Determinants of Price to Earnings Ratio in Financial Sector of Pakistan Stock Exchange

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Abstract

Price to earnings ratio a relative valuation technique has always remained at the center of attraction for market analysis and investors ever since the invention of discounted dividend growth model Gorden and Shapiro (1956). The purpose of this paper is to examine the determinants of price to earnings ratio in financial sector of Pakistan Stock Exchange. This study is significant for investors, policy makers and research scholars especially in Pakistan Stock Exchange. By taking data of 100 financial firms this study applied Ordinary least square regression model under fixed effects to test the proposed hypothesis of study. It has been found out by the results of the study that factors such as leverage, firm size and return on assets significantly explain the price to earnings ratio of financial sector of Pakistan Stock Exchange whereas, exchange rate, inflation and dividend payout out ratio are unable to explain the price to earnings ratio of financial sector of Pakistan Stock Exchange. Overall the results of the study are helpful towards investors who can make better future investment decisions particularly when it comes to stock selection, fund allocation and portfolio strategies especially in financial sector of Pakistan Stock Exchange.

Key Words:

Inflation Rate, Leverage, Firm Size, Return on Assets, Pakistan Stock Exchange.

Acknowledgement

I take this marvelous moment, as an opportunity to thanks Almightily ALLAH; it is all through Allah's wish and will, giving me the strength and courage to carry out this research.

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Tanzil ur Rahman

Dedication

I dedicate my research to my Parents, family and my research supervisor and my colleagues who encouraged me to keep my efforts intact throughout the research process.

Table of Content

Chapter No 1

Introduction

This study is based on determinants of Price to Earnings Ratio in Financial Sector of Pakistan Stock Exchange. Different factors across the globe effects the Price to earnings ratio in different stock markets. In this study, Pakistan case is reviewed. In this section of study Background of Study, Problem statement, Research Objectives, Questions, Significance and limitations are discusses.

1.1 Background of the study

Price paid for a share relative to the income or profit earned by the firm per share is a measure of price to earnings ratio which usually indicates the earnings multiple of a firm by Graham and Dodd (1934). Association between company's earnings and stock prices can be looked through price earnings, moreover, for valuing both stock markets and individual stocks it has been recognized as one of the most useful financial tool. In simple words price to earnings tells investors how much they will pay per dollar of earnings.

Price-to-Sales ratio, Price-to-Earnings ratio, Book-to-Market ratio and Price-to-Dividend ratio are some of the most used financial ratios over the years by scholars while looking in to the performance of stock market. However, for analyzing the individual stocks, markets, sectors and industries most of the market analyst, researchers, fund managers and investors used to put their faith in price to earnings due to its attractiveness and simplicity Molodovsky (1953). Price to earnings can also be called as "price earnings multiple" tells investors how much they will pay per rupee of earnings in a firm. It also influence the confidence of investors as it deals with investor sentiment and gives a probable picture of future firm performance.

Investors have different methods or ways through which they can know whether the stock market is rationally priced or not with knowledge of how much they have to pay for every one dollar of earnings. Furthermore, price earnings ratio of individual stocks and market illustrate variations as the time passes which clearly tells us that stock markets around the world faces the problem of financial bubbles, speculation and irrational pricing all those things have been mentioned by theorists who are concentrating on stock price volatility around the world. Due to such significance of price to earnings over the past decades empirical researchers tried to locate those factors that can contribute significantly towards price earnings of a firm which can help investors to make their investment decisions more effectively and efficiently.

Past researchers such as (Anderson and Brooks 2006; Houmes and Chira 2015; Jitmaneeroj 2017; Ramcharran 2002; White 2000) have used multiple firm level and country level factors that can determine the significance or influence on price to earnings ratio with the aim of looking whether the variations in these micro and macro factors cause changes in price to earnings of firm across countries, markets and industries.

The findings of these studies illustrate that risk free rate, equity risk premium and leverage ratio maintained a negative association with growth of earnings while on the contrary dividend payout ratio and price to earnings have maintained a positive association. These firm level factors include dividend payout ratio, leverage ratio, firm size, price volatility, earnings growth, equity risk premium and country level factors include inflation rate and interest free risk rate. For stock valuation price earnings is one of most frequently used variable over the years.

In addition to above if it talk about the recent developments in capital markets of Pakistan Stock Exchange. According to (Economic survey of Pakistan Stock Exchange, 17-18) due to political and economic instability capital markets of Pakistan Stock Exchange remained relative narrow.

However, with security conditions of Pakistan Stock Exchange improved considerably positive performance is being observed in capital markets of Pakistan Stock Exchange. Compelling developments in corporate sector as till as capital markets takes place during the regime of current government. Moreover, during the past five years Securities and Exchange commission of Pakistan Stock Exchange (SECP) being the primary regulator in this matter has continued to push for various reforms that can tackle the constrains or barriers of a fast growing market like Pakistan Stock Exchange. Resultantly, KSE 100 index witnessed its highest level on May 24, 2017 in the history (Stock Market Report published by Pakistan Stock Exchange) at points of 53,103. which shows the revival of investor's confidence because they are getting better returns on their respective investments in capital markets of Pakistan Stock Exchange.

A merger of earlier three stock exchanges namely Karachi, Lahore and Islamabad is now helpful for local as till as foreign investors as they can now have a single platform to look at the stocks in which they want to invest their funds. Inflows of foreign reserves by overseas Pakistan Stock Exchange is, improved security and economic conditions in terms of GDP has been noted among positive economic indicators since the start of fiscal year 2018 (Economic survey of Pakistan Stock Exchange, 17-18).

If it talk about foreign investments in Pakistan Stock Exchange domestic firms, insurance companies and individual investors absorbed securities worth USD one hundred twenty three point nine million by foreign investors during July 2017 to March 2018. The confidence of investors in Pakistan Stock Exchange's equity market is highlighted by this strong buying of stocks by local investors (Economic Survey of Pakistan Stock Exchange, 17-18). The objective of the study is two fold i.e. to firstly, investigate the firm level factors that can influence the price earnings of financial sector of Pakistan Stock Exchange and secondly, to investigate firm level

factors and country level factors as control variables to look out the impact on price to earnings of financial sector of Pakistan Stock Exchange.

The rest of research is divided into different chapter namely chapter two will show literature review, chapter three will shed light on research methodology, chapter four will tell us about the results and their interpretation and chapter five will be about conclusion, recommendations, implications and future research.

1.2 Problem Statement

Theorists that focusing on stocks price volatility stated that P/E ratios of individual stocks and market depict variability across time indicating that, stock markets had always been facing irrational pricing speculation and financial bubbles. Therefore the investors have various valuations techniques to identify whether the stock market, is rationally priced, or how much they will pay every 1 dollar of org, firm's earnings. So that researcher tried to examine the determinants of price to earnings ratio in order to identify the factor that influence price to earnings ratios. Companies with unleveraged P/E (the ratio obtained if no debt is used) greater than the reciprocal of the cost of debt, P/E ratio increased with the leverage while; those with an unleveraged P/E less than the said reciprocal, had a P/E ratio decrease as leverage increased; Companies with unleveraged P/E ratios equal to the reciprocal of debt cost showed no relationship between the P/E ratio and leverage.

