



## مجلة البحوث المحاسبية

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# THE USE OF FINANCIAL STATEMENTS' INFORMATION AND OTHER INFORMATION IN INVESTORS' DECISIONS

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#### Abstract

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This paper aims to study the ability of financial statements information and other information to predict stock returns, especially in times of uncertainty. This study uses the company size (measured in total assets), the debt ratio (leverage), Operating Cash Flow (OCF), Earnings Per Share, (EPS), and net profit as measures that reflect financial statements' information. On the other hand, nonfinancial statements' information (i.e., other information) is proxied by dollar component that reflects the firms' involvement in international trading activities or not. The study uses data from 86 firms registered in the Egyptian Stock Exchange from all non-financial institutions. The study covers the financial statements and stock return information from March 2021 to March 2022. The results revealed that company size and dollar components (non-financial statement information) have a significant and positive relationship with stock return. On the other side, the other financial statement's information revealed nonsignificant relation with stock return.

يهدف هذا البحث إلى دراسة مدى قدرة المعلومات المستخرجة من القوائم المالية والمعلومات الأخرى على التنبؤ بالعائد على الأسهم، خاصة في أوقات عدم التأكد. تستخدم هذه الدراسة حجم الشركة (يقاس بإجمالي الأصول)، ونسبة الدين (الرافعة المالية)، والتدفقات النقدية التشغيلية، والأرباح لكل سهم (EPS)، وصافي الربح كمقاييس تعكس معلومات القوائم المالية. من ناحية أخرى، يتم الاستدلال على المعلومات الأخرى بواسطة المكون الدولاري الذي يعكس مشاركة الشركات في أنشطة التجارة الدولية من عدمها. تستخدم الدراسة بيانات ٨٦ شركة مسجلة بالبورصة المصرية من جميع المؤسسات غير المالية. تغطي الدراسة البيانات المالية ومعلومات عائد الأسهم من مارس ٢٠٢١ إلى مارس ٢٠٢٢. وكشفت النتائج أن حجم الشركة ومكونات الدولار (المعلومات غير المالية، تغطي الدراسة البيانات المالية ومكونات الدولار (المعلومات غير المالية) لها علاقة مهمة وإيجابية بعائد الأسهم. من ناحية أخرى، كشفت الدراسة عن عدم وجود علاقة ذات دلالة إحصائية بين معلومات القوائم المالية وعائد السهم.

#### العدد الاول مارس ۲۰۲۳ 1. Introduction

Investors' decision to invest or not in a specific company, depends mainly on the expectation of stock return. Stock return is defined as the difference between the current price of the stock and its price in a prior point of time divided by the stock price in the prior point of time (Daniswara and Daryanto, 2019). Stock return gives investors an indication about the future growth of the company. As the price of the stock refers to information related to the profitability of the organization (Mizik and Jacobson, 2013). According to Statement of Financial Accounting Concepts (SFACs) No.1, "financial reporting is intended to provide information useful in making decisions".

By "value relevance", I mean the ability of financial statements information to guide the investors decisions through its reflection and on the changes in stock prices. Initiated by the seminal work of Ball and Brown (1968), the value relevance literature is growing extensively with a special focus on developed countries (Badu and Appiah, 2018). These studies examined the value relevance of various financial statements' information such as earnings, book value, operating cash flow, common financial ratios, and firm size (Cohen et al., 2002; Wang et al., 2013; Cupic et al., 2022).

It is claimed that investors and potential users of financial information for business and economic decisions will need other non-financial information to fully inform their decisions (FASB, 1978 SC No.1, P. 22-1).

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However, very few studies were concerned with examining the relevance of the "other information" that are available to investors but not disclosed in the financial statements. Researchers claimed that the future earnings of organizations are influenced with the availability of other information (Beaver et al., 1980; Shan et al., 2014). Other information investigated in previous literature was that information available in the financial analysts' forecasts.

The motivation of this research is to extend the literature of value relevance in one of the most important emerging economies, Egypt. The importance of the paper is derived from the timing in which the value relevance of information, whether the financial statements information or the other information, is tested. This period is characterized with high levels of uncertainty in terms of the changes in the value of the currency. Also, the economy is just getting out of an international economic crisis due to Covid-19 closure. The world is facing a lot of political and economic challenges due to the war of Russia and Ukraine. So, although Egypt is achieving a high level of economic growth despite these circumstances, the investors are always uncertain about the time in which the currency will be floated again and devalued. So, this special timing is motivating to study the value relevance of the financial statements' information as well as the other information and how they affect the investors' decision making.

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The remaining of the paper is structured as follows; the following section will focus on investigating the previous studies conducted in the value relevance field. This section will also contain the hypothesis development. Section 3 will focus on the research method used, the sample and the model. Section 4 will present the statistical results of running the SPSS on the data used, both descriptive and regression results will be presented. This section will be followed with the discussion section. Finally, the paper will be concluded in section 6 with presentation of recommendations for future studies.

