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Dividend Price Ratio and Stock Return: Evidence from Pakistan, India and China

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Abstract--- *This study estimated the effect of dividend premium and size in the growing capitalization markets of Pakistan, India and china. This paper examined the role of dividend in the terms of large and small firms and to correlate the dividend with stock returns. This study used monthly closing prices of 40 non-financial sector firms listed at Karachi Stock Exchange (KSE) For Pakistan, 40 from Taiwan economic journal Database (TEJ) for China and 40 from Bombay Stock Exchange (BSE) for India for the period of 2004 to 2014 based on market capitalization. Descriptive statistics and correlations analysis have been used to examine the relationshiop between the independent variables Market premium (MKT), Size premium (SMB) and dividend premium (LMH) and dependent variable stock return. Resluts from the descriptive statistics of Fama and French three factors shows that Pakistan has the highest mean value of marke premium and dividend premium, while India has the highiest mean value of size premium. Results of standard deviation shows that India has the lowes value of standard deviation of market premium and size premium, While China has the lowest value of SD for dividend premium. As per the results of the correlation anlaysis, Pakistan has the strongest negative relationsip between dividend premium (LMH) and market premium (MKT), between devidend premium and size premiumand between size premium and market premium as compared to India and China. The results revealed the positive relation of stock returns and dividend in the rapidly growing markets of Pakistan, India and China. From the overall results we concluded and suggest that Strategies of Investment would be scheme by the investors on the basis of the size, market premium and dividend premium. Consequences of the study disclosed the positive relation of stock returns and dividend in the rapidly growing markets of Pakistan, India and China.*

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Keywords--- *Bombay Stock Exchange, Dividend Premium, Fama and French, GARCH Model, Karachi Stock Exchange, Ordinary Least Square, Price Earnings Ratio, Taiwan Economic Journal.*

I. INTRODUCTION

It is an important issue in the finance history to identify the relationship between risk and return. Numerous of studies have been conducted in this regard. Several asset pricing models were invented to illustrate the correlation between excess market return and excessive portfolio return. Later, in the expansion of the single periodic mean-variance portfolio model of Markowitz (1959) and the Capital Asset Pricing model was developed by Sharpe (1964); Linter (1965); Mossin (1966). This model is the expansion of one-period mean-variance portfolio models of Markowitz (1959) and Tobin (1958). The Sharpe-Lintner and Mossin model created major commitment to the understanding of the relationship between risk and return.

In recent decades, the literature has shifted from the CAPM model to a multi-factor model in asset pricing. In the ensuing investigations Fama and French (1992; 1993) Carhart (1997) and Chen, Novy-Marx and Zhang (2010) create multi-factor models by upgrading the single-factor CAPM with factors identifying the relationship between different variables such as size, value, book to-market, momentum, investment and productivity (ROA). Fama and French modified CAPM in three factor assets pricing model for stocks. They explained three factors for stock returns by indicating size, book to market ratio and market. The size effect shows that the returns of low value companies are higher than those companies which have higher market equity. While market value of higher invested firms is below than those firms which consist the lower market capitalization.

Furthermore, researchers model supported the work of Banz (1981); Huberman and Kandel (1987); and Chen & Lakonishok (1991). In addition, many other researchers have reviewed this issue, such as Ballature (1978); Campbell and shiller, (1988); Fama and French (1988 & 1989), by using multiple methods for forecasting the return of share on the bases of dividend premium. Stephen Ross (1976) was the first who introduced the APT (Arbitrage Pricing Theory). As indicated by this hypothesis, there is linear correlation between expected stock return and their factors. Since the development of APT many researcher analyzed it and tried to identified the factors which are not defined by APT. Banz (1981) and Reinganum (1981) proposed size factor by declaring that size effect has significant impact on smaller firms as compare to large firms. Firms with low value produce higher returns than larger firms. Due to Comparative assessment, investors seek the attention for making their investments among South Asian countries for getting the maximum return on each portfolio.

