



# **OPERATING AND INVESTMENT CASH FLOWS AND ITS RELATIONSHIP TO COMMON STOCKS RETURNS - AN APPLIED STUDY IN THE IRAQ STOCK EXCHANGE**

**Assistant Professor Dr. Abdullah Kadem Hassan**  
Al-Qadisiyah University - College of Administration and Economics  
Email: [abdulla.hassen@qu.edu.iq](mailto:abdulla.hassen@qu.edu.iq)

<b>Article history:</b>	<b>Abstract:</b>
<b>Received:</b> 8 <sup>th</sup> July 2023 <b>Accepted:</b> 6 <sup>th</sup> August 2023 <b>Published:</b> 6 <sup>th</sup> September 2023	The research aimed to identify the relationship of cash and investment flows in the returns of stocks in the Iraq Stock Exchange. The research problem was represented by the extent to which investors depend on the indicators shown in the list of flows and rely on them when investing. The research started from the hypothesis that there is a positive and significant relationship between the indicators of cash and investment flows in Stock returns, and for the purpose of verifying the validity of the hypothesis from which the research was launched, data on cash flows were collected from 6 industrial companies operating in the Iraq Stock Exchange.

**Keywords:** Operating cash flows, investment cash flows, stock returns.

## **INTRODUCTION:**

The list of cash flows is one of the important lists that helps its users to identify the financial conditions of companies, as it shows the monetary impact of all the activities carried out by the company during the financial period, with an indication of the nature of this effect as it constitutes a cash flow inside or outside the company, as this list shows strengths and weaknesses In terms of the company's ability to generate cash from the component that is used to pay off obligations and finance expansions. The fact that the Iraqi investment environment witnessed a significant decline due to the level of its performance due to the unstable economic and security conditions, and because these conditions affect the investor's decision in the investment process, he must make his investment decisions according to indicators that help the investor to invest and give a clear picture of the company's status and the fact that the list of flows gives A clear picture, this of course leaves an impact on stock returns as a result of information related to the financial statements, and this is what the research came to identify the relationship between those flows and stock returns and verify whether the returns respond to information related to cash flows.

## **RESEARCH METHODOLOGY**

### **Research problem:**

The problem of the research is that the process of investing in shares may be marred by many problems due to the lack of reliance on some indicators in the investment process, which give a clear picture of the performance of companies, and this is evident in the list of cash flows, which can be relied upon in the investment process due to the difficulties faced by investors in the market Iraq Securities In the investment process and how stock returns respond to financial information, we can ask the following question: (Is there a relationship between operational and investment cash flows in stock returns).

### **Research objective:**

The research aims to identify the extent to which stock prices respond to the data represented by the cash flow statement through the relationship between cash flows and stock returns.

### **Research importance:**

The importance of the research stems from the importance of the researched variables, as the good reliance on the indicators that can be provided by the cash flow list, which guarantees the safety of investment in stocks, as they are auxiliary tools for investment in giving a clear picture of the companies' performance.

### **Research hypothesis:**

The research stems from the hypothesis that (there is a significant correlation between indicators of cash and investment flows and stock returns)

### **Research variables:**

First: the independent variable

- Net cash flow from operating activities/equity
- Net cash flow from operating activities/total assets



- Net cash flow from investing/equity activities
- Net cash flow from operating activities/equity

Second: the dependent variable

- $\text{Earnings per share} = \frac{\text{share price at the end of the period} - \text{share price at the beginning of the period}}{\text{share price at the beginning of the period}}$

### Research community and sample:

The research community is represented by the listed companies, from which the industrial sector was selected, and a sample of 6 companies was taken from it, representing 15% of the total industrial sector companies.

### PREVIOUS STUDIES

1. **Sulayman's study (2014):** The study aimed to analyze the liquidity using the cash flow ratios compared to the traditional ratios for a sample of the Jordanian industrial companies.
2. **Ahmed's study (2020):** The study aimed to use the cash flow list to predict business failure from a sample of 66 companies listed on the Istanbul Stock Exchange out of a total of 33 companies. The study concluded that the cash flow measure is one of the strong indicators for predicting business failure.
3. **Kumar's study (2020):** The study aimed to measure the real cash flows based on the ratios based on the cash flow. The study relied on the data of the Indian company Tata. The study concluded that the cash flow ratios are an important measure to indicate financial soundness.
4. **Maxwell's Study (2010):** The study aimed to investigate the extent to which cash flow analysis can be used to determine competitiveness in the Ghanaian financial market. The study found that investors care about cash flow because it gives them a clear picture of what the company is and its actual activities.

