

The Impact of Economic Performance on the Return on Investment (ROI) in the Pharmaceutical Industry (A Case Study: Hikma Pharmaceutical Company for the Period 2011 to 2021)

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Abstract

This study aimed to identify the impact of economic performance on pharmaceutical companies' return on investment. The sample of the study included pharmaceutical companies in Jordan as Al-Hikma pharmaceutical Company was particularly chosen to be the sample of the study. Moreover, the study relied on some variables relevant to Al-Hikma pharmaceutical Company's economic performance, such as (total revenue, volume of export, and Net Profit). Furthermore, the results of the study showed that there was a statistically significance impact of total revenue and net profit on the Return on investment of Al-Hikma pharmaceutical Company at a significance level ($\alpha = 0.05$).and showed there was not a statistically significance impact of volume of export on the Return on investment of Al-Hikma pharmaceutical Company at a significance level ($\alpha = 0.05$). The study suggested a number of recommendations such as encouragement to invest in the company, as it achieves a good return on investment and is characterized by growth.

Keywords: return on investment, economic Performance, Al-Hikma pharmaceutical Company.

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1. Introduction

The pharmaceutical industry in the world in general and Jordan in particular is one of the most important sectors. This importance stems from the importance of this commodity to humans, especially with the emergence of modern diseases and epidemics that did not exist previously, as medicine is considered one of the necessary and indispensable commodities. Based on the data of the Jordan Chamber of Industry, the results showed The annual production volume of the pharmaceutical industries is estimated at one and a half billion dinars, which constitutes 8% of the total existing production of the Jordanian industrial sector. This industry also contributes 2% of the gross domestic product. We also shed light on what this industry in Jordan showed in terms of capacity and efficiency during the Corona crisis, as it provided the necessary goods for the Jordanian citizen and various sectors in light of government closures and the difficulty of importing during that period, and Hikma Pharmaceutical Company proved its efficiency, especially at the beginning of the Corona crisis, where a number of Scientific research that confirms the effectiveness of a particular drug in treating corona virus disease, and it was granted by the company to the Jordanian Ministry of Health to give it to those infected in Jordan to combat this virus.

From the foregoing, we shed light in this research on some of the criteria that affect the performance and investment of such manufacturing industries in Jordan.

2. Methodology

2.1 Research problem:

Recently, the results showed that some companies for the pharmaceutical industries did not achieve profits, as some of them exited from the competition and the market, and others were acquired from other competing companies. The researcher attributes this to the uncertainties of existing and prospective investors to invest their capital in such companies due to their fear of achieving low rates of return on these investments, and therefore the variables related to the return on investment must be known. The following main question emerges from the above:

- Does economic performance impact on return on investment?
- The following sub-questions emerge from the main question:
 - Does revenue impact the rate of return on investment?
 - Does the volume of exports impact the rate of return on investment?
 - Does net profit impact the rate of return on investment?

2.2 Research importance:

The importance of the research stems from the nature of the sector, which is the pharmaceutical industry sector, because of its importance to the national economy and the increasing need for such commodities with global

developments and development, where such commodities are subject to continuous development in their quality and specifications.

2.3 Research objectives:

The research aims to know the impact of economic performance on the return on investment, and also aims to study and analyze the economic performance of Hikma Pharmaceutical Company and its ability to manage its resources and costs, control the volume of its exports and achieve profitability, and the impact of that on the rate of return on its investment to know the extent of its ability and determine its performance for the period from 2011-2021.