This research will provide important information for dividend decision makers and shareholders of these emerging markets. It also provides the practical approach for investors and dividend policy makers in making of profitable portfolio for maximizing the stock return and minimizes the risk on portfolio. It is good for company to pay the dividends to their shareholders but a firm must contain appropriate retain earnings for increasing its future investments. This study is going to explore the correlation of stock return and dividend price ratio in emerging countries of Pakistan, India and china and fulfill the gap of literature on dividend policies. This study will try to find the answers for the questions such as What is the function of dividend in amplification of equity returns in Pakistan,

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India and China?, Whether dividend price ratio effect in Asian emerging markets is constant? Is the role of dividends in explaining equity returns in Pakistan, India and China? The main objectives of this study includes; To sustain, discernment about the role of dividend price ratio in equity market return, To contrast the dividend price ratio in Pakistan, India and China and to check the relationship of size and market premium by using Three factor in growing markets of Pakistan, India and China. This study is going to determine the relationship and impact of dividend price ratio and stock return in the capital market of the major growing economies i.e. Pakistan, India and China. The reaming paper structure is followed by the second section Literature review, third section methodology, and fourth section analysis the data after this fifth section consists on results and discussion and last section is conclusion of the study.

Hypothesis

H1: There is positive relationship exists between size premium and stock return.

H2: There is positive relationship exists between dividend premium and stock return.

H3: There is positive significant relationship exists between market premium and stock return.

II. LITERATURE REVIEW

This section deals with review of theoretical groundwork, empirical literature review and conceptual framework of the study.

Capital Asset Pricing Model

Capital asset pricing model was developed by Sharpe (1964) and Lintner (1965) in the extension of Markowitz (1959) and Tobin (1958) portfolio mean variance model. Every portfolio has risk because risk is constant it only can be minimize from a particular portfolio but it cannot be completely avoid from an investment. CAPM is based solely on a beta risk factor that measures systemic risk. Beta explains the variation in the expected return of a portfolio and asset. Capital express model represent the correlation between stock return and systematic risk.

$$E(Ri) = Rf + \beta i\,((E(Rm) - Rf)$$

ERi = stock return, Rf= free risk rate, βi = risk measurement / slope, Rm= market return

From the above equation we can conclude that investors are unwilling to take higher risk. It seems plausible that the immense risk of stock (higher β) would comprise higher stock return than lower risk (low β).

Arbitrage Pricing Theory (APT)

In order to overcome the limitation of CAPM, another model "Arbitrage Pricing Theory" (APT) projected by Ross (1976). According to CAPM beta is only single factor that express return but opposed to this model, APT asserts that more than risk there are many common factors that influenced the expected return. APT suggests liner multi factor relationship with expected return.APT asserts that there are systemic risks in the economy, while maintaining all available supplies at the same level. Fabrian and Herwany (2010) explore the capacity of both

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CAPM and APT to clarify overabundance portfolio returns in the Jakarta stock trade and find that while beta does not without anyone else clarify overabundance returns, two macroeconomic factors to be specific conversion scale furthermore, financing cost spread seem, by all accounts, to be huge in significant in APT test.

Fama and French Three Factor Model

In CRR's APT structure there is no authoritative on the choice of number of risk factors. In complexity to this, French and Fama (1993& 1996) figure a 3-factor demonstrate that catches three particular factors affecting expected return. They examined the joined part of Market beta, measure, use, gaining value proportions, and book to Market value, Price ratio for cross sectional regression varieties in stock returns of supplies of AMEX, NYSE, and NASDAQ. What's more discovered that book to Market value and size, along with market beta are clarifying anticipated returns by employing the cross sectional approach. In (1998) extended their study by testing different markets around the world and found maximum returns on the valuable stocks than inventory growth stocks, in (2006) conducted a study on profitability, investment and average returns and confirmed the prediction of theory of valuation. According to theory three elements (beta, book to market ratio, size) are associated with stock returns in (2015), Fama and French have released a working paper in which they added two more factors that is profitability and investment along with three factors model and claimed that cross sectional variations in expected returns can be better explained by their five factors model.

Empirical Literature Review

Harry Markowitz (1950) proposed the portfolio theory, argued that lower risk bear can elevated the productivity of portfolio by merging assets based on interrelation in return and risk can be minimized by diversifying the securities. Different investigators such a as Treynor (1961 &1962); Sharpe (1964) and Linter (1965) they established the capital asset pricing model later it was expanded by Black (1972) and known as zero beta CAPM but the traditional CAPM cannot by replaced due to its simplicity. Relationship and impact of value and risk was assessed by Lennon and Griffin (2002) by using the method of Fama and French (1973) they found the positive and significant relationship between normal returns and variability.

