# Analysis the Determinants of Market Stock Price Movements: An Empirical Study of Jordanian Commercial Banks 

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#### Abstract

Financial firms make up a substantial fraction of the domestic equity market. A number of studies subsequently used different conceptual and methodological approaches to model equity return of financial services firms. Movement of the stock price as the consequence of the movement of the micro and macroeconomic factors is strongly supported by the literature review. Amman Stock Exchange in Jordan is inefficient in weak form. The sample of study includes the 14 commercial banks of Amman Stock Exchange for the period 2005-2008. Simple and multiple regression analysis is conducted to find out the relationship microeconomic factors with the stock price and found highly positive significant relationship between market price of stock and net asset value per share; market price of stock dividend percentage, gross domestic product, and negative significant relationship on inflation and lending interest rate but not always significant on some years of Amman Stock Exchange in Jordan.


Keywords: Market price, Comovement, Emerging markets

## 1. Introduction

Whether stock markets across national borders are integrated is important for several reasons. For global investors and country funds, a highly integrated world stock market indicates that the returns of securities are similarly priced internationally. As a result, there is little differential in risk premiums and the potential for cross-border diversification diminishes (Akdogan, 1996). For corporate finance, a highly integrated stock market implies that there is less opportunity to acquire capital at lower costs across borders. This discourages activities of foreign listings. The third issue relates to the market efficiency hypothesis. The degree of market integration indicates the level of information efficiency in the presence of geographic boundaries and technological constraints. Last but not least, the issue of market integration has increasingly received attention from international and development economists.
The price of a commodity, the economist makes us to believe is determined by the forces of demand and supply in a free economy. Even if we accept the economists' view, what factors influence demand and supply behavior? Price? Yes, but not all the time, at least there are some other factors. In the securities market, whether the primary or the secondary market, the price of equity is significantly influenced by a number of factors which include book value of the firm, dividend per share, earnings per share, price earning ratio and dividend cover (Gompers, Ishii \& Metrick, 2003).
The most basic factors that influence price of equity share are demand and supply factors. If most people start buying then prices move up and if people start selling prices go down. Government policies, firm's and industry's performance and potentials have effects on demand behavior of investors, both in the primary and secondary markets. The factors affecting the price of an equity share can be viewed from the macro and micro economic perspectives. Macro economic factors include politics, general economic conditions - i.e. how the economy is performing, government regulations, etc. Then there may be other factors like demand and supply conditions which can be influenced by the performance of the company and, of course, the performance of the company vis-a-vis the industry and the other players in the industry.
The objectives of this paper are primarily having an idea about the factors affecting the equity return of studied banks stock. Secondarily, to identify whether there is a significant relationship between market return of listed commercial banks with some microeconomic factors.

## 2. Literature Review

Critics of the stock market, argue that the actual operation of the pricing and takeover mechanism even in well functioning stock markets lead to short termism and lower rates of long term investment particularly in firm specific human capital. It also generates perverse incentives, rewarding managers for their success in financial engineering rather than creating new wealth through organic growth (Singh, 1997). In addition, empirical evidence shows that the takeover mechanism does not perform a disciplinary function and that competitive selection in the market for corporate control takes place much more on the basis of size rather than performance (Singh, 1971). Therefore, a large inefficient firm has a higher chance of survival than a small relatively efficient firm.

Critics further argue that stock market liquidity may negatively influence corporate governance because very liquid stock market may encourage investor myopia. Since investors can easily sell their shares, more liquid stock markets may weaken investors' commitment and incentive to exert corporate control (Bhide, 1994). These problems are further magnified in emerging market countries with their weaker regulatory institutions and greater macroeconomic volatility. These serious limitations of the stock market have had led many analysts to question the importance of the system in promoting economic growth in emerging markets
Empirical evidence linking stock market development to economic growth has been inconclusive even though the balance of evidence is in favor of a positive relationship between stock markets and economic growth. Levine and Zervos (1998) find that various measures of stock market activity are positively correlated with measures of real economic growth across countries, and that the association is particularly strong for developing countries. Their results also show that after controlling for initial conditions and economic and political factors, the measures of banking and stock market development are robustly correlated with current and future rates of economic growth and productivity improvement.
Durham (2002), on the other hand, finds that the positive impact of stock market development is largely dependent on the inclusion of higher income countries in the regression samples, which limits the relevance for lower income countries. He provides evidence that indicates that stock market development has a more positive impact on growth for greater levels of GDP per capita, lower levels of country credit risk, and higher levels of legal development
The decomposition of stock price movements is very sensitive to what assumption is made about the presence of permanent changes in either real dividend growth or excess stock return (Wohar \& Mark, 2006). Cochrane (1992) Timmerman (1995) have argued that fluctuation in stock prices can be explained by time-varying discount rates and future excess returns. Cochrane (1992) by using an alternative methodology to decompose the variability of stock prices also found the variability of excess return to be more important than the variability of dividend growth.
Corwin (2003 identifies uncertainty and asymmetric information as a strong influence on the firm's equity pricing and as a matter of fact lead to under priced instrument. In the light of the preceding literature review, many factors both micro and macro-economics, have impact on equity pricing in the stock market, the impact differs from firm to firm, industry to industry, economy to economy and from time to time, but one comforting conclusion is that most of the factors appear to have the same behavior regardless of time, industry or firm constraints. For instance, increased inflation and interest rates, declining dividends, earnings, poor management leave negative impact on equity pricing and vice-versa
A lower degree of efficiency in less developed countries market might be caused by common characteristics of loose disclosure requirements as well as thinness and discontinuity of trading. It is generally assumed that the emerging markets are less efficient than the developed markets. Raihan, et al (2007) found that in Chittagong Stock Exchange (CSE) in Bangladesh, stock return series do not follow random walk model and the significant autocorrelation co-efficient at different lags do not accept the hypothesis of weak form efficiency. Mobarek and Keasay (2000) also found the same result after conducting research in Dhaka Stock Exchange (DSE) of Bangladesh.
Conducting research in Dhaka Stock Exchange (DSE) Rahman, et al (2006) found the negative correlation between the beta and stock return, which is reason for inefficiency of market where the assumptions behind the CAPM model is not supported. Wong, et al (2009) found that when limit hits are imminent stock prices approach limit bounds at faster rates \& with increased volatility and higher trade efficiency. They also argued about asymmetry effects between limit hits at the ceiling and floor bounds.

