

Stock Price and Investment Measures in Bangladesh

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Abstract

Stock price fluctuation is a usual phenomenon throughout the world. But in case of Bangladesh, stock prices fluctuate violently disregarding all micro and macro economic fundamentals. This paper has attempted to analyze the behavior and structure of stock prices in Bangladesh in terms of some investment measures. This has also examined the patterns of stock prices with a view to discovering the main factors, both economic and non economic, behind it. The potent factors governing the stock price behavior in Bangladesh appear to have been, by and large, economic in nature although psychological and political factors have also caused violent fluctuations in prices. Market manipulation and other market abuses like insider trading, underhand dealing have their worst impact in wild and wide fluctuations sometimes. Dividend decision of the enterprises has a critical role to play in price formation and substantial relationship between stable dividend policy and PER has been observed. The conventional investment measures like stock yield and PER display relatively high volatility in Bangladesh market causing weak relevance to market reality. Thus, investors need to pay attention to other measures such as PBR. Anyway, security markets provide investors a means to trade freely and timely, issuers to raise funds cheaply and smoothly and the economy to allocate resources efficiently. In order to attain the optimum level of efficiency,

the concerned authorities should continue their efforts to such areas like broadening the active membership of the exchange, ensuring fairness and transparency, enhancing professionalism, integrity and liquidity of the market

The significance of a well functioning and robust stock market as a corollary to a sustainable growth of the economy in general and private corporate sectors in particular is being increasingly recognized in recent years. In a modern economy with sizable private corporate sectors, stable security price and general economic development are so interwoven that the state of the economy and specially the investment climate thereof can easily be guessed by a mere review of the behavior of the stock markets. The stock markets to an economy, what a clinical thermometer is to a human body. It reflects the health of the economy. It is recognized that the stock market and economic activity move in a similar pattern that indicates investors' attempt to forecast economic trends. Thus, the stock price index is considered as a major indicator of the economy.

Stock prices, in general, are determined by the interaction of demand and supply. Stock differs from other consumer goods to the extent that stock itself can't directly be consumed like other consumer goods rather the income generated by it can be used for consumption purposes. Accordingly, determination of a stock price may be governed by the volume of net assets it holds. However, in spite of its considerable bearing on the price of a stock, net assets are, in a sense, the liquidation value of the enterprise and thereby not considered most suitable measure for a going concern. Basically, the most important aspect in the stock price mechanism is the amount of earning the investor's money will realize in a certain period. This is usually

related to the dividend rate which can play a crucial role behind demand and supply relationship and thereby price formation. An anticipated future dividend is subject to uncertainties and influenced by many economic and noneconomic factors. Fluctuations in security prices are the function of a variety of factors. Interest rates, industrial production, commodity prices, savings, investments, population, employment, political and economic developments, technological changes, corporate profits, earnings or dividends, investors' feelings etc. are the prominent ones that can influence stock prices. As a result, many indeterminate factors come into play to complicate the pricing mechanism. All these may conveniently be divided into 'internal' and 'external' factors. While the former is related to the internal achievement of a particular industry or a company, the latter is exclusively the outcome of the stock market conditions affecting the stock prices in general. Chen, Roll and Ross(1986) have hypothesized a broad range of influences that could affect security prices. According to them the value of a share is equal to the present value of future cash flows to the shareholder. Any factor impacts on either the size of future cash flows or the discount rates used to value the cash flows will have its bearing on the price. The primary function of a stock market is to allocate resources to the most profitable investment opportunities. If stock prices provide accurate signals for resource allocation, firms are able to make correct production-investment decisions, and investors are able to choose the most suitable stocks for investment. These choices are possible if the market is efficient, that is, if stock prices 'fully reflect' all available information.

This paper seeks to examine the trends in stock prices with a view to discovering their behavioral pattern and also locate the main factors, both economic and non-economic, behind the stock price behavior in Bangladesh.

Dhaka Stock Exchange (DSE) trading system

In Bangladesh a company willing to offer shares for a public subscription must apply to the Securities and Exchange Commission (SEC) for approval. The company so approved is then eligible to apply for listing on the stock exchanges. The stock exchange may list the security for dealings on the exchange floor if it is satisfied after making such inquiry as it deems necessary to fulfill the conditions prescribed for this purpose. Trading on the stock exchange is undertaken for the listed stocks only. According to the regulation of Bangladesh, public companies having paid up capital of Tk. 10.0 million or more are required to be listed on the stock exchange. No company with an issued and paid up capital of less than Tk. 1.0 million is listed on the stock exchange while companies with paid up capital between Tk. 1.0 million and 10.0 million can exercise their option for listing. The advantages of listing are increasing security's prestige, more publicity through media, raising security's marketability and easy accessibility to bank loans, tax concession etc. In spite of these advantages many companies do not prefer to be listed due to required disclosure of information, cost and necessary procedural formalities attached to listing process, unwillingness to make wide ownership and so on.

Shares can be acquired from the primary market or secondary market. Application for allotment of shares can be submitted in prescribed form when a public offer is made by any company. The prescribed application form is obtainable from the bankers to the issue, stock exchanges and the company office. Only one application in one name is permissible. If the applicant is allotted a share, he receives an allotment letter. He can either retain the allotment letter until a share certificate is issued or dispose of the

allotment within renunciation period through broker signing the 'form of renunciation' usually attached at the back of the allotment letter. However, the investor receives the share certificate in exchange of the allotment letter subsequently.

Stock exchange is the legal platform for trading in the secondary market. Trading is conducted by the broker-members of the stock exchanges in Bangladesh. An investor can associate himself with the stock exchange trading only through a broker whom he can approach to execute his buy or sell order. DSE brokers are allegedly taking unnecessary long time to execute the order which often goes against the interest of the investor. In order to execute an order to buy or sell securities on behalf of his client, a broker is supposed to provide services at the time of executing a sell order as well as provide services and funds for a buy order. He charges a commission for such services which is 1 percent of the total value of the transaction. Thus, the stock markets in Bangladesh predominantly operate through the agents without any responsible market makers. The members of the DSE do not operate margin accounts for general investors. There is no provision in Bye-laws of the Exchange for undertaking market making roles.

While the stock exchange brokers must carry out trading of the listed stocks on the floor of the exchange in principle, off floor transactions are carried out through a kerb market in Bangladesh, notably during recent times. Trading of shares during floor trading hours as well as beyond trading hours is conducted among large number of interested investors assembled outside the stock exchange. Transactions are usually conducted through physical delivery of share certificates in the kerb market. Very often transactions take place at a distorted price. Fraudulent practices entrap people through trading on the false certificates, have become a regular

phenomenon in the country's kerb market centering the DSE. The unregulated kerb market has exacerbated the stock market manipulation and inflicted extensive damage to the market. Such unrecognized markets, if not guided properly, might have negative impacts on the sound development of stock markets.