There are plenty of issues with the P/E ratio, one of them is that it does not account for any type of growth or lack of it. Also companies with major debt issues are obviously, higher risk investments but Price in P/E only consider the equity price and not the debt that the company has incurred. This study is expected to fascinate and help decision makers to evaluate that explains

variations in organization Price to Earnings ratio in order to attract investors, attention and raise their confidence to select which to invest which firm to select on basis of P/E ratio. Most recently after peaceful change of political regime and aid from friendly countries, suddenly the confidence of local as till as foreign investors increases which means that it are going to see several foreign and local investors invest their money in to the stock market of Pakistan Stock Exchange in near future. It came to know from previous researches that for investment purpose people tend to use Price to earnings ratio which is partially based on both fundamental and technical analysis (Houmes and Chira 2015; Jitmaneeroj 2017). Therefore, before making any investment in financial sector of Pakistan Stock Exchange using price to earnings ratio one must know the determinants that could affect the price to earnings ratio. Another problem that pakistan stock exchange face today due to political instability, economic problems, inflation, crona virus effect on economies and trade, geo politics etc due to all those factors PSX don't get confidence and trust from investers, so in this study we find which factors or derterminants effect P/E ratio in PSX.

1.3 Significance of the Study

While investigating New York Stock Exchange NYSE listed firm Matsumoto, Shivaswamy & Hoban (1995) surveyed security analysis and asked the respondents to rate the usefulness of sixty three financial ratios divided into thirteen groups on a likert scale of one to five. The findings of the study states that among all those sixty three ratios profitability ratios, leverage ratios, sales growth ratios, price to earnings, market to book value and lastly earnings per share are some of the most significant ratios. On the contrary, capital turnover and cash position ratios are least important and ratios such as inventory turnover, cash flow ratios, dividend ratios and receivable ratios tier moderately important.

Similarly to above study analysts have given the least rankings to ratios such as Price to Earnings ratio, Debt ratios and liquidity ratios and on the contrary gives highest rankings to profitability ratios and the rest of the ratios are in importance (Gibson 1987).

On the basis of above mentioned arguments Firstly, present study is expected to help-out the decision makers in ascertaining the significant factors that affect the organization's P/E ratio, so that they can attract attention of investor and increase their confidence to select these companies in their portfolios. Secondly, management and other policy making individuals of certain firms can make their future polices in comparison to their respective competitors by reviewing this study. Lastly, this study will help to provide additional literature on the already existing vast literature on determinants on price to earnings ratio to academicians and researchers around the world.

1.4 Aim of the study

The aim of this study is to analyze the determinants of price to earnings ratio in financial sector of Pakistan Stock Exchange.

1.5 Research Questions

1.5.1 What is the impact of Leverage on P/E ratio of financial sector of Pakistan Stock Exchange?

1.5.2 What is the impact of Firm size on P/E ratio of financial sector of Pakistan Stock Exchange?

1.5.3 What is the impact of ROA on P/E ratio of financial sector of Pakistan Stock Exchange?

1.5.4 What is the impact Dividend payout ratio on P/E ratio of financial sector of Pakistan Stock Exchange?

1.6 Research Objectives

1.6.1 To examine the impact of leverage on P/E ratio of financial sector of Pakistan Stock Exchange

1.6.2 To investigate the impact of Firm size on P/E ratio of financial sector of Pakistan Stock Exchange

1.6.3 To evaluate the impact of ROA on P/E ratio of financial sector of Pakistan Stock Exchange

1.6.4 To analyze the impact of Dividend payout ratio on P/E ratio of financial sector of Pakistan Stock Exchange

1.7 Limitations of the Study

Given the chosen variables in this study some of the previous studies such as Jitmaneeroj (2017), Kumar (2015), Sum (2014) etc. have also used Return on Equity, Tobins Q, Net profit Margin, Investor sentiment and some other variables in their respective studies. However, by looking into the scope of the study it are focusing on fundamentals therefore, it have excluded investor sentiments from this study. As sentiments can help us in short term investment decisions but cannot help in long term investment decisions. Similarly, the research has excluded return on equity as it may arise the problem of multicollinearity with leverage ratio that has been included in this research. Furthermore, Net profit margin and Tobins Q are also excluded from the study as it may arise the issue of multicollinearity with price to earnings ratio and firm size.

Chapter No 2

Literature Review

2.1 Concepts and Definitions

Price to earnings

When current share price is measured relative to its earnings per share for a firm or a company it is commonly known as price to earnings ratio. Earnings multiple or price multiple are two other names that can be used for price to earnings ratio. Market value per share divided by earnings per share is the formula that is commonly used for calculating price to earnings ratio (Wenjing H. 2018).

Dividend payout

Total amount of dividends paid to owners or commonly called as shareholders relative to net income of the company is called as dividend payout ratio. The portion that remained at the disposal of company after giving dividends is used for the purpose of reinvestments in core operations and paying off the debts of the company. Dividends paid divided by net income or dividend per share divided by earnings per share is the formula to find out dividend payout ratio of a firm over a specific time period (Wenjing H. 2018).

Liquidity

If an asset can urgently be purchased or sold without affecting the asset price then it is called as liquid assets. When a market allows assets to be purchased and sold easily at a stable price, whether it is in real estate market or stock market then it can easily be referred to market liquidity. Fine art, real estate property and receivables are relative illiquid in comparison to cash which is considered to be the most liquid asset. The ease through which a firm, company or individual can easily meet its financial needs refers towards liquidity (Wenjing H. 2018).

Leverage

When firms used to go for investments in present and future projects, they use to borrow funds as their source of increasing capital. In order to increase the potential return on investment leverage is used as a financial strategy to acquire capital. High leveraged companies' means that they have used more debt financing than equity financing (Wenjing H. 2018).

Market Share

When a company's total sales are compared against the total sales of market or percentage of an industry it is called as market share of that respective company. Total sales of an industry divided by a company's total sales gives us the market share of that respective company for a given period of time. This formula is generally used when it want to compare a firm's market share in comparison to industry or its competitors (Wenjing H. 2018).

Inflation

The gradual escalation in the prices of goods and services over a period of time is said to be inflation, when such phenomenon occurs the purchasing point of currency tends to depreciate. Central bank is responsible to avoid deflation and limit inflation in a country (Wenjing H. 2018).

Interest rate

Interest rate is the amount that is being charged by the lender to a borrower for the use of asset over a pre-defined period. Vehicle, building, large assets, consumer goods and cash are some of the assets that can be borrowed. Interest rates are commonly noted on annual basis (Wenjing H. 2018).

Unemployment

It refers to a situation where a person is actively finding a job but is unable to find one. One can easily measure the health of an economy through looking into the number of unemployed persons. One common way to find out unemployment rate is to divide the total number of unemployed people divided by the number of people in the labor force (Wenjing H. 2018).

Financial Performance Variables

How till a firm can utilize its assets to generate revenues for its business tends to come under the strand of financial performance. If it want to see the financial health of a company over a period of time in comparison to other similar firms or industry, this “financial performance” measure is mostly used. Following are the two most commonly used financial performance measures around the globe (Wenjing H. 2018).

2.2 Theoretical Reflections

2.2.1 Efficient Market Hypothesis

In order to make money people use to invest their money in buying assets or stocks. The notion is always to make profit by selling higher and purchasing or buying at low price. However, you can beat the market because market will always win and it is efficient no matter how appealing the above mentioned notion is. By the early nineteen hundred the concept of market efficiency has been anticipated by Bachelier (2010) in his respective thesis of mathematics. Market cannot be outguessed because there has no such evidence which confirms that you can beat the market as per the findings of Cowles (1933).