## 2. Literature Review

Value relevance research aimed to evaluate the usefulness of accounting information to investors' decisions (Barth et al., 2001). This usefulness was translated through testing the association of the accounting information presented in the financial statements with the stock prices or the changes in the stock prices (stock return) (Holthausen and Watts, 2001). Consequently, two regression models were developed; the return model in which dependent variable is the stock return (Easton and Harris, 1991) and the price model in which the dependent variable of the model is the stock price (Ohlson, 1995).

Prior research about value relevance have been classified into various categories depending on the criteria based on which the classification is made (e.g., Martinez, 1999; Holthausen and Watts, 2001). Martinez (1999) classified the research studying the relevance and usefulness of

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financial statements information into two categories depending on the independent variables used to reflect the accounting information tested. The first category of studies is the one that study the return-earnings relationship. The second one is that examine the return-fundamentals (the group of accounting ratios that measure the firms' return on invested capital, return on assets, return on equity, growth, activity, and financial structure ratios) relationship (e.g., Wang et al., 2018).

On the other hand, Holthausen and Watts (2001) classified previous value relevance research into; (1) relative association studies, (2) incremental association studies, and (3) marginal information content studies. Relative association studies focus on comparing the strength of the association between stock prices or return and the various financial statements' numbers (e.g., Ebaid, 2012, Cupic et al., 2022). In such type of studies, the association between each financial statement number with stock price or return is tested separately. The financial statements' number is considered more relevant if it has higher R<sup>2</sup> compared to the other numbers. Incremental association studies investigate the relevance of accounting numbers by testing its ability to explain the changes in stock prices or return. In these studies, the accounting number is value relevant if its regression coefficient is significant (e.g., El Shamy and Kayed, 2005). Marginal information content studies use event studies over a short period of time to investigate whether a specific accounting information adds value to the investors and make a difference in their decision.

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While the majority of value relevance studies focused on the relevance of accounting or financial statements numbers to explain the changes in stock prices or return, accounting numbers are not the only factors influencing the change in stock prices. Macro or country-level factors and other micro or firm-level factors can also motivate the changes in stock prices. At the country-level factors include foreign trade policy, financial and monetary policy, industrial policy, market supervision, and other macro-economic factors (Wang et al., 2013). On the other hand, the firm-level factors include the investors' expectations about the performance of the company as well as the other information available to investors (Wang et al., 2013; Shan et al., 2014).

Other information has been claimed to influence the future earnings of the organizations while it is not reflected in the current numbers of earnings presented in financial statements (Beaver et al., 1980). Previous researchers presented different forms of other information. Shan et al. (2014: 1347) used other information to refer to "information contained in analysts' earnings forecasts about a firm's fundamentals beyond that reflected in current financial statements". While Beaver et al., (1980) presented other information as information regarding future capital expenditure, expected strike, or the discovery of oil. Shan et al. (2014) added some factors (such as changes to interest rate, dividend pay-out, earning growth, and accounting methods used to derive earnings) to the factors that can be considered as other information included in the valuation model. Also, Martinez (1999) study for the (PRINT) :ISSN 2682-3446 8 (ONLINE): ISSN 2682-4817

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French market found that the inclusion of the inflation indicator and a state-of- the economy variables (non-financial statement information) to the regression model increased the explanatory power of the independent variables to the return.

Another classification for value relevance studies depends on the country in which the study was conducted. While majority of the studies were conducted in developed countries, an increasing number of studies are investigating the emerging economies as well (e.g., Shamy and Kayed, 2005; Ragab and Omran, 2006; Maratani et al., 2009; Ebaid, 2012; Badu and Appiah, 2018; Cupic et al., 2022). However, the previous research about the association of earnings and cash flow with stock prices in emerging economies provided mixed findings. Cupic et al., (2022) argued that it is difficult to generalize the findings of one study on all emerging economies. A specific reason for this is the impact of the non-financial information and factors that affect each of these economies such as the impact of the macroeconomic environment.

This study focuses on studying the association between the stock return and financial statements' information as well as other information. The study focuses on a short time span (one year) during which the Egyptian Stock Exchange market faces uncertainty about the movement of the value of Egyptian pound (i.e., currency floating decision). So, the other information referred to in this study indicated the involvement of the organization in foreign activities (importing or exporting activities) or (PRINT) :ISSN 2682-3446 9 (ONLINE): ISSN 2682-4817

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not. As the currency floating decision is expected to influence the performance of companies that has foreign currency transactions, the study aims to investigate whether the stock return of such companies complies with the expected effect of currency floating on their financial performance or not.

#### 2.1 Hypothesis Development

2.1.1 Value Relevance of Financial Statements' Information

Stock return is used to determine whether the current stock price has any gains or losses in comparison with the earlier price (Daniswara and Daryanto, 2019). The information provided to investors through the stock return guide their decisions to invest or not in a specific stock. So, investors tend to predict the return of stocks to make their decisions (Nugraho, 2020). Financial information provided to investors through the financial statements has a huge effect on the ability of investors to make informed decisions. The Financial Accounting Standard Board (FASB) defined the relevance of the financial statements information as their ability to make a difference in the decisions of the users of financial information. Additionally, it is claimed that financial information is relevant when it has a predictive ability.