Trading takes place five days a week on the exchanges of Bangladesh. The market operates through 'an open outcry' with broker-members seated around a table with no access to outsiders. Dealing prices are recorded with a chalk on a black board by a member of the stock exchange staff. By the standards of large stock exchanges in developed countries, the technology is simple and not subject to technological failure. For a market of this size, the trading arrangements can, by and large, serve the purpose. However, in view of the growing size of the market, frequent allegations about the market manipulation, and recent upsurges followed by sharp downswings, credibility of the system as a whole has been brought into question. Computerization of the trading system and introduction of a central depository system (CDS) can bring improvement of the situation. Under central depository system for securities, transactions in securities are cleared on books merely by entering such transactions in the accounts concerned, with the stock certificates held in custody by a certain agency, instead of physically delivering them after each transaction. Since this system offers the advantages of rationalizing depository and delivery of large number of securities as well as preventing possible loss or misplacement, it has been in use now-a-days in many countries. Physical delivery of share certificates is not permitted under CDS. Consequently, people will be discouraged to go to the kerb market and thereby it may reduce the dominance of this market. It is true that computerization has proved efficiency, accuracy and speed of

trading in many markets. But liquidity of the market may suffer from entire computerization. Order flows are generated, although at least partially, by subtle interactions of human activities on the floor, including behavior of the rivals, floor atmosphere, floor gossips and so on, all of which can hardly be held by computer. That means prices might be 'overshooting' or 'undershooting' if traders are just reacting to price moves on the screen without well understanding the reasons behind such moves. This may result in rather market volatility due to lack of exchange of information among the traders. The system, therefore, needs to combine the advantages of the technology-efficiency, accuracy and speed-with those of human interaction, visibility and information exchangeability on the trading floor so that maximization of liquidity and better market coordination can take place.

Till now little research has been conducted on the ownership and trading patterns on DSE. However, the widespread view is that most of the equity is tightly held by the families, relatives and friends. The shares of Multinational Companies (MNCs) are owned by foreign parents and government who usually tend to decline to sell their shares in the local markets. Different informal estimates suggest that between 50-70 percent of equity is tightly held by families, relatives and friends. Institutions appear to be less dominant in stock exchange trading, although no reliable figures are available. According to informal estimates this share accounts for about 20 percent (Bichitra, 1996). However, all these estimates should be treated with caution.

Stock price indexes

Market always works for discovering true values despite efforts to

conceal or distort them. Bangladesh capital market is not an exception. The efforts to force investment at high levels than could be supported has usually been reflected in the poor performance of stocks. The industrial performance is poor and as such capital markets could only reflect such performance. A useful tool for studying overall price behavior of a market is a price index. Both the DSE and Bangladesh Bank (BB) maintain share price indexes of the shares listed with DSE. The BB's 'Index of Ordinary Shares

Table-1
Equity prices in Bangladesh

Year	General index	Converted to a single base (1978-79)	%Relative variation in index based on immediately preceding year
<u>1978-79=100</u>			
1978-79	100.00	100.00	—
1979-80	99.48	99.48	-0.52
1980-81	102.85	102.85	3.39
1981-82	108.24	108.24	5.24
1982-83	114.06	114.06	5.37
<u>1982-83=100</u>			
1983-84	109.98	125.44	9.98
1984-85	138.91	158.44	26.30
1985-86	157.40	177.20	11.84
1986-87	322.55	367.90	107.62
<u>1986-87=100</u>			
1987-88	128.52	472.82	28.52
1988-89	157.51	579.48	22.56
1989-90	151.15	556.08	-4.04
1990-91	124.50	458.03	-17.63
1991-92	120.64	443.83	-3.10
1992-93	135.91	500.01	12.66
1993-94	189.50	697.17	39.43
1964-95*	289.66	1065.66	52.86

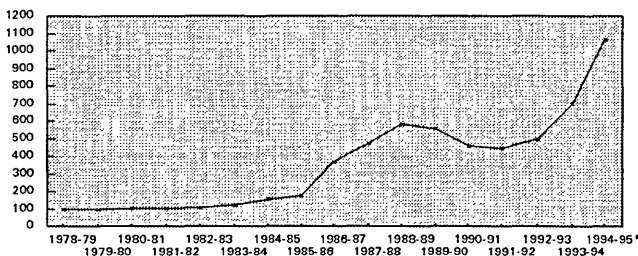
Note: *Figures indicate value for January 1995.

Source: Compiled from various issues of Economic Trends and Index Numbers of Stock Exchange Share Prices, Statistics Department, Bangladesh Bank.

of Companies Listed in the DSE Ltd.’ provides share price index taking different financial years as a base for different periods. Both indexes rely on DSE’s published price quotations to track prices of the shares of listed companies. Although the two indexes do not always yield exactly the same figures, they tend to agree in general.

Table-1 presents the stock price index prepared by BB. Transforming the index into a graph takes the shape like Figure-1. It is worth mentioning that DSE remained inactive during the First Five Year Plan (FFYP) period (1973-78) due to government socialist policy adopted at that time. Although it resumed its operation in the face of a very unfavorable condition in 1976, it did not get momentum for a considerable time. Its operational activities were expanding very slowly. During the Two Year Plan (TYP) period (1978-80) equity prices were hesitant and did not gain much ground as it appears from Table-1. In terms of annual index it declined from 100 in 1978-79 to 99.48 in 1979-80. However, during the Second Five Year Plan (SFYP) period (1980-85) the price index rose from 102.85 in 1980-81 to 158.45 in 1984-85. The rise was almost steady throughout this period. By and large, the period was free from violent

Figure-1
Stock price trend in DSE



fluctuations in equity prices though there were significant rises in prices in the face of a favorable situation in the industrial sector primarily due to government policy support for private sectors and denationalization. From the year 1980–81 the equity price index recorded a gradual rise compared to those of their respective preceding years. This rising trend continued and peaked in 1987–88 and thereafter it declined. During SFYP (1980–85) stock prices did not gain much ground, though a slight increase in prices recorded every year. The impact of Industrial Policy of the Government announced in 1982 along with some tax reliefs, concessions and the like allowed for investors in the government budgets during this period were believed to be the important factors behind this upward swing. Factors like expectations for the increase of stock prices, satisfactory earnings in many companies also contributed to this bullish tendency. The effect of all these was counterbalanced by the continued labor unrest, reduced production volume in some sectors, instability in political conditions, natural calamities etc. However, throughout this period the index went up in most of the months with greater magnitude. Although the index went down in some months, the decline proved to be a temporary phase as prices began to increase after a short time.

The Third Five Year Plan (TFYP) (1985–90) started with an optimistic note. This was mainly as a result of the announcement of New Industrial Policy of 1986, relaxation of the rules of import of raw materials and machineries, larger size of TFYP and larger allocation to the private sectors and so on. The opening year of the plan period (1985–86) witnessed a moderate rise in equity prices and the trend was considerably accentuated in the following year (1986–87) when the General Price Index rose up to 367.90 from 177.20 in the previous year, i. e., the index became more than double within a year. The year 1987 has been marked as the boom period for

the stock market of Bangladesh. Anticipations among investors for raising profits and dividends, emergence of a new class of investors, hedge against inflation, denationalization and holding company policy of the government, downward revision of interest rates, incentive schemes for export promotion, growth prospects of certain industries, exemption of income tax of individual shareholders, and reduction of corporate tax are the possible factors attributable for such rising price and thereby remarkable success of investment in share markets. However, since July 1987 the stock markets of Bangladesh were experiencing a bearish condition. Declining trends in most stock prices and the market index as well as the volume of transactions are the evidences supporting the bearish market. In order to get rid of this bearish market condition, a committee was constituted by the government of Bangladesh to suggest remedies for improvement in the market condition. The committee prepared an index covering only the active stocks and classified them into two categories: Multinational Companies (MNCs) and Local Companies (LCs). According to the report of the committee the MNCs stock price index increased five times by June 1987 over the base of 31 March 1986 against little more than two times in case of LCs stocks for the same period. The rates of overall price decline in December 1989 over 1987 was calculated 21 percent. It was also reported that though the overall price index had reflected fall by about 21 percent in 1989, in case of MNCs it was 20 percent and in case of LCs it was 25 percent. It was also reported that although the overall price index had jumped more than four times in 1987 in a period of 11 months, it had shown a fall of about 21 percent in 1989 over 1987. (Ministry of Industries, 1990). According to many knowledgeable stock market experts the damage was caused to the stock market due to political unrest, natural calamities and unprecedented floods in 1987 and 1988. However, it is believ-

ed by many that the market overreacted in this period without considering much of the economic fundamentals (Seok and Park, 1992).

