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THE ROLE OF FINANCIAL ATTRIBUTES OF PROFITABLE FIRMS ON STOCK PERFORMANCE IN PAKISTAN

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ABSTRACT

The study in hand endeavored to determine how financial characteristics of profitable firms directly affect their share prices on the stock market. For this purpose, we have used data from 2000 to 2018 and want to know, whether these financial attributes, i.e., ROE, ROA, P/E ratio, PM, size, and leverage, are directly involved with the stock prices of the profitable firms. However, the panel data approach was utilized to analyze the data. The results categorically showed that a firm's financial attributes have a linear relationship with its stock returns on stock market. This result also indicated that the equity holders of those firms of market investors follow direction of equity prices for future return because, as the price equity of the profitable firms increases, they invest more for high discounting's in market because of the linear relationship between firms financial attributes and their stock prices. more over this results also explained that the efficiency of PSX can be improved by by improving financial knowledge of market arbitrageurs. The results provide signifncant information in reaching the decision as well as recommending some suggestions to stakeholders, policy-makers along with future researchers to revisit their decisions regarding ctock performance in Pakistan.

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INTRODUCTION

The stock exchange is among finest places to invest and earn a profit. The return on investment implies the profits made from the investment and investors search for investment possibilities that will enhance their capital. For that purpose, investors should take into account a variety of criteria i.e. "Firm financial, relevance of accounting, accounting/ non-accounting information (Brown, 1968 & Beaver, 1968; Navdal, 2010; Muhammad & Ali 2018)". The firm's accounting, non-accounting and financial information are awfully important for market common investors

in order to earn profit in marketplace (Ball & Brown, 1968; Beaver 1968). Moreover, firms also spend more money on these kinds of information during the financial crisis, market under/over-reactions and during market crash periods to increase value of their shares. If investors spend money or invest regardless of cost-effectiveness and return-on-investment, they will not get desired results (Brown, 1968; Beaver, 1968; Zaheri & Barkhordary, 2015; Navdal, 2010). Risk and profitability are two elements of investment (Vennet, 1996; Muhammad & Ali, 2018; Khalid, Rehman & Kashif, 2019; Aharon, Gavious & Yosef, 2010). CAPM is method for measure the risk-return relationship. In this model, sole factor impacting stock returns is systematic risk (Beta).

There are some other worthwhile factors i.e. Fama and French (1973) developed multi-factor model by including two variables, BM ratio and firms size which identify the risk significantly affect stock returns. Aharon, Gavious and Yosef (2010) and Khalid et al., (2019) applied various variables in the transaction multiples model to identify firm's profitability and risk factors and Brown (1968); Beaver (1968), and Keener (2011) has used relevance of accounting techniques to measure firm present and future prospect in term of firm profitability and returns. Intention of investors in company stock is to earn a logical return, and stock return is comprised of stock price movements and profit received in marketplace. Company's stock prices and its variations are a criterion for stock exchange decision making by market investors. Logical investors aim to maximize their return while assuming an acceptable degree of risk. They require criteria that enable them to predict performance of investments. These criteria would be very predictable and observable that may evaluate performance of any firm's equity.Making quick decisions is vital guideline in capital market investment. Slow decision-making on investment lead to loss of possible profit & incurrence of potential loss (Brown, 1968; Francis & Schipper, 1999; Nguyen & Swanson 2009; Zaheri & Barkhordary, 2015; Yang, Ryu & Ryu, 2017 and Muhammad & Ali 2018).

The goal of a firm's financial information is to provide financial information to shareholders in order to enable them to make the better business decisions in the stock market. This research investigates to what degree profitable firm's equity transactions are influenced by respective firm's financial information to common stockholders with in stock market.We hypothesize that by providing firm's financial information, the returns and transactions of profitable firms have grown considerably during over and under market reactions. We also investigate whether the importance of financial data in explaining returns has shifted over time (Lys et al., 1999; Yosef et al., 2010; Yang et al., 2017; Muhammad & Ali 2018 and Khalid et al., 2019). As per empirical literature, the findings of these investigations are conflicting (Amir & Lev, 1996; Bartholdy & Peare, 2001; Hirschey et al., 2001; Drew et al., 2003; Venkatachalam et al., 2003; Nguyen & Swanson 2009; Callen et al., 2010; Yang et al., 2017; Neukirchen, 2022). Moreover, firms also spend more money on these kinds of information during the financial crisis, market under/over-reactions and during the market crash periods to increase the value of their shares. Inthis research we would like to know how firm's financial information effects on its market returns. The main question, if there is any sig. relation-ship between firm's profitability indicators like (ROA, ROE, BM & PM), risk indicators (firm's size & leverage)and stock returns (Khalid et al., 2019).