In a study of the impact of dividend and earnings on stock prices, Hartone (2004) argues that a significantly positive impact is made on equity prices if positive earnings information occurs after negative dividend information. Also, a significantly negative impact occurs in equity pricing if positive dividend information is followed by negative earning information. Docking and Koch (2005) discovers that there is a direct relationship between dividend announcement and equity price behavior. Al-Qenae, Li \& Wearing (2002) in their study of the effects of earning (micro-economic factor), inflation and interest rate (macro-economic factors) on the stock prices on the Kuwait Stock Exchange, discovered that the macro-economic factors significantly impact stock prices negatively. A previous study by Udegbunam and Eriki (2001) of the Nigerian capital market also shows that inflation is inversely correlated to stock market price behavior.
New theoretical research works show that stock market development might boost economic growth and empirical evidence tends to provide some support to this assertion. Levine and Zervos (1998), for instance, find that stock market development plays an important role in predicting future economic growth
The paper looks at the impact of institutional quality on stock market development because it widely believed that the strengthening of property rights could broaden appeal and confidence in stock market investment. Equity investment thus becomes gradually more attractive as political risk is resolved over time (Perotti and Van Oijen, 2001). Therefore, the development of good quality institutions can affect the attractiveness of equity investment and lead to stock market development. The analysis on the impact of institutional quality on stock market development is related to the recent literature on the link between the legal institutional framework and corporate finance. Laporta et al (1997) find that countries with lower quality of legal rules and law enforcement have smaller and narrower capital markets and that the listed firms on their stock markets are characterized by more concentrated ownership. Demirguc-Kunt and Maksimovic (1998) show that firms in countries with high ratings for the effectiveness of their legal systems are able to grow faster by relying more on external finance.
In principle, stock markets are expected to accelerate economic growth by providing a boost to domestic savings and increasing the quantity and the quality of investment. In particular, stock markets can encourage economic growth by providing an avenue for growing companies to raise capital at lower cost. In addition, companies in countries with developed stock markets are less dependent on bank financing, which can reduce the risk of a credit crunch. The stock market is also expected to perform an 'act of magic' by permitting long term investment to be financed by funds provided by individuals, many of whom wish to make them available for only a very limited period, or who wish to be able to withdraw them at will (Baumol, 1965). The stock market is also expected to ensure through the takeover mechanism that past investments are also most efficiently used. Theoretically, a free market in corporate control, by providing financial discipline, is expected to provide the best guarantee of efficiency in the use of assets. The presumption is that, if management does not maximize firm value, another economic agent may take control of the firm, replace management, and reap the gains from a more efficient firm.
While the question of whether stock markets promote growth has gained considerable attention in academic and policy discussions, there is little theoretical and empirical work on the determinants of stock market development in emerging markets. Calderon-Rossell (1991) developed a partial equilibrium model of stock market growth. This model, to date model represents the most comprehensive attempt to develop the foundation of a financial theory of stock market development. Recent works tend to focus on the role of financial liberalization in promoting stock market development. Mishkin (2001) argued that financial liberalization promotes transparency and accountability, reducing adverse selection and moral hazard. These improvements tend to reduce the cost of borrowing in stock markets which eventually increase the liquidity and the size of the stock market
The study has contributed to existing literatures in confirming or raising new issues with respect to other factors influencing stock prices. Interest researcher may want to identify and examine the non-economic factor. Lastly, policy makers who are concerned about the growth of the capital market are better informed on how to deploy the monetary policies instruments as well other economic indices to achieve the desired market growth. This paper studies the macroeconomic and institutional determinants of stock market development in emerging economies using a panel dataset of 14 banks for the period 2005 to 2008. Specifically, the paper examines the impact some factors affecting the stock market of banking.