It is evident that the period from 1978 to 1996 is characterized by a rising tendency in equity prices intervened sometimes with hesitant or falling price in Bangladesh. As regards to this increasing trend, it must be borne in mind that this occurred mostly in the years when the government policies have emphasized the private sector through divestment and allowed them to play their role in a wider range of industries. Throughout this period prices fluctuated violently though the direction and duration of the fluctuation were not similar in all the cases. The monthly rates of changes showed more cases of 'increases' than 'declines' as we approach to more recent years. Table-2 shows that prices were less stable in more recent times. The maximum variations are found in TFYP(1985-90) and the minimum in the TYP(1978-80). The degree of variations shows an ascending order. Again, during the TFYP both 'rises' and 'declines' were pronounced than earlier plans. The riskiness of the equity in terms of standard deviation and coeffi-

Table-2
Average 'rises' and 'declines' of share price and their deviations

Measures	Rises			Declines		
	1978-80 (TYP)	1980-85 (SFYP)	1985-90 (TFYP)	1978-80 (TYP)	1980-85 (SEYP)	1985-90 (TFYP)
i. Averages	0.30	1.95	7.59	0.32	1.07	2.51
ii. Standard Deviation	0.22	2.63	11.36	0.30	1.28	3.59
iii. Coefficient of Variation	73.33	134.87	149.67	93.67	119.63	143.03

Source: Ahmed, 1992.

cient of variation is pronounced in later years which is consistent with the increasing rate of 'rises' as the finance theory suggests.

In a study (Ahmed et al., 1993) we have considered the relationship between stock price and internal or micro factors. For this purpose nine independent variables have been taken to analyze the relative stock price. The independent variables are current ratio, debt-equity ratios, earnings per share, book value of a share, dividend payout ratio, nationality of the company (i. e., national or multinational), size of the company in terms of paid up capital, current bonus dividend and growth of dividends while relative stock price has been taken as the proportion of stock price of individual company to the face value of that company. A correlation matrix has been prepared. It has been seen that the share price is significantly correlated with book value of a share, earnings per share, nationality of the company and debt equity ratio. According to regression analysis book value and nationality of the company have significant impact on stock price at more than 99 per cent level of confidence. Higher book value implies accumulation of past earnings. Thus, earnings performance or dividend paying ability has been the leading influencing factor in share price determination. The implication of this factor is that the securities with high return potential command higher price. The significant relationship between the nationality of the company and the share price recognizes the fact that the investors have more confidence in the performance of multinational companies than local ones. This is consistent with the findings of the committee formed by Ministry of Industries (1990). As noted earlier in calculating the level of general price fall in 1989 it has been seen that the multinational companies accounted for 20 percent price fall while that of the local companies was 25 percent. Besides, the debt-equity ratio has displayed a negative relationship

with share price.

Judged as a whole, TFYP period may be regarded as a period of rising stock prices although the rise was by no means steady. FFYP (1990–95) experienced fall in prices in its initial years which steepened in 1991 and continued during most parts of 1992. But the rate of decrease has slowed and gradually started to increase and culminated in November 1996. However, the market could not be sustained for long and since the second week of November 1996 the market experienced sharp decline. The stock price of Bangladesh underwent dramatic behavior. A sharp increase in general is observed for the periods of 1987–89 and 1993–96 associated with rapid fall following these periods. The aggregate behavior of stock prices reflects tone and temperament of the industrial sectors and related policies. The price rise that followed the bear market of early 1990's may be considered as an extension of ongoing reform policy of the government and firm commitment for liberalization and private sector development. Macroeconomic factors such as growth of the economy, increased flow of foreign exchange, deregulation of the market, lowering of interest rates, changing corporate and financial strategies with introduction of fiscal and other incentives; institutional factors, specially establishment of SEC, are also relevant for price rises. However, it is believed by some quarters that the market entered into an adjustment period and overreacted to some economic factors like lowering interest rates, tax incentives and easy convertibility of Bangladesh currency associated with some market abuses including market manipulation.

While prices appear to be violent throughout the period, there have been periods of sufficiently long duration in which the direction of the changes has shown a remarkable consistency. Of course, during this period

the equity prices unmistakably have shown an upward trend. Of the various factors affecting equity prices in Bangladesh, the impact of the annual national budget appears to be not deniable. In almost all the years prices either declined or behaved hesitantly on the eve of presentation of the budget as the investors' class, in general, had always expected a change in the dose of taxation on various sectors. However, the most potent factors governing the price behavior appears to have been, by and large, economic in nature although psychological and political factors have also sometimes resulted in wild and wide fluctuations in equity prices. Rumors and expectations about any factor had also their significant impact on the equity price behavior. Irrespective of the nature of a particular factor, equity prices were significantly affected when that factor directly or even indirectly affected the corporate sector in general and an industry in particular. On certain occasions, the equity prices have also moved under the impact of the corrective measures to curb the speculation-generated trends. This seems to be one of the major causes of price fall after the stock boom of 1987 and 1996 in Bangladesh.

In the history of Bangladesh stock markets the most significant event occurred in 1996 when the market behaved irrationally. In DSE all share price index rose from 770 in January 1996 to 3,700 points in the first week of November of the same year. But it dropped to 2,261.47 points on 29 December 1996 and again to 1,140.65 points on 8 April 1997. This abnormal price rise has taken place ignoring all micro and macro economic fundamentals. The price of shares of a company, having negative worth, increased three to four times. Even share price of a closed company also increased. The abnormal rise in share prices created an urge for mindless gambling among the various segments of people. Some people took the situation to

become rich overnight. Suddenly the market started experiencing nightmares as the overpriced share market began sliding toward its rational level every day and subsequently crashed. The alarming fluctuation created a serious tension among investors and ultimately resulted in forced closure of floor trading for several days. Rise in stock price level appears to be too high that cannot be explained in terms of economic fundamentals of Bangladesh. It is difficult to segregate any single factor responsible for this price upheaval rather a combination of some factors including some policy issues might have contributed to such development. The likely candidates that might have some bearing on it are price manipulation on the exchange, lack of proper implementation of a circuit breaker, withdrawal of lock-in¹⁾ system, absence of institutional traders on the exchange, lack of aggressive campaigning about economic fundamentals and its grave consequences etc.