In his seminal work about efficient capital markets, Fama (1970) described efficient markets as the one in which stock prices of a specific firm "fully reflect" the available information about this firm. So, it can be claimed that financial information is relevant when it can be reflected

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in the stock prices or stock return or provide a predictive indication about the direction of the stock prices and stock return.

The research in the value relevance of financial information is rich since the seminal work of Ball and Brown in 1968 (for example, Cohen et al., 2002; Francis et al., 2003; Wang et al., 2013, Cupic et al., 2022). A great deal of previous research focused on studying the relation between earnings and return (for example, Badu and Appiah, 2018; Cupic et al., 2022) However, another stream of the research focused on examining the relevance of some financial ratios (for example, Martinez, 1999; Maratani et al., 2009) The findings were not similar along the literature. While the majority of value relevance literature were conducted in developed countries, a recent growth in the number of studies in emerging economies is noted. However, the mixed findings in the emerging economies as well motivates the continuity of such types of studies in different countries.

#### Value relevance of Earnings

Nichols and Wahlen (2004) explained the theoretical foundation of the linkage between accounting earnings and stock return on which the previous value relevance studies were found. This relation is understood first by understanding the nature of each concept. While earning is the accounting measure of the firm's "bottom-line" performance, stock return is the market measure of the firm's "bottom-line" performance. The link is developed using current earnings information to predict the firm's future earnings. Then, future earnings (PRINT): ISSN 2682-3446 11 (ONLINE): ISSN 2682-4817

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are consequently used to provide expectations about the future dividends. Finally, the present value of the future dividend is considered as the share value. Based on this sequence, the whole value relevance

literature was developed since the work of Ball and Brown in 1968.

Since then, the results of previous literature examining the value relevance of earnings have concluded almost similar findings. Literature showed a significant relationship between earnings and stock return. This finding was true in USA market where Francis et al. (2003) conducted their study across 16 different industries. In Europe, the earnings were also significant and have positive relation with stock return (Taran et al., 2021). With a movement to developing countries, the results did not change despite the different economic conditions. In Serbia, Cupic et al. (2022) found that earnings have a positive and significant relation with stock prices during the two subperiods studied. However, the capital market stabilization through the changes in regulation lead to larger adjusted R square which means higher value relevance of earnings. In China, Chen et al. (2001) found that earnings are value relevant in the Shanghai and Shenzhen Stock Exchange.

Studies conducted in Egypt provided results that are consistent with other literature findings. Ebaid (2012) found that among the various accrual accounting performance measures, Net income has the highest explanatory power and hence value relevance. The value relevance of NI is higher than other income figures found in the income statement,

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such as EBITDA, operating income, income before tax, and income before extraordinary items (Ebaid, 2012). Ragab and Omran (2006) found that earnings, as reflected in Earnings Per Share (EPS), have a significant and positive relation with stock return. However, opposite to the findings of previous literature, the change in EPS did not show any significant relation with stock return (Ragab and Omran, 2006). So, given the findings of the previous literature, the following hypothesis can be stated:

H1: There is significant relationship between earnings and stock return

## Value Relevance of Operating Cash Flow

While earnings are the accrual accounting numbers that provide summary about firm's performance (Dechow, 1994), cash flow statement is claimed to provide investors with information that help them evaluating the organizations' ability to generate cash (IASB, 2007). Information gained by investors about the cash flow from operations (OCF) give them an indication about the efficiency of the organizations' operations and their ability "to generate sufficient cash flow to repay loans, maintain the operating capability of the entity, pay dividends and make new investments without recourse to external sources of financing" (IASB,2007, IAS 7, Paragraph 13). Previous literature emphasized that operating cash flow contains information that is different from that included in earnings figures (Livant and Zarwin, 1990). So, the effect of operating cash flow figures on investors decisions may be different from that resulted from the earnings figures. (PRINT) :ISSN 2682-3446 13 (ONLINE): ISSN 2682-4817

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So, despite the importance of OCF, previous studies argued that cash flow is a 'noisy' measure of firm performance due to the timing and matching problems (Dechow, 1994). This state of uncertainty about the usefulness of information provided to investors through numbers of cash flow created the need to test its value relevance for stock return, either separately or compared with the value relevance of earnings (Livant and Zarwin, 1990; Dechow, 1994; Ball et al., 2016; Ball and Nikolaev, 2022). Dechow (1994) found that, on the short term, accrual earnings are more strongly associated with stock return than cash flow from operations. Ball et al. (2016) found that the cash flow profitability numbers are significantly related to the stock return. They found that cash flow outperforms the accrual numbers of earnings in explaining stock return of firms. In Egypt, Ebaid (2012) found that OCF is value relevant to stock return. However, earnings are statistically higher in their value relevance than operating cash flow. So, although previous literature mainly found that accrual-based earnings are more value relevant than operating cash flow, they did not negate the value relevance of OCF. So, the hypothesis can be formulated as follows:

H2: Operating Cash flow has a significant relation with stock return

## Value Relevance of Financial Leverage

In addition to the claims about the relevance of earnings and cash flow, Dimitrov and Jain (2008) argued that financial leverage can be a value relevant piece of information provided by financial statements. They argued that financial leverage includes information that reflect the (PRINT) :ISSN 2682-3446 14 (ONLINE): ISSN 2682-4817