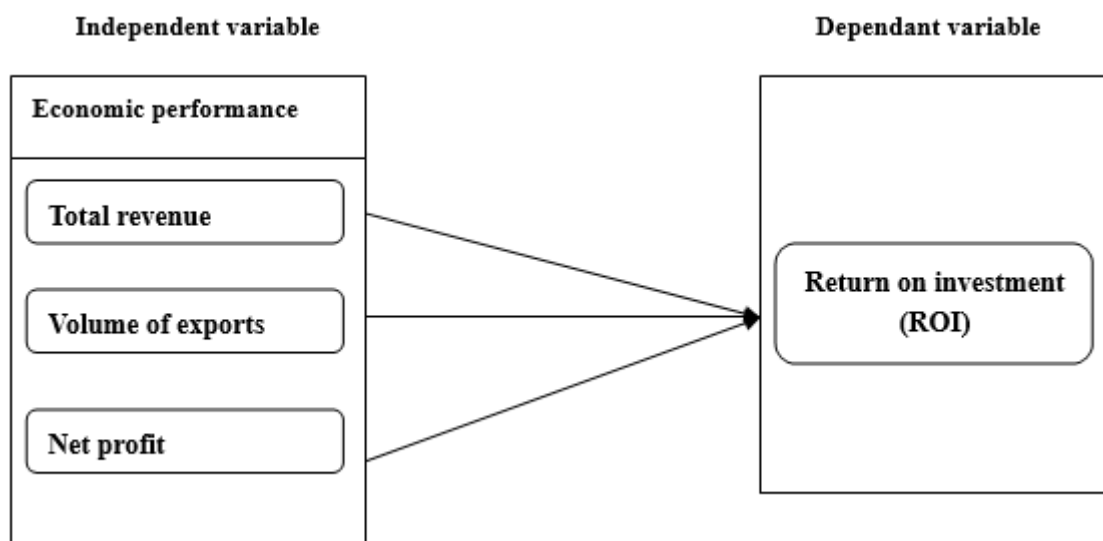
2.4 Research hypotheses:

The first hypothesis **H0**: There is no statistically significant impact at the level of significance ($\alpha \leq 0.05$) for total revenue on return on investment (ROI) in the Hikma pharmaceuticals company.

The second hypothesis **H01**: There is no statistically significant impact at the level of significance ($\alpha \leq 0.05$) for volume of export on return on investment (ROI) in the Hikma pharmaceuticals company.

The third hypothesis **H02**: There is no statistically significant impact at the level of significance ($\alpha \leq 0.05$) for net profit on return on investment (ROI) in the Hikma pharmaceuticals company.

2.5 Research model:



2.6 Theoretical & previous studies

First: the concept of revenue:

Accounting coach, retrieved, (2021) Revenue is the amount a company receives from selling goods and/or providing services to its customers and clients. A company's revenue, which is reported on the first line of its income statement, is often described as sales or service revenues. Hence, revenue is the amount earned from customers and clients before subtracting the company's expenses.

The importance of revenues to the researcher because revenues are what show the extent of profit achieved by companies from selling goods or services after paying all the expenses incurred on them, and therefore it is important to know the definition of revenues and expenses accurately in order to know the profit resulting from the sale of goods and services.

Second: the concept of exports:

Al-Hiyari, Iman, <https://mawdoo3.com> (2018) defines exports as the volume of goods and services produced in one country that are purchased by residents in another country, Management to take administrative decisions to achieve optimal performance of the balance between external sales and their volume and the impact of this on the profitability of the company.

Among the most important export benefits for companies are:

- 1- Reach more consumers and businesses. If you are only operating in the domestic market, you may reduce your total potential earnings and the chances of expanding your business globally and exporting.
- 2- Expanding the lifecycle of products, if your local market seems saturated with your goods and services, you can introduce them to new markets in other parts of the world.
- 3- Diversify market opportunities Even if the local economy is starting to falter, you may still have other

growing markets that can receive your goods and services globally.

But there are some things that must be considered when exporting from the complexities of the export process, for example, the large number of procedures and paperwork, potential financial risks, cultural and language barriers, and potential requirements that require modifying the method of packaging and possibly designing your products

Third: the concept of profit:

Aqel, Muflih (2004), defined profitability as a relationship between the realized profits and the investments that contributed to achieving those profits, and profitability is measured through the relationship between profits and sales, The researcher believes that high profitability can be achieved by making the right investment and financing decisions due to the resultant achievement of the desired profits, and from the above we conclude that profitability is an important tool for measuring the efficiency of the administration and its economic performance.