Fluctuation in equity price is a usual phenomenon throughout the world. It is possible that a temporary supply of or demand for an extraordinary large amount of securities takes place sometimes. This may upset the balance between demand and supply. In order to stabilize the market, it is necessary to conduct some price supporting activities. Such activities are specially needed when the market is dominated by speculation and rumor. A circuit breaker implying a price limit and trading halt may work to stabilize the market especially when investors behave rather irrationally. The concept of a circuit breaker is not a new one. Yet it is one of the most controversial issues among all financial discussions. In the final analysis it is

1) Under lock-in system a foreign investor in shares cannot sell his shares within a year. In view of the large impact of foreign funds on the relatively small market of Bangladesh lock-in system was introduced. This was abolished in the budget of 1996-97.

explained as a trade off between financial efficiency and stability. When one emphasizes financial efficiency, he must do it at the cost of more systematic instabilities. Similarly, when one emphasizes financial stability, he must do it at the cost of more competitive inefficiencies. The choice will depend upon the circumstances in which the market is situated and eventually upon the value judgement of a society. It is found in many countries in some form or the other and the rules are framed according to their respective needs. Advocates of efficiency objective contend that a circuit breaker would unduly delay price discovery, injure the investors forcing them to accept 'incorrect' prices anticipating trading halt. It is also argued that it causes deprivation of hedgers from market use when it is most needed. On the contrary, opponents argue for effectively limiting financial risks and hence systematic instability in critical times. They also contend that it may even facilitate price discovery by providing a 'time-out' during which counter orders can be generated. Bangladesh's market is relatively small even if it is compared with other emerging markets of South Asia. The presence of foreign portfolio managers with their huge fund can easily create an imbalance between demand and supply. This is needless to say that they will try to manipulate price with their profit motive. In view of the market condition of Bangladesh, financial stability needs to be supported by the authorities concerned and hence a circuit breaker should be executed effectively considering the cause of overall market development instead of the interest of any individual party. Simultaneously, wide campaigning through media against such irrational behavior and their consequences also need to be conducted. Legal measures should be instituted and executed effectively by the authorities concerned in order to contain manipulation of stock prices.

The implication of the withdrawal of lock-in system in the market is a

subject of empirical investigation. However, it is unlikely to be positive in the market condition of Bangladesh. Experience of undertaking reform and stabilization programs shows that countries are prone to excessive foreign funds that ultimately prove unsustainable behavior leading to financial market failure. This is because excessive optimism is created among domestic and foreign investors and the policy-makers. Although better economic performance and large inflows of foreign capital justify such optimism initially but afterwards it does not sustain in general resulting into a recession, crisis in the financial markets and capital flight. Investment in stock markets of Bangladesh by the domestic investors has got some momentum only recently that needs to be retained. Recent volatile stock market behavior is likely to have its negative impact on sound market development. The authorities should impose financial controls in an appropriate form to limit the potential damage. Regulations of cross-border transaction of financial capital are suitable tools. In the light of the experience of successful liberalization programs undertaken by East Asian countries in 1960s and 1970s, such moves appear to be appropriate in the context of liberalization and stabilization policies currently being pursued in Bangladesh.

Impact of dividend decision

The important aspect of the dividend policy is to determine the amount of earnings to be distributed to shareholders and the amount to be retained in the firm. Retained earnings are preferred to external sources of funds for financing growth. Conversely, dividends are desirable from shareholders' point of view following the 'bird-in-the-hand' principle. Pro-

per balance between these two objectives needs to be evolved in formulating a dividend policy.

The shareholders of a concern, while investing their money, have one thing in mind, i. e., to earn profit on their investment which at least would not be lower than the rate of interest available for the same fund in the money market. The market rate of interest is the minimum which they expect to earn. This, however, does not mean that they will earn this every year on their investment. It all depends on the profits earned by the concern. If no profits are earned, the ordinary shareholders get nothing, notwithstanding the fact that if they invested it in the money market, they could have earned more. It is at this point that a dividend differs from interest. In case of ordinary shares, the dividend may or may not be paid as profits are earned or not, and even when profits are earned, the whole of it or a major portion may be transferred to the reserve fund by directors at their discretion but interest on debentures must be paid. Interest is, therefore, predetermined and fixed; the dividend is unknown and uncertain. Yet to a speculative brain or to one who is ready to undertake risk, investment in rationally selected shares offers greater return than the predetermined and fixed rates of interest. In fact, they expect to earn much more. If the concern earns profits, it will be too glad to share it in some form or other with the investors.

Dividend policy is the result of the action of various factors. One of the legal restrictions imposed is that dividend should not be declared from capital of the concern but only from the profit of the relevant year or any other undistributed profit (Companies Act 1994, Schedule 1). It is to be determined within the limit set by unappropriated surplus. It is true that the psychology of the investors demands high dividends, but that is not the only

factor to be considered. Apart from legal restrictions there are many other factors which stand in the way of a high dividend being declared. If too high a dividend, quite disproportionate to that declared in other lines, is declared by a particular concern in a particular line, that would signify undercapitalization and attract funds from the public, thereby once more reducing dividends to normal. It is also known that in the field of finance, corporate savings have come to acquire great importance. Hence if the concern wants to be selfsufficient in financial matters, or at least depends on its own savings for a major part of its requirements, it is better not to declare a high dividend but to carry a major portion of the undistributed surplus to the reserve fund. There are certain industries, e. g., railroads, where profits are earned in the longrun. Over a number of years no profits may be earned and no dividend declared. In speculative enterprises a high degree of uncertainty haunts profits. Accordingly, it is necessary to declare dividends at a low level which may be maintained all through the life of the corporation. The age of the concern also gets importance. It is true that a certain level of dividends becomes essential for new concern to declare in order to attract sympathy of the investors, but where it needs its own earnings for its growth, a cautious dividend policy is commendable.

All investors have one good reason to forgo dividends in so far as they originate at companies having growth prospects and continuing needs for new capital which, after all, essentially describes the kinds of companies that most investors look for. New capital acquired from external sources is both expensive and hard to get. New capital acquired through retained earnings is both cheap and readily obtainable. It is cheap in the sense that its uses involve neither the payment of interest nor the allocation of earnings to new shares. They consequently produce higher earnings per share than

other kinds of capital. Acknowledging this general principle, some economists have nevertheless argued that cost free capital may sometimes be undesirable. They contend that it may make managements sloppy in their investment decisions. They have argued that a management demanding a certain return from new projects to be financed with capital obtained externally will often settle for a more modest return on projects to be financed with retained earnings. Logically, retained earnings should not be committed to the business unless the return expected on them exceeds the shareholders' 'opportunity cost' (Loomis, 1968).

Considering all these viewpoints, the following general principles may be laid down regarding the distribution of profits among shareholders. In the first place, the company newly started should make it a point to pay no dividend or a very nominal dividend over a number of years after the commencement of business. Secondly, it should be the aim of the company to stabilize the dividend rate and in order to achieve that end, it must first reduce the fluctuation of profits to the minimum, so that a stable dividend policy may be ensured. Finally, it is for the company to pay out as dividend, in any year, only a portion of the surplus profits, not the whole of them, as a matter of financial prudence. How much of these surplus profits are to be paid as dividend is a matter to be considered by the management; no hard and fast rule can be laid down in this regard.

Economists, however, have long striven to make some broader points involving the relationship between dividends and stock prices. One important question remains there concerning the relative importance of retained earnings and dividends in determining a stock's price earning ratio (PER). Underlying this question is the proposition that both retained earnings and dividends convey a return to the stockholder. Dividends, of course, are

some direct payoffs. Retained earnings, on the other hand, increase the value of the stockholders' investment and stimulate the power of the business to produce additional earnings. Since these are capitalized in the market, the value of stockholders' shares increases. The question then is which method of payment do most investors prefer?