## 3. Conceptual Framework

The importance of the stock market as an investment vehicle for the investors is explained here. Very few people in Zimbabwe are aware that they can invest money on the stock market and reap some very lucrative returns through dividends and capital gains. For investors who invest on the market there is of course some risks that they have to live with, for example, the unexpected crashing of the stock market. According to McGregor, (1989)
companies usually borrow money from banks in order to meet their short-term cash requirements. However, when they need long-term finance, they may sell their ownership interests in the company by using common and preferred stocks. Moreover, they can also borrow from the public by selling bonds to meet their long-term capital requirements. Stocks exist to enable companies in need of long-term finance to sell pieces of their business as stocks (equity securities) in exchange for cash.
The selling of equity securities is the principal method of raising long-term capital other than the issuing bonds. The publicly held shares can be traded to other investors on the stock market and are in this case, known to be liquid. According to Stanlake, (1993) company shares represent permanent loans and there are no rights to repayment of such loans. He also noted that in the absence of some kind of stock exchange, securities such as these will be very illiquid and it would be very difficult to find buyers for them. Hence, the existence of the stock exchange solves this problem because it provides a market where holders of shares and long-term securities can always buy and sell them.
In principle, stock markets are expected to accelerate economic growth by providing a boost to domestic savings and increasing the quantity and the quality of investment. In particular, stock markets can encourage economic growth by providing an avenue for growing companies to raise capital at lower cost. In addition, companies in countries with developed stock markets are less dependent on bank financing, which can reduce the risk of a credit crunch.
The stock market is also expected to perform an 'act of magic' by permitting long term investment to be financed by funds provided by individuals, many of whom wish to make them available for only a very limited period, or who wish to be able to withdraw them at will (Baumol, 1965). 4 Better savings mobilization may increase the savings rate. If efficient stock markets enable savings to be allocated to investment projects with higher returns, the rate of return to savers increases, making savings more attractive. As a result, more savings are channeled to the corporate sector.

## 4. Data and Methodology

Archival research methodology was used in this study using publicly available archival data .Basically the regression model was applied on Amman Stock Exchange in Jordan on the data of bank. The population size is 14 listed commercial banks in Amman Stock Exchange (ASE). Primarily I have chosen all population banks as sample on probability sampling basis. The data have been collected from Amman Stock Exchange and banks’ annual reports

### 4.1 Dependent Variable

In this study the dependent variable is "Market Price of Stock (MPS)" in Jordanian taka. There was collected 14 commercial banks average market value of share for the time period of 2005 to 2008.

### 4.2 Independent Variables

There was chosen three independent variables and tried to identify how they affect on determination of market value of share.
Variables are:
(1) Net Asset Value per Share (NAVPS) in Jordanian banks;
(2) Dividend percentage (DIV) in Jordanian banks;
(3) Earnings per Share (EPS) in Jordanian banks.
(4) Lending interest rate (INT) in Jordanian banks
(5) Inflation rate (INF) in Jordanian banks
(6) Gross Domestic Product (GDP) in Jordanian banks

### 4.3 Hypotheses

H1: There is a significant relationship between Market Price of Stock (MPS) and Net Asset Value per Share (NAVPS) on Jordanian banks.
H2: There is a significant relationship between Market Price of Stock (MPS) and Dividend Percentage (DIV) on Jordanian banks
H3: There is a significant relationship between Market Price of Stock (MPS) and Earnings per Share (EPS) on Jordanian banks.

H4: There is a significant relationship between Market Price of Stock (MPS) and Lending interest rate (INT) on Jordanian banks
H5: There is a significant relationship between Market Price of Stock (MPS) and Inflation rate (INF) on Jordanian banks
H6: There is a significant relationship between Market Price of Stock (MPS) and Gross domestic product (GDP) on Jordanian banks

### 4.4 Model

In this study regression model was used for data analysis .The a model is:

$$
\mathrm{MPSt}=\beta 0+\beta 1 \mathrm{NAVPSt}-1+\beta 2 \mathrm{DIVt}-1+\beta 3 \mathrm{EPSt}-1+\beta 4 \mathrm{INTt}-1+\beta 5 \mathrm{INFt}-1+\beta 6 \mathrm{GDPt}-1+\mathrm{et}
$$

Where,
$\beta 0=$ constant
$\beta 1,2 \ldots 3=$ coefficients of predictors
MPS: Market Price of Stock
NAVPS: Net Asset Value per Share
DIV: Dividend Percentage
EPS: Earnings per Share
INT: Lending interest rate
INF: Inflation rate
GDP: Gross domestic product