For more than forty years efficient market approach remains center of attention in the field of finance. The available information when fully reflects in security prices then the market is defined as efficient market Fama (1970). A security fully reflects all possible information then it

is called as completely efficient market. Efficient market approach has the most solid empirical support in economics as written by Jensen (1978).

According to Fama (1970) tells us that there are three types of available information that could affect the stock prices namely semi strong and strong forms. Firstly, when stocks gives us information only about past price or prior stock performance then it comes under the domain of form of information. Secondly, when stocks gives us information about both publicly available information for instance annual reports of firms, new equity issues , announcements of stock splits and so on along with past performance of stocks then it is commonly called as semi-strong form of information. Last but not least, when stocks gives private information, past performance information and all other information that is available to everyone publicly then it is comes under the domain of strong form of information. People who used to make abnormal profits or above average profits from inside trading is not already included into the prices of stocks as per the results of Seyhun (1986).

In order to predict the changes or variations in stock prices researchers and analysts over the years are trying to make a universal method. However, this universal method to predict the changes in stock prices have been first explored by Pearson (1905). Researchers and analysts have been encountered a major problem when predicting the future path of stock prices if prices wander randomly.

Investors have different methods or ways through which they can know whether the stock market is rationally priced or not with knowledge of how much they have to pay for every one dollar of earnings. Furthermore, price earnings ratio of individual stocks and market illustrate variations as the time passes which clearly tells us that stock markets around the world faces the problem of financial bubbles, speculation and irrational pricing all those things have been mentioned by

theorists who are concentrating on stock price volatility around the world. Due to such significance of price to earnings over the past decades empirical researchers tried to locate those factors that can contribute significantly towards price earnings of a firm which can help investors to make their investment decisions more effectively and efficiently.

Past researchers such as (Anderson and Brooks 2006; Houmes and Chira 2015; Jitmaneeroj 2017; Ramcharran 2002; White 2000) have used multiple firm level and country level factors that can determine the significance or influence on price to earnings ratio with the aim of looking whether the variations in these micro and macro factors cause changes in price to earnings of firm across countries, markets and industries.

If it study the effect of specific events that used to occur from the perspective of individual organization it is when it came to know that markets are efficient Fama (1991). Stock splits and there effect on stock market was first investigated by Fama, Fisher, Jensen, and Roll (1969). Moreover, earnings, capital expenditure, takeovers and divestitures are some of the other events that have been looked to analyze its impact on stock markets by researchers such as (Ball & Brown, 1968; McConnell & Muscarella, 1985; Klein, 1986; Jensen & Ruback; 1983).

In order to negate the point of view of random walk approach which states that stock returns are not being influenced by the day of the many researchers have looked into this matter? Over the years from different aspects random walk has been tested and negated by scholars all over the world. Cross (1973) and Keim and Stambaugh (1984) have found out that as compared to other days of the results tire quite different on Monday known as Monday effect or the effect is clearly shown in security prices.

Over time and across countries it has been found out that the day before holiday and after holiday along with first three days of the and last three days of the end effect have shown different returns, even the means cloudy day and sunny day also reflects changes in stock returns so this clearly negates the notion of random walk approach. Efficient market theory is unable to explain these phenomenon as these are commonly called as anomalies and these anomalies tells us that market prices is not solely moved by information rather it have other dominant factors.

Whenever, investors' deals with new information they always tend to act rationally and sensibly this is the assumption of efficient market theory. However, according to the past literature of psychology individuals tend to rely upon the opinions of others, are often biased and prejudiced, prone to making mistakes every now and then, have limited information abilities when it comes to decision making in any matter. When it comes to the significance of efficient market theory it has been recognized as one of the best, simple and elegant theory that can help user to understand the security markets. However, changes in asset price can be clearer by the quest of obtaining a universal theory which is yet to come (Dimson & Mussavian, 2000).

Information alone does not move the prices alone it has been uncovered as a criticism to efficient market theory. However, as it speak it came to know that noise trading, fads, and other psychological factors can deviate the security prices through a large evidence of past empirical literature.

When people used to make investments without knowing the whole process or available means in buying and selling of stocks this phenomenon refers to noise trading. Most of the typical individuals are noise investors generally in today's world because most people are financially illiterate.

2.2.2 Gordon Growth Model

The Gordon groeth model is used, to determine the intrinsic value of a stock based on a future series of dividends, that grow at a constant rate, Given a dividend per share that is payable in one year and the assumption the dividend grows at a constant rate in perpetuity the model solves for the present value of the infinite series of future dividends. Because the model assumes a constant, growth rate it is generally only used for companie's with stable growth rates in dividends per share. This model values a company stock using an assumption of constant growth in payment's a firm makes to its common equity share holders.

Assumption of a constant growth on dividends per share remains one of the main limitation of Gordon growth model. Firstly, because of uncertain financial difficulties or successes and business cycles companies very rarely show constant growth in their dividends and secondly the issue of the association by growth rate used in the formula and discount factor. The model will be worthless if result comes up with a negative value when required rate of return is less than the growth rate of dividends per share. Apart from that lastly, value per share can approach to infinity if the growth rate and required rate of return becomes identical.

2.2.3 Net present value of Growth opportunity Model

New projects or potential/future acquisitions are examples of growth opportunities that have been involved with all future cash flows associated with net present value per share is the formula for the net present value of growth opportunities. Intrinsic value per share of these growth opportunities is being determined by net present value of growth opportunities and this in turn tells us that how much of the firm's current per share value is determined by them. The formula to calculate net present value of growth opportunities is discounted firm's cost of capital of projected cash inflows minus the buying price of the asset/project or the initial investment.

2.3 Macroeconomic Indices and P/E

2.3.1 GDP Growth Rate

Price to earnings ratio will be high whenever a country's economy is in boom or growth cycle because due to the fact that this growth cycle reflects in the prospective higher returns of listed companies of that country through which share prices of potential stocks rise above average. However, price earnings ratio tends to fall when a nation's economy is in its recession phase or not in growth cycle which results in fall of share price and investors then tend to look on the negative side of stocks Itnjing (2008). Whenever, the interest rates rise in an economy it will result in decrease of share prices which in turn reduces the price earnings of a firm. This happens because when interest rates rise up investors and people who are not good at financial literacy tend to keep their money in banks and other financial institutions.

2.3.2 Interest Rate

Interest rate is the amount that is being charged by the lender to a borrower for the use of asset over a pre-defined period. Vehicle, building, large assets, consumer goods and cash are some of the assets that can be borrowed. Interest rates are commonly noted on annual basis.

Share prices have been affected by the change in the interest rate in two ways. Firstly, direct movements of funds in security markets by investors have been observed due to the variations in interest rates in a country. Whenever, interest rates rise up in an economy, people and other investors start to put their money in to banks as this is one of the most secure investment from the perspective of generally public especially those who are not good in financial literacy, resultantly the share prices will fall down as money has been removed from their thus it will ultimately cause price earnings ratio of firms to fall down. On the contrary, people especially investors those who are good at financial literacy used to put their respective money in to the

stock markets by purchasing stock of reputable firms whenever, interest rates in banks fall down. Thus all this approves the notion that there is a negative association between average price earnings and interest rate Itnjing (2008).