Significance of the CAPM and Fama and French model was assessed by Homsud et al. (2009) for this they selected Thailand Stock Exchange from it 421 portfolios studied. It comprising 4 years era since 2002-2007. Findings of the study show that the three-factor model has more capacity to describe CAPM analysis. In addition, Jang and Wilbur (2010) examined the risk coordination in value market. Author revealed that beta can examine the risk on returns. Hassan (2011) investigates this association for Pakistani-market. Reviewer selected the 250 companies covering the period of 2000-2007. Statistical results revealed that value impact directly related to various portfolios. In addition, they analyzed that there is inappropriate relationship between book and MKT stocks. Besides, they are of view that there is inconsequential relationship among low book/MKT stocks.

Senthil kumar (2009) assessed two factors that are value affect and size by applying Fama and Macbeth (1973) process, studied these factors relationship and 7 years data 2002 to 2008 from the Indian stock exchange. Results of the study disclose positive and also significant relationship between return and size. Due to size along with B/M

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ratio unstableness causes in returns. Similarly, B/M has huge impact on returns and makes it clear. Another research was conducted by Khan (2009 and used Fama and Macbeth (1973) model, In order to check the correlation of stock returns with price returns to Pakistani markets. Study concludes that returns are not associated with cost.

Research Framework

In this study, the author also used Size premium, market premium and dividend premium as independent variables and Rpt – Rft as stock return dependent variable to analysis the effects and relationship of these proxies. The model of variable's relationship is conceptualized as under: -

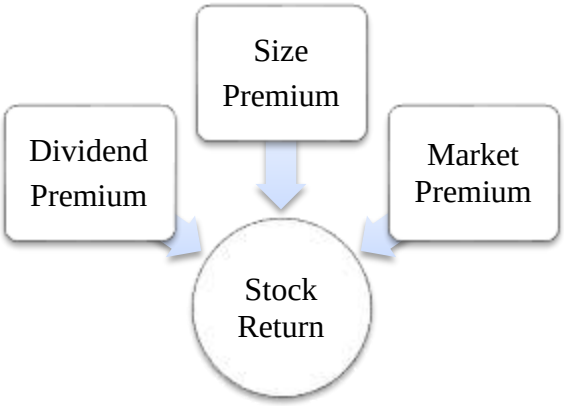

Figure: 1 Conceptual Frame Work (Source: Developed)

III. RESEARCH METHODOLOGY

Data Collection and Sample

This study used monthly closing prices of 40 companies listed at Karachi Stock Exchange (KSE) For Pakistan, 40 companies Taiwan economic journal Database (TEJ) for China and 40 companies Bombay Stock Exchange (BSE) for India for the period of 2004 to 2014 based on market capitalization. The reason to choose just 120 companies is the limited availability of data. For this purpose random sampling was used. Sample comprises of companies from non-financial sector. The reason to consider only non-financial sector is that in case of financial sector, accounting period closes at December but in non-financial period closes at June. The data collected from stock exchange of emerging countries i.e. Pakistan, China and India. For that purpose data has been collected from the websites of Karachi stock exchange (KSE) and Bombay Stock Exchange (BSE) and Taiwan economic journal of China.For identifying the relationship between dividend price ratio and stock return, descriptive statistics and inferential statistics analysis has been done.

Model Specification

Mathematically, we can represent the model as:

$$R_{pt} - R_{ft} = \alpha + \beta 1MKTt + \beta 2SMB_t + \beta 3DIVPt + e_t \qquad (1)$$

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Given equation represent the model for the analysis of two-pass regression.

$$R_{pt} - R_{f\,t} = \gamma + \gamma_1 \beta t(MKT) + \gamma_2 \beta t\,(SMB) + \gamma_3 \beta t(DIVP) + e_t \qquad (2)$$

Where, Rpt = return of portfolio, Rft = Risk free rate at the time t, α =Alpha, β =Common intercept,

e =Error Term, MKT =Market Premium, SMB =Size Premium, DIVID =Dividend Premium, ϒ =Intercept of variable

Variables of the Study

This study examines the effects and relationship between dividend price ratio and stock return of three emerging market Pakistan, China and India using variables: Stock Return (Dependent Variable) and Dividend (Independent Variable).