Among the most important factors that affect profitability are the following:

- 1- The amount of profit is mainly related to the amount of results and revenues resulting from sales or other commercial activities practiced by the establishment. With the increase in sales, for example, the profit can increase and it may also be subject to a decline with the decrease in sales.
- 2- The various costs and expenses have a similar effect on the profit, as the lack of expenses and expenses of all kinds help to increase the profit. While higher expenses and expenses contribute to reductions in the amount of profits.
- 3- The amount of available cash and working and fixed capital. The effect of increasing or decreasing profits. The availability of liquidity may lead to the possibility of taking advantage of available investment opportunities or obtaining some monetary and quantitative concessions, and this leads to increased profit or access to advanced machines and fixed assets.

Fourth: The concept of return on investment:

Aqel, Muflih (2004), defined the return on investment as the amount or percentage of the profits realized from the investment or the equivalent incentive for each investment made by the investor, and it expresses the ability of the assets to achieve income expressed as a percentage of return, and this ratio reveals the profitability of the company in its operational and non-operating operations, Or is the profit or loss resulting from the investment during a period of time.

As defined by **Abu-Ghazaleh Dictionary for Accounting and Business, (2010)** as a measure that expresses the ability of assets to achieve income expressed as a ratio, and this ratio reveals the company's profit in operational and non-operating operations, and thus it acts as a measure of the effectiveness and activity of management and extracts the return on investment by dividing the net profit by The average value of the total assets value.

From the above, we can summarize the rate of return on investment as an indicator of the efficiency of performance through the efficiency and effectiveness of investment funds to generate profits and an indicator that attracts investors to these investments because it shows the success of the investment, project or strategy.

2.7.The previous studies:

1-Aldahrawe, Mohammad, (2016): The impact of fluctuating global oil prices and the global financial crisis on the profitability of the Jordanian transport sector companies

The study aimed to test the effect of fluctuation in international prices on the profitability of the transportation sector companies in the Amman Stock Exchange. This is in addition to examining the impact of the global financial crisis on the profitability of public sector companies.

2-Alnabout,mojahid,(2019): The Effect of Working Capital Management Strategies on Profitability of Jordanian Food Companies Listed in the Amman Stock Exchange

This study aimed to know the impact of conservative, risk-taking and moderate working capital management strategies on corporate profitability, as measured by the rate of return on investment. Simple regression model was relied on to test the study's hypotheses, It was found that there is a set of results, the most important of which are: the presence of a negative impact and statistical significance for each of the conservative strategy and the risk-taking strategy in working capital management on the profitability of Jordanian food companies listed on the Amman Stock Exchange, moderate working capital management, which ensures the achievement of appropriate levels of working capital management in companies by reducing the volume of inventory in a manner commensurate with the volume of the company's activity and ensuring that its operations are not interrupted.

3-Hashmawi, Mohammad & Ali, Iazaldeen, (2020): Exports of industrial small and medium enterprises between reality and prospects

This research paper aims to study the reality of exports of small and medium industrial enterprises in light of the new industry strategy and the new growth model. Strategic for industrial and mining people. The study concluded that despite the efforts made, the exports of small and medium-sized industrial enterprises are still marginal, did not live up to the required level, and that there are horizons that must be worked on by exploiting

opportunities such as e-commerce and traditional industries and heading towards promising markets such as African and Arab markets.

4-Zaghzoug, Samar,(2018 :) The effect of manufacturing environment factors and activity-based costing system on performance

The study aimed to analyze and evaluate previous studies on the specific manufacturing environment variables for the selection and success of the application of ABC activity-based cost measurement systems, in addition to a case study to analyze the impact of the activity-based cost measurement system on performance in light of the manufacturing environment factors such as: cost structure - competition intensity - Multiple products - management support - information system, in one of the Egyptian companies working in the food industry and recently shifted from applying the traditional cost measurement system to a simplified activity-based costing system. The results concluded that the application of the activity-based cost measurement system led to an improvement in the decision-making process, such as pricing decisions, which in turn led to an improvement in the company's sales level, total profit and return on assets.