### THE THEORETICAL SIDE OF THE RESEARCH

In this aspect, the focus will be on the theoretical aspects of the study variables of cash flows of all kinds and ordinary stock returns, as follows:

#### The concept of cash flows:

The concept of cash flow refers to the process by which the funds used are transferred to and from the company, as the positive cash flows represent the movement of funds into the interior, and the negative cash flows that represent the movement of funds outside the company (Nair, 2015:8) meaning that the flows refer to the continuous process which are carried out by the company and which are related to production operations (Adrian,26:26). (Breaver,1966:71) is the first to realize the importance of cash flows as an indicator that expresses financial distress, and four financial indicators of cash flow were included, and after that the pioneer in the field of cash flows Cash Brever came to study both.

(Mills & Yamamura, 2010:45) (Ginacomino & Mielkr, 1988:54) which deals with the study of cash flows. The cash flows are presented by the cash flows list, which is a source for obtaining cash flow data and is defined as a disclosure of the sources of funds and their uses through their cash flows For operational, investment and financing activities (Varshney & Jain, 2016:43).

#### Types of cash flows:

1. **Operating cash flows:** Operational activities or operating activities are activities related to converting inputs into outputs, and these activities result in cash flows within the company from its internal activities.
2. **Investing cash flows:** Cash flows from investing activities include all transactions and events involving the purchase and sale of securities, property, buildings, equipment and other assets that are generally held for resale and all loans that are classified as flows from investment activities. The analysis of investment activities includes identifying those accounts in the balance sheet. Generalities related to investment are usually long-term asset accounts (Alberecht et al. 2011-614).
3. **financing cash flows:** They are the items that include the provisions of obligations and property rights, which include obtaining capital from the owners and providing a return on their investments, as well as borrowing money from creditors and paying assumed money (Kieso.et al, 2013:40)) In this research, it will be limited to operational and investment cash flows as a result to provide data on it.

#### The concept of return on investment in ordinary shares:

It is the return that was actually gained or the return that the investor obtained from the investment, and it consists of two parts, which is the capital and revenue return (Besley & Birgham, 2008: 318). This concept of return differs



from other concepts. There is the required return, which is defined as the return that must be obtained at least to cover the cost of financing (Besley & Birgham, 2008: 450) or it is the return that motivates investors to buy certain assets, but in exchange for that, the investor is compensated for bearing risk and postpone its current consumption for the future, and if the required return is less than expected, the opposite will happen (Mayo, 2008:147). There is another concept of return, which is represented by the expected return, which is the return that is expected to be achieved from the investment, and this means the average value of the probabilistic distribution of the results (Elton & Gruber, 1996: 175). As for the concept of the return of the portfolio, it is the weighted average of the returns of the securities that make it up, (Omisore et al .2012: 23). It can be said that the total return is a measure of investment performance, and it is linked to the concept of return and investment risk, which is an inherent term for return and consists of systemic risk and unsystematic risk.

**THE APPLIED SIDE OF RESEARCH**

**First: the descriptive analysis of the cash and investment flows of the companies in the same research:**

**1. Analyzing operating cash flows:**

From the table below, it is clear that the highest average of the net cash flow index from operating activities to equity was for Co4, with an average of 0.06 with a standard deviation of 0.10, while the lowest average was achieved for Co2 with an arithmetic mean of -3.16 and a standard deviation of 10.10. Net cash flows from operating activities to total assets were for Co4 with an arithmetic mean of 0.42 and a standard deviation of 0.73, while the lowest average achieved for Co2 was -1.7 with a standard deviation of 5.663

Table (1) The arithmetic means and standard deviations of the operating cash flows of the companies sampled in the research

Companies	Mean and S.D.	Operating cash flows	
		V1	V2
Co.1	Mean	0.132	0.115
	S.D.	0.10	0.12
Co.2	Mean	-3.16	-1.7
	S.D.	10.10	5.663
Co.3	Mean	0.031	0.029
	S.D.	0.102	0.095
Co.4	Mean	0.60	0.42
	S.D.	0.910	0.73
Co.5	Mean	0.202	0.140
	S.D.	1.41	4.412
Co.6	Mean	-0.32	0.012
	S.D.	0.720	0.443

**2. Analysis of investment cash flows:**

From the table below, it is clear that the average achievement of the index of investment cash flows to equity was for the co2 company, as the average for the company was 1.463 with a standard deviation of 3.74. The assets, the highest average was achieved at the company Co2, as the average was 1.70 with a standard deviation of 4.423, while the lowest average was achieved at the company -0.080 with a standard deviation of 0.363.

