risk by finding the difference between total risk and systematic risk.

Systematic Risk: Impact to the Stock Returns and Dividends

In a recent study for Rostami & Gandoman (2018), they investigated the relationship between systematic risk and expected return in Iran during the period 2010-2015 through using financial data for 105 companies listed in Tehran Stock Exchange. Their finding indicated a direct and significant impact for the systemic risk criteria on the previous returns of the companies. Furthermore, the results show direct and significant impact for the systematic risk criteria and the expected return of the companies.

In another related study Bibiana, et al., (2018) used the consumer price index and all share index on the Nigerian stock exchange as a proxy of inflation which represent one of the systematic risk factors in order to find the impact of inflation rate on stock returns during the period 1995 to 2014. The co-integration and causality analysis shows that there is significant negative relationship between stock returns and inflation rates in Nigeria, while Johansen co-integration test result found a long run relationship between stock market returns and inflation rates in Nigeria. Moreover, the results revealed that there is a significant negative impact for the inflation rates on stock market returns in Nigeria.

Sampagnaro & Megaravalli (2018) aimed in their paper to study the long-run and the short-run relationship between stock markets and macroeconomic variables of three ASIAN economies (India, China and Japan) during the period 2008 to 2016. To achieve the purpose of the study it was depend on monthly time series data, and applying the unit root test, the cointegration test, and Granger causality test. The findings indicated a positive and significant long-run effect for exchange rate on stock markets; on another side it was found that the inflation has a negative and insignificant long-run effect. In the case of the short run, it was found that there is no statistically significant relationship between macroeconomic variables and stock markets.

Rayappan & Chauque (2018) examined the impact of exchange rate and inflation on Malaysian stock market performance during the period 2007-2016. The macroeconomic variables that used in this study was exchange rate inflation rate, their monthly data had been collected and analyzed by using the OLS regression tests to show the short-run and long-run relationship between macroeconomic variables and the stock market performance in Malaysia. Findings in this study revealed that exchange rate and inflation have a negative impact on the stock market performance in Malaysia.

Gwahula (2018) conducted a study aiming to determine the factors that influence the development of Dar essalaam stock exchange market in Tanzania through using four indicators of microeconomic variables, and that were money supply exchange rate, inflation rate and interest rate. The results suggest negative relationship between interest rate and stock return, on the other hand, it was found statistically insignificant relationship between the inflation rate, exchange rate and money supply on the stock return of Dar essalaam stock exchange market.

Unsystematic Risk: Impact to the Stock Returns and Dividends

Using the time series analyses during the period 2006-2015, El Menshawy & Masry (2018) try to find the impact of unsystematic risk on stock returns in Egyptian Stock Exchange (ESE) as one of an Emerging Capital Markets. Their results indicated slightly higher volatility for small size stocks than the big size stocks. The results also found insignificant impact for unsystematic risk volatility on stock return in ESE. Ali, et al., (2018) researched on the relationship between financial risks (Credit Risk, Liquidity Risk) and stock returns for the listed

companies in Pakistan stock Exchange during the period 2010-2015. The results indicated a negative significant relationship between credit risk and stock return of company, while it was found a significant positive relationship between liquidity risk and stock return. Moreover, the results indicated a positive and significant relationship between the size of the company and stock return.

Mwaurah, et al., (2017) studied the impact of financial risk on stock returns in Nairobi Securities Exchange in Kenya during the period 2006 to 2015. The Individual regression reveals a statistical significant positive relationship between stock returns and the following financial variables: credit risk, liquidity risk and capital risk. On the other hand, the collective multiple GLS regression with bank size as a control variable show a negative significant influence for the financial variables with stock returns while bank size had a positive significant impact on stock returns.

Karimnia & Malgharni (2014) investigate the relationship between unsystematic and profit growth of companies listed in Tehran Stock Exchange in six sectors. They found that the non-systematic risk associated with a significant relationship with profit growth in the industries of cement and plaster, medicine, food, chemical, automobile and parts, and machinery and equipment in Tehran stock exchange during the period 1985-1989.

