# Impact of Investment and Financing Policies for Working Capital on Earning and Stocks Prices: An Applied Study in Iraq Stock Exchange<sup>1</sup>

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## ABSTRACT

The research aims to study the impact of Companies policies of financing and investment for working capital on stocks prices and earnings, for six companies are listed on the Iraq stock exchange across the industrial sector which they (Baghdad Packaging Company (IBPM), Baghdad Soft Drinks Company (IBSD), Electronic Industries Company (IELI), Iraqi Carpet and Furniture Company (IITC), Al-Mansour Pharmaceutical Industries (IMAP), Modern Chemical Industry Company (IMCI), these six companies represent the research sample, and the sector represent the research community, Data and information where obtained from annual reports, the study period was extend from (2010) to (2017), while the financial methods used were (net working capital, current financing ratio, current investment ratio, earning per share), and the statistic method where (compare means test, range), across other locations (SPSS V 25, Excel 2020), compare results and test hypothesis, as it was founded that policies of financing and investment are affects the price and earning of the stocks.

## INTRODUCTION

One of the important challenges that faces the financial managers are the changes that occur in stock markets, so usually they use different policies of financing and investment to make profits through this markets, and sometimes these different policies are effect on the value of stock or even the earnings that comes from holding it, in this research we will deal with the mechanism of price action and earnings using multiple financial methods to show the impact of these policies on these variables, as well as a test hypothesis.

## **RESEARCH METHODOLOGY**

We are present in our research serious of organize steps which research has taking for the purpose of studying these topics and reaching important results, that will have a part to solve problems of this research, methodology is the guideline which shows the research both through this study towards satisfying results.

- A. **Research problem:** the research problem will be short size in main question (is the policies of investing and financing impact on stock prices and earnings?).
- B. **Research importance:** there is search important appears in the determination of which policy could make the best performance.
- C. **Research hypothesis:** the investing and financing policies affect the stocks price and earnings of companies that sample of research.

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#### LITERATURE REVIEW

Working capital concept: The total working capital is referred to as the sum of the company's investments in current assets.

That is, owning assets that are converted into cash within a maximum period of one year, and these assets include cash, securities, accounts receivable, merchandise, and receivables represented by advance expenses and accrued revenues(Kim,1988:54). As current assets are characterized by the speed of movement as they pass through each trading cycle the state of cash, then goods, then debts, then cash, to start a new cycle after that, and so on (Bringham & Houston, 2005: 20).

## Therefore, the net working capital represents the current assets minus the current liabilities.

There are many definitions of net working capital in the financial literature, and it is often referred to as working capital, net working capital, or working capital. In the literature, the concept of working capital is often viewed in terms of net or gross (Kieschnick et al. ,2013:17).

Current assets are the most relevant areas that affect the level of working capital, as the entire process of managing current assets generally focuses on two components, inventory and amounts due from customers. Inventory is a current asset that generates high costs, by analyzing small and medium-sized companies in this field, many places can be found where unnecessary costs are incurred. Therefore, in order to create an ideal working capital management strategy, it is necessary to introduce different methods and inventory management tools derived from logistics services, which improve the level of inventory and management costs. (Nowak ,2010:182).

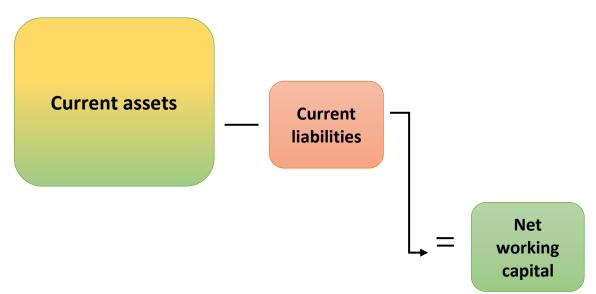
**Working capital level:** The level of working capital can be determined using the capital and property approach in two ways, the first method is referred to using equity as a starting point for the calculation and includes the fixed capital of the company (Kim & Srinivasan, 1988: 209):

## Net working capital = fixed capital - fixed assets......(1)

The second method is the probability approach because it starts from current assets:

# Net Working Capital = Current Assets - Short-Term Liabilities ......(2)

The value of working capital can also be collected using the short-term or long-term approach to the short run as it is called in the balance sheet. Working capital is the excess of current assets over current liabilities, as shown in Figure (1):



Figure(1): Net working capital based on balance sheet

Source: Zimon, Grzegorz (2021), Entry to working capital, Encylopedia 2021,1, 764-772, P:765.