## 5. Results and Discussion

Over the past few decades, the world stock markets have surged, and emerging markets have accounted for a large amount of this boom. The speed and extent of stock market development in developing countries have been unprecedented and have led to fundamental shift both in the financial structures of less developed countries and in the capital flows from developed nations. This section presents the results of the determinants of market stock price.
Factors affecting asset prices are numerous and inexhaustible. The factors can be categorized into firm (bank), industry, country and international or market and non-market factors, and economic and non-economic factors. All the factors can be summarized into two classes - micro and macro factors. Factors in each class of the classification are inexhaustible. For instance, have impact on the investor's pricing decision. Molodovsky (1995) believes that dividends are the hard core of stock value. The value of any asset equals the present value of all cash flows of the asset.
From the hypotheses, the stock price is a function of the impact of net asset value per share, dividend percentage, earning per share, lending interest rate ,inflation rate and gross domestic product,. We restricted the influencing factors to five as representatives of the firm's fundamental factors and external (country) factors.
The outcome of the regression would be the variance on the dependent variable as resulting from the impact of the independent variables. A regression analysis was run on the independent variables (NAVPS/ DIV/ EPS/ INT/ INF/ GDP) on dependent variable stock price (MPS).
Table 1 presents the means, standard deviation, minimum and maximum value of the variables. In descriptive statistics it was found the mean value of MPS is $10.99,4.75,5.49,3.68$ and 6.23 respectively, mean value of NAVPS is $22.46,26.32,16.25,14.71$ and 19.94 , mean value of DIV is $.075, .098, .099, .082$ and .090 and, EPS is $.49, .29, .26, .23$ and .32 . The standard deviation of MPS is $15.73,4.98,7.10,3.75$, and 9.36 NAVPS is 23.16 , $40.53,13.85,9.82$, and 24.61 , DIV is $.103, .096, .106, .086$, and .0949 , EPS is $.29, .164, .241, .167$ and .238, INF is $.034, .0626, .0474, .149$ and .075 , GDP is $1873,1880.3880 .4501$ and 3078 and INT is $.107,122,132,116$ and .119 respectively. Also the minimum maximum and range value are shown in Table 1.
The model was tested by ordinary least-squares (OLS) estimators. Using simple and multiple regression analysis of all period of the study By discussing result of Table 2, it was found that the linear function model accept the hypothesis one, two, three ,four, five and sex of all years. It contains the highest adjusted R squared value (0.827) says that the model explains six of the variation in market value of share. F- ratio is found significance at F- value $=45.648 \alpha=(0.05)$, that means the regression model is highly significant at 95 percent level of
significance. Also the independent variables namely NAVPS, EPS, DIV is positive significant at t- test 4.310, 4.25 and 3.661 respectively at $\alpha=0.01,(\mathrm{p}<0.01)$, and GDP is also positive significant at t -test 2.985 at $\mathrm{a}=0.05$ ( $(\mathrm{p}<0.05)$, INF is low negative significant at -2.782 at $10 \%$, finally, INT is negative value but not significant.
The results indicate of Table 3. It contains the highest adjusted R squared value ( 0.888 ) says that the model explains more than two of three of the variation in market value of share. F ratio is found significance at $F$ - value $=9.623$ at $\alpha=(0.05)$, that means the regression model is significant at 95 percent level of significance. Also the independent variables namely EPS are significant at t -test $6.416, \alpha=0.01,(\mathrm{p}<0.01)$, DIV is significant at t -test 2.540, $\alpha=0.05(\mathrm{p}<0.05)$. and GDP is also positive significant at t -test 3.10 at $\mathrm{a}=0.01((\mathrm{p}<0.01)$, INF is low negative significant at -2.980 at $10 \%$, finally, INT is negative value but not significant .
The results indicate of Table 4. It contains the highest adjusted R squared value ( 0.823 ) says that the model explains all of the variation in market value of share. F ratio is found significance at F -value at $27.809, \alpha=(0.05)$, that means the regression model is significant at 99 percent level of significance. Also the independent variables namely NAVPS, EPS and DIV are significant at t-test 4.500, 7.470 and $3.436, \alpha=0.01,(p<0.01)$. and GDP is also positive significant at t -test 2.980 at $\mathrm{a}=0.05((\mathrm{p}<0.05)$, INF is low negative significant at -1.988 at $10 \%$, finally, INT is negative value -1.878 at low significant at $10 \%$.
The results indicate of Table 5. It contains the highest adjusted R squared value ( 0.913 ) says that the model explains all of the variation in market value of share. F ratio is found significance at F -value at $10.592, \alpha=(0.01)$, that means the regression model is significant at 99 percent level of significance. Also the independent variables namely NAVPS, EPS and DIV are significant at t-test at $3.600,6.379$ and $4.358 \alpha=0.01,(\mathrm{p}<0.01)$ and GDP is also positive significant at t-test 4.340 at $\mathrm{a}=0.01((\mathrm{p}<0.01)$, INF is high negative significant at -3.231 at $1 \%$,finally, INT is negative value -1.782 at low significant at $10 \%$.
The results indicate of Table 6. It contains the highest adjusted R squared value ( 0.610 ) says that the model explains all of the variation in market value of share. F ratio is found significance at F -value at $25.540 \alpha=(0.05)$, that means the regression model is significant at 99 percent level of significance. Also the independent variables namely NAVPS, EPS and DIV are significant at t-test at 4.819, 9.804 and 5.082, $\alpha=0.01,(\mathrm{p}<0.01)$ and GDP is also positive significant at t -test 2.345 at $\mathrm{a}=0.05((\mathrm{p}<0.05)$, INF is negative significant at -1.897 at $5 \%$, finally, INT is negative value but not significant
Finally, inflation as an external factor exerts a very significant negative influence on the stock prices in Nigeria (Zhao, 1999 \& Udegbunam and Eriki, 2001). The positive GDP's coefficient in relation to the stock price is in agreement with some other studies (Udegbunam and Eriki, 2001; Ibrahim 2003; Mukherjee and Naka 1995; Chaudhuri and Smiles, 2004).
The domestic economy is denied of the investments that would have occurred if the funds in the foreign reserve are released for spending in the domestic economy. The hypothesis that the GDP affects stock price significantly is accepted. The coefficient of interest which is negative is expected and found to be significant. The negative coefficient of the lending interest rate is in agreement with the findings of Al-Qenae, Li \& Wearing (2002), and Mukherjee and Naka (1995). Lending interest rate is a strong tool in the hands of CBN to influence the economy and where the interest is high, the accessibility of the investors to access funds is curtailed and the impact on the stock price would be negative as shown. The hypothesis that lending interest rate affects the stock price significantly is accepted