In addition to above stated comments earnings of firms have been directly affected by the variations in interest rate. Whenever, the interest rates rise in an economy it will result in decrease of share prices which in turn reduces the price earnings of a firm. This happens because when interest rates rise up investors and people who are not good at financial literacy tend to keep their money in banks and other financial institutions because this seems the safest way to earn a specific amount of return on their investments on the other hand companies will pay increased interest rates on their respective loans which will ultimately decrease their profits. However, on the contrary, when interest rates goes down it will result in increase in share prices of share prices which in turn escalates the price to earnings ratio of firms in an economy.

This happens because when interest rates goes down investors and people who are good at financial literacy tend to take out their money from banks and other financial institutions and put back their respective investments in to stock markets because it will give them opportunity to earn abnormal profits.

On the other hand companies take more debt from financial institutions like state bank and other commercial banks because they now have to pay less amount of interest on their loans which ultimately escalates their profit margins which is then reflected in to price to earnings ratio Itnjing (2008).

2.3.3 Growth Rate of CPI

The gradual escalation in the prices of goods and services over a period of time is said to be inflation rate, when such phenomenon occurs the purchasing point of currency tends to depreciate. Central bank is responsible to avoid deflation and limit inflation in a country

Price to earnings of a firm will be less during the period of devaluation whereas, on the contrary, investors used to buy capitals such as stocks during inflationary period as price to earnings will be high during high inflation. It has been till known fact that real estate and stocks are inflation proof therefore price to earnings and inflation are obviously positively associated with each other. Thus in order to constrain the risk of devaluation investors are recommended that when they are making their respective investment decisions by using price to earnings ratio they must keep in mind the rate of inflation usually replaced by growth rate of CPI Itnjing (2008).

2.4 Financial Indices and P/E

2.4.1 Dividend Payout Ratio

There is a positive association with company's price to earnings ratio and dividend payout ratios it has been widely accepted reason being investors gain higher returns on their investments when a firm is paying high dividends. On the opposite side, when investors are gaining less returns on their respective investment the price to earnings ratio will fall down. Dividend payout ratio is one of the direct determinant of price to earnings ratio which is derived from formula of Gordon growth. Therefore, it has been supposed that price to earnings and dividend payout ratio are positively associated According to Itnjing (2008).

2.4.2 Liability-Asset Ratio

Price to earnings has been influenced directly by one of the many indices called as earnings per share. The association with profit levels and capital size is being reflected by Earning per share index. Therefore, in the same level of corporate profit conditions, if a firm has a relative small capital size, it will result in higher earnings per share which in turn will be reflected in lower

price to earnings ratio However, on the contrary, if a firm has larger capital size, it will result in lower earnings per share which in turn will be reflected by high price to earnings ratio for that respective firm. It has been widely accepted that there is an inverse association with two things i.e. equity financing and debt financing.

If a firm has high liability to asset ratio, it means that the firm has more debt financing as compared to equity financing which in turn leads to high earnings per share and low price to earnings ratio for that respective firm. Therefore, on the basis of this argument it has been evident that higher liability to asset ratio results in with price to earnings ratio confirming the presence of negative association between price to earnings ratio and liability to asset ratio Itnjing (2008).

2.4.3 Dividend Payout Ratio and P/E

This policy is deciding on how a corporate profit, should be distributed, either you should pay it whole as dividend or to retain whole or part of it for expansion. According to Wenjing, (2008) the return and stock value expected by the investors, will rise when high dividend payout are made and consequently it leads to escalating price to earnings ratio. We know that the inverter will prefer more return increase in stock value, Arnotta and Asness (2003) that showed positive association between dividend payout ratio and price to earnings ratio.

According to Brav, Graham, Harvey and Michaely (2005) the extent has been declined over the past years to which firms adhere to their target payout ratios which means that over the last few decades firms have changed their behavior with respect to paying dividends to their respective shareholders. Due to this variability firms tend to sometimes give smaller and sometimes higher amount of earnings to maintain a steady amount dividend giving patterns which clearly shows that if earnings of a firm are especially low or high in a certain year, firms might not be able to match their respective target payout ratio.

The association between price to earnings and dividend payout ratio is full of mix results around the globe. Most recently, Jitmaneeroj (2017) has investigated the non-linear association and conditional association between dividend paid and price to earnings.

The researcher have come out with some new and interesting findings based on the annual data of USA industries for a time period between 1998 to 2014 almost for sixteen years by using fixed effects model to analyze the non-linear and conditional association between the said two variables. The scholar come up with results which states that dividend paid and price to earnings have both positive and negative association when the required rate of return is greater as till as less than return on equity. Therefore on the basis of above results the first hypothesis of the study is as following

H_1: Dividend payout ratio has a significant impact on Price to Earnings ratio in financial sector of Pakistan Stock Exchange.

2.4.4 Profitability and P/E

Company performance is one of major indicator for evaluating firm performance. Price to earnings and return on assets (ROA) have been used by both Marco (2013) and Itnjing (2008) researchers to see the correlation between these two variables. It has been found out that by Itnjing (2008) Price to earnings and return on assets (ROA) are negatively associated with each other with note able finding that price to earnings are directly determined by return on assets (ROA). Similar to this study another study which states that current and future return on assets (ROA) determines the decision of price to earnings unitedly this is the findings of Penman (1996) who in his study gave an extensive theoretical bases between return on assets (ROA) and price to earnings.

Firms that have higher forward price to earnings ratio than other firms is due to the fact that those firms have very high or very low profitability in the shape of return on assets (ROA) these results are according to the findings of Ohlson and Gao (2006) who also predicted a U-shaped association between the two said variables theoretically. Thus on the basis of above evidence second research hypothesis is as following

H_2: There is a significant impact of ROA on Price to earnings ratio of financial sector of Pakistan Stock Exchange.

2.4.5 Leverage and P/E

Does capital structure affect the P/E ratio? Since the P/E ratio can be described as an indicator of future growth in earnings Penman, (1996), it can be very fruitful to determine if the capital structure change can improve it. If this happened then it can improve the value of a given firm by altering its capital structure and it can also determine the P/E ratio given a particular capital structure value. Mahmood and Zakaria (2010) in Malaysia, did research on the relationship between the P/E ratio and capital structure of property and construction sectors and established a positive correlation.

This meant, to increase the leverage ratio lead to a decrease of the P/E ratio. The reason for this was that those firms which are highly geared pay large amounts of interest on the debts, this lowers the profit margin and the P/E ratio. Shroff and Singh (2009) argued that since high leverage can lead a company into financial distress, investors will avoid such companies leading to low stock market prices and P/E ratios. They supported the idea that high leverage will lead to low P/E ratios. Leibowitz (2002) did not arrive at a particular relationship between capital structure and the P/E ratio.

If capital structure increased, the P/E ratio could either increase or decrease depending on what point of view is under consideration. He considered two points of view namely: Corporate finance point of view- ascertaining how adding debt to an unlevered company affects its value; a market perspective- here the investment analyst starts dealing with a company which is already levered and its returns are known. In a market perspective increasing leverage reduces the P/E ratio quite significantly. In the corporate perspective, increasing leverage causes a modest increase or decrease of the P/E ratio.

Minjina (2008) using a formula developed by Koller, Geodhart and Itssels (2005) placed companies in three groups namely: Companies with unleveraged P/E (the ratio obtained if no debt is used) greater than the reciprocal of the cost of debt, P/E ratio increased with the leverage while; those with an unleveraged P/E less than the said reciprocal, had a P/E ratio decrease as leverage increased; Companies with unleveraged P/E ratios equal to the reciprocal of debt cost showed no relationship between the P/E ratio and leverage.