Table 1: Variables and Measurement

Variables	**Abbreviations**	**Nature of the Variables**
Dividend Premium	DIVD	Independent
Size Premium	SMB	Independent
Market Premium	MKT	Independent
Stock Return	Rpt- Rft (Rpt =return of portfolio, Rft = risk free rate at time t)	Dependent

IV. RESULTS AND DISCUSSION

Descriptive Statistic Analysis

The authors divided the analysis in two types, first, are Size-Dividend sorted portfolio and second are Fama and French three factor model.

Table 2: Descriptive Statistics, Size- Dividend Sorted Portfolios. (Pakistan)

Variables	Mean	Median	SD	Min	Max	Skewness	Kurtosis
S	0.0045	0.0047	0.0281	-0.134	0.145	-1.011	17.21
B	0.0041	0.0023	0.0092	-0.057	0.0263	-1.891	11.57
S/LD	0.0052	0.0051	0.0291	-0.137	0.1392	-0.576	15.37
S/HD	0.004	0.0036	0.032	-0.138	0.1398	-0.926	14.002
B/LD	0.115	0.0049	0.310	-0.119	1.051	2.688	5.354
B/HD	0.015	0.0051	0.011	-0.015	0.046	0.505	1.569

Note: S (Small), B (Big), S/LD (small low dividend), S/HD (small high dividend), B/LD (small high dividend), B/HD (big low dividend and big high dividend).

The above mentioned table No. 2 shows descriptive statistics as mean value, median, standard deviation, minimum value, maximum value, skewness and kurtosis value for the data related to Pakistan. The mean value of small portfolio (S) is 0.0045 while the SD is 0.0281. The mean value of big portfolio (B) is 0.0041 and SD is 0.0092.

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Similarly small portfolio / low dividend (S/LD) and small portfolio / high dividend (S/HD) has a mean value of 0.0052 and 0.004 respectively while their SD values are 0.0291 and 0.032 respectively. The mean value of big portfolio / low dividend (B/LD) and bigh portfolio / high dividend (B/HD) are 0.115 and 0.015 while their SD is 0.310 and 0.011 respectively.

Table 3: Descriptive Statistics Size- Dividend Sorted Portfolios. (India)

Variables	Mean	Median	SD	Min	Max	Skewness	Kurtosis
S	0.0101	-0.0061	0.103	-0.183	0.540	2.044	7.690
B	0.025	-0.0219	0.102	-0.536	0.305	-1.621	9.934
S/LD	0.009	-0.001	0.121	-0.246	0.932	3.788	26.897
S/HD	0.014	-0.003	0.155	-0.310	1.169	4.102	27.268
B/LD	-0.039	-0.039	0.175	-1.029	0.818	-1.969	19.52
B/HD	-0.012	-0.017	0.097	-0.504	0.442	-0.092	8.607

Note:S (Small), B (Big), S/LD(small low dividend), S/HD(small high dividend), B/LD(small high dividend), B/HD(big low dividend and big high dividend).

Table No. 3 shows descriptive statistics for the data related to India. The mean value of small portfolio (S) is 0.0101 while the SD is 0.0103. The mean value of big portfolio (B) is 0.0025 and SD is 0.0102. Similarly small portfolio / low dividend (S/LD) and small portfolio / high dividend (S/HD) has a mean value of 0.009 and 0.014 respectively while their SD values are 0.121 and 0.155 respectively. The mean value of big portfolio / low dividend (B/LD) and bigh portfolio / high dividend (B/HD) are -0.039 and -0.012 while their SD is 0.175 and 0.097 respectively.

Table 4: Descriptive Statistics Size- Dividend Sorted Portfolios. (China)

Variables	Mean	Median	SD	Min	Max	Skewness	Kurtosis
S	0.0031	0.035	0.027	-0.178	0.195	-0.262	14.165
B	0.005	0.009	0.009	-0.210	0.095	2.150	11.932
S/LD	0.007	0.026	0.043	-0.163	0.132	-0.186	15.788
S/HD	0.002	0.008	0.055	-0.174	1.074	-0.355	14.371
B/LD	0.108	0.009	0.321	-0.185	1.122	2077	3.740
B/HD	0.011	0.032	0.008	-0.034	0.127	-0.174	1.087

Note:S (Small), B (Big), S/LD(small low dividend), S/HD(small high dividend), B/LD(small high dividend), B/HD(big low dividend and big high dividend).