## 6. Conclusion

The stock exchange has been perceived by many as the backbone for most contemporary economies, serving a critical need of raising capital funds for companies at a reasonably low cost as compared to other sources of finance such as borrowing. The stock exchange serves two critical functions; it provides a critical link between companies that need funds to set up new businesses or to expand their current operations and investors that have excess funds to invest in such companies and it provides a regulated market place for buying and selling of shares at prices determined by supply and demand, not withstanding other macroeconomic fundamentals such as interest and inflation rates. To meet their short-term cash requirements corporations usually borrow from banks.
Using simple and multiple regression analysis in this study found highly positive significant relationship between market price of stock and net asset value per share; market price of stock dividend percentage gross domestic product, and negative significant relationship on inflation and lending interest rate but not always significant on at years 2005, 2006 and at all years of Amman Stock Exchange in Jordan.
The findings of this paper have important policy implications for emerging market countries. First, economic growth plays an important role in stock market development. It is important to initiate policies to foster growth
and development as countries liberalize their financial systems. Second, the development of well-developed banking sector is important for stock market development in emerging markets. At the early stages of its establishment the stock market is a complement rather than substitute for the banking sector. Developing the banking sector can promote stock market development as demonstrated by the experiences of many East Asian countries. Support services from the banking system contribute significantly to the development of the stock market. However, when stock markets are sufficiently developed they tend to compete with the banking sector as shown by our findings. Third, domestic investment is an important determinant of stock market development in emerging markets. To promote stock market development emerging markets countries can encourage investment by appropriate policies.
Finally, good quality institutions are important determinants of stock market development. Well established institutions reduce political risk, an important factor in investment decisions. The development of good quality institutions such as law and order, efficient bureaucracy, and democratic accountability is therefore crucial for stock market development in emerging economies.
Future research can be conducted considering macroeconomic factors like money supply, exchange rate, etc. time series analysis also can be done in market as a whole or in different industries

## References

Akdogan, H. (1996). A suggested approach to country selection in international portfolio diversification. Journal of Portfolio, 33-40.
Al-Qenae, Rashid, Li, Carmen Wearing, Bob. (2002). The Information Content of Earnings on Stock Prices: The Kuwait Stock Exchange. Multinational Finance Journal, 6
Bhide, Amar. (1994). The Hidden Cost of Stock Market Liquidity. Journal of Financial Economics, Vol. 34, pp. 31-51.
Baumol, J. William. (1965). The Stock Market and Economic Efficiency. New York: Furham University Press.
Cochrane, J. H. (1992). Explaining the variances of price-dividend-ratio. Review of Financial Status, 15, 243-286.
Calderon-Rossell, R. Jorge. (1990). The Structure and Evolution of World Stock Markets," in S.Ghon Rhee and Rosita P. Chang (eds.), Pacific Basin Capital Markets Research Proceeding of the First Annual Pacific Basin Finance Conference, Taipei, China, 13-15 March 1989, (Amsterdam: North Holland).