5-Manji, Mohammad & Mohammad Eman, (2021): The role of competencies in increasing the return on investment on human capital

The study aimed to present the theoretical and conceptual background about (leadership) job competencies and investment in human capital, and work to uncover the obstacles to using (leadership) job competencies when investing in human capital to try to formulate some solutions for them. The researcher used the descriptive analytical method to verify the objectives set for the study. Where this approach depends on a precise scientific description of the concepts contained in the study in order to determine their features and characteristics, namely: (leadership competencies, return on investment on human capital), and the extent of the impact of leadership competencies on the return on investment on human capital.

2.8What distinguishes the current study from previous studies?

The current study is distinguished from other previous studies in its dealing with the study variables and collecting them together, and it is distinguished by the sector covered by the study, as it represents a large volume of the national economy, the study is also distinguished by its re-certification, as the study will be completed in the current year 2022.

3.Method and Procedures

3.1 Study methodology

The study relied on Financial Data Analysis method relevant to the sample of the study, followed by the Analytic method to investigate the impact of economic performance on return on investment for Hikma pharmaceutical date.

3.2Study Sample

The sample of the study included all pharmaceutical companies in Jordan as the Jordanian Al-Hikma pharmaceutical Company was chosen particularly as the sample of the study since it has all data and financial reports needed for the study, and is one of the largest companies in pharmaceutical sector.

Information Gathering Sources and Data Relevant to Study Variables

To cover the theoretical side of the study, the researcher relied on secondary sources, such as books, periodicals, Internet and previous research papers relevant to the same issue, interviews with financial managers of Al-Hikma pharmaceutical Company, as well as annually financial data and reports revealed and published on the same company's website during 2011 -2021.

3.3 Statistical Analysis Methods

To test study hypotheses, statistical analysis methods available in the SPSS were used as follows:

1. T-Test: to validate homogeneity of study data.
- 2- Simple Regression Analysis: to test the impact of an independent variable on dependent variables.

4. Data Statistical Analysis and Hypothesis test

Before validating the study's main hypotheses, it is necessary to conduct some tests on study's data as follows:

1-T-Test

Table 1. Results of T values for testing homogeneity of data of study variables

No	Study Variables	T - value	df.	Sig.
1	Revenue	12.249	10	0.000
2	Export	22.798	10	0.000
3	Net profit	9.069	10	0.000
4	Return on investment	14.792	10	0.000

Table (1) shows homogeneity of data of study variables, represented by the total revenue, volume of export, net profit and return on investment. This could be proved by T-Test values of (12.249, 22.798, 9.069 and 14.792). All these values are less than the significance level ($\alpha = 0.05$). After validating homogeneity of data, the hypothesis relevant to measure the impact would be tested by using simple linear regression method as follows:

4.1 Results of Study Hypothesis Test

H0: There is no statistically significant impact at the level of significance ($\alpha \leq 0.05$) for total revenue on return on investment (ROI) in the Hikma pharmaceuticals company.

Table 2. Results of Simple Linear Regression for testing the First main-Hypothesis

Independent Variable	Coefficients (β)	T - value	Sig.	Standardized Coefficient (Beta)
Constant (β)	0.045	2.250	0.000	-
Total Revenue	0.062	8.042	0.000	0.937
Correlation Coefficient (r)	0.451	Determinant Coefficient (R2)=.361		
F-Value	64.672	Sig. of F =0.000		

Table (2) showed the following results:

- 1- Results showed validity of simple linear regression model. This could be proved by F value of (64.672), alongside statistical significance value of (0.000) which was less than ($\alpha = 0.05$). Thus, the null hypothesis (H0) was **rejected**. This means that there was statistically significant impact of Total revenue on the Hikma pharmaceutical Company return on investment.
- 2- Results showed validity of regression coefficient (β) total revenue. Also, there was a statistically significant impact, at the significance level ($\alpha = 0.05$), for the Total revenue on the Hikma pharmaceutical Company return on investment. This could be proved by T value which was less than the level of significance ($\alpha = 0.05$). Thus, the null hypothesis (H0) was also rejected.
- 3- Determinant coefficient (R2) value of (0.361) indicated that the total revenue, constituted 36.1% of changes in return on investment of the Hikma pharmaceutical Company.