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As for long-term assets, working capital is the surplus of fixed capital over fixed assets. Fixed capital is the sum of property rights and long-term liabilities, so the net working capital obtained on a long-term basis is shown in Figure (2):

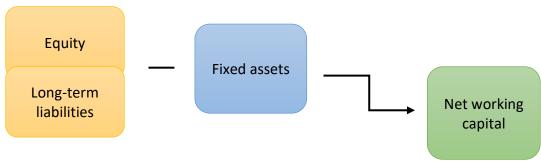


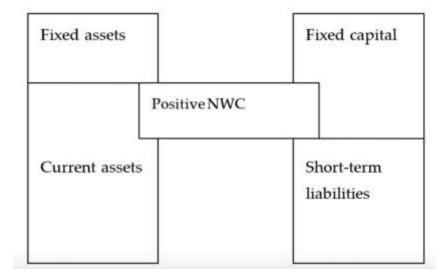
Figure (2): net working capital based on capital

Source: Nowak, E. Analiza Sprawozdan(2010)' Finansowych; PWE: Warszawa, Poland,p:75.

No matter how the calculations are made, the result should be the same. The net working capital can be:

- positive
- minus
- equals zero.

The net working capital is positive when current assets are higher than current liabilities, which are shown in detail in Figure (3):



Source: Zimon, Grzegorz (2021), Entry to working capital, Encylopedia 2021,1, 764-772, P:766.

Positive working capital means that the company's current assets are financed with short-term liabilities and fixed capital, the part of the fixed capital that finances the current assets is called positive working capital. Positive working capital also provides a liquidity reserve that provides safety in the event of a shortage of cash due to certain circumstances.

The importance of working capital in achieving the financial security of the company: The levels and size of the working capital allow determining the financial security of the company. If the working capital is at a low level, the short-term liabilities are at a high level in financing the current assets, which raises the company's risk. As the level of short-term liabilities decreases through the timely payment of obligations, so there must be a correct turnover of short-term debtors in days in order to dispose of short-term obligations, thus providing the company with quick liquidity. Therefore, the policy of trade credit management has a strong and direct influence on the level of net working capital. So the low level of working capital is also information about the financial management of the company and its ability to generate profits through its projects. Efficiency in managing more than one project can also lead to a

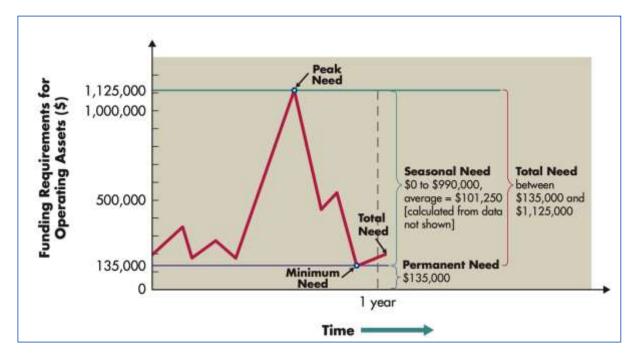
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decrease in working capital, but it entails risks, since a low level of working capital means a decrease in the company's financial liquidity (Bardfield,2007:38).

In the case when the working capital is at a high level, this means a large participation of shares in the financing of the current operation. If this is due to additional long-term loans, then there are additional financial costs, if the capital increases with equity, this must be a positive assessment if the institution has strong and healthy fundamentals for future operations as shown in Figure (4) short-term financial needs and the cash cycle Semper pump company on the importance of working capital on the market value of the company (Nowak, 2010: 111).



#### Figure (4): Total cash needs

Source: Gitman, Lawrence & Zutter, Chad J.(2015), "principles of managerial finance", 4<sup>th</sup> Edition, Pearson education limited, Edinburgh Gate, Harlow, England, p:660.

**working capital management strategies:** Positive working capital and its management essentially keeps the company in a good and healthy financial condition, and the literature often indicates that working capital directly affects the company's financial liquidity, profitability, market value and solvency, allowing for cost optimization and thus its role and impact on the company's financial position (Debski et al, 2005: 65).

There are also writers who claim that working capital decisions have a positive impact on the efficiency and effectiveness of corporate middle management.

Since working capital greatly affects the profitability, financial security of the company, operational efficiency and the cost optimization process of the company, it is necessary to categorize the optimal policy for the management of the company.