Previous studies such as Ramcharran (2002); Beaver and Morse (1978) have been line with the findings of Afza and Tahir (2012) who found out in their respective results that price earnings ratio is negatively associated with leverage of firms. Similar to this finding, it has been noticed that when a firm is highly levered it escalates the bankruptcy risk of that respective firm that could affect negatively on market multiples which clearly depicts that as the leverage of company increases it will ultimately decrease the price to earnings ratio of that respective firm.

If all other factors remained constant whenever there is a need for a firm to increase its working capital, it shows that firm has exposed to more risk level and that resultantly puts down the whole price earnings ratio for that respective firm. In other words, if a company is increasingly investing in its working capital domain even though the company has strong and sound net

profits at its disposal it means they will surely loose some of their net profit and thus will be unable to generate cash is the bottom line of all this discussion. This phenomenon is significant for company's future because working capital affect is shown in targeted price to earnings ratio of a firm and investors took this thing seriously whenever, they are going to invest in a company. Therefore, from the above discussions third hypothesis of the study is as follows

H_3: There is a significant effect of leverage on price to earnings ratio of financial sector of Pakistan Stock Exchange.

2.4.6 Firm Size and P/E

For the objective of looking into the correlation previous studies such as Afza and Tahir (2012); Bhattarai (2014); Baksi and Chan (2000), Anderson and Brooks (2006); Flint, Tan and Tian (2010); Almumani (2014) have taken price to earnings as their dependent variable of the study while considering firm size as their independent variable of respective studies. It has been noticed that firm size maintained a positive association with price to earnings for last two years of the study i.e. 2008 and 2009, whereas, on the contrary, price to earnings and firm size maintained inverse association for the first three years of the study i.e. 2005, 2006 and 2010 Afza and Tahir (2012).

These findings tells us that large and stable firms who are less exposed by certain economic and political instability will be center of attention for investors when stock market starts declining whereas, when the stock market is in its growth period it implies that the market has more growth opportunities. Therefore, investors tend to value the shares of small firms. Firm size and price to earnings move together with share prices when size of the firm is positively and significantly associated with price to earnings ratio as per the study conducted by Bhattarai (2014). Smaller firms have speedy earnings growth as compared to larger firms that have slower

earnings growth as it has been evident by the independent variable “size of the firm” according to findings of Flint et al. (2010). Thus on the basis of above evidence forth hypothesis of the study is as following

H_4: There is a significant effect of firm size on price to earnings ratio of financial sector of Pakistan Stock Exchange.

2.5 Recent Empirical Evidence

Returns seems to improve for high price to earning firms and declines for low price to earning firms but when insider ownership is high these are the findings of Houmes & Chira (2015) who have analyzed how price to earnings are being affected by ownership structure especially insider ownership. These findings are true when it see these findings in the context of both alignment of incentives and violation of these policies.

For low price to earnings firm when management is performing poorly, it clearly shows the inability and incapability of outside shareholders as till as board of directors which in turn lower stock returns of that firm. Converse to this situation for high price to earnings firm their management when perform effectively, it means that board of directors and outside shareholders does not intervene more frequently, thus they create higher returns which shows that value maximizing management has been receiving incentives.

By using regional data based on average basis Gregoriou, Kontonikas & Montagnoli (2014) have investigated a study that circles around the notion whether earnings ratio affect the regional and averaged based house prices in UK. The researcher have used house prices in a time-series properties with earnings ratio. By testing null hypothesis of non-stationary test the researcher used unit root test for which includes tests such as abrupt structural changes examined through non-linear and linear tests. The results of the study states that data is stationery. This in turn

means that earnings may have long lasting divergence from house prices in the United Kingdom (UK).

Fixed effect model was used to see the impact of dividend paid with respect to price earnings ratio by employing advance econometric techniques to see the association between the said two variables. Moreover, the aim of the study is to look out whether dividend yield impacts the price earnings ratio on stock returns in Pakistan Stock Exchange. For the period 1998 to 2009 which accounts for almost 11 years, the sample size of the study was one hundred and eleven non-financial firms that have been listed under Karachi stock exchange 100 index.

The results of the study itre quite interesting as it has been recommended that if investors want to earn returns above average (abnormal return) they can decide about their respective investments on the basis or grounds of price to earnings ratio and firm size because stock prices of the said firms has been affected by firm size and price to earnings ratio significantly and positively whereas, on the contrary, stock prices of the said firms in the study maintained an inverse association with dividend yield Arslan and Zaman (2014)

According to the findings of Nel (2009) it has been stated that researchers should use different multiples for different sectors because findings suggest that price to earnings are not found to be most accurate valuations across all sectors. If policy makers and investors want to increase the accuracy of equity valuations they have to look out for other than Price to earnings ratio multiples. The researcher have investigated the accuracy of five most popular multiples that incudes price to earnings ratio as till to look that whether the popularity of price earnings are justifiable from a sector prospective in South African equity market. The researcher have proposed that price earnings ratio is one of the most used technique in the world when it comes to equity valuations. However, this claim of the researcher has not been on the basis of previous

research but in fact it is on the evidence of practice. The researcher used a sample size of 19 years from 1998 to 2010.

2.6 Research Gap

Different studies had been published globally in this area of research. But there is still a gap with context to Pakistan. This study will help in covering such research gap and can be addition to the previous literature. In Pakistan, no recent study has been published with the variables that are taken in this study. After going through all the above paragraphs it came to know that researchers have found different results while investigating the determinants of price to earnings ratio in their respective studies. So firstly, findings of this research will add on into existing body of knowledge. Moreover, to the best of my knowledge a lot of studies have been done related to determinants of price to earnings ratio but very few studies have been found out where macroeconomic variables are used as controlling variables so the study is going to fill this literature gap.

2.7 Research Hypothesis:

The following are the research hypothesis of the study derived from literature review.

H_0: Dividend payout ratio has no impact on Price to Earnings ratio in financial sector of Pakistan Stock Exchange.

H_1: Dividend payout ratio has a significant impact on Price to Earnings ratio in financial sector of Pakistan Stock Exchange.

H_0: There is a no impact of ROA on Price to earnings ratio of financial sector of Pakistan Stock Exchange.

H_2: There is a significant impact of ROA on Price to earnings ratio of financial sector of Pakistan Stock Exchange.