Salehi, et al., (2011) was carried to test empirically the impact of liquidity on the stock returns in companies listed in Tehran Stock Exchange through using monthly data for the years 2002 - 2009. The study results show that a negative correlation between liquidity and stock returns.

Kandel (2018) interested in studying the relationship between systematic risk and unsystematic risk of commercial banks of Nepal. He found that Nepalese banks have a high proportion of unsystematic risk, beside that; it was note that both systematic risk and unsystematic risk are associated with a positive correlation with stock returns. A study (2017) try to find the impact of Beta (systematic risk) and some financial variables (unsystematic risk) on the stock price of listed companies in Indonesia over the period 2011-2015. The pool regression results indicated a significant impact to both systematic risk and unsystematic risk on the stock price, where, it was found that all the unsystematic risk factor include net profit margin, price earnings ratio, price to book value and earning per share beside the systematic risk have a significant impact toward stock prices in both case; simultaneously and partially.

Similar study for Soltes, et al., (2015) conducted in EU countries. They found that both of systematic risk and unsystematic risk have influence toward stock returns, but this effect was higher with the unsystematic. Pimentel (2015) study the relationship between risk and return in Brazilian market using annual data for 212 listed companies over the period 1995-2013. He found a significant and negative relationship between total risk and return, in addition to that his results show that size and stock liquidity are not significant with total risk.

AL-Qudah & Laham (2013) investigated the impact of systematic risk and unsystematic risk in industrial sector of Amman stock exchange. Their results support the existing of significant relationship between unsystematic risk -expressed through financial leverage- and stock returns. While they didn't show any relationship between systematic risk expressed through beta- and stock returns.

RESEARCH METHODOLOGY

The paper depends on regression model as a methodology to achieve the goals. The data used in this paper consist of annual observations of the dependent and independent variables during the period (2002 - 2018).

Sample Size

For conducting this study, the sample size had been chosen and determined among the industrial companies listed in Amman Stock Exchange after meet the following criteria, and the company that doesn't match this had been omitted:

- To be registered and traded in Amman Stock Exchange during the period of the study.
- Availability of Companies stock price in the website of the stock exchange.

The final sample consists of 38 Jordanian industrial companies listed in Amman Stock Exchange. The collecting data were code into E-views software, where, the relationships among independent variables and dependent variables were statistically tested by using collinearity test, hausman test, random effects model and fixed effect model.

Mathematical Model

The following risk-return relationship empirical estimating models in panel data set for the period (2002-2018):

First Model: The combined relationship of systematic risk and unsystematic risk with return.

$$R_{it} = \alpha_0 + \alpha_1 \beta_m + \alpha_2 \text{GDP} + \alpha_3 \text{CPI} + \alpha_4 \text{SIZE} + \alpha_5 \text{Liq} + \alpha_6 \text{CR} + \alpha_7 \text{Pro} + \epsilon_{ie} \quad (1)$$

Second Model: The combined relationship of systematic risk and unsystematic risk with dividends.

$$\text{Div}_{it} = \alpha_0 + \alpha_1 \beta_m + \alpha_2 \text{GDP} + \alpha_3 \text{CPI} + \alpha_4 \text{SIZE} + \alpha_5 \text{Liq} + \alpha_6 \text{CR} + \alpha_7 \text{Pro} + \epsilon_{ie} \quad (2)$$

Where,

R_{it} : Stock return

Div_{it} : Dividends

β_m : Market beta

GDP: Gross domestic product

CPI: Consumer price index (inflation)

SIZE: Size of the company

Liq (liquidity risk): Total current assets/ total current liabilities.

CR (credit risk): Total debt/ total assets.

Pro (profitability): Net income/ total assets.