When analyzing working capital management strategies individually, the positive moderate level of working capital should be considered as the optimal business management, as it must be based on a solid and safe foundation, and therefore the rules of working capital management must be a conservative strategy. The main task of managers is to introduce the appropriate adjustment to each of the working capital cycle in order to improve the level of working capital in the company and to prevent the zero level and keep it positive (Almeida&Eid, 2014:65).

## DATA AND ANALYSES

A. Level of working capital: The first steps of data analysis for the research sample companies will be done by determining the level of working capital for each of the research sample companies during the study period as shown in the table (1).

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Year/ Company	IBPM	IBSD	IELI	IITC	IMAP	IMCI
2010	54,455,113	55,684,858,295	1,652,532,583	1,629,198,294	2,001,471,696	123,907,289
2011	300,918,014	66,812,955,204	31,175,800,048	1,793,877,411	2,503,916,357	4,609,495,958
2012	219,533,209	79,105,396,446	30,317,193,225	2,821,092,283	2,891,123,048	4,724,822,875
2013	672,781,506	89,373,161,813	23,914,972,029	1,898,375,419	6,214,700,797	4,844,294,852
2014	515,414,682	93,308,071,966	19,107,929,511	1,960,575,561	6,151,153,215	4,090,151,809
2015	352,833,895	107,643,351,311	15,470,052,950	1,899,280,643	6,330,978,580	3,790,703,597
2016	241,138,632	53,911,037,816	16,561,950,120	1,806,168,844	6,127,363,692	4,716,601,549
2017	227,722,530	79,872,846,821	16,030,576,468	2,015,162,271	5,147,011,269	4,669,302,118

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It is noted from the table (1) that the net working capital of the Baghdad Packaging Company reached its highest level in the year (2013) with approximately (672) million Iraqi dinars, while it reached its lowest level in the year (2010) at (54) million Iraqi dinars, which is attributed This led to a weakness in the company's assets. The highest level of the working capital of the Baghdad Soft Drinks Company reached in 2015 at 107 billion Iraqi dinars, and the lowest level in the year (2010) with 55 billion Iraqi dinars. Electronic industries had the highest net working capital in the year (2011) amounting to (31) billion Iraqi dinars, while the lowest net working capital of the company in (2010) amounted to nearly one and a half billion Iraqi dinars, and the Carpet and Furniture Company recorded the highest level of net working capital The year (2012) amounted to approximately (2.821) billion Iraqi dinars, and the lowest level was also in the year (2010) at (1.629) billion Iraqi dinars, and Al-Mansour Pharmaceutical Industries recorded a net working capital that reached its highest level in (2015), reaching (6,330) ) billion Iraqi dinars, while the lowest level in (2010) was (2,001) billion, while Al-Asriya Chemical Company recorded the highest levels of The working capital in the year (2013) was (4,844), and its lowest level in the year (2010) was (123) million Iraqi dinars, as we note from the controversy () that the year (2010) was characterized by a decrease in the level of net working capital for all sample companies The research is due to the start of commercial activity in that period after a break due to circumstances the country went through, as it was the year (2009), the beginnings of work for the Iraqi Stock Exchange.

B. Table (2) shows the earnings per share and stock prices of the research sample companies during the study period for the purpose of determining the impact of investment and financing policies on these two variables.

Year/ Company	IB	PM	IBS	SD	IE	LI	IIT	C	IM	AP	IM	CI
reary company	SP	EPS	SP	EPS	SP	EPS	SP	EPS	SP	EPS	SP	EPS
2010	8.200	0.090	1.100	0.055	2.370	-1.400	4.940	0.275	2.670	0.031	68.090	0.931
2011	9.600	0.013	1.520	0.030	3.080	-1.700	4.810	0.340	3.050	0.028	55.030	1.265
2012	4.200	0.011	1.290	0.130	1.620	-0.640	4.610	0.360	1.910	0.100	60.000	0.986
2013	2.720	0.038	2.340	0.160	1.350	-0.880	4.580	0.370	1.010	0.040	39.800	1.442
2014	1.700	0.004	2.570	0.148	1.745	-1.500	3.770	0.336	0.770	0.058	60.500	1.701
2015	1.690	0.002	2.160	0.201	1.180	-0.930	3.920	0.325	0.890	0.070	77.000	0.654
2016	1.590	0.005	2.560	0.252	0.970	-0.600	4.580	0.327	0.660	0.080	70.000	0.965
2017	1.780	0.010	2.410	0.210	0.560	-0.900	7.610	0.458	0.660	0.026	60.000	0.877
Average	3.935	0.022	1.994	0.148	1.609	-1.069	4.853	0.349	1.453	0.054	61.303	1.103