Gordon (1962) says that for most companies generous dividend payout tends to lift price earning ratios (PER), and niggardly payout to depress them. According to him, it is rational to prefer the certainty of a dividend payment now to the uncertainty of a possible future (realized through growth) flowing out of retained earnings. However, Miller and Modigliani (1961) have argued that dividends do not count. They have contended that investors are essentially indifferent to the level of dividends and that therefore they have virtually no effect on PERs at least if transaction costs and taxes are ignored. Still a third view has been pronounced by Friend and Puckett (1964) who have shown that in non growth industries-they included food and steel in this category-investors tended to value dividend somewhat higher than retained earnings but the opposite, they feel, is true for growth industries-identified as electronics, utilities and chemicals.

Thus, the issue is still unresolved and Black (1976) has rightly concluded 'What should the corporation do about dividend policy? We do not know.' We have already mentioned that stocks differ from ordinary commodities in that the purchaser of stocks does not expect to derive any benefit from the direct consumption of the stocks themselves. This necessitates the value of a stock to be considered in a way different from that we usually do with other commodities. The fundamental factor considered in purchasing a stock is how much profit the invested money will realize in a particular period and this depends upon a dividend rate anyway.

Table-3
Number of listed companies paying dividends

Year	No. of companies listed	No. of companies paying dividend	% of total listed companies	Number paying		
				5 to 15%	16 to 25%	26% and above
1980	23	15	65.22	—	—	—
1981	26	21	80.77	10	10	1
1982	29	22	75.86	12	9	1
1983	44	25	56.82	6	15	4
1984	58	35	60.34	8	18	9
1985	72	45	62.50	18	18	9
1986	82	43	52.44	14	21	8
1987	90	53	58.89	18	25	10
1988	111	46	41.44	17	16	13
1989	116	61	52.59	22	24	15
1990	130	77	59.23	40	25	12
1991	133	69	51.88	40	19	10
1992	142	62	43.66	31	21	10
1993	147	74	50.34	43	19	12
1994	157	65	41.40	29	21	15
1995	183	84	45.90	32	24	28

Source: Calculated from various issues of DSE Fact Book and Monthly Review.

Dividend, therefore, becomes an important factor behind stock price formation, as it is universally accepted that one can look upon a share as a profit sharing security. In the backdrop of above discussion let us look to the dividend scenario of Bangladesh enterprises in Table-3. It is clear from this Table that with the increase of listed companies the number of dividend paying companies is also increasing in absolute terms but it is decreasing in relative terms. Among the dividend paying companies the median rate appears to be within the range of 16 to 25 percent while the number of companies within the highest range (26 percent and above) is small. Out of 15

Table-4
Changes in time deposit interest rate, dividend yield
and average dividend rate (in %)

Year	Time Deposit Interest Rate (One Year)		Stock Yield		Average Dividend	
	B'desh	Japan	B'desh	Japan	B'desh	Japan
1976	8.25	6.750	—	1.91	—	12.50
1977	8.25	5.250	—	1.82	—	12.68
1978	8.25	4.500	—	1.60	—	12.90
1979	8.25	6.000	—	1.57	—	12.98
1980	14.00	7.000	12.90	1.63	13.97	13.16
1981	14.00	6.250	12.20	1.55	13.88	13.38
1982	14.00	5.750	11.30	1.68	12.68	13.62
1983	14.00	5.750	9.90	1.39	11.98	13.76
0984	14.00	5.500	5.70	1.09	8.32	14.22
1985	14.00	5.500	10.70	0.99	18.20	14.50
1986	14.00	3.760	5.40	0.78	11.75	14.66
1987	13.25	3.390	3.50	0.63	13.41	14.72
1988	13.25	3.390	1.80	0.55	6.21	15.04
1989	13.25	4.320	2.90	0.47	10.17	15.56
1990	10.00	6.080	3.94	0.52	8.59	16.08
1991	9.00	5.250	5.42	0.64	10.24	16.42
1992	7.50@	6.820	4.60	0.90	9.50	16.42
1993	6.00@	3.089	4.13	0.82	8.39	—
1994	5.00@	2.174	2.08	0.76	7.91	—

Notes: 1. Time deposit interest rates are as of the end of each year. Since 1993 figures relate to one year time deposits of more than ¥ 10 million. 2. Stock yield and average dividend rates are based on dividend paying companies. @Since 1992 individual banks are allowed to decide the interest rates on deposits within a range. This is the minimum rate set by the monetary authority, however, when taking the average of the actual rate offered by individual bank on one year time deposit these are 8.55%, 8.26% and 6.56% for 1992, 1993 and 1994 respectively.

Sources: Compiled from TSE (1995) and Japan Securities Research Institute (1994), Economic Trends, Bangladesh Bank-various issues and DSE Stock Exchange Review and DSE Fact Book-various issues.

years (from 1981 to 1995) the number of companies paying dividend 16 percent and above outweighed the number paying between 5 percent and 15 percent. It gives an impression that in general most of the dividend paying companies paid a good amount as dividend although the number of such companies is around 50 percent of the total listed companies.

Table-4. presents a comparative position of stock dividend yields, average dividend rates of the listed companies on the DSE and TSE and annual time deposit interest rates in Bangladesh and Japan. When seen from a long term viewpoint, the yield of dividend paying stocks has almost consistently been dropping till recently in both Bangladesh and Japan. The dividend yield of the listed companies in DSE was 12.9 percent in 1980 which declined rapidly afterwards. Undergoing some fluctuations during the period under consideration, it came down to about 2 percent in 1994. A similar trend is observed for the stocks of TSE. Average dividend rates of the Bangladeshi enterprises was 13.97 percent in 1980 which demonstrates a declining trend in subsequent years. However, the dividend rate of the Japanese companies appears to be steadily increasing. The important point is that the dividend rate and yield in Bangladesh are lower than the time deposit interest rate whereas in Japan although dividend yield is lower than a time deposit interest rate, a dividend rate is higher than that.

A low yield is attributable either to the low dividend or to the high market capitalization or to both as it appears from the following definition of the dividend yield:

$$Dividend\ Yield = \frac{Cash\ Dividend}{Market\ Price\ of\ Share} \dots\dots\dots(1)$$

An increasing market capitalization and a decreasing cash dividend

are observed in Bangladesh. Moreover, the rate of yield decrease is more than the rate of decrease in dividends. This indicates that both lower dividend and higher capitalizations are relevant factors for explaining low yields. In case of Japan, businesses have mostly been taking a dividend policy that is enough to a certain fixed percentage of the face value as dividends steadily and continuously, while stock prices went up and remained high (TSE Fact Book, 1986). Accordingly, the dividend yield has gone down. Until recently the time deposit interest rate was much higher in Bangladesh, which was partly because of high rates of inflation. The dividend yields and dividend rates are relatively lower in Bangladesh when interest rates are compared. Recently, however, the interest rates have been revised downward along with low rates of inflation. A look at the investment indexes (PERs and dividend yields) in Bangladesh will also reveal a considerable fluctuation of these indexes. They undergo sharp fluctuations specially during a period of major policy changes. On the other hand, these indexes for Japan offer more or less stable condition over a relatively longer period of time.

There is a feeling among the laborers of Bangladesh that when high profits are earned, they should not be spent on fat dividends, but carried to reserve and depreciation funds and utilized for improving the standard of living of the workers. It is true that too fat dividends are not desirable, but dividends declared by companies in Bangladesh in most cases have not been excessive. However, in a period of prosperity, to the interest of the industry itself, it is necessary to build up as much corporate reserve as is feasible so that on the one hand it will lighten the problems of industrial finance in normal times and on the other, work as the main support in the dark days of depression.