We cannot help to neglect the importance of the stock market in the present world. Here is the important reason: it mobilises country resources and other ttypesof investing activities and

converted into productive domestic and foreign investments. Here we evaluate what financial attributes of the firms are that directly affect their share prices at the market place. Another reason for the contemporary research is that Pakistani firms have weak financial instruments and investments, while on the other side, these firms earn more than their fundamental values. If investors spend money or invest regardless of cost-effectiveness and return-on-investment, they will not get the desired results. Here we recognise these parameters that contribute to and sustain this momentum at the market place. The Pakistani stock market fails to attract foreign investors, but besides this, the firms generate abnormal profits, and even country GDP has an inverse relationship with stock market capitalization and returns. In some cases, the KSE 100 index has crossed the 45000 index due to these firms, which other words could be considered market manipulation. Here are the basic factors that the present research has identified on this topic, which manifold the basic nature of our stock market abnormal returns (Khalid et al., 2019).

LITERATURE REVIEW

Since a long time, financial authors have been looking for elements that impact stock return. Many writers explored the influence of inflation in stock returns. e.g. (Fama & Macbeth, 1973; Lintner 1975) and others looked into a wide range of macroeconomic factors. Authors such as Sharp (1964), Lintner (1969), Fama and Macbeth (1973)and Chen et al. (1986) studied pricing of securities risk focusing on multi-factor models. Chen et al. (1986) studied the most notable efforts on determining the risk of economic indicators. They hypothesized that abrupt shifts in macroeconomic factors serve as warning sign for changes in the stock values.They determined that the month-wise growth rate of industrial output, as well as a the sudden shift in the risk premium and unanticipated inflation are important explanatory elements. Rutledge and Karim (2008) investigated the link between size and return in the Chinese market and discovered that smaller enterprises have higher returns. Fama and French discovered that business size may explain equity return fluctuations between 1963 and 1990 (Eugene & French, 1992). In this connettion, we also investigate whether the importance of financial data in explaining returns has shifted over time. Davis and Desai (1998) and Yosef et al. (2010) identified business size as a significant determinant influencing changes in realized stock return because it represents risk factor.

Drew et al. (2003) and Yang et al. (2017) concluded in their study that business size, book-to-market equity and securities returns that small and prosper enterprises produce better returns than bigger firms. So, Tang et al. (2010) and Yang et al. (2017) argued that equity return is inversely connected to firm's size. As per Rouwenhorst (1999), small firms beat large firms in terms of the stock return. Chan et al. (2007) concluded, the size of the company is an essential element in determining stock returns Lakonishok et al. (1994). In England, Banz (1981) and Reinganum (1981) discovered that stocks of the smaller enterprises yield a better return than stocks of larger firms. The logical investors aim to maximize their return while assuming an acceptable degree of risk. Company's stock prices and its variations are a criterion for stock exchange decision making by market investors. Fama and French (2021), and Yang et al. (2017) came to the conclusion that stock return is simply characterized by two elements: size and book / market ratio. Maroney discovered that a high B/M ratio led to a larger return (Maroney, 1997; Yosef et al., 2010; Khalid et al., 2019; Faisal, 2022). Lam concluded that firm business size, book/market ratio, and inverse P/E ratio may explain the disparity in stock returns in Hong Kong (Lam, 2002) while Yosef et al. (2010) used this to remove auto correlation. In this regard,

as per Reid et al. (1985), businesses with a greater book-to-market ratio have a higher average return.