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economic performance of the organization. The rare discussion about the use of financial leverage to reflect on the economic performance make it worth further investigation (Dimitrov and Jain, 2008). They found that financial leverage is value relevant and negatively associated with stock return. Similarly, Bradshaw et al. (2006) found a significant negative relation between financial leverage and stock return. This finding is also supported with Penman et al. (2007) who found that financial leverage is negatively correlated with stock return. On the other hand, financial leverage was proved to have a positive and significant relation to the stock return in Pakistan (Din, 2016). So, the hypothesis can be stated as follows:

H3: Financial Leverage has a significant relation with stock return

## Value Relevance of Firm Size

Firm size has been measured using different ways. For example, Fama and French (1992) measured the size with the market equity which is the stock price times the number of outstanding shares. Some studies used the total assets to measure the firm size (Johnson and Soenen, 2003; Maratani, 2009; Intariani and Suryantini, 2020). Other studies may use the number of employees; however, market equity and total assets are the highly used in the value relevance studies. The results of previous studies agreed on the significance of the firm size in its relationship with stock return. However, the direction of the relationship was not an agreed upon finding among the previous studies. Fama and French (1992, 1995) found that firm size is negatively related (PRINT) :ISSN 2682-3446 15 (ONLINE): ISSN 2682-4817

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to the stock return. This means that small size firms tend to have higher stock return than large size firms. On the other hand, Johnson and Soenen (2003) concluded that large size firms outperform small size firms in their stock return performance. This positive relationship between size and stock return was also confirmed by studies conducted in Indonesia and Pakistan that reflect a type of emerging economies (Maratani, 2009; Din, 2016; Intariani and Suryantini, 2020). Egypt is considered as an emerging economy, so this study will follow the findings from Indonesia and Pakistan. So, the hypothesis can be stated as follows:

H4: Firm size has a significant and positive relation with stock return

## 2.1.2 Value Relevance of Other Information

While the value relevance of financial statements' information was the focus of a growing number of previous studies, testing the relevance of other information is still to some extent scarce. Other information is a broad concept that encompasses all the information that can be available to investors and not directly mentioned in the financial statements. Other information was used in previous literature to refer to the information included in the analysts' forecasts for future earnings (Hope and Kang, 2005; Shan et al., 2014), and earnings announcement (Thomas, 2000). Hope and Kang (2005) found that the inclusion of the other information in the regression model of testing the value relevance of earnings information has improved the explanatory power of the

model (cf. Bondar and Weintrop, 1997). Also, Shan et al. (2014) found

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that other information significantly affects the stock return volatility. More types of non-financial statements' information can also affect the stock return. The decisions of individual investors, to buy, sell or keep a specific firm's stock, are usually influenced by the changes in exchange rates. Exchange rate is defined as "the changing level of the price of one nation's currency when compared with another nation's currency" (Parlak and Ilhan, 2016). Changes in exchange rate influence the financial performance of domestic (local) companies involved in importing and exporting activities as well as multinational companies (Hyde, 2007). Investors are interested to gain information about the estimated effect of exchange rate changes on the firms' performance (Pritamani et al., 2004). However, financial information included in financial statements does not provide a clear reflection of the effect of exchange rate changes (O'Brien, 1997).

Previous studies claimed that the effect of changes in exchange rate varies among organizations depending on their level of involvement in importing and exporting activities (Chakraborty et al., 2015). From an economic point of view, the fluctuations that lead to the depreciation of the currency makes the exports cheaper and more attractive for other countries. Consequently, it increases the demand for exports. This increase in the level of exports is expected to be reflected at the level of sales and consequently the profitability of the exporting firms. On the other hand, the depreciation of the currency will increase the cost of

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imports and consequently decrease the profitability of import-oriented firms.

As long as the currency fluctuation can affect the profitability of importing and exporting firms, it can be argued that it will affect the stock return (Chakraborty et al., 2015). However, this claim was not always supported by empirical evidence. According to Pritmani et al. (2004), some studies recorded insignificant relationship between the exchange rate and the stock prices of exporting and importing companies. Bartov (1997) examined the value relevance of the information related to the translation of foreign currency adjustments as shown in the financial statements. The results showed that there is a significant positive association between the adjustments and the stock return for the company that uses non-dollar currencies as their functional currency (Bartov, 1997).

So, the higher tendency of companies to trade internationally leads to increasing the willingness to understand how firms' exposure to foreign exchange movement affect the forecasting of companies' earnings (Yusoff et al., 2023). Consequently, this study uses "Dollar Component" as a proxy that reflects the involvement of companies in international trade or not. Moreover, this study is conducted during a period in which there is a high uncertainty level in terms of the fluctuation of currency prices. Additionally, early in March 2022, the Egyptian government made the decision of floating the currency. The decision that leads to a depreciation in the price of the Egyptian pound compared to US Dollar. Economically, this depreciation of the currency will influence the performance of companies involved in international trade activities. The extent to which the stock exchange market can reflect this change in the stock prices and return can be tested through studying the relevance of the dollar component to the stock return.