It was noted from the table (2) that the Baghdad Packaging Company reached the highest share price in the year (2011), at (9.6) dinars, and the lowest share price (2016), which amounted to (1.59), and the earnings per share during the study period amounted to (0.0216), The highest share price recorded by the Baghdad Soft Drinks Company amounted to (2.57) in the year (2014), the lowest price in the year (2010) at (1.1), and the earnings per share during the study period reached (0.148), and the Electronic Industries Company achieved the highest price Shares reached (3.8) in (2011), the lowest price in (2017), recorded profitability of (-1.06), and the highest share price of carpets was (7.61) in (2017), and the lowest price was (3.77) in (2014). The earnings per share were (0.348), and Al-Mansour Company recorded the highest share price in the year (2011) of (3.05), the lowest price of (0.66) in the year (2017), and earnings per share of (0.054), and the chemical company recorded the highest share price in the year (2015) amounted to (77) dinars, the lowest price was (39.8) in the year (2013), and the achieved profit amounted to (1,102).

C. Financing policies: Table () shows the financing policy of the research sample companies and during the study period for the purpose of determining the extent of the impact of these policies on the variables of the study, as the

green color was specified in the table (3) to show the conservative policy, while the yellow color was allocated to the moderate policy, and the red color to the risk financing policy.

Year/ Company	IBPM	IBSD	IELI	IITC	IMAP	IMCI
2010	11%	2%	90%	35%	8%	76%
2011	4%	2%	26%	40%	8%	20%
2012	1%	4%	26%	37%	24%	1%
2013	0%	7%	32%	42%	6%	1%
2014	2%	4%	35%	29%	11%	33%
2015	1%	5%	39%	29%	6%	47%
2016	4%	10%	35%	28%	8%	2%
2017	4%	5%	39%	33%	6%	2%

It is not noted from the table (3) that Baghdad Packaging adopted a conservative financing policy during the extended study period (2010-2017), as it was the highest percentage of short-term financing in the year (2010) at (11%) and the lowest percentage for the company in the year (2013). Baghdad Soft Drinks Company the same approach in the financing policy, as it continued with the policy conservatively, during the study period, as the highest percentage of the company was in the year (2016) at (10%) and the lowest percentage in the year (2010) at (2%), while the company The electronic industries had a varying basis of financing during the study period, as it was a risk in the year (2010) with a short-term financing rate of (90%), and in (2011) and (2012) it approached a conservative policy at (26%) and (26%) ) respectively, and then switched to a moderate policy for the remainder of the study period from (2013) to the end of the study period, and the Iraqi Company for Carpets and Furniture adopted a moderate policy for each of the years (2010, 2011, 2012, 2013, 2017), and a conservative policy in the years (2014). ,2015,2016), as the prevailing policy of Al-Mansour Pharmaceutical Company was the conservative financing policy during the study period, while Al-Asriya Chemical Company approached a risky policy in the year (2010) with a financing rate. It reached (76%), while it continued with a conservative policy for the remainder of the study period, except for the years (2014) and (2015), which used a moderate financing policy.

Investing policies: Table (4) shows the investment policies of the research sample companies during the study period, as the red color was assigned to the risk-taking investment policy, the yellow to the moderate policy, and the green to the conservative policy, for the purpose of classifying the investment policies of the companies and determining the extent of their impact on the share price and earnings per share of the research sample companies.

Company/ year	IBPM	IBSD	IELI	IITC	IMAP	IMCI
2010	28%	39%	95%	91%	70%	86%
2011	57%	46%	97%	97%	73%	97%
2012	41%	49%	97%	97%	80%	97%
2013	60%	54%	96%	10%	85%	96%
2014	48%	51%	96%	97%	86%	85%
2015	36%	52%	96%	97%	85%	85%
2016	27%	30%	96%	97%	83%	98%
2017	26%	30%	96%	97%	70%	98%

Table (4) shows that Baghdad Packaging Company pursued a risky policy throughout the study period, except for two years (2011) and (2013), in which its investment policy was moderate at (57%) and (60%), respectively, as well as the Baghdad Soft Drinks Company, which was The investment policy was a risk and took years. As for the Electronic Industries Company, it followed a moderate policy for the entire period of study, as well as the Iraqi Carpet and Furniture Company, which approached conservative politicians, except for the year (2013), in which the investment policy was a risk, with a short-term investment rate of (10%), or Al-Mansour Pharmaceutical Industries used a moderate investment policy for each of the years (2010, 2011, 2017), and the remaining years of the study period used a conservative policy, while the Chemical Industries Company pursued a conservative investment policy for the entire study period.