Table No. 4 shows descriptive statistics for the data related to China. The mean value of small firm (S) is 0.0031 while the SD is 0.027. The mean value of big firm (B) is 0.005 and SD is 0.009. Similarly small firm with low dividend (S/LD) and small firm with high dividend (S/HD) has a mean value of 0.007 and 0.002 respectively while their SD values are 0.043 and 0.055 respectively. The mean value of big firm with low dividend (B/LD) and bigh firm with high dividend (B/HD) are 0.108 and 0.011 while their SD is 0.321 and 0.008 respectively.

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Table 5: Comparison between Paksitan, India, China with Respect ot Mean & Stadandard Devation

Variables	Mean			Standard Deviation		
	Pakistan	India	China	Pakistan	India	China
S	0.0045	0.0101	0.0031	0.0281	0.103	0.027
B	0.0041	0.025	0.005	0.0092	0.102	0.009
S/LD	0.0052	0.009	0.007	0.0291	0.121	0.043
S/HD	0.004	0.014	0.002	0.032	0.155	0.055
B/LD	0.115	-0.039	0.108	0.310	0.175	0.321
B/HD	0.015	-0.012	0.011	0.011	0.097	0.008

In table 5 shows the comaparitvie anlaysis between Pakstian, India & China with respect to some of the central tendencies such as mean and standard deviation of the data. For Small firm (S) the mean value of India is higher than the Pakistan and China (0.0031), While the standard deviations for small firm (S) China has the lowest value of (0.027) while Pakistan has (0.0281) and India has (0.103). The mean value of Big firm (B) is (0.025) for Inida the highiest followed by China (0.005) and Pakitan (0.0041). In Case of small firm with low dividend India has the highiest mean of 0.009, while Pakistan has the lowest value of standard deviation of 0.0291. For small firm with higher dividend (S/HD), India has the highiest mean of 0.014 and Pakistan has the lowest value (0.032) of standard deviation. For Big firm with low dividend (B/LD) the mean value of Pakistan (0.115) is the higiest while Inida has the lowest standard deviatioin value of (0.175). In case of big frim with high dividend (B/HD), Pakistan has the highest value of (0.015), while China has the lowest value of standard deviation of (0.008).

Table 6: Descriptive Analysis for Pakistan of Fama and French Three Factors

Variables	Mean	Median	SD	Min	Max	Skewness	Kurtosis
MKT	0.005	0.012	0.077	-0.460	0.198	-2.092	10.685
Size	-0.050	0.000	0.153	-0.514	0.137	-2.516	4.809
LMH	0.050	0.001	0.1518	-0.051	0.519	2.675	5.311
Note: Rm-Rf (market premium) and LMH show (low dividend minus high dividend premium)							

As per the above mentioned table 6 shows that descriptive analysis for data related to Paksitan. The table shows that the mean value of market premium (MKT) is 0.005 while standard deviation value is 0.077 or 7.70% data deviate around the mean. Mean value and SD for size is -0.050 & 0.153 respectively. Similary the mean value and standard deviation of devedend premium (LMH) is 0.050 & 0.1518 respectively.

Table 7: Descriptive Analysis for India of Fama and French Three Factors

Variables	Mean	Median	SD	Min	Max	Skewness	Kurtosis
MKT	0.0008	0.011	0.071	-0.278	0.343	-0.633	2.478
Size	0.036	0.018	0.161	-0.294	1.178	4.718	28.562
LMH	-0.016	-0.003	0.148	-1.020	0.551	-4.289	31.858
Note: Rm-Rf (market premium) and LMH show (low dividend minus high dividend premium)							

Table 7, shows the descriptive analysis for data related to India. The table shows that the mean value of market

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premium (MKT) is 0.0008 while standard deviation value is 0.071 or 7.10% data deviate around the mean. Mean value and SD for size is 0.036 & 0.161 respectively. Similary the mean value and standard deviation of devedend premium (LMH) is -0.016 & 0.148 respectively.