H5: There is a significant relationship between Dollar Component "other information" and the stock return.

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## 3. Research Methods

## 3.1 Sample Selection

The sample used in this research includes all companies listed in Egyptian Stock Exchange in the period between March 2021 and March 2022 (the time span covered in the study). The financial service institutions were excluded from the study because of their special nature in reporting and to ensure the homogeneity of the sample (Ebaid, 2012 and Robu et al., 2014). Also, companies in the Travel, Tourism and Leisure sector were excluded. The exclusion of these companies was based on the possibility that their negative net profit during the period from 2021 and 2022 is mainly influenced by Covid-19 consequences on the field. Tourism and Leisure sector in Egypt was one of the highly negatively affected sectors during Covid-19 (Sayed et al., 2022). The short period covered in this study might lead to bias in the results shown from this sector. As most of the companies incurred huge losses during 2021. While in 2022 some of the companies started to achieve a huge increase in the revenues generated. This disparity of accounting numbers might disturb the results of the model due to the inclusion of tourism and leisure sector. While these companies are highly involved in dollar generating and spending activities and they are highly influenced with the dollar risk exposure. The effect of changes in currency cannot be separated from the effect of Covid-19 as it was a highly negatively affected sector during the closure policies in times of Covid- 19. Additional companies were excluded due to missing values. The following table shows the selection of the sample companies. After excluding the companies, the final sample is 86 companies represent almost all the other non-financial sectors represented in EGX.

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			No. of
			Companies
No of listed			222
companies			
Less Financial			(47)
Companies			
Subtotal			175
Less Travel and			(13)
Leisure			
Subtotal			162
Missing Data			(76)
Final Sample			86
Sector	No. of	(-) Companies	Final Sample
	Companies	with Missing	
		Data	
<b>Basic Resources</b>	17	7	10
Building Materials	11	8	3
Food and Beverage	27	10	17
Health Care and	20	9	11
Pharmaceuticals			
Education	5	4	1
IT, Communication	7	4	3
Textile	8	4	4
Trade and	4	2	2
Distribution			
Shipping and	4	1	3
Transportation			
<b>Construction and</b>	42	15	27
Real Estate			
<b>Industrial Products</b>	10	6	4
and Energy			
Packaging	5	4	1
Total			86

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## **3.2 Definition of Variables**

Data were collected manually from the published interim financial statements for the selected companies both March 2021 and March 2022. Stock prices were collected from investing.com website. Earnings per Share (EPS) was used as a proxy for accounting earnings. EPS were collected from companies as they were disclosed in the financial statements. In this model, I used the change in EPS to reflect the growth or decline of EPS between the two points of time. Another proxy for accounting earnings is the change in net profit. To test the value relevance of cash flows, the operating cash flow has been used. The size of the company was tested using log of assets. The effect of currency fluctuations on the company was measured by the dollar component which is an integer variable where 0 means that the company is not involved in either importing or exporting activities and 1 means that the company is involved in importing or exporting activities.

Stock return for firm *i* over return period  $t R_{it}$  is calculated as follows:

RET  $_{it} = P_{it} P_{it-1}/P_{it-1}$ Where  $P_{it}$  and  $P_{it-1}$  are the prices per share for firm *i* at the end of period *t* (March 2022) and *t*-1 (March 2021).

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RET it	Stock Return of firm $\underline{i}$ over return period $t$ calculated as
	follows RET $_{ii} = P_{ii} - P_{ii-1}/P_{ii-1}$
AEPS:	Change in earnings per share of firm $\underline{i}$ over period $t$ as
	announced in the financial statements of the firm
	calculated as follows EPS;2022/ EPS;2021
<b>AOCF</b> it	Change in net cash flow from operations (reported in the
	cash flow statement) of firm $\underline{i}$ over period $t$
ANPa	Change in net profit of firm <u>i</u> over period t
DER	Debt to Equity Ratio of firm $\underline{i}$ at the end of period $t$
SIZE	The log number of total assets of firm $\underline{i}$ at the end of
	period t
DC	${\tt DollarComponent} which is a  dummy  variable that equals$
	one if the firm is involved in Dollar generating or
	consuming activities, and zero otherwise

## 3.3 Empirical Model

The paper uses the regression models using OLS to examine the relevance of the various financial and non-financial information in explaining the stock return of the firm. This is achieved through studying the explanatory power of the regression model. The value of  $R^2$  will show how much variation in the return of the stocks is explained by financial and nonfinancial information (Biesland, 2009).