Table (2) the arithmetic means and standard deviations of investment cash flows for the sample companies of the study

Companies	Mean and S.D.	Investing cash flows	
		V1	V2
Co.1	Mean	-0.10	-0.080
	S.D.	0.390	0.363
Co.2	Mean	1.463	1.70
	S.D.	3.74	4.423
Co.3	Mean	-0.035	-0.033
	S.D.	0.133	0.122
Co.4	Mean	0.80	0.670
	S.D.	1.610	1.413
Co.5	Mean	0.240	0.18
	S.D.	0.63	0.48



Co.6	Mean	0.160	- 0.030
	S.D.	0.654	0.660

**Second: Analysis of the market value of shares, return and risk for the same research companies**

From the table below, it is clear that the highest market value was achieved at Co6, with an average of 6.787. The lowest market value was achieved at Co4, with an average of 0.562. With regard to the return, the highest average return was achieved at Co2, with an average of 2.03, while the lowest average was achieved at Co5, 0.016. As for the highest risk, it was achieved at Co30.342, while the lowest risk was achieved at Co2, as the average was 0.005.

Table (3) the market value of shares, return and risk for the companies in the same research

Companies	Market value	The company's average earnings per share	Total risk of the company
Co.1	2.642	0.55	0.124
Co.2	0.856	2.03	0.005
Co.3	0.742	0.104	0.342
Co.4	0.562	0.30	0.024
Co.5	4.446	0.016	0.032
Co.6	6.787	0.061	0.317

**PRACTICAL SIDE**

The results of the correlation between indicators of operating and investment cash flows and ordinary stock returns:

**First: The relationship between the net operating cash flow index to equity and ordinary stock returns:**

The table below shows the correlation between the net cash flow index to equity and ordinary stock returns. From it, it is clear that the relationship between the two variables is direct and strong, as the correlation coefficient reached 69%, as this relationship reveals the explanatory power of 48% for the aforementioned index of change in stock returns. It is a significant relationship because The P-Value is less than the 5% level of significance.

Table (4) the result of the relationship between the net cash flow index to equity and ordinary stock returns

P-Value	sig	BETA	R <sup>2</sup>	R
0.04	0.04	-0.058	0.48	0.69

**Second: The relationship between the net operating cash flow index to total assets and stock returns regular:**

The table below shows the correlation between the net cash flow index to total assets and ordinary stock returns, and from it it is clear that the relationship between the two variables is direct and strong, as the correlation coefficient reached 75%, as this relationship reveals the explanatory power of the indicator mentioned in stock returns, as the explanatory power reached 57%, which is a significant relationship Because the P-value is less than the 5% level of significance.

Table (5) The relationship between the net operating cash flow index to total assets and ordinary stock returns

P-Value	sig	BETA	R <sup>2</sup>	R
0.02	1.02	0.06	0.57	0.75

**Third: The relationship between the net investment cash flow index to property rights and ordinary stock returns:**

The table below shows the correlation between the net investment cash flow index to equity and ordinary stock returns. From it, it is clear that the relationship between the two variables is direct and strong, as the correlation coefficient reached 72%, as this relationship reveals the explanatory power of 52% for the aforementioned index of change in stock returns. It is a significant relationship Because the P-Value is less than the 5% level of significance.

Table (6) The relationship between the net investment cash flow index to equity and ordinary stock returns

P-Value	sig	BETA	R <sup>2</sup>	R
0.03	0.04	-0.08	0.51	0.72

**Fourth: The relationship between the net investment cash flow index to property rights and ordinary stock returns:**

The table below shows the correlation between the net investment cash flow index to total assets and ordinary stock returns. From it, it is clear that the relationship between the two variables is direct and strong, as the correlation



coefficient reached 99%, as this relationship reveals the explanatory power of 98% of the mentioned indicator of the change in stock returns. It is a significant relationship Because the P-value is less than the 5% level of significance.