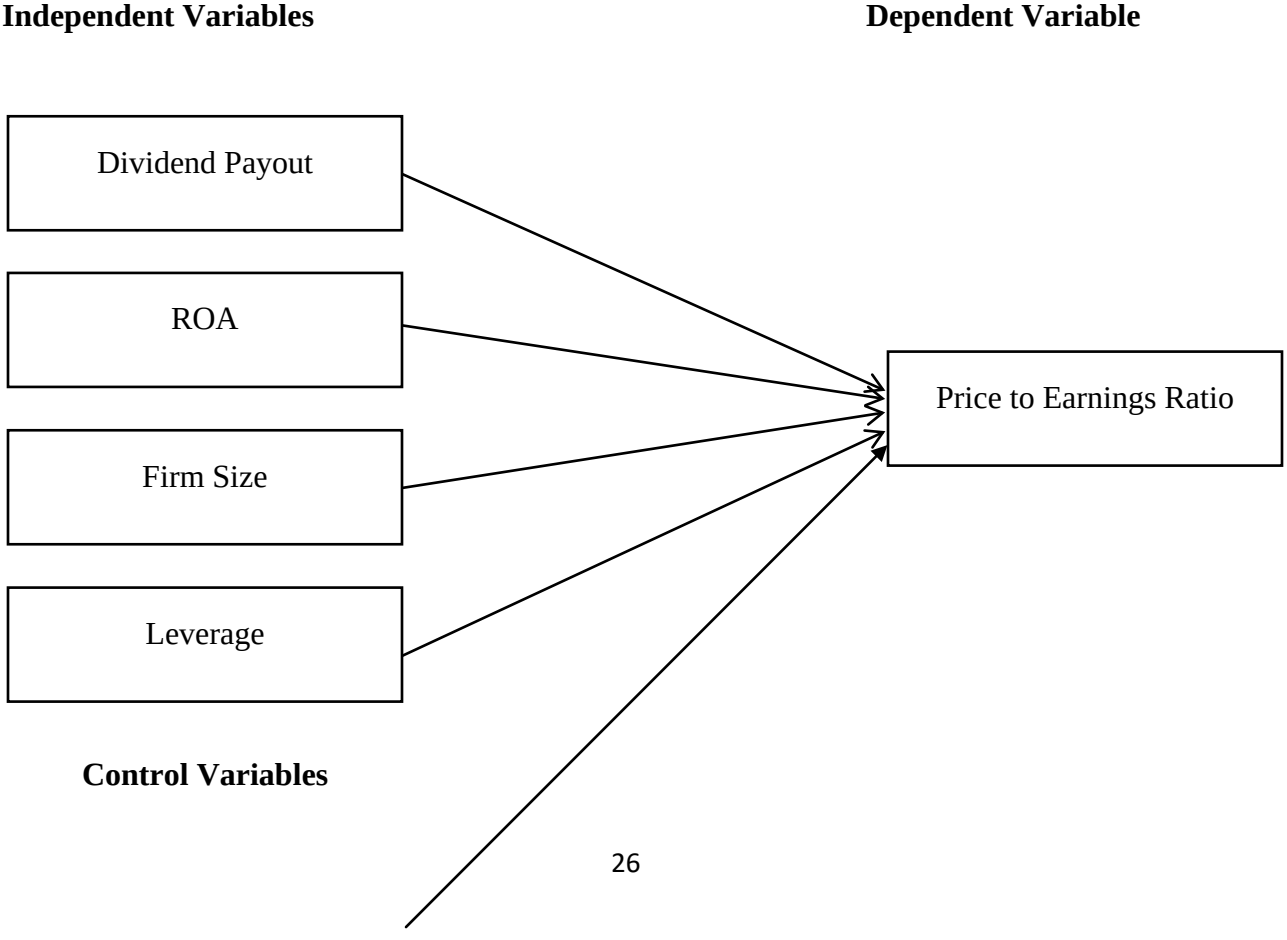
H_0: There is no effect of leverage on price to earnings ratio of financial sector of Pakistan Stock Exchange.

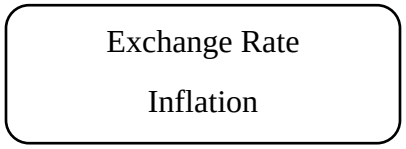
H_3: There is a significant effect of leverage on price to earnings ratio of financial sector of Pakistan Stock Exchange.

H_0: There is no effect of firm size on price to earnings ratio of financial sector of Pakistan Stock Exchange.

H_4: There is a significant effect of firm size on price to earnings ratio of financial sector of Pakistan Stock Exchange.

2.8 Theoretical Framework





The above is the theoretical framework of the study.

CHAPTER NO 3

RESEARCH METHODOLOGY

The design of the research study is revolving around the systematic plan or action to resolve the problem statement. Research design is a detailed outline of how researcher transforms his or her ideas, knowledge, and skills into a meaningful form. A research design will typically include how data is to be collected, what instruments will be used, how the instruments will be used and what are the intended means for analyzing data that has been collected.

3.1 Research Type

The research is a Causal study that is aimed towards investigating the determinants of price to earnings ratio in financial sector of Pakistan Stock Exchange. Moreover, understudy research is quantitative in nature and the data will be collected through secondary means that is online sources.

3.2 Target Population

The target population for this study includes all the listed companies under financial sector of Pakistan Stock Exchange. Reason being it is difficult for investors to understand the fundamentals related to financial sector.

3.3 Sample size

The sample size chosen for the research includes 100 companies from financial sector of Pakistan Stock Exchange. The companies have been purposively chosen from Pakistan stock exchange to better understand the dynamics of financial sector of PSX. The fundamentals of financial sector is not easy to understand as far as general public and investors are concerned therefore, this study is limited towards financial sector of Pakistan Stock Exchange. As we know

Pakistan stock exchange some years ago is one of fast growing stock exchange in Asia so it medium of attraction for local as well as foreign inverter to invest in it, so for new investor it is important to know actual growth rate and P/E ratios so that they can invest. We take top 100 companies of PSX so investor have a full knowledge of PSX and we tried to examine, the determinants of price to earnings ratio in order to identify the factors that can effect of influence price to earnings ratio and ultimately, the investor confidence toward organization, firm for making investment decisions.

3.4 Study Time period

Moreover, the study time frame which has been selected to analyze data comprises of 10 years starting from 2010 to 2020.

3.5 Type of Data

The research uses secondary data and the data that has been used to analyze the impact and relation between dependent and independent variables is in the form of panel data.

3.6 Data Diagnostic Test

For stationary and normality of data current study will perform Augmented Duckey Fuller Test (ADF) and Descriptive Statistics. These tests have confirmed the stationery and normality of data.

3.7 Data Collection Instrument

Data collection is among the first and foremost important step in any research. The data for the study is secondary in nature which has been collected from audited online available financial statements.

3.8 Sources of Data

The sources for data collection are as follows:

Variables	Data Sources
Price to Earnings ratio, Dividend payout ratio, Firm Size, Leverage, Return on Assets	State Bank of Pakistan Stock Exchange and Annual Reports of Companies
Inflation and Exchange rate	IMF and World Bank

3.9 Operationalization of variables

Variables	Measures	Source/ citation
Price To Earnings Ratio	Market value per share divided by Earnings per share	Jitmaneeroj (2017), Kumar (2015), Afza and Tahir (2012)
Dividend Payout Ratio	Dividend per share divided by Earnings per share	Khan et al. (2020), Jitmaneeroj (2017), Tahir et al (2017)
Size of Firm	Natural Log of Assets	Tahir et al (2017), Bhattarai (2014), Almumani (2014)
Leverage	Total Debt divided by Total Assets	Arslan et al (2017), Minjina (2008), Ramcharran (2002)
Return on Assets	Net profit divided by Total Assets	Wu (2014), Premkanth (2013), Sezgin (2010)

Exchange Rate	National currency relative to US Dollar	Megaravalli & Sampagnaro (2018)
Inflation	CPI Growth Rate	Megaravalli & Sampagnaro (2018), Apergis (2015)

3.10 Data Analysis Technique

The study has performed Descriptive statistics, correlation and regression analysis

3.11 Data Analysis Tool

E views version eight has been used to analyze data in this study

3.12 Specification of Model

Whenever, it go for regression analysis, it is mandatory to fulfil assumptions of regression. Before looking in to further details, firstly the study will perform fixed redundant effect (FRE) using fixed effects which will assist us in determining whether it are going to use common effect model or Non-common effect model. Secondly, if the results of (FRE) shows that it have to use Non-common effect model, then it will perform Hausmann test which will help us determine whether to use random effect model or fixed effect model Gujrati (2009). However, on the basis of some of the earlier studies see for instance Afza and Tahir (2012), Khan et al (2020), Tahir et al (2017), this study may use OLS regression and generalized least square (GLS)