α_0 : Constant

$\alpha_{1,2,3,4,5,6,7}$: Coefficients of variables

ϵ_{ie} : Residual

Description Study Variables

This section will review minimum value, maximum value, the mean and standard deviation for the variables of the research. Tables below reflect a summary of the results of descriptive statistics for the variables of the study:

Table 1 SUMMARY RESULTS OF DESCRIPTIVE STATISTICS FOR JORDANIAN COMPANIES				
Variable	Mean	SD	Max	Min
RE	0.2578554	3.993145	16.78488	-7.11217
Div.	0.4047238	0.5450455	3.388231	0

Beta (β)	0.4065439	1.613787	5.404997	-6.37679
GDP	4.422588	2.35832	8.176	1.94
CPI	3.642765	3.314875	13.971	-0.877
SIZE	7.9007	1.9008	9.20726	1.1109
Liq.	2.733951	2.165805	11.92754	0.379461
CR	0.3144551	0.1954441	0.865362	0.005979
Pro	0.0317482	0.0855231	0.294162	-0.23039
CF	0.9431345	61.24907	894.366	-743.17

The table above presents summary statistics for the research variables. From table 1 we can make a number of observations. The mean gives the average value of the variables, while standard deviation shows the spread of the series away of the mean, the higher the value, the higher the deviation of the variables. However, maximum and minimum values provided indications of significant variations over the years of study.

Our results show that the mean of return was about (0.258), and the standard deviation approximately (3.99), this ratio has ranged between (-7.11) as minimum, and approximately (16.78) as maximum which means that returns are vary between Jordanian industrial Companies. The mean of dividend was about (0.40), and the standard deviation approximately (0.55), and this reflects lower variations. The value of dividend has ranged between (0) as minimum, and approximately (3.39) as maximum which reflects different policies in distributing dividends between Jordanian industrial Companies, where the value of (0) means that the company doesn't distribute dividends among its shareholders in some years.

With respect to Beta (β), it indicates the sensitivity of the returns fluctuations of securities in compare with fluctuations in market returns, the minimum and maximum value stood at (-6.377) and (5.405) respectively, indicating that systematic risk is vary between Jordanian industrial Companies. The mean of Beta (β) was about (0.41), and the standard deviation approximately (1.61).

The mean of GDP considered was (4.423) with a standard deviation of (2.358), and this indicates low variations in GDP. The ranged of GDP was between (1.94) as minimum, and (8.176) as maximum, so we can note that there is no negative results in GDP and this reflect good economy.

The minimum value of Inflation was (-0.877) and the maximum value was (13.97) while the mean was (3.643) with standard deviation of (3.315), the higher and the lower values reflect a very wide range of discrepancies between the sample and the entire market. As for the size the minimum was (1.1109) and the maximum was (9.20726), on the other hand the mean was (7.9007) but the standard deviation for it was (1.9008) which means that the size is various between Jordanian industrial Companies.

The liquidity results of the study sample Companies show variation between Jordanian industrial Companies regarding their preferences in keeping money, this clearly can be noted from the minimum and the maximum values which were about (0.379) and (11.928) respectively. While, the average of the liquidity was about (2.734) with standard deviation of (2.166).

Also, credit results of the study sample Companies show variation between Jordanian industrial Companies regarding their preferences in depend on external debt, this clearly can be noted from the minimum and the maximum values which stood at (0.00597) and (0.865) respectively. While, the average of the credit was about (0.314) with standard deviation of (0.195).

Companies included in this sample generate profits ranging between (-0.230) and (0.294) of their total assets, with an average value of about (0.032) and standard deviation approximately (0.086) which means that the level of the Jordanian industrial Companies profitability is vary, and this depend on the type of industry that the company belong to.

The mean of the cash flow for the research sample is (0.943) with standard deviation of (61.249) which means that cash flow varies considerably between industrial Companies in Jordan and this implies a high level of fluctuation in cash flow over the period. There seems to be evidence of huge variance between the maximum and minimum values showing from the great differences between them for the cash flow of Jordanian industrial Companies under consideration, where the minimum value was (-743.17) and the maximum value was (894.366).

Correlation Matrix

Correlation means the relationship between two variables. The correlation shows two things, first it shows the direction between two variables and secondly it shows the strength of associations between two variables (Anwaar, 2016). The below table 2 shows the values of correlation among the variable.