RET 
$$_{it} = \beta_0 + \beta_1 \Delta EPS_{it} + \beta_2 \Delta OCF_{it} + \beta_3 \Delta NP_{it} + \beta_4 DER_{it} + \beta_5 SIZE_{it} + \varepsilon_{it}$$
(1)

$$\operatorname{RET}_{it} = \beta_0 + \beta_1 \operatorname{DC} + \varepsilon_{it} \tag{2}$$

RET  $_{it} = \beta_0 + \beta_1 \Delta EPS_{it} + \beta_2 \Delta NP_{it} + \beta_3 \Delta OCF_{it} + \beta_4 DER_{it} + \beta_5 SIZE_{it} + \beta_6$ DC + $\epsilon_{it}$ (3)

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Where *i* and *t* represent the firm and year indexes, respectively. RET refers to the return of the stocks;  $\Delta$ EPS represent the change in earnings per share;  $\Delta$ NP represent the change in net profit;  $\Delta$ OCF denotes to the change in cash flow from operations; DER refers to debt to equity ratio; SIZE is the natural logarithm of the company's total assets; DC refers to the dollar component.

## 4. Results and Discussion4.1 Descriptive Statistics

Table 1 shows the descriptive statistics of the dependent and independent variables for the sample of 86 firms. The mean for the stocks returns during the year (from March 2021 to March 2022) is -0.077 with a median of -0.090 and ranges from -0.849 to 0.905. The negative average return of stocks indicates an overall decrease in the share prices in March 2022 compared with prices in March 2021.  $\Delta EPS$ recorded an overall mean of 1.819 and median equals to 1 ranging from -14 to 60.  $\Delta$ NP has a mean of 0.414 ranging from -15.670 to 33.570 and median of 0.030.  $\triangle OCF$  reported a negative mean equal to 0.356 and a median equal to -0.354. Debt to Equity Ratio (DER) has a mean of 3.057 ranging from -4.555 to 19.808. The logarithm of assets of the 86 firms (size) ranges from 3.912 to 7.998 with a mean of 6.128 and median of 6.097. The descriptive statistics also show that the mean of all variables is larger than mean which means that these variables are skewed toward the right (i.e., positively skewed) (only  $\triangle OCF$  has approximately equal mean and median with a normal distribution).

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As DC is a dummy variable, the frequency of its occurrence. Among the 86 firms, 53 firms (61.6%) are not involved in activities that generate or consume dollar currency. While 33 firms (38.4%) of the firms have either importing or exporting activities and have dollar component in their financial statements. Table 2 shows the distribution of the dollar component variable among the various sectors of the sample firms. Sectors of basic resources, healthcare and pharmaceuticals, IT and communication, and Industrial products have the majority of their companies involved in importing and exporting activities with 70%, 72.7%, 66.7%, and 75% respectively of the firms have DC of 1. All the firms in the sectors of Trade and Distribution and Shipping and Transportation have DC. On the other hand, the firms in the sectors of Building Materials, Food and Beverage, Textile, Construction and Real Estate are mainly firms with local activities where 66.7%, 70.5%, 75%, and 96.3% respectively have 0 DC. Firms in education and packaging sectors are 100% have local activities.

Depende	ent Var	iable					
Variable	И	Mean	Median	SD	Min	Max	
RETit	86	-0.077	-0.090	0.379	-0.849	0.905	
Independent variable							
<b>AEPS</b>	86	1.819	1.000	7.753	-14.000	60.060	
ANPit	86	0.414	0.030	5.381	-15.670	33.570	
<b>AOCF</b> it	86	-0.356	-0.354	5.388	-28.520	25.810	
DER.	86	3.057	2.099	3.577	-4.555	19.808	
SIZE	86	6.128	6.097	0.883	3.912	7.998	
Dummy Variable							
Variable	И	Va	due	Frequency	(%	6) )	
DC		1	0	53	61.6		
DC	00		1	33	38	.4	

Table 1: Descriptive Statistics of Dependent and IndependentVariables

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Sector.	No. of	Dollar Component				
Sector	Companies	0	(%)	1	(%)	
Basic Resources	10	3	30%	7	70%	
Building Materials	3	2	66.7%	1	33.3%	
Food and Beverage	17	12 70.5%		5	29.5%	
Health Care and Pharmaceuticals	11	3	27.3%	8	72.7%	
Education	1	1	100%	0	0%	
IT, Communication	3	1	33.3%	2	66.7%	
Textile	4	3	75%	1	25%	
Trade and Distribution	2	0	0%	2	100%	
Shipping and Transportation	3	0	0%	3	100%	
Construction and Real Estate	27	26	96.3%	1	0.7%	
Industrial Products and Energy	4	1	25%	3	75%	
Packaging	1	1	100%	0	0%	
Total	86	53	61.6%	33	38.4%	

## Table 2: Distribution of DC among Sectors

## 4.2 Test for multicollinearity

The extent of multicollinearity among the independent variables is examined. Table 3 presents the results of the Pearson correlations between the variable. From the table the size and the debt-to-equity ratio variables negatively and significantly correlates with each other. Also,  $\Delta$ EPS and  $\Delta$ NP positively and significantly correlates. However, the multicollinearity tolerance and VIF showed that there is no collinearity between the variables.

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						Multicolli nearity	Statistics VIF
Variable	SIZE	DER	∆EPS	∆NP	AOCF	Tolerance	
SIZE	1					0.878	1.139
DER	.308*	1				0.901	1.110
∆EPS	.072	056	1			0.612	1.634
ΔNP	001	037	.619*	1		0.611	1.637
∆OCF	.177	111	.081	.106	1	0.954	1.048
**. Correlation is significant at the 0.01 level (2-tailed).							