Table 8: Descriptive Analysis for China of Fama and French Three Factors

Variables	Mean	Median	SD	Min	Max	Skewness	Kurtosis
MKT	0.003	0.016	0.086	-0.269	0.275	-0.589	11.477
Size	0.035	0.012	0.154	-0.078	0.168	0.741	9.783
LMH	-0.015	-0.007	0.141	-0.176	0.099	-0.638	5.586
Note: Rm-Rf (market premium) and LMH show (low dividend minus high dividend premium)							

The above mentioned table 8, shows the descriptive analysis for data related to China. The table shows that the mean value of market premium (MKT) is 0.003 while standard deviation value is 0.086 or 8.60% data deviate around the mean. Mean value and SD for size is 0.035 & 0.154 respectively. Similary the mean value and standard deviation of devedend premium (LMH) is -0.015 & 0.141 respectively.

Table 9: Comparison between Pakistan, India and China of Fama and French Three Factors

Variables	Mean			Standard Deviation		
	Pakistan	India	China	Pakistan	India	China
MKT	0.005	0.0008	0.003	0.077	0.071	0.086
Size	-0.050	0.036	0.035	0.153	0.161	0.154
LMH	0.050	-0.016	-0.015	0.152	0.148	0.141
Note: Rm-Rf (market premium) and LMH show (low dividend minus high dividend premium)						

The above table 9, shows the descriptive statistics related to independent variables market premium (MKT), size premium (Size) and dividend premium (LMH). As per the result market premium is with hight mean in Pakistan(0.005) while it has the lowest standard deviation in India of (0.071). Inida has the highiest mean value for size premium of 0.036 and Pakistan has the lowest value of standard deviation. For dividend premium, Pakistan has the highest mean of (0.050), while China has the lowest value of standard deviation.

Correlation Analysis

Correlation describes the association between two time series. It's also describes the direction and strength of the relationship of variables.

Table 10: Correlation Analysis for Pakistan of Dividend based Three –Factor Model

Variable	**LMH**	**MKT**	**SMB**
LMH	1.000	-0.143	-0.980
MKT	-0.143	1.000	0.129
SMB	-0.980	0.129	1.000

Note: Rm-Rf, shows (market premium) and LMH show (low dividend minus high dividend premium).

In case of Pakistan, result in above mentioned table 10 shows that there is a strong negative correlation between

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size premium (SMB) and dividend premium (LMH) of -0.980 or -98%. Positive correlation between market premium (MKT) and size premium (SMB) factor is 0.129 or 12.90% noted. The correlation between LMH and MKT premium is -0.143 or 14.30% in oppostive direction means the existence of negative correlations.

Table 11: Correlation Analysis for India of Dividend based Three –Factor Model

Variable	LMH	MKT	SMB
LMH	1.000	-0.079	-0.498
MKT	-0.079	1.000	0.042
SMB	-0.498	0.042	1.000

Note: Rm-Rf, show (market premium) and LMH shows (low dividend minus high dividend premium).

In case of India, from the results in above mentioned table 11the author noted that there is a negative correlation between size premium (SMB) and dividend premium (LMH) of -0.498 or -94.80%. Positive correlation between market premium (MKT) and size premium (SMB) factor is 0.042 or 4.20% noted. The correlation between LMH and MKT premium is -0.079 or 7.90% in oppostive direction means the existence of negative correlations.

Table 12: Correlation Analysis for China of Dividend based Three –Factor Model

Variable	LMH	MKT	SMB
LMH	1.000	-0.075	-0.189
MKT	-0.075	1.000	0.092
SMB	-0.189	0.092	1.000

Note: Rm-Rf, show (market premium) and LMH shows (low dividend minus high dividend premium).

In case of China, the above mentioned table 12shows that there is a negative correlation between size premium (SMB) and dividend premium (LMH) of -0.189 or 18.90% in oppostive direction. Positive correlation between market premium (MKT) and SIZE (SMB) factor is 0.092 or 9.20% noted. The correlation between LMH and MKT premium is -0.075 or 7.50% in oppostive direction means the existence of negative correlations.

Table 13: Summary of Correlation Analysis for Pakistan, India & China of Dividend based Three –Factor Model

Variable	Pakistan	India	China
LMH -> MKT	-0.143	-0.079	-0.075
LMH -> SMB	-0.980	-0.498	-0.189
SMB -> MKT	0.129	0.042	0.092

From the above table 13 the author can easilyy compare correlation anlayis. There is a strong negative correation between dividend premium (LMH) and Market Premium (MKT) in Pakistan (14.30%) as compare to India (7.90%) and China (7.5%). Pakistan also has the strongest negative correlations between dividend premium (LMH) and size premium (SMB) of 98% which in case of India is 49.80% and In China it is 18.90%. The correlation between size premium (SMB) and market premium (MKT) is positive in all the three countries as Paksitan has the stronger correatioin of 12.90%, Indai (4.20%) and China (9.20%). From the results we conluded that dividend premium has a negative correlation with market premium as well as with size premium, while the

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correlation between size premium and market premium is positive in all of the three countries.