H01: There is no statistically significant impact at the level of significance ($\alpha \leq 0.05$) for volume of export on return on investment (ROI) in the Hikma pharmaceuticals company.

Table 3. Results of Simple Linear Regression for testing the second main-Hypothesis

Independent Variable	Coefficients (β)	T - value	Sig.	Standardized Coefficient (Beta)
Constant (β)	0.386	4.565	0.001	-
Volume of export	-0.001	-2.196	0.056	-0.591
Correlation Coefficient (r)	0.451	Determinant Coefficient (R2)=.349		
F-Value	4.824	Sig. of F =0.056		

-Results showed validity of simple linear regression model. This could be proved by F value of (4.824), alongside statistical significance value of (0.056) which was more than ($\alpha = 0.05$). Thus, the null hypothesis (H01) was **accepted**. This means that there was not statistically significant impact of volume of export on the Hikma pharmaceutical Company return on investment.

H02: There is no statistically significant impact at the level of significance ($\alpha \leq 0.05$) for Net profit on return on investment (ROI) in the Hikma pharmaceuticals company.

Table 4. Results of Simple Linear Regression for testing the second main-Hypothesis

Independent Variable	Coefficients (β)	T - value	Sig.	Standardized Coefficient (Beta)
Constant (β)	0.090	4.862	0.001	-
Net profit	0.000	6.444	0.001	0.907
Correlation Coefficient (r)	0.451	Determinant Coefficient (R2)=.822		
F-Value	41.520	Sig. of F =0.001		

Table (4) showed the following results:

- 1- Results showed validity of simple linear regression model. This could be proved by F value of (41.520), alongside statistical significance value of (0.001) which was less than ($\alpha = 0.05$). Thus, the null hypothesis (H02) was rejected. This means that there was statistically significant impact of net profit of the Hikma pharmaceutical Company return on investment.
- 2- Results showed validity of regression coefficient (β) for the net profit. Also, there was a statistically significant impact, at the significance level ($\alpha = 0.05$), for the net profit on the Hikma pharmaceutical Company return on investment. This could be proved by T value which was less than the level of significance ($\alpha = 0.05$). Thus, the null hypothesis (H02) was also rejected.
- 3-Determinant coefficient (R2) value of (0.451) indicated that the net profit constituted 45.1% of changes in return on investment of the Hikma pharmaceutical Company.

5. Conclusion and recommendations

The study showed a number of results as follows:

There was a statistically significant impact, at the significance level ($\alpha = 0.05$), for the total revenue on Al-Hikma pharmaceutical Company return on investment, There was not a statistically significant impact, at the significance level ($\alpha = 0.05$), for the volume of export on Al-Hikma pharmaceutical Company return on investment and There was a statistically significant impact, at the significance level ($\alpha = 0.05$), for the net profit on Al-Hikma pharmaceutical Company return on investment.

In the light of the study results, the researcher came to a number of recommendations as follows:

- 1-The senior management of the company must set the financial policies that come with maximizing the volume of revenues to achieve the highest rate of return on investment, and analyze the future effects of that.
- 2-The study recommends the need to take the necessary measures by the senior management to focus more on the export side to take a larger space in the volume of the total revenues of the Al-Hikma Pharmaceutical Company operating in Jordan.
- 3-Based on the results of the study, the researcher recommends investing in the company, as it achieves a good return on investment and is characterized by growth throughout the study period.

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