Corwin, Shane, A. (2003). The Determinants of Underpricing for Seasoned Equity Offers. Journal of Finance, 58(5).
Chaudhuri, K., and Smiles, S. (2004). Stock Market and Aggregate Economic Activity: Evidence from Australia. Applied Financial Economics, (14).
Durham, J. Benson. (2002). The Effects of Stock Market Development on Growth and Private Investment in Low Income Countries. Emerging Markets Review, Vol. 3 (3), pp. 211-232.
Demirguc-Kunt, Asli, and Vojislav Maksimovic. (1998). Law, Finance, and Firm Growth. Journal of Finance, Vol. 53, pp. 2107-2137.
Docking, Diane S., \& Koch, Paul D. (2005). Sensitivity of Investor Reaction to Market Direction and Volatility: Dividend Change Announcements. Journal of Financial Research.
Gompers, Paul A., Joy L. Ishii, and Andrew Metrick. (2003). Corporate Governance and Equity Prices.
Ibrahim, Mansor H. (2003). Macroeconomic Forces and Capital Market Integration: A VAR Analysis for Malaysia. Journal of the Asia Pacific Economy, 8 (1).
La Porta Rafael, Florencio Lopez-de-Silanes, and Andrei Shleifer. (1997). Legal Determinants of External Finance. Journal of Finance, Vol. 52, pp. 113-150. Economic Review, Vol. 88, pp. 536-558.
Levine, R., and Zervos, S. (1998). Stock markets, banks, and economic growth. American Economic Review, 88 : 537-558.

Molodovsky, Nicholas. (1995). A Theory of Price-Earnings Ratios. Financial Analysts Journal, 51(1).
Mukherjee, Tarun K., \& Naka, Atsuyuki. (1995). Dynamic Relations between Macroeconomic Variables and The Japanese Stock Market: An Application of Vector Error Correction Model. The Journal of Financial Research, XVIII. (2).

Mishkin, Frederic. (2001). Financial Policies and the Prevention of Financial Crises in Emerging Market Countries. NBER Working Paper No. 8087, (Cambridge: NBER).

Moberek, A., \& Keasey, K. (2000). Weak-form market efficiency of an emerging market: Evidence from Dhaka Stock market of Bangladesh, ENBS Conference paper, Oslo, Norway.
McGregor, R. (1989). The Mechanics of the Johannesburg Stock Exchange. Juta and Co, Ltd., Cape Town, ISBN: 0-7021-2248-3.

Perotti, C. Enrico and Peter Van Oijen. (2001). Privatization, Political Risk and Stock Market Development in Emerging Economies. Journal of International Money and Finance, Vol. 20 (1), pp. 43-69
Rahman, M., Baten, A., Uddin, B., \& Zubayer, M. (2006). Fama-French's CAPM: An empirical investigation on DSE. Journal of Applied Sciences, 6(10), 2297-2301.
Raihan, M. A., \& Ullah, M. A. (2007). Chittagong stock market of Bangladesh: Turning of a weak-form market into an efficient market. SAARC Journal of Human Resource Development.
Timmerman, A. (1995). Cointegration tests of present value models with a time- varying discount factor. Journal of Applied Econometrics, 10, 17-31.
Stanlake, G.F. (1993). Introductory Economics. Longman House, Essex, ISBN: 0582354846, pp: 222
Singh, Ajit. (1971). Takeovers: Their Relevance to the Stock Market and the Theory of the Firm. (Cambridge: Cambridge University Press).
Singh, Ajit. (1997). Financial Liberalization, Stock Markets, and Economic Development. The Economic Journal, Vol. 107, May, pp. 771-782.

Udegbunam, R.I., and P. O. Eriki. (2001). Inflation and Stock Price Behavior: Evidence from Nigerian Stock Market. Journal of Financial Management \& Analysis, XX (14).
Wong, W. K., LIU B., \& ZENG Y. (2009). Can price limits help when the price is falling? Evidence from transaction data on the Shanghai Stock exchange. China Economic Review, 20, 91-102.

Wohar and Mark, E. (2006). What drives stock prices? Identifying the determinants of stock price movements. Southern Economic Journal.

Zhao, Xing-Qiu. (1999). Stock prices, inflation and output: evidence from China. Applied Economics Letters, 6.