V. CONCLUSION & FUTURE RECOMMENDATIONS

This study is attempted to estimate the effect of dividend premium and size in the growing capitalization markets of Pakistan, India and china. This investigation defined the inferences of size and dividend premium factors of the three factors model in developing countries. The purpose of using the dividend factor along with size is to estimate the stock returns. This paper examined the role of dividend in the terms of large and small firms and to correlate the dividend with stock returns. This study used monthly closing prices of 40 companies listed at Karachi Stock Exchange (KSE) For Pakistan, 40 companies Taiwan economic journal Database (TEJ) for China and 40 companies Bombay Stock Exchange (BSE) for India for the period of 2004 to 2014 based on market capitalization. For this purpose random sampling was used. Sample comprises of companies from non-financial sector because in non-financial period closes at June 30 of each year. Descriptive statisci and correlations analysis have been used to examine the relationshiop between the independent variables Market premium (MKT), Size premium (SMB) and dividend premium (LMH) and dependend variable stock return.

Resluts from the descriptive statistics of Fama and French three factors, Pakistan has the highest mean value of marke premium and dividend premium (0.050), while India has the highiest mean value of size premium. Results of standard deviation shows that India has the lowes value of standard deviation of market premium (0.071) and size premium (0.153). While China has the lowest value of SD for dividend premium.

As per the results of the correlation anlaysis, Pakistan has the strongest negative relationsip(-0.143) between dividend premium (LMH) and market premium (MKT). Paksitan has the strongest negative correlations (-0.980) between devidend premium and size premium also. While in cas of the correlation between size premium and market premium paksian has the strongest positive correlationshiop (0.129) as compared to India and China.

The results revealed the positive relation of stock returns and dividend in the rapidly growing markets of Pakistan, India and China. From the overall results we concluded and suggest that Strategies of Investment would be scheme by the investors on the basis of the size, market premium and dividend premium. As unstable stocks having different returns from the secure stocks, thus dividend base three factor model or any other model should be used in the place of Capital Asset Pricing Model. In future same research and model should be conducted on other developing economies like Bangladesh, Sri Lanka etc.

REFERENCES

[1] Benz, R.W. (1981). The Relationship between Return and Market Value. *Journal of Financial Economics*, 3-18.

[2] BREEDEN, D. T., GIBBONS, M. R., & LITZENBERGER, R. H. (1989). Empirical Tests of the Consumption-Oriented CAPM. *The Journal of Finance, 44* (2), 231-262.

[3] Carhart, M. M. (1997). On persistence in Mutual Funds Performance. *The Journal of Finace, 57*, 57-82.

[4] Chan, L. K., Hamao, Y., & Lakonishok, J. (1991). Fundamentals and Stock Returns in Japan. *The Journal of Finance*, 46(5), 1739-1764

DOI: 10.37200/IJPR/V24I3/PR2020314
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[5] Chen, L., Novy-Marx, R., & Zhang, L. (2010).An alternative three-factor model.Available at SSRN 1418117.

[6] Fama, E. F., &MacBeth, J. D. (1973). Risk, return, and equilibrium: Empirical tests. *The Journal of Political Economy*, 607-636.

[7] Fama, E. F., &MacBeth, J. D. (1973). Risk, return, and equilibrium: Empirical tests. *The Journal of Political Economy*, 607-636.

[8] Fama, E. F., & French, K. R. (1992). The cross-section of expected stock returns. *The Journal of Finance*, 47(2), 427-465.

[9] Fama, E. F., & French, K. R. (1993).Common risk factors in the returns on stocks and bonds. *Journal of financial economics*, 33(1), 3-56.

[10] Fama, E. F., & French, K. R. (1995). Size and book-to-market factors in earnings and returns. *The Journal of Finance*, 50(1), 131-155.