Table 3: Pearson Correlation and multicollinearity diagnosis ofindependent variables

## 4.3 Regression Analysis

In this section, the relationship of accounting and other information with return is analysed using OLS regression as for equations 1, 2, 3. In value relevance literature, the explanatory power of the regression model, represented in R squared and adjusted R squared, were used to measure the value relevance of accounting information (Beisland, 2009 and Badu& Appiah, 2018). Also, the regression coefficient and the P-value were used to explain the direction and the significance of the relationship (Badu& Appiah, 2018).

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Value relevance of accounting information is measured by the adjusted  $R^2$ . In model 1, as shown in table 4, the adjusted  $R^2$  indicates that 12.7% of the change in the return of stocks can be explained by the variation in the accounting information used in the model. The table also shows that the regression coefficient of the independent variables of Size, Debt-to-Equity Ratio (DER), change in operating cash flow, and change in earnings per share are positive. However, only the firm size represented in total assets is significantly affecting the stock return. On the other hand, the change in net profit is negatively related to stock return. It also not significant in explaining the variation in stock return

Independent Variables	Unstandardized B	Coefficients Std. Error	t	Sig.	Dependent Variable	
Size	0.169	0.046	3.635	< 0.001**		
DER	0.010	0.011	0.925	0.358		
$\triangle \mathbf{EPS}$	0.009	0.006	1.353	0.180	ъ	
$\triangle \mathbf{NP}$	-0.004	0.009	- 0.410	0.683	K	
$\triangle OCF$	0.003	0.007	0.390	0.697		
F = 3.466						
Sig. =0.007						
$R_{==}^2 = 0.178$						
Adjusted $\mathbb{R}^2 = 0.127$						
Notes: *and** represent significance levels of 0.05 and 0.01 respectively.						

 Table 4: Regression Results for Model 1

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Model 2 tests the relevance of the other information on stock return. Dollar component is the only variable used. As mentioned earlier, DC is a dummy variable where the reference variable (0) refers to the companies with no dollar component and (1) refers to companies that have dollar components due to their importing or exporting activities. The regression coefficient of DC, as shown in table 5, equals 0.243. This means that companies with dollar component have higher return of 24.3% than the return of those companies with no dollar component. The results show that this difference in the return between companies with dollar component and other companies is significant. So, it can be concluded that dollar component is a significant predictor of return in the Egyptian Stock Exchange market. The adjusted R<sup>2</sup> for this model equals 0.087. This means that 8.7% of the variation in return can be explained by DC.

Independent Variables	Unstandardized B	Coefficients Std. Error	t	Sig.	Dependent Variable		
DC	0.243	0.080	0.313	0.003**	R		
F = 9.131							
	Sig. = 0.003						
	$R^2 = 0.098$						
Adjusted $R^2 = 0.087$							
Notes: *and** represent significance levels of 0.05 and 0.01 respectively.							

 Table 5: Regression Results for Model 2

Model 3 combines all variables of models 1 and 2. As shown in table 6, the adjusted R square for the model is 0.171 which means that 17.1% of the change in the stock return can be explained by the variables included in the model. The model is significant as both Size and DC are significant. Combining all the variables in the model gave the companies with dollar component a higher return of 18.6% than companies with no dollar component (indicating a decrease of 5.7% as compared to the percentage in model 2)

Independent	Unstandardized	Coefficients		<b>G</b> !-	Dependent			
Variables	В	Std. Error	t	Sig.	Variable			
Size	0.147	0.046	3.175	0.002**				
DER	0.004	0.011	0.381	0.704				
∆EPS	0.006	0.006	1.041	0.301				
∆NP	-0.004	0.009	- 0.430	0.668	R			
∆OCF	0.004	0.007	0.524	0.602				
DC	0.186	0.081	2.306	0.024*				
					F = 3.931			
					Sig. = 0.002			
$R^2 = 0.23$								
$Adjusted R^{2} = 0.171$								
Notes: *and** represent significance levels of 0.05 and 0.01 respectively.								

 Table 6: Regression Results for Model 3

## 5. Discussion

The regression coefficients of both the change in EPS and change in NP showed that earnings measures are insignificant in explaining the change in stock return. So, H1 is rejected. This finding contradicting the majority of the previous literature whether conducted in developed, developing, or more specifically in Egypt (for example, Ebaid, 2012;

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Cupic et al., 2022). However, this finding is consistent with the study of Ragab and Omran (2006) who indicated that the change in EPS was significant to stock return. Although their study found a significant relation between EPS and stock return, the change in EPS showed insignificant relation. They claimed that insignificance might be due to the short-term horizon that Egyptian investors have as they are concerned with the earnings levels rather than the change in earnings. In terms of this study, the insignificant relation of earnings might be due to the short horizon of the data collected and analysed. It is noted that EPS has a positive relation with the change in return while change in NP showed a negative relationship with stock return.