Table 1. Descriptive Statistics for (NAVPS/ DIV/EPS/MPS/GDP/INF/INT) in Every Year and In Overall Years

| Year | Index | NAVPS | DIV | EPS | MPS | GDP | INF | INT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2005 | Mean | 22.46 | . 075 | . 49 | 10.99 | 1873 | . 034 | . 107 |
|  | N | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
|  | Std.Dev | 23.16 | . 1033 | . 290 | 15.73 | 3.37 | . 0001 | . 013 |
|  | Minimum | $4.79$ | . 01 | . 09 | 2.50 | 1870.6 | . 03 | . 10 |
|  | Maximum | 95.97 | . 30 | 1.14 | 63.30 | 1880 | . 04 | . 14 |
| 2006 | Mean | 26.32 | . 0986 | . 291 | 4.75 | . 0626 | . 0626 | . 122 |
|  | N | $14$ | 14 | 14 | 14 | 14 | $14$ | 14 |
|  | Std.Dev | 40.53 | . 096 | . 164 | 4.98 | 2.20 | . 0002 | . 006 |
|  | Minimum | 5.71 | . 01 | . 12 | 1.93 | 2058.5 | . 06 | . 12 |
|  | Maximum | 161.5 | . 26 | . 74 | 21.36 | 2065 | . 06 | . 14 |
| $2007$ | Mean | 16.25 | . 099 | . 266 | 5.49 | 3880 | . 0474 | . 132 |
|  | N | 14 | 14 | 14 | 14 | 14 | . 14 | 14 |
|  | Std.Dev | $13.85$ | $.106$ | . 241 | 7.10 | 2.62 | . 0002 | . 014 |
|  | Minimum | 5.40 | . 01 | . 07 | 2.0 | 3878.8 | . 05 | . 11 |
|  | Maximum | 59.61 | . 30 | . 94 | 29.34 | 3887 | . 05 | . 17 |
| 2008 | Mean | 14.71 | . 0821 | . 235 | 3.68 | 4501.7 | . 149 | . 116 |
|  | N | 14 | 14 | 14 | 14 | 14 | . 14 | 14 |
|  | Std.Dev | 9.82 | . 0868 | . 167 | 3.75 | 2.15 | . 0002 | . 010 |
|  | Minimum | $4.75$ | . 01 | . 10 | 1.46 | 45001.1 | . 15 | . 11 |
|  | Maximum | 42.60 | . 25 | . 67 | 15.16 | 4505 | . 15 | . 14 |
| 2005 | Mean | $19.94$ | . 0907 | . 321 | 6.23 | 3078.6 | . 073 | . 119 |
| TO | N | 56 | 56 | 56 | 56 | 56 | 56 | 56 |
| $2008$ | Std.Dev | . 24.61 | . 0949 | . 238 | 9.36 | 1145.9 | . 045 | . 014 |
|  | Minimum | 4.75 | . 01 | . 07 | 1.46 | 1870.6 | . 03 | . 10 |
|  | Maximum | 161.51 | . 30 | 1.14 | 63.30 | 4505 | . 15 | . 17 |

This table was presented the descriptive analysis of many factors that affected on stock price such as NAVPS, DIV, EPS, GDP, INF and INT on different years 2005, 2006, .2007, 2008 and on all years , the maximum and minimum value presented of each variable and the standard deviation and mean of each independent variables and dependent variable
Table 2. Regression Analysis of the Determinants of Market Stock Price Movements (2005)

| Dependent Variable: Market Price of Stock (MPS) |  |  |  |  |  |  |  |  |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| year | Index | NAVPS | DIV | EPS | GDP | INF | INT | Total |
| $\mathbf{2 0 0 5}$ | $\mathbf{R}^{\wedge} \mathbf{2}$ | .607 | .528 | .601 | .540 | .349 | .021 | .945 |
|  | Adj- R^2 | .575 | .488 | .568 | .340 | .235 | .019 | .827 |
|  | SIG | $.001 * * *$ | $.003^{* * *}$ | $.001^{* * *}$ | $.045^{* *}$ | $.076^{*}$ | .123 | $.032 * * *$ |
|  | F- test | -- | -- | -- | -- | -- | - | 45.648 |
|  | T-test | 4.310 | 3.661 | 4.252 | 2.985 | -2.782 | -.980 | ---- |
|  | Coefficient | .779 | .726 | .775 | .654 | -.545 | .- .054 | $.821 .121-.050$ |
|  | of Beta |  |  |  |  |  |  |  |

This table was presented the simple and multiple regression on the independent variables such as NAVPS, DIV, EPS, GDP, INF and INT on year 2005 and the results presented at Significant at $\mathrm{p}<0.10 * *$ Significant at $\mathrm{p}<$ $0.05^{* * *}$ Significant at $\mathrm{p}<0.01$

Table 3. Regression Analysis of the Determinants of Market Stock Price Movements (2006)

| Dependent Variable: Market Price of Stock (MPS) |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| year | Index | NAVPS | DIV | EPS | GDP | INF | INT | Total |
| $\mathbf{2 0 0 6}$ | $\mathbf{R}^{\wedge} \mathbf{2}$ | .183 | .350 | .774 | .660 | .440 | .880 | .888 |
|  | Adj- R^2 | .115 | .295 | .755 | .450 | .320 | .634 | .755 |
|  | SIG | .127 | $.026^{* *}$ | $.000^{* * *}$ | $.002 * * *$ | $.056^{*}$ | .199 | $.031^{* * *}$ |
|  | F- test | -- | --- | -- | -- | -- | --- | 9.623 |
|  | T-test | 1.642 | 2.540 | 6.416 | 3.100 | -2.980 | -.780 | ---- |
|  | Coefficient | .428 | .591 | .880 | .780 | -.665 | -.440 | $-.085-.134 .815$ |
|  | of Beta |  |  |  |  |  |  |  |