3.13 Econometric Models

$$P/E_{it} = \alpha + \beta1(FS)_{it} + \beta2\ (LEV)_{it} + \beta3(ROA)_{it} + \beta4(D.P)_{it} + \mu_{it}$$

$$P/E_{it} = \alpha + \beta1(FS)_{it} + \beta2\ (LEV)_{it} + \beta3(ROA)_{it} + \beta4(D.P)_{it} + \beta5(INF)_{it} + \beta4(ER)_{it} + \mu_{it}$$

Where,

P/Eit = Price to Earnings of Firm I in time T

B = Intercept of equation

FS = Firm Size

LEV = Leverage of Firm

ROA = Return on Assets

D.P = Dividend Payout Ratio

INF = Inflation

ER = Exchange Rate

UIT = Disturbance Term

Chapter No 4

Data Analysis and Results

4.1 Diagnostic Test

4.1.1 Unit Root Test

Variable	ADF T-Statistics	Prob
DP	259.831	0.0000
ER	537.95	0.0000
INF	1039.4	0.0000
LEV	325.219	0.0000
LNTA	307.011	0.0000
PE	342.661	0.0000
ROA	412.581	0.0000

From the above Table 4.1.1 it have the results for Augmented Dickey Fuller test. The Null Hypothesis was that the variable has unit root and alternate hypothesis was that variable is stationery (Does not have unit root). Our results from ADF test shows that it will reject null hypothesis as the P-values are highly significant.

Interpretation: The values of Augmented Dickey fuller test (T-statistics are 259.831, 537.95, 1039.4, 325.219, 307.011, 342.661 AND 412.581 for respective dependent and independent variables) along with the p-values that are (0.000 for all dependent and independent variables. Leverage, Firm size (LNTA) and ROA becomes stationery at level. However, the rest of the variables such as Dividend payout ratio, Exchange rate, Inflation and Price to earnings ratio becomes stationery at 1st difference. Thus it means that data health is good for further analysis.

4.1.2 Correlation Matrix

	DP	***ER***	***INF***	***LEV***	***LNTA***	***P/E***	***ROA***
DP	1.0000						
ER	0.0396	1.0000					
INF	-0.0365	-0.1495	1.0000				
LEV	0.0170	0.0054	0.0319	1.0000			
LNTA	-0.0123	-0.0259	-0.0128	0.2305	1.0000		

P/E	-0.0030	0.0185	0.0069	-0.0036	-0.0032	1.0000	
ROA	0.1076	0.1486	0.1230	-0.3524	0.0583	0.0988	1.0000

The table 4.1.2 presents the correlation matrix of between all variables. The independent variables are (Dividend payout ratio, Leverage, Firm size (LNTA), return on Asset) and price to earnings ratio as dependent variable. Refer heading 3.9 for variables formulation. It is evident that there is no issue of multi-collinearity assuming 0.7 thresholds. The significance levels are as under:

*** Significant at 1% level

** Significant at 5% level

* Significant at 10% level

4.1.3 Descriptive Statistics

	DP	**ER**	**INF**	**LEV**	**LNTA**	**PE**	**ROA**
Mean	0.0042	4.4031	-0.3846	0.5904	8.1101	-0.0350	0.0098
Median	0.0000	2.7404	-1.2311	0.5692	7.4979	0.0000	0.0178
Mode	0.0000	0.0000	0.0000	0.2922	5.5890	0.0000	-0.0057
S.D	1.0001	4.0697	4.8994	0.5866	2.7246	26.2107	0.1710
Min	15.7727	-0.5288	-6.6384	-1.4581	1.2754	-579.4381	-3.2322
Max	14.5574	11.3049	12.6874	13.1532	14.6884	569.9548	0.7246
Count	970	970	970	970	970	970	970

The table 4.1.3 reports the descriptive summary of all dependent and independent variables and control variables. The independent variables of the study are leverage, firm size, dividend payout ratio and return on assets whereas, price to earnings ratio is dependent variable of the study. Moreover, exchange rate and inflation are control variables in the study. Refer heading 3.9 for variable formulation. The overall sample is comprised of 970 observations which is based on annual data starting from 2010 to 2020.

4.2 Regression Analysis

4.2.1 Redundant Fixed Effects Test

Redundant Fixed Effects Tests
Pool: PANEL
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.106069	-96,771	0.24
Cross-section Chi-square	112.6404	96	0.118

Interpretation: From the above table it can clearly see as the p-values are insignificant. Therefore, this study will perform fixed effect model under common effects.

4.2.2 Regression Analysis with control variables

Cross-section fixed effects test equation:
Dependent Variable: PE_?
Method: Panel Least Squares
Date: 12/14/21 Time: 01:39
Sample (adjusted): 2010 2020
Included observations: 9 after adjustments
Cross-sections included: 97
Total pool (balanced) observations: 873

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.002183	0.050384	0.043334	0.9654
LEV_?(-1)	6.667180	1.100327	6.059269	0.0000
ER_?(-1)	0.027244	0.052306	0.520857	0.6026
D(INF_?)	-0.078482	0.141569	-0.554374	0.5795
LNTA_?	-0.582212	0.242789	-2.398016	0.0167
ROA_?	18.01631	3.940683	4.571874	0.0000
DP_?	-0.219337	0.811213	-0.270381	0.7869

R-squared	0.063197	Mean dependent var	0.019097
Adjusted R-squared	0.056706	S.D. dependent var	0.199935
S.E. of regression	0.194184	Akaike info criterion	-0.432037
Sum squared resid	32.65457	Schwarz criterion	-0.393774
Log likelihood	195.5842	Hannan-Quinn criter.	-0.417399
F-statistic	9.736718	Durbin-Watson stat	2.390049
Prob(F-statistic)	0.000000		

Interpretation: From the above table it can see that firstly leverage has a positive significant relationship with price to earnings ratio at 1% level of significance. Secondly, exchange rate has a positive but insignificance effect on price to earnings ratio. Thirdly, inflation maintained a negative insignificant association with price to earnings ratio. Fourthly, firm size (LNTA) has a

negative but significant impact on price to earnings ratio at 5% level of significance. Fifthly, ROA maintained a positive but significant impact on price to earnings ratio at 1% level of significance. Lastly, Dividend payout ratio has a negative but insignificant impact on price to earnings ratio of financial sector of Pakistan Stock Exchange. Moreover, the value of R-square shows that there is almost 6% variations in dependent variable being explained by independent variables and control variables.

4.2.3 Regression Analysis without control variables

Cross-section fixed effects test equation:
Dependent Variable: PE_?
Method: Panel Least Squares
Date: 12/14/21 Time: 01:48
Sample (adjusted): 2010 2020
Included observations: 9 after adjustments
Cross-sections included: 97
Total pool (balanced) observations: 873

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.026197	0.020759	1.261933	0.2073
LEV_?(-1)	6.635069	1.098295	6.041247	0.0000
LNTA_?	-0.573274	0.242516	-2.363863	0.0183
ROA_?	17.95258	3.828445	4.689261	0.0000
DP_?	-0.158910	0.808762	-0.196485	0.8443

R-squared	0.061995	Mean dependent var	0.019097
Adjusted R-squared	0.057673	S.D. dependent var	0.199935
S.E. of regression	0.194084	Akaike info criterion	-0.435337
Sum squared resid	32.69645	Schwarz criterion	-0.408007
Log likelihood	195.0248	Hannan-Quinn criter.	-0.424882
F-statistic	14.34212	Durbin-Watson stat	2.389536
Prob(F-statistic)	0.000000		

Interpretation: From the above table it can see that firstly leverage has a positive significant relationship with price to earnings ratio at 1% level of significance. Secondly, firm size (LNTA) has a negative but significant impact on price to earnings ratio at 5% level of significance.