Table (7) The relationship between the net investment cash flow index to equity and ordinary stock returns

P-Value	sig	BETA	R2	R
3.75	2.46	2.86	0.98	0.99

Through the above statistical tests, the hypothesis on which the research was based was confirmed that there is a relationship between cash flows and ordinary stock returns.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **First: Conclusions:**

1. The variance of the operating and investment cash flows of the companies in the same research, some of which achieved positive and negative results, in addition to the difference in the standard deviation values.
2. The market value of the companies varied, as some of them had a high market value and others had a low one.
3. Variation in the average return that investors get from investing in stocks.
4. The convergence of most companies in terms of the risk incurred by them, i.e. the total risk.
5. There was a response by investors to the information contained in the financial statements and their relationship to the investment process, since the flows give an image of the company's status.

### **Second: Recommendations:**

1. Pay attention to the statement of cash flows, as it provides information for investors to rely on in the investment process.
2. Investors should consider and benefit from cash flow statement information when investing.
3. Companies must pay attention when disclosing financial statements and presenting accurate data to the market.
4. The research recommends conducting other research with a larger sample in order to give great attention to the relationship between cash flows and the response of stock returns to it.

## **REFERENCES:**

1. Adrian , Taran Morosan" A critical study regarding the elaboration of the cash flow statement using the direct method in romania", Journal: Annals of Constantin Brancusi University of Targu Jiu, Economy Series ISSN,2013.
2. Ahmed OZCAN , " The use of cash flow statement in predicting business failure: evidence from an emerging market, Yonetim Bilimleri Dergisi / Journal of Administrative Sciences Cilt/Volume 18, Say1/No: 36 , 2020.
3. Ayoub, Maysam & Jammoul, Weam & Mekdessi , Selim, "International Accounting Standard 7 — Statement of Cash flows —Compared to the Lebanese General Accounting Plan", IOSR Journal of Business and Management , Volume 19, Issue 6, 2017.
4. Beaver, W.H., . Financial ratios as predictors of failure. Journal of accounting research, pp.71-111, 1966.
5. Bestey, scott & Brighan, Engene F. ,(2008) "Essentials of Management Finance" 14ff ed Thomson-south western.
6. Elton, Edwin & Gruder, Martin , (1995) "Modern Portfolio theorv & thinvestment anal 5 ed john Wiley &sons, INC, 1995
7. Giacomino, D.E. & Mielke, D.E.. Using the statement of Cash flows to analyze corporate performance. Management of Accounting, May: 54-57,2005.
8. Gitman, lawence j " Pringles of Managerial finance " 12th ed pearaon prentice hall, 2009.
9. Kieso , and other , " Accounting principles courier - Kendallville " united stated America , 2013..
10. Kieso , Danald E & Jerry J . Weygandt , & , Terry D. Warfield " Intermediate Accounting " , 14 th , John Wiley & Sons Inc , U.S.A 2012 ..
11. MAXWELL SAMUEL AMUZU, " CASH FLOW RATIO AS A MEASURE OF PERFORMANCE OF LISTED COMPANIES IN EMERGINE ECONOMIES THE GHANA EXAMPLE, A dissertation submitted in fulfilment of requirement for the, Degree of Doctor of philosophy, st. Clements University, Turks and Caicos Islands , March 2010.
12. Mayo, Herbert " Investment: an introduction" 9<sup>th</sup> ed Thomson-south western.
13. Mills, J.Re & Yamamura, J.H.. The power of cash flow ratios. Journal of Accountancy, 186(4):53-60., 2010.
14. Nair, Shalini, "Cash flow Defining the construction industry", M.Sc. Thesis, Office of Graduate and Professional Studies of Texas A&M University, 2015 .



**World Economics & Finance Bulletin (WEFB)**

**Available Online at:** <https://www.scholarexpress.net>

Vol. 26, September, 2023

**ISSN: 2749-3628,**

15. Sulayman H. Atieh\_2\_ liquidity Analysis Using Cash Flow Ratios as Compared to Traditional, master thesis Accounting Department, College of Finance & business, The World Islamic Science & Education University, Amman, Jordan, April 1, 2014.
16. Varshney, Nidhi & Jain, Manjula, "cash flow statement of bank of baroda and syndicate bank: a comparative analysis of operating, investing and financing activities", voice of Research , Vol. 5 Issue 2, ISSN 2277-7733, September ,2016.