Variable	RE	Div.	Beta (β)	GDP	CPI	SIZE	Liq.	CR	Pro	CF
RE	1									
Div.	0.0397	1								
Beta (β)	0.0505	0.0736	1							
GDP	-0.003	0.0043	0.0302	1						
CPI	-0.119	-0.033	0.053	0.413	1					
SIZE	-0.065	0.0425	0.1205	-0.018	0.0039	1				
Liq.	-0.002	0.277	-0.016	0.023	-0.043	-0.016	1			
CR	-0.002	-0.349	0.0226	-0.099	0.0065	0.105	-0.605	1		
ROA	0.183	0.3332	0.0724	0.1499	-0.01	0.285	0.245	-0.403	1	
CF	0.0154	0.0113	-0.012	-0.034	0.009	0.048	0.007	-0.032	0.05	1

A general rule, if the correlation between two independent variables is between -0.70 and 0.70, there likely is not a problem using both of the independent variables. A more precise test is to use the variance inflation factor, it is usually written VIF (Issah & Ngmenipuo, 2015). The previous table shows us good results regarding the multicollinearity problem where this problem is not exist between the independent variables, this clearly from the values of correlation that range between (-0.605) to (0.413). A positive correlation between the stock return (RE) as a dependent variable and all of the following independent variables: Beta (β), profitability (ROA) and cash flow (CF), also it was also clear to us that there is a negative relationship between the dependent variable stock return (RE) and the following independent variables: GDP, CPI, SIZE, Liquidity (Liq.) and credit risk (CR). For the dividend (Div.) as a dependent variable it was associated with a positive correlation toward Beta (β), GDP, SIZE, Liquidity (Liq.) profitability (ROA) and cash flow (CF), meanwhile, it was associated with a negative correlation toward CPI and credit risk (CR).

Collinearity Test

To make sure that there is no collinearity problem between the variables of the study, we use collinearity test, and the table below illustrate the results of this test:

Variable	VIF
Beta (β)	1.02

GDP	1.23
CPI	1.19
SIZE	1.18
Liq.	1.59
CR	1.9
Pro	1.41
CF	2.1

From the table 3 above we note the (VIF) value was below the value (10), and this indicate that the data of the study doesn't has problem in collinearity.

REGRESSION RESULTS

The Impact of Systematic Risk and Unsystematic Risk on Stock Returns Stock

Breusch and Pagan Lagrangian multiplier test:

The Breusch and Pagan Lagrangian multiplier test for random effects was use in order to choice between the OLS results and Random Effect Model results, and then we used Hausman Test to choice between the Random Effect Model results and Fixed Effect Model results.

chi ²	Pro.
0	1

From the table 4 above we note that the probability value was (1), and this value isn't significant at (5%), which mean that the OLS results is more suitable than Random Effect Model results.

chi ²	Pro.
29.88	0.0001

From the table 5 above we note that the probability value was (0.0001), and this value is significant at (5%), which mean that the Fixed Effect Model result is more suitable than Random Effect Model result.

Regression Results Using Random Effect Model and OLS Model

Regression analysis shows that the effect of one variable to another variable. It shows that the variation of dependent variable has been explained by the variation of dependent variable. Panel regression consists of three major effects which are Common Effect, Fixed Effect and Random Effect (Anwaar, 2016).

Variable	Random Effect Model		OLS Model	
	P- value	Coefficient value	P- Value	Coefficient Value
Beta (β)	0.229	0.1229	0.23	0.1229

GDP	0.939	0.0061	0.939	0.0061
CPI	0.007***	-0.1458	0.007***	-0.1458
SIZE	0.000***	-0.4805	0.000***	-0.4805
Liq.	0.951	-0.0058	0.951	-0.0058
CR	0.029***	2.4916	0.03**	2.4916
ROA	0.000***	12.532	0.000***	12.532
R-Squared	0.087		0.0793	
Sig. for F statistic	0		0	
Significant at 1%***		Significant at 5%**		Significant at 10%*

From the table 6 above we can note that the results of Random Effect Model are similar to the results of OLS Model. These findings show that there is a significant association between the stock returns and the following independent variables: inflation (CPI), size, Credit Risk (CR) and profitability (ROA), where the p-value was significant at 1% and 5%. The coefficient values of inflation (CPI) and size were negative, which lead to the following hypotheses:

Inflation has a Negative Statistical Impact toward the Stock Returns in Jordanian Companies.