According to Ashiq Ali et al. (2003) the B/M ratio can forecast future returns. Umar (2008) did a study titled "Fundamental analysis of Saudi emerging market stock returns 1990-2004" and discovered a link between yearly stock returns and the B/M ratio and inverse E/P ratios.Book value has linear relation with p/e relation and vice versa (Basu, 1987; 1997; Yosef et al., 2010; Khalid et al., 2019; Khalid et al., 2022; Faisal et al., 2022). This research investigates to what degree profitable firm equity transaction are partial by respective firm financial information to common stockholders with in stock market.Overall, the findings of empirical research studies indicated that there is considerable association between the desired average stock return and characteristics such as any firm's size, BM value ratio, and earnings-to-price ratio (Chan et al., 2007; Basu 1983). In some cases, the KSE 100 index has crossed the 45000 index due to these firms, which other words could be considered market manipulation. Chen et al. (1986) studied the most notable efforts on determining the risk of economic indicators. Strange et al. (2008) employed the Beta pricing test and incorporated another frequent risk factor known as leverage and discovered a link between return and market leverage. Thus, the Bhandari found a positive association between the avg. rate of the equity return and firm's financial leverage (Bhandari, 1988).

Empirical Findings

Lie and Lie (2002); Huddart et al. (2003), Huddart and Louis (2006 & 2007); Officer (2007) and Neukirchen (2022) argued, firms financial attributes, i.e., BM; size, and financial leverage, have a strong and significant relation with company or firm returns: Elliot et al. (1984); Yosef et al. (2010); Navdal (2010); Chowdhury et al. (2018); Dargenidou et al. (2018); Khalid et al. (2019); Engelhardt et al. (2022); and Faisal et al., (2022) concluded, financial attributes like "BM, ROE, ROA, BM & size" have significant relationship with good firm returns (Khalid et al., 2019).

RESEARCH METHODOLOGY

The regression model, which assumes relationship amid dependent and independent variables, is starting point for econometric analysis. The research econometric model is mentioned below, (Zaheri & Barkhordary 2015; Muhammad & Ali 2018; Khalid et al., 2019; Faisal et al., 2022). Panel data has been used for econometric analysis.

$$Returns_{it} = \alpha_{it} + \beta_1 ROE_{it} + \beta_2 Profitmargin_{it} + \beta_3 ROA_{it_1} + \beta_4 Lev_{it} + \beta_5 P/E_{it} + \beta_6 B/M_{it_{it}} + e_{it}$$

The empirical findings explain that profitability attributes, i.e., "ROE, profit margin, and ROA" have a linear relation or positively correlate with firm returns. However, the empirical findings of financial leverage and size are mixed. It could be positive/negative. Both variables represent a firm's risk and have an inverse relationship with the firm's returns, while on other side, they represent earnings for creditors, where, these variables have a positive relationship with firm's returns. Size variable one hand, size is associated with firms risk and future growth opportunity (Franco et al., 2008; Yosef et al., 2010; Khalid et al., 2019; Faisal et al., 2022) and on the other -side it explains that smaller firms have more riskier securities than larger firms (Francis et al., 2005; Yosef et al., 2010; Khalid et al., 2019 and Faisal et al., 2022). Profitability and financial risk attributes have equivocal relationship. Also, B/M and P/E ratios represent "shareholders maximisation of wealth". However, B/M also represents the firm's strength for the relevance of

the accounting information (Franco et al., 2008; Francis et al., 2005; Huddart et al., 2006; Huddart et al., (2003, 2006, 2007; Chaudhry et al., 2018; Khalid et al., 2019; and Faisal et al, 2022).

Hypotheses

Many research on the determinants impacting return have been done, as evidenced by the empirical literature; yet, only a few variables were assessed. Thus, the current paper intends to investigate the influence of seven key financial factors on the enterprises in Pakistan that lead lucrative industries over an eighteen-year timeframe. Thus, the following are some research hypotheses:

H1: Firm size and equity return have a substantial link.
H2: Firm's financial variables like Leverage, PM, P/E ratio, B/M, ROA & ROE have significant relation with respective firm's stock returns.
H3: Firm's relevance of accounting information have significantly effect returns of profitable firms.
H4: Firm's Profitability and risk factors significant effect upon profitable firm returns Sample size and Data

In the subject research study, the research have used 164 cross-sections and 2253 observations for un-balanced Panel regression analysis from the period 2000 to 2018. In this connection, the time series data was taken from COMPUSTAT. The basic aim of the research to explore the effect of financial variable of the profitable firms on the stock market returns. The data of four industries have been employed as a sample size i.e. (chemical, cement, pharmaceutical and textile).