Price earnings ratio (PER)

The price earnings ratio (PER) is an index obtained through dividing the stock price by the earnings per share to show the ratio between these two figures. As such, it is contemplated as a criterion for investment decisions. Having been used with stock yields in the developed economies since 1920's, investors particularly institutional investors have come to consider PER more important than yield in recent times. Formulation of PER has substantial relation with share valuation. Security analysts usually go through the process of discounting forecasted earnings or dividends to get a present value of a share. Conceptually the investment value of a share is equal to the present value of dividends expected from its ownership. In notational terms this can be expressed as:

$$P_o = \sum_{t=1}^{\infty} \frac{D_t}{(1+i)^t} \dots\dots\dots(2)$$

Where P_o is the current price of the share, D_t is an expected dividend at the end of period t and i is equal to the investor's discount rate or opportunity cost applicable to the dividend stream. This is a general valuation model.

When the dividend per share is assumed constant year after year at a value of D then Equation (2) becomes

$$P_o = \frac{D}{(1+i)} + \frac{D}{(1+i)^2} + \frac{D}{(1+i)^3} + \dots\dots\dots(3)$$

If g is considered as dividend growth rate and assumed constant the

valuation model takes the form of Equation (4).

$$P_o = \frac{D_1}{(1+i)} + \frac{D_1(1+g)}{(1+i)^2} + \frac{D_1(1+g)^2}{(1+i)^3} + \dots \quad (4)$$

Fortunately, there is a simple formula for the sum of this geometric series²⁾.

If i is greater than g then it simplifies to

$$P_o = \frac{D_1}{i-g} \quad (5)$$

Equation (5) is popularly known as constant growth model. Two assumptions underlying this equation deserve attention: a constant growth rate and infinite time horizon. Rather than forecast an explicit value of the dividend or earnings, many analysts start with ex post data of most recent years and project a growth rate g in subsequent years. There might have some variation between the actual and forecast. However, it should be recognized that the value for this growth rate g represents an average growth over the investor's time horizon, n years. Secondly, an infinite time horizon indicates mathematical convenience rather than investment reality. Instead of discounting over a finite time horizon of n years, where the value of n may vary between 5 and 50 years depending on the investors, it is assumed that discounting will take place over an infinite time horizon. It is, of course, recognized that the combination of these two assumptions implies the value

2) We need to calculate the sum of an infinite geometric series

$$(A) \quad P_o = a(1 + X + X^2 + X^3 + \dots) \quad \text{where } a = D_1/(1+i) \text{ and } X = (1+g)/(1+i).$$

Multiplying both sides by X we have

$$(B) \quad P_o X = a(X + X^2 + X^3 + \dots)$$

Subtracting (B) from (A) gives us $P_o = a(1 - X)$. Substituting for a and X in this formula, we find that $P_o = D_1/(i-g)$.

of g must be an average growth rate over an infinite time horizon. The constant growth model is widely used and as such we will focus on this model. To arrive at the concept of PER, one merely has to divide both sides of the Equation (5) by earnings E . Then it becomes

$$P_o/E = \frac{D/E}{i-g} \dots\dots\dots(6)$$

Thus, as the model indicates, the key determinants of PER are the following:

- 1 D/E , the dividend payout ratio.
- 2 i , the discount rate used by the equity investors.
- 3 g , the growth rate of dividends.

Other things being equal, (a) the higher the payout ratio and the growth rate of dividends, the higher will be PER; (b) the higher the discount rate, the lower will be PER. It is needless to say that there is inverse relationship between payout ratios and the growth rate of dividends. This is because when the payout ratio is high, the retention ratio is low. A low retention ratio indicates a low rate of growth of dividends. It is obvious that the formula will yield meaningful results only if the value of the discount factor i is greater than the growth rate g . Otherwise, PER will be infinite or negative. This does not mean that PER is useless if the growth rate for certain companies is found higher in some years. It is only the long term growth rate which has relevance to the formulation.

The most common traditional index for investment decisions is the yield obtained by dividing the annual dividend by the purchase price of the stock. It enables the investor to determine the maximum price he can pay for a stock issue with a given dividend per share when he wants to secure a

certain rate of return on the investment in comparison with the interest rate on savings and bond yield. In other words, the yield emphasizes the dividend rate. The implication of PER, on the other hand, goes one step further and underscores the relationship between the potential profit per share and stock price.

It is usually recognized that the yield on stocks should be higher than that on fixed-interest bearing securities like bonds and debentures because of the higher investment risk attached to stock investment than fixed interest-bearing securities. However, it is observed that with the rapid economic growth of the post war era and the development of economic policies, this relationship began to reverse itself around 1955 and stock purchase continued even when their yield fell below that of bonds and debentures. This phenomenon is known as 'yield revolution'. As this 'yield revolution' emerged common in the United States, Europe and Japan, the emphasis upon the use of PER became stronger. Consequently, PER came to be recognized as one of the most important measures for investment decisions.

Table-5 provides a comparative picture of PER of Bangladesh, Japan, USA and UK. It is difficult to evaluate stock prices merely by looking at the figures of international comparison because of different accounting methods, discount rates used for pricing, and rate of profit growth. Nevertheless, it has some analytical relevance. This Table gives an impression that different standard for PER can be used for different countries. PERs for Japanese enterprises range from 36.7 to 79.5, for USA from 10.38 to 15.91, for UK from 9.49 to 30.66 and for Bangladesh from 8.02 to 28.91 for the period under consideration. The highest range is found for Japan and the lowest range is for USA. In Japan, PER suddenly dropped from 70.6

Table-5
Comparative PER of the listed stocks at year end

Year	Price Earnings Ratio (Multiple)			
	Bangladesh	Japan	USA	UK
1986	10.30	47.3	14.91	11.84
1987	28.91	58.3	14.04	10.82
1988	8.07	58.4	10.38	9.49
1989	25.53	70.6	12.47	11.11
1990	12.09	39.8	11.66	10.10
1991	8.02	37.8	15.91	17.25
1992	8.87	36.7	15.24	21.74
1993	7.70	64.9	15.20	30.66
1994	23.12	79.5	12.70	17.81

Source: For Bangladesh estimated from various issues of DSE Stock Exchange Reviews, for others, TSE Monthly Statistics Report for First Section Stocks and Securities Research Institute, 1996.

in 1989 to 39.8 in 1990 due to downward swing of Tokyo stock markets in early 1990. The common understanding is that Japanese share prices are relatively at high levels in terms of economic fundamentals. Table-5 shows that the highest PER is observed in 1987 and the lowest in 1993 in Bangladesh markets. This is consistent with the general price rise in 1987 and general price fall in 1993. Since PERs for Japanese and Bangladeshi firms display relatively high volatility, it would not be appropriate to consider this criterion as an absolutely proper standard for making investment decision. As PER has shown weak relevance to market reality, investors also need to pay attention to other measures such as a price-book value ratio (PBR). Based on the assets value of the enterprises and cash-flow multiple, PBR is stock price divided by cash flow (i. e., after-tax profit plus depreciation charges).