Size has a negative statistical impact toward the stock returns in Jordanian Companies.

While the coefficient value of credit risk (CR) and profitability (ROA) was positive, and this lead to the following hypotheses:

Credit risk has a positive statistical impact toward the stock returns in Jordanian Companies.

Profitability has a positive statistical impact toward the stock returns in Jordanian Companies.

On the other hand, we can note that there is no significant association between the stock returns and the following independent variables: Beta (β), GDP and liquidity, where the p-value was insignificant.

The higher the value of R-Squared, the higher the chances of a security moving in the same direction with the market index. A high value R-Squared indicates that the inherent total risk within industrial companies is aggressively affected by the systematic risk and vice versa. In contrast, if the R-Squared has a low value, it denotes that the security does not move along with the market index. In another words, a security with a low value of R-Squared does not act much like the market index (David et al., 2018)

The R-Squared value was about (8%), which means that the proportion that explained by the independent variables from the changes occurred in the dependent variable was (8%) and there are other factors the affect the dependent variable with percent of (92%).

The Impact of Systematic Risk and Unsystematic Risk on Dividends

chi²	Pro.
37.09	0

From the table 7 above we note that the probability value was (0.000), and this value is significant at (5%), which mean that the Random Effect Model results is more suitable than OLS results.

chi²	Pro.
17.95	0.0122

From the table 8 above we note that the probability value was (0.0122), and this value is significant at (5%), which mean that the Fixed Effect Model result is more suitable than Random Effect Model result.

Regression Results Using Fixed Effect Model

variable	P- value	Coefficient value
Beta (β)	0.158	0.1367409
GDP	0.397	-0.0586895
CPI	0.741	0.0148536
SIZE	0.456	0.3281204
Liq.	0.148	0.1878254
CR	0.216	-2.377898
ROA	0.000***	28.94381
R-Squared	0.4266	
Sig. for F statistic	0	
Significant at 1%***	Significant at 5%**	Significant at 10%*

From the table 9 above we can note that the results of Fixed Effect Model show that dividends is a significant association toward profitability (ROA) only, where the p-value was (0.000), and this value is significant at 1%.

The coefficient value of profitability (ROA) was positive, which lead to the following hypothesis:

Profitability has a positive statistical impact toward the dividends in Jordanian Companies:

The R-Squared value was about (43%), which means that the proportion that explained by the independent variables from the changes occurred in the dependent variable was (43%) and there are other factors the affect the dependent variable with percent of (57%).

THE RESULTS

1. Inflation has a negative statistical impact toward the stock returns in Jordanian Companies.
2. Size has a negative statistical impact toward the stock returns in Jordanian Companies.
3. Profitability has a positive statistical impact toward the stock returns in Jordanian Companies.
4. Profitability has a positive statistical impact toward the dividends in Jordanian Companies.

RECOMMENDATIONS

Based on the above findings, the researcher recommends the following recommendations:

1. Companies should manage and study the most critical risk indices that affect their return and dividend level, in order to protect themselves from any bad effect on their performance results.

- Investors should take into their considerations the annual reports of the company that they invest in; in order to keep continues follow-up its performance, and thus, make their own judgments and decisions.

Further Research

There are areas where future research might be useful:

- Apply this study on different Arabian region and show the different aspects.
- Apply this study by using different factors for systematic risk such as interest rate risk and foreign exchange risk.
- Apply this study on different important sectors such as the financial sector that include Banks and insurance Companies and try to find the differences between these financial institutions.
- Try to find the impact of covide 19 on the stock indices as type of new risk.

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