[11] Fama, E. F., & French, K. R. (1995).Size and book-to-market factors in earnings and returns. *The Journal of Finance*, 50(1), 131-155.

[12] Fama, E. F., & French, K. R. (1996).Multifactor explanations of asset pricing anomalies. *The journal of finance*, 51(1), 55-84.

[13] Fama, E. F. and K. R. French (2015). A five-factor asset pricing model. *Journal of Financial Economics* 116 (1), 1–22.

[14] Febrian, E and Herwany, A. (2010). ‘‘THE PERFORMANCE OF ASSET PRICING MODELS BEFORE, DURING, AND AFTER AN EMERGING MARKET FINANCIAL CRISIS: EVIDENCE FROM INDONESIA.’’ *The International Journal of Business and Finance Research* Volume 4, Number 1, 2010.

[15] Griffin, J. M., & Lemmon, M. L. (2002). Book–to–market equity, distress risk, and stock returns. *The Journal of Finance*, 57(5), 2317-2336.

[16] Gruber, M. J., & Ross, S. A. (1978). THE CURRENT STATUS OF THE CAPITAL ASSET PRICING MODEL (CAPM). *The Journal of Finance, 33* (3), 885-901.

[17] Hassan, A., &Javed, M. T. (2011).Size and value premium in Pakistani equity market. African *Journal of Business Management*, 5(16), 6747-6755.

[18] Homsud, N., Wasunsakul, J., Phuangnark, S., & Joongpong, J. (2009). A study of Fama and French three factors model and capital asset pricing model in the Stock exchange of Thailand. *International Research Journal of Finance and Economics, 25*, 31–40.

[19] HUBERMAN, G., KANDEL, S., & STAMBAUGH, R. F. (1987). Mimicking Portfolios and Exact Arbitrage Pricing. *The Journal of Finance* , 1-9.

[20] John Y. Campbell and Robert J. Shiller, "Cointegration and Tests of Present Value Models," *Journal of Political Economy* 95, no. 5 (Oct., 1987): 1062-1088

[21] Kasa, K. (1992). Common stochastic trends in international stock markets. *Journal of Monetary Economics, 29* (1), 95-124.

[22] Khan, K. I. (2012). Effect of Dividends on Stock Prices– A Case of Chemical and Pharmaceutical Industry of Pakistan. *Management, 2* (5), 141-148.

[23] Lintner, J. (1965). The Valuation of Risk Assets and The Selection of Risky Investments in Stock Portfolios and Capital Budgets. *Rev. Econ, and Statis.* , 13-37.

[24] Markowitz, H. (1956). Portfolio Selection. *The Journal of Finance, 7* (1), 77-91.

DOI: 10.37200/IJPR/V24I3/PR2020314
Received: 20 Feb 2020 | Revised: 28 Feb 2020 | Accepted: 14 Mar 2020

[25] Markowitz 1959. Portfolio Selection: Efficient Diversification of Investments. *New York: John Wiley & Sons.*

[26] Mirza, N., & Shahid, S. (2008). Size and value premium in Karachi stock exchange. *Lahore Journal of Economics*, 13(2), 1–26.

[27] Mossin, j. (1966). Equilibrium in a capital asset market. Econometrics: *journal of the Econometric Society*,768-783.

[28] Reinganum, M. R. (1981). Misspecification of capital asset pricing: Empirical anomalies based on earnings' yields and market values. *Journal of Financial Economics*, *9* (1), 19-46.

[29] Reinganum, M. R. (1983). The anomalous stock market behavior of small firms in January: Empirical tests for tax-loss selling effects. *Journal of Financial Economics*, 12(1), 89-104.

[30] Ross, S. A. (1976). The arbitrage theory of capital asset pricing. *Journal of economic theory*, 13(3), 341-360.

[31] Sharpe, W. F. (1964). "Capital Assets Prices: A Theory of Market Equalibrium under Condition of Risk". *The Journal of Finance* , 425-42.

[32] Tobin, James. 1958. "Liquidity Preference as Behavior towards Risk." *Review of Economic Studies*, vol. 25, no. 1 (February):65–86

[33] Treynor, J. (1965). How to rate management of investment funds. *Harvard Business Review*, *43*, 63-75.

DOI: 10.37200/IJPR/V24I3/PR2020314
Received: 20 Feb 2020 | Revised: 28 Feb 2020 | Accepted: 14 Mar 2020