If we see the sector-wise average PER of the listed stocks on DSE at Table-6, we find that the jute sector has the lowest PER as expected due to depressionary condition prevailing in this sector. Broadly speaking, 1987 shows higher PER in most of the sectors in comparison to other years. This corroborates the fact that higher market price of stocks was prevailing in 1987. In the period of rising stock prices, a strong tendency for the investing public to emphasize PER is observed at the time of stock purchase. But the rapid increase in stock prices caused by the excess demand pressures also results in a weakening of PER as a basis for investment decisions. In such a situation net worth of the company deserves greater atten-

Table-6
Sector-wise average PER of the listed stocks on DSE

Sector	1986	1987	1988	1989	1990	1991	1992	1993	1994	Average
Banks	25.4	85.5	9.2	-8.5	84.1	13.0	2.3	9.1	7.5	25.3
Investment	6.1	11.6	10.9	8.4	6.6	5.6	9.0	11.3	10.5	8.9
Engineering	4.9	8.5	8.9	35.0	8.4	5.7	9.9	4.7	16.0	11.3
Food & Allied Pro.	7.6	33.4	10.8	111.0	6.3	9.1	10.2	-0.2	6.8	21.7
Fuel and Power	9.1	11.2	11.1	12.2	6.7	5.3	12.7	11.0	11.3	10.1
Jute	-	0.1	-12.3	9.7	0.1	3.2	0.7	-0.5	14.5	1.9
Pharmac. & Chemicals	10.0	52.6	8.6	5.0	5.1	4.7	15.1	32.4	87.9	24.6
Paper & Printing	13.2	14.0	17.7	16.8	17.0	26.5	11.1	4.6	3.1	13.8
Service	6.1	6.1	6.1	6.1	6.1	6.1	3.0	3.0	2.0	5.0
Textile	4.1	6.4	9.4	4.7	9.7	9.3	8.7	7.0	4.6	7.1
Insurance	-	-	-	-	6.9	6.1	5.9	7.9	10.7	7.5
Misc.	10.1	12.9	9.1	7.8	-10.8	4.7	7.2	2.0	32.0	8.3

Note: PER calculated in December every year.

tion implying investment decisions based on the ratio between price and net assets are more relevant. Strictly speaking, it is not easy to evaluate whether share prices are inflated by looking at indicators such as PERs and dividend yields. An international comparison of PERs, for instance, has to take into account different accounting methods, and also calculating a discount rate for share prices and long term rates of profit growth.

Dividend policy stabilization

Much has been written by authorities on corporation finance about stable dividend policy urging its necessity. Of course, the need for stabilization is not of the same degree of urgency in all cases, particularly so in 'closed corporations'³⁾. But the urgency for stabilization is very great in case of corporations whose shares are widely distributed. Decisions regarding dividends and demand for external funds interact with each other as well as with investment. The determinants of dividends and hence retained earnings, and external finance need to be considered in order to attain planned level of investment. While analyzing dividend behavior, Lintner (1956) states that dividends represent primary and active decision variable and retained earning is a residual factor. Companies usually try to achieve a long run dividend payout ratio through a gradual process over a period of time. It is argued that the rationale for such a stable dividend policy is attributable to equity holders' preference for steady growth of income from their investment. Markets also pay for such stability. This indicates that lagged

3) 'Closed corporations' are those whose shares are mostly held by family members, relatives and friends and these shares are not sold outside for retaining control.

dividends and current earnings have their bearing on current dividends.⁴⁾ Among the shareholders, of course, two classes are to be distinguished—investors and speculators. So far as the speculators are concerned, they are in favor of constant fluctuations in the price of stocks. But the interest of genuine investors is altogether different. They desire stability in income from their investment. This in turn has its effect on the price of securities. For, only those securities will have greater demand from the investors which earn a stable dividend and consequently have a high and more stable value in the market. If the dividends declared by a security over a number of years are irregularly distributed, e. g., 8, 8, 6, 4, 4 averaging 6 percent, instead of 6 percent per annum, over a period of five years, then that security may command a lower price in the former case than the latter. In a study it has been revealed that about 70 percent of the investors in Bangladesh have preference for a moderate dividend payout ratio (Ahmed et al., 1993) suggesting a situation conducive for sustaining a stable dividend policy or maximization of the dividend in long run. Investment plans affect dividend policies in so far as there is a preference on the part of firms to grow through internal funds. In lean years when profits are low, firms may go for borrowing to keep the dividend rate stable. Alternatively, firms may resort to their own reserves for this purpose. A change in sales has its bearing upon working capital requirements and dividend payments. The effect of tax policies is also considered in the literature. Accordingly, empirical in-

4) Lintner's model can be shown as follows: $d_t - d_{t-1} = z(D_t - d_{t-1}) + x$, where D_t is desired dividend and z is coefficient bounded between zero and one, reflecting the rapidity of adjustment. The desired dividend is a fraction of current profits represented by $D_t = rP_t$, where r is target payout ratio and P is profits. Substituting for the unobserved d_t , the first equation can be rewritten as $d_t = zrP_t + (1 - z)d_{t-1} + x$.

vestigations on dividend behavior indicate that the impact of investment, external finance, change in sales and tax policies needs to be incorporated in explaining the dividend behavior. The demand for external finance is related to the firm's growth objectives. If the internal resources are not sufficient for the growth objectives provided by the market opportunities then the alternative open for the firm is external finance. The cost and risk associated with borrowing are relevant factors need to be considered in this case.

From the standpoint of the concern itself, a stable dividend policy is desirable for more than one reason. A corporation with stable dividend records finds good reception for any subsequent floatation and that at a premium too. It also improves the borrowing position of the corporation. A company on the road to progress will need money at every step for improvements and extensions. Such companies are, therefore, under frequent necessity of selling securities. The importance of this factor is all the more great in a country like Bangladesh where the propensity to invest in industrial securities is low. If stable dividend policy is pursued by the enterprises, it can help in augmenting the popularity of industrial securities.

One of the frequently raised issues about dividend policy is that dividend paid by the Bangladeshi enterprises is small and not paid in due time (Kashem, 1985). At times, however, this allegation may appear to be quite true, but a patient inquiry reveals that the policy is circumstantial. Our jute industry is a glaring example, where no dividend or a very low rate of dividends is paid for a long time. Otherwise, in general, the dividend declared seems to be reasonable. Of course, inordinate delay between declaration of a dividend and its payment is a real phenomenon in corporate behavior of Bangladesh enterprises. According to an instruction by the

Ministry of Finance, government of Bangladesh companies should pay a dividend ratified by the shareholders in the AGM within 60 days after the meeting. But more than 54 percent of the investors reported it took more than 60 days after the AGM (Ahmed et al., 1993). The situation is expected to be improving with the establishment of SEC and some measures initiated by them in recent years. In this connection relationship between PER of the DSE listed stocks and their dividend payment has been examined. For this purpose all the listed stocks have been classified into three groups, e. g., (i) those companies who never paid a dividend, (ii) those who paid a dividend every year and (iii) those who paid a dividend in some years continually. The averages of PER calculated for these three groups for two periods of time—1986 to 1989 and 1990 to 1994—are shown in Table-7. First, let us see the average PER for the period from 1986 to 1989. Companies paying a dividend every year have the highest average PER representing 20.22 and the average PER of those companies who paid no dividend is the lowest representing 1.95. The average PER of the companies who paid dividends continually is 3.67 which is in between the two extreme groups. Again,

Table-7
Average PER of companies and associated cash dividend

Types of Company	Average PER	
	1986–1989	1990–1994
i. Paid Dividend Every Year	20.22	11.21
ii. Paid Dividend in Some Years	3.67	10.99
iii. Paid no Dividend	1.95	0.55

Notes: i. Two cases of abnormally high PER have been excluded. ii. Average PER of individual enterprise has been used for this purpose.