## **Hypothesis Test**

Branching from the basic hypothesis of the research which states (Are financing and investment policies affected by the price and earnings of the common stock) several hypotheses to measure the impact of each of the funding and investment policies on the price and earnings of the common stock, as will be explained in the following tables, as the effect is strong for (0.7) High, average (0.4 - 0.69) and weak effect (0.39) below using the (compare means test) method in hypothesis testing:

Measures of Association	Eta	Eta Squared		
Price * conservative	0.615	0.378		
EPS * conservative	0.188	0.035		
Measures of Association	Eta	Eta Squared		
Price * moderate	0.468	0.219		
EPS * moderate	0.731	0.535		
Measures of Association	Eta	Eta Squared		
Price * risky	0.31	0.096		
EPS * risky	0.06	0.004		

It is noted from Table (5) that the effect of conservative financing policy has a weak effect on the price and earnings per share of the research sample companies. And the effect of moderate financing policy has a weak effect on the share price and a medium effect on earnings per share. Earnings and price per share.

Table (6) also shows the effect of short-term investment policies on the price and earnings per share of the research sample companies.

Measures of Association	Eta	Eta Squared
Price * conservative	0.459	0.211
EPS * conservative	0.677	0.458
Measures of Association	Eta	Eta Squared
Pri * moderate	0.065	0.004
EPS * moderate	0.038	0.001
Measures of Association	Eta	Eta Squared
Price * risky	0.864	0.746
EPS * risky	0.901	0.811

It is noted from Table (6) that the moderate investment policy has a weak effect on the share price and a medium effect on the earnings per share, and the moderate investment policy has a weak impact on the stock price and profitability, and the risky investment policy has a strong impact on both the share price and earnings per share.

# RESULTS

The study concluded that the risk-taking investment policy has a strong impact on each of the two study variables represented by the share price and earnings per share for the research sample companies during the study period. The impact of the risk financing policy on the price and earnings per share of the research sample companies, but the effect was clear in the moderate policy compared to the rest of the financing policies

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## REFERENCES

- 1. Almeida, J.R.; Eid, W., Jr. Access to finance, working capital management and company value: Evidences from Brazilian companies listed on BM&FBOVESPA. J. Bus. Res. 2014, 67, 924–934.
- 2. Bardfield, James (2007), "Introduction to the Economics of Financial Markets", Oxford University Press, Inc., 198 Madison Ave., New York.
- 3. Bringham, E.F.; Houston, J.F. Podstawy Zarzadzania(2005), Finansami; PWE: Warszawa, Poland.
- 4. Debski, W. Teoretyczne i Praktyczne Aspekty Zarzadzania, Finansami Przedsi(2005), ebiorstw; Wydawnictwo Naukowe PWN: Warszawa, Poland.
- 5. Gitman, Lawrence & Zutter, Chad J.(2015), "principles of managerial finance", 4<sup>th</sup> Edition, Pearson education limited, Edinburgh Gate, Harlow, England.
- 6. Howells, Peter & Bain, Keith(2007), "Financial markets and institutions", 5<sup>th</sup> Edition, , Pearson Education, Inc. Publishing, new Jersey.
- 7. Kieschnick, R.; Laplante, M.; Moussawi, R(2013). Working Capital Management and Shareholders' Wealth. Rev. Financ, 17, 1827–1852.
- 8. Kim, Y.& Srinivasan, V(1988). Advances in Working Capital Management; JAI Press: Greenwich, CT, USA.
- 9. Nowak, E. Analiza Sprawozdan(2010)' Finansowych; PWE: Warszawa, Poland.
- 10. Wedzki, D(2003). Strategie Płynno'sci Finansowej; Oficyna Ekonomiczna: Kraków, Poland.
- 11. Zimon, Grzegorz (2021), Entry to working capital, Encylopedia 2021,1, 764-772.