Table 1

Variables & its Calculations

Research variables		
SIZE	log of Total assets	Yosef et al., 2010
Return-on-Asset	EBITDA/Total Assets	Yosef et al., 2010
Return-on-Equity	EBITDA/BV	Yosef et al., 2010
Profit Margin	EBITDA/Sales	Yosef et al., 2010
P/E ratio	EPS/Market price of the share	Yosef et al., 2010
Leverage	Total Liabilities -Current Liabilities/Total Assets	Yosef et al., 2010
Book-to-Market ratio	Market value of Equity / Book value of Equity	Yosef et al., 2010
Returns	"Price at beginning of period / (Price at beginning of periodPrice at end of period) / divided share"	Zaheri & Barkhord (2015)

RESULTS OF STUDY

As per the below-mentioned regression analysis, The results of the testing hypotheses show that among the factors under consideration i.e. business size, leverage, return on assets, Book to market ratio, return on the equity and book–market value ratio are all strongly connected to stock return. All of these indicators are also used as the relevance of accounting information of the firms. Size and leverage variables represented firm's risk factors, whereas the ROE, ROA and profit margin represents the firm's profitability factors. While under the study of Huddart et al. (2003, 2006, 2007); Chaudhry et al., 2018) the book to market value represented firm's

earnings management, managerial incentives and firm relevance of accounting information. Large businesses have a more diverse range of activities. Such variety contributes to increased profitability and return. Due to their credit in global finance markets, large corporations give their required funds at cheaper interest rates. Regression results analysis is in line with previous empirical literature. PSX investors use this financial information for investment in profitability firms' equities.

Table 2
Returns Model of Profitable firms of Pakistan Stock Market (PSX)

Returns				
Variable	Coefficient		t-Statistic	Hypothesis
C	0.4476		0.2698	----------
ROE	(2.4383) ***		2.8032	Accepted +
PM	(1.7802) ***		2.7959	Accepted +
Lev	(0.3220) ***		2.8003	Accepted +
ROA	(0.3413) ***		2.4518	Accepted +
BM	(1.9891) ***		2.3718	Accepted +
P/E ratio	(0.7193) ***		2.3699	Accepted +
Size	(-1.2839) *		-1.8867	Accepted -
Cross-section fixed (dummy variables)				
Adj-R-squared	0.5273	S.D. dependent var	0.8732	
F-stat	8.1231	DW stat	1.8486	

DISCUSSION & CONCLUSION

The firm's financial attributes, announcements and information are said to be value relevant and support the financial characteristics of respective firm stock returns (Ou & Penman 1989). The contemporary research investigation determined that how Pakistani investors use a firm's financial attributes during stock valuation and how this activity affects a respective firm's stock returns. Above-mentioned firms' financial attributions determine firm's profitability and risk factor during stock market over and under reactions and are said to be value relevant in terms of firm's financial attribution. Overall domestic and foreign-related publications alluded to the fact that there is no agreement on which financial variable best describes a firm's stock returns. In any stock exchange there is higher dispersion in terms of variables influencing stock return. Seigel (2007) has thoroughly demonstrated in his research work that there is a high association between various ratios and capacity to estimate stock returns. Study utilized seven variables from various distinct categories i.e., "profitability, liquidity, solvency, and other market-based ratios".

The results suggested that there is an association between firm's ROA, P/E-ratio, PM, Leverage and size, with the stock returns, when investors made investment decisions in the stock market because investors examine both the firm's profitability and risk factors. The study results also concluded that profitable firm financial attributes has linear relationship with its stock returns at the stock market. This result also indicated that the Equity holders of those firms of market investors follow equity prices direction for future return because as increase in price equity of profitable firms they invest more for high discounting's in market becausr of linear relationship between firms financial attributes and their stock prices. more over this results also explained

that the efficiency of PSX can be improved by by improving financial knowledge of the market arbitrageurs.

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