PERs have displayed a similar trend for the five year period from 1990 to 1994. For this period PER of the first category appears to be marginally higher than the second category, and the third category companies are demonstrating lower level of PER for both the periods. These figures suggest that the market regards a dividend and a regular dividend is likely to be evaluated positively by the market. This may stimulate the share price. Accordingly, stable dividend policy might have significant influence on PER of the enterprises in Bangladesh.

The question of stabilization of dividend policy has not altogether been neglected in Bangladesh, although it has not received the same sort of treatment as in other countries. Japan has demonstrated a policy of a stable dividend. If we look to the average dividend rate of Japanese firms at Table-4, it is evident that a stable dividend policy is followed by them. Most Japanese enterprises stabilized their dividend at 10 percent of face value and hence investing in stocks became more advantageous than keeping funds under the short term rate (Oka, 1991). This stable dividend policy of Japanese enterprises, among others, might have its influence on the higher PER when compared with those of other countries. As a matter of practical policy, adoption of two sorts of measures is advisable in view of the preference for stable dividend policy in a country like Bangladesh. In the first place, efforts should be made by the management of each enterprise to declare dividends at such a level which can be maintained in the foreseeable future. Secondly, Dividend Equalization Fund may be instituted by the enterprises with the objective to equalize the rate of dividends over the years.

Individual shareholders generally prefer dividends. Corporations, on the other hand, prefer to minimize dividends in order to meet their invest-

ment needs. 'In a period when corporate capital is scarce, when corporate investment opportunities are expanding, and when capital gains are taxed at low rates, it is clearer than ever that dividends are a 'bad buy' for most stockholders' (Loomis, 1968). However, dividend and capital gain are assessed differently by individual and corporate investors in practice in view of the tax structure and other relevant factors prevailing in an economy. In Bangladesh, dividend incomes of individuals are not taxed up to a certain limit and the capital gains on sales of listed securities have been exempted from tax but dividend incomes of companies have not been exempted. In Japan, the dividend incomes of companies have not been exempted from tax rather tax is payable on such incomes at a usual rate while interlocking stockholding can avail the tax benefit when this is done by the borrowed fund (Nakatani, 1984). Corporations, in Japan, have typically relied more on debt financing than has been usual in other industrialized countries. Interest charges for Japanese nonfinancial corporations were approximately 53 percent of operating income in 1971 while the similar figure for U. S. nonfinancial corporations was approximately 35 percent (Flath, 1984).⁵⁾ This might have induced the Japanese enterprises for interlocking stockholding and seeking high leverage very often referred to as 'overborrowing'. High share of Japanese business corporations in total share holding probably reflect these conditions⁶⁾. It is evident that investors are mainly

5) However, according to Kuroda and Oritani (1980) the difference in interest as a fraction of earnings will diminish to some extent if financial subsidiaries are consolidated and financial lease payments are considered as interest.

6) In case of Japan this share is represented by financial institutions(43.8 percent) and business corporations(23.9 percent) while the share of business corporations in Bangladesh is almost zero(TSE, 1995).

interested in buying the shares of the big companies who have higher degrees of goodwill and higher rate of a dividend. On the other hand, when a company is closely held, as occurs in Bangladesh, its management may prefer for a tax or expansion reasons to keep dividend payment low, thereby tending to reduce potential investors' interest (Robbins, 1980). Futatsugi (1986) shows that the reciprocal share holding of the Japanese firms has permitted them to ignore the obvious market demand for a higher dividend implied by the imperfections and uncertainties of the market. In this connection Baumol (1965) is quoted as:

..... A very substantial proportion of American business firms manage to avoid the direct disciplining influence of the securities market, or at least to evade the type of discipline which can be imposed by the provision of funds to inefficient firms only on extremely unfavorable terms. A company which makes no direct use of the stock market as a source of capital can apparently, proceed to make its decision confident in its immunity from this type of punishment by its impersonal mechanism of the stock market.

Finance theory suggests that the tax deductibility of interest is a marginal advantage of debt financing since dividend payment is not allowed such advantage in case of equity financing. Corporations tend to balance it against the higher expectation of failure costs that undertakes higher level of debt financing. It has been argued that the tax deductibility of interest can't explain the higher leverage in Japan, because tax rates on corporate income are not significantly different from that of the U. S. (Wallich and Wallich, 1976). The higher leverage may be conceived as insulation from

business failure costs, perhaps, because the Japanese government act as the tacit guarantor of private loans, at least to large firms (Caves and Uekusa, 1976 and Wallich and Wallich, 1976). Although corporate tax rates are comparable in the U. S. and Japan, personal tax rates are much lower in Japan. Both corporate and personal taxes have important bearing upon the overall marginal tax advantage of corporate debt financing. When capital gains are largely untaxed, a reduction in all other personal taxes increases the pass-through of interest income by a larger percentage than it increases the pass-through of equity income which comprises dividend and capital gains. Thus, the relatively low personal tax rates might imply that the marginal tax advantage is larger in Japan (Flath, 1984).

In order to restrain management from withholding dividend payments despite available earnings, Bangladesh had a penalty tax rate that was imposed if a company earned a certain level of profits and did not declare dividends. This was eliminated in 1978 so that management may retain more of the earnings and facilitate expansion. In Japan low dividend payments are sometimes appraised as disadvantageous for the capital market to play its due role as a pool of long term funds for business enterprises and in providing better investment opportunity for investors (Ahmed, 1988). Apparently, it is implied that the Bangladesh government should choose such a policy which will be in between readopting the former tax policy that will help the securities market and thereby benefit capital formation in the long run, or exempting the tax in order to benefit capital formation in the short run.

Concluding remarks

It is recognized that the influence of dividend decision in the stock price mechanism has some valid reasons. Dividends convey valuable information to the investors and it has been documented that managers' behavior also appears to be consistent with this view (Lintner, 1956). Although other alternatives exist through which managers can disseminate information (Pettit, 1972) but dividends are highly visible compared with other announcements in addition to its credibility of cash signals. Business enterprises in Bangladesh should, in their own interest, follow a stable dividend policy and this implies a conservative pay-out ratio. The shareholders should also realize that a conservative dividend policy may apparently be prejudicial to their interest in so far as they are not allowed to share in high profits. But really they are not losers. For, even in bad years it will be the policy of the concern to maintain the rate of dividends from the Dividend Equalization Fund even though no or very low profit is earned. Besides, by raising the confidence of the shareholders in a particular scrip, a stable rate facilitates capital appreciation which is beneficial to all concerned including the shareholders. Hence greater emphasis should be put on this aspect of the issue. Anyway, security markets provide investors a means to trade freely and timely, issuers to raise funds cheaply and smoothly and the economy to allocate resources efficiently. But the securities markets in Bangladesh have not yet developed to accomplish these functions at a desired level. Institutional structure has also been suffering from various limitations. Lack of professionalism, alleged oligarchy among the exchange brokers, weak legal framework and execution thereof have significant impact on securities

market development. Price manipulation and other market abuses like insider trading, underhand dealing and the like are likely to stem from such situations. The efforts need to be directed toward eliminating these weaknesses of the market. The concerned authorities should continue their endeavor to such areas like broadening the active membership of the exchange, ensuring fairness and transparency, enhancing professionalism, increasing the number of securities listed, integrity, stability and liquidity of the market and so on.

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