Thirdly, ROA maintained a positive but significant impact on price to earnings ratio at 1% level of significance. Lastly, Dividend payout ratio has a negative but insignificant impact on price to earnings ratio of financial sector of Pakistan Stock Exchange. Moreover, the value of R-square shows that there is almost 6% variations in dependent variable being explained by independent variables.

Chapter No 5

Discussion and Conclusion

This study is based on determinants of Price to Earnings Ratio in Financial Sector of Pakistan Stock Exchange. Different factors across the globe effects the Price to earnings ratio in different stock markets. Price paid for a share relative to the income or profit earned by the firm per share is a measure of price to earnings ratio which usually indicates the earnings multiple of a firm. However, for analyzing the individual stocks, markets, sectors and industries most of the market analyst, researchers, fund managers and investors used to put their faith in price to earnings due to its attractiveness. Price to earnings can also be called as "price earnings multiple" tells investors how much they will pay per rupee of earnings in a firm. It also influence the confidence of investors as it deals with investor sentiment and gives a probable picture of future firm performance. Investors have different methods or ways through which they can know whether the stock market is rationally priced or not with knowledge of how much they have to pay for every one dollar of earnings. Furthermore, price earnings ratio of individual stocks and market illustrate variations as the time passes which clearly tells us that stock markets around the world faces the problem of financial bubbles, speculation and irrational pricing all those things have been mentioned by theorists who are concentrating on stock price volatility around the world. Due to such significance of price to earnings over the past decades empirical researchers tried to locate those factors that can contribute significantly towards price earnings of a firm which can help investors to make their investment decisions more effectively and efficiently. There are plenty of issues with the P/E ratio, one of them is that it does not account for any type of growth

or lack of it. Also companies with major debt issues are obviously, higher risk investments but Price in P/E only consider the equity price and not the debt that the company has incurred. This study is fascinate and help decision makers to evaluate that explains variations in organization Price to Earnings ratio in order to attract investors, attention and raise their confidence to select which to invest which firm to select on basis of P/E ratio. Most recently after peaceful change of political regime and aid from friendly countries, suddenly the confidence of local as till as foreign investors increases which means that it are going to see several foreign and local investors invest their money in to the stock market of Pakistan Stock Exchange in near future. The findings of the study states that among all those sixty three ratios profitability ratios, leverage ratios, sales growth ratios, price to earnings, market to book value and lastly earnings per share are some of the most significant ratios. On the contrary, capital turnover and cash position ratios are least important and ratios such as inventory turnover, cash flow ratios, dividend ratios and receivable ratios tier moderately important.

5.1 Discussion:

Leverage and Price to Earnings Ratio

The purpose of this paper is to examine the determinants of price to earnings ratio in financial sector of Pakistan Stock Exchange. This study is significant for investors, policy makers and research scholars especially in Pakistan Stock Exchange. Leverage maintained a positive significant relationship with price to earnings ratio at 1% level of significance. This relationship holds which in turn means that banks in financial sector of Pakistan Stock Exchange are taking more leverage and thus investing that leverage in expanding their business around Pakistan Stock Exchange, which resultantly increase their price to earnings over the period of 10 years starting from 2010 to 2020. The results of the study are in line with some of the previous studies such as

Mahmood and Zakaria (2010). Therefore, on the basis of this result it are going to accept our proposed hypothesis $H_{3.}$

Firm size and Price to Earnings Ratio

In line with second research objective 1.6.2 the results of the study in table 4.2.3 shows that firm size maintained a negative but significant relationship with price to earnings ratio at 5% level of significance. This is due to the reason that as the size of financial firms in financial sector of Pakistan Stock Exchange increases they tend to give frequent dividends which in turn hurt the price to earnings ratio in the long term. The results of the study are in line with some of the previous studies such as Ghayoumi et al (2011). Therefore, on the basis of this result it are going to accept our proposed hypothesis $H_{4.}$

ROA and Price to Earnings Ratio

In line with third research objective 1.6.3 the results of the study in table 4.2.3 shows that ROA maintained a positive significant relationship with price to earnings ratio at 1% level of significance because it is one of the oldest notion that higher the profitability higher the return which resultantly increase the price to earnings of financial sector over the period of 10 years starting from 2010 to 2020. The results of the study are in line with some of the previous studies such as Ohlson and Gao (2006). Therefore, on the basis of this result we are going to accept our proposed hypothesis $H_{2.}$

Dividend payout ratio and Price to Earnings Ratio

In line with last research objective 1.6.4 the results of the study in table 4.2.3 shows that Dividend payout ratio maintained a negative but insignificant relationship with price to earnings

ratio. The results of the study are in line with some of the previous studies such as Arnoota & Asness (2003). Therefore, on the basis of this result it are going to reject our proposed hypothesis $H_{1.}$

5.2 Conclusion

To conclude the above discussion it clearly see that firm level factors such as leverage, firm size and ROA significantly influence the price to earnings ratio in financial sector of Pakistan Stock Exchange whereas, firm level factor i.e. dividend payout ratio and country level factors such as exchange rate and inflation are unable to influence the price to earnings ratio of financial sector of Pakistan Stock Exchange. Thus on the basis of results of study it are going to accept our proposed hypothesis H_2, H_3 and H_4 and reject hypothesis H_1. So this study conclude that leverage, Firm size and Return on Asset are the factors which impact or effect the Price to Earnings ration in Financial sector of Pakistan Stock Exchange. On the basis of above mentioned arguments Firstly, present study is expected to help-out the decision makers and investers in ascertaining the significant factors that affect the organization's P/E ratio in financial sector of Pakistan stock exchange. so that they can attract attention of new investor and increase their confidence to select these companies in their portfolios with respect to my analysis. Secondly, management and other policy making individuals of certain firms can make their future polices in comparison to their respective competitors by reviewing this study. Lastly, this study will help to provide additional literature on the already existing vast literature on determinants on price to earnings ratio to academicians and researchers around the world.

5.3 Policy Implications

This research or study by analyzing, factors explaining variation in P/E ratio facilitates investors and researchers in identifying the significant factors, those influence the P/E ratios for firms in corporate and banking sector and helps in making, investment decisions for building their portfolios, firms their fore should pay higher dividends, to their investors or shareholders in order to raise confidence of shareholders or investors. The reach findings, of that paper provides, some important implication for researchers and investors particularly for the selection of stock allocations of fund and portfolios strategies. Investors and researchers can still rely on P/E ratio as an important and very useful tool for making their successful decision, and can enhance performance of their portfolio. Investor's earn or get abnormal return's by allocating, more weight's on stock, with high P/E ratio.

5.4 Future Research

After looking at the impact of firm level factors on price to earnings ratio, adding behavioral factors like investor sentiments and information spill over in the model can be a good insight for future research. Moreover, a comparative analysis for financial and non-financial sector can also be a good area for future research.

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