This table was presented the simple and multiple regression on the independent variables such as NAVPS, DIV, EPS, GDP, INF and INT on year 2006 and the results presented at Significant at $\mathrm{p}<0.10 * *$ Significant at $\mathrm{p}<$ $0.05 * * *$ Significant at $\mathrm{p}<0.01$
Table 4. Regression Analysis of the Determinants of Market Stock Price Movements (2007)

| Dependent Variable: Market Price of Stock (MPS) |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| year | Index | NAVPS | DIV | EPS | GDP | INF | INT | Total |
| $\mathbf{2 0 0 7}$ | $\mathbf{R} \wedge \mathbf{2}$ | .628 | .496 | .823 | . .534 | .340 | . .670 | .823 |
|  | Adj-R^2 | .597 | .454 | .808 | .440 | .231 | .444 | .700 |
|  | SIG | $.001^{* * *}$ | $.005^{* * *}$ | $.000^{* * *}$ | $.023^{* *}$ | . $.078^{*}$ | $.056^{*}$ | $.020^{* * *}$ |
|  | F-test | -- | --- | -- | -- | -- | - | 27.809 |
|  | T-test | 4.500 | 3.436 | 7.470 | 2.980 | -.1 .988 | -1.878 | --- |
|  | Coefficient | .792 | .704 | .907 | .550 | -.330 | -.340 | $.599-.059 .350$ |
|  | of Beta |  |  |  |  |  |  |  |

This table was presented the simple and multiple regression on the independent variables such as NAVPS, DIV, EPS, GDP, INF and INT on year 2007 and the results presented at Significant at $\mathrm{p}<0.10 * *$ Significant at $\mathrm{p}<$ $0.05 * * *$ Significant at $\mathrm{p}<0.01$
Table 5. Regression Analysis of the Determinants of Market Stock Price Movements (2008)

| Dependent Variable: Market Price of Stock (MPS) |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| year | Index | NAVPS | DIV | EPS | GDP | INF | INT | Total |  |
| $\mathbf{2 0 0 8}$ | $\mathbf{R}^{\wedge}$ | .519 | .613 | .772 | .789 | .655 | .321 | .913 |  |
|  | Adj-R^2 | .479 | .580 | .753 | 677 | .423 | .211 | .853 |  |
|  | SIG | $.004 * * *$ | $.001^{* * *}$ | $.000^{* * *}$ | $.001^{* * *}$ | $.002^{* * *}$ | $.078^{*}$ | $.001^{* * *}$ |  |
|  | F-test | -- | -- | -- | -- | -- | -- | 10.592 |  |
|  | T-test | 3.600 | 4.358 | 6.379 | 4.340 | -3.231 | -1.782 | --- |  |
|  | Coefficient | .721 | .783 | .879 | .788 | -.678 | -.453 | .500 .261 .476 |  |
|  | of Beta |  |  |  |  |  |  |  |  |

This table was presented the simple and multiple regression on the independent variables such as NAVPS, DIV, EPS, GDP, INF and INT on year 2008 and the results presented at Significant at $\mathrm{p}<0.10$ ** Significant at $\mathrm{p}<$ $0.05 * * *$ Significant at $\mathrm{p}<0.01$

Table 6. Regression Analysis of the Determinants of Market Stock Price Movements (2005-2008)

| Dependent Variable: Market Price of Stock (MPS) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| year | Index | NAVPS | DIV | EPS | GDP | INF | INT | Total |
| $\mathbf{2 0 0 5 - 2 0 0 8}$ | $\mathbf{R} \wedge 2^{\wedge}$ | .301 | .324 | .640 | .698 | .345 | .011 | .610 |
|  | Adj-R^2 | .288 | .311 | .634 | .492 | .231 | .023 | .455 |
|  | SIG | $.000^{* * *}$ | $.000^{* * *}$ | $.000^{* * *}$ | $.043^{* *}$ | $.089^{*}$ | .198 | $.020^{* * *}$ |
|  | F-test | -- | --- | -- | -- | -- | -- | 25.540 |
|  | T-test | 4.819 | 5.082 | 9.804 | 2.345 | -1.897 | -.780 | ---- |
|  | Coefficient | .548 | .569 | .800 | .780 | -.543 | -.023 | .293 .021 .455 |
|  | of Beta |  |  |  |  |  |  |  |

This table was presented the simple and multiple regression on the independent variables such as NAVPS, DIV, EPS, GDP, INF and INT on years 2005-2008 and the results presented at Significant at $\mathrm{p}<0.10$ ** Significant at $\mathrm{p}<0.05^{* * *}$ Significant at $\mathrm{p}<0.01$