The regression analysis showed that the change in the operating cash flow is insignificant in its effect on stock return. So, OCF is not value relevant to guide the investors in their decisions for acquiring stocks. So, the results referred to rejecting hypothesis 3. The result is inconsistent with the previous literature. While earnings were more value relevant than OCF in the previous literature, especially in Egypt, OCF was still value relevant (Ebaid, 2012). However, the irrelevance of OCF is consistent with the findings of this paper as earnings showed irrelevance as well. So, if the change in earnings is insignificant to stock return, OCF as well is insignificant.

The results of the regression showed that Debt-to-Equity ratio has positive and insignificant relation with stock return. The sign of the

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relation between the movement in financial leverage and stock return is consistent with the previous findings from Pakistan (Din, 2022). However, this is inconsistent with the previous studies conducted in developed economies (Dimitrov and Jain, 2008). However, the results of this study are inconsistent with previous literature in terms of the significance of the relation between financial leverage and stock return except for the study conducted in Indonesia showed the insignificance of the DER with stock return.

The regression results showed that firm size is significantly related to the stock return. This result is consistent with the previous literature (Fama and French, 1992, Johnson and Soenen, 2003; Maratani, 2009; Intariani and Suryantini, 2020). The results also showed a positive relation between the firm size and the stock return. This means that firms with larger size tend to have higher stock return than those with smaller sizes. This finding is consistent with the findings from previous literature conducted in emerging countries such as Indonesia and Pakistan (Maratani, 2009; Intariani and Suryantini, 2020).

On the other hand, the nonfinancial statements' information represented in the dollar components variable showed a significant relationship with stock return. The results of the regression model number 2 (as shown in table 5), showed that the regression coefficient of the dummy variable DC is significant at 0.01 significance level. When tested by itself, this variable alone explains almost 9% of the variation in the stock return.

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When combined with the financial statements' information, DC coefficient also showed a significant relation with stock return at 0.05 significance level. The explanatory power of the regression model increased from 12.7% (adjusted R square for model including financial statements' information only) to 17.1% when DC is added to the model.

Also, the positive sign of the coefficient of DC means that companies that are involved in international trade have higher stock return than those without dollar components. The higher stock return of these companies means that Egyptian investors are aware of the positive effect of currency depreciation decisions on firms involved in international trade activities. The results also point to the responsiveness of the stock market and its ability to predict the positive effect of the currency depreciation decision. The results are consistent with the claims that currency fluctuations can affect the stock return (See Chakraborty et al., 2015).

## 6. Conclusion

This paper is motivated by the scarcity of value relevance studies in the Egyptian market. Also, the paper is motivated by the uncertainty that characterizes the period during which the study is conducted. This paper added to the previous value relevance literature by studying the relevance of non-financial statements' information, known as "other information". The paper aimed at examining the extent to which both

financial statements' information and non-financial statements' information can influence the investors' decisions.

The regression results revealed that, among the financial statements' information, firm size is significant and positive in explaining firms' changes in stock return. This finding is consistent with previous studies in terms of the significance of the size (see Fama and French, 1992; Fama and French, 1995). However, the result of this study differs from Fama and French studies in terms of the direction of the relationship between firm size and stock return. The positive sign of the firm size were found in studies conducted in emerging economies such as Indonesia and Pakistan (see Maratani, 2009; Din, 2016; Intariani and Suryantini, 2020). The other financial statements' information examined in this paper, earnings, operating cash flow, and financial leverage, revealed insignificant relationship with stock return. These results were inconsistent with previous studies whether conducted in Egypt or in other countries (see Ragab and Omran, 2006; Ebaid, 2012; Cupic et al., 2020).

On the other hand, the dollar components that is used as a non-financial statements' information is significant and positive in explaining the variation in stock return. This means that companies with international trade activities are performing better than those not involved in international trade especially in periods of uncertainty and expectations of currency devaluation.

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This study provides useful conclusion and implications for investors and firms' management. The findings of the usefulness of dollar components disclose that investors are aware of the importance of the international expansion of firms' activities. In periods of economic crises in which the national currency is expected to lose its power in front of the US Dollar, it is essential that firms provide quality products and services that can be exported. The devaluation of the currency will provide exporting firms a competitive advantage as their products can enter international markets with lower prices. So, it is essential for firms' management to adopt expansive strategies and find ways to enter international markets.

The positive relation of firm size to stock return may give an alarm that smaller firms are not attractive for investors. Investors might be less confident about the resilience of smaller business in front of the economic challenges. Providing some protective policies that support smaller firms to facilitate their growth in the market may have a positive effect on the sustainability and consequently their performance in the future.

Despite the contribution of this study to the value relevance literature, it has some limitations. The study used the return model to examine the value relevance and did not use the price model. Future research is recommended to use both return and price models so the results can be compared. Future research is recommended to include the Book Value

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per Share ratio in the analysis. Also, the paper is limited with the short period covered in the study. Future research can expand the period to test whether the results of this study are still applicable in future periods when the real effect of the devaluation appeared and reflected on the prices of stocks. The paper studied the effect of dollar component reflecting the import and export activities. Future research can expand the results to include the volume of the dollar transactions in the listed companies to understand how this variable can affect the stock return

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