CHAPTER 2

LITERATURE REVIEW OF STOCK MARKET

As the activities on a stock market tend to be specialized and not understood by common people, this chapter will give some basic definitions and review stock market history, participants, operations and importance, so as to serve as a basis for understanding how stock market can help promote investment and trade in a monetary zone. Besides, review of other studies will be done in this chapter to give various dimensions of stock market in an economy.

2.1 Definition

Although common, the term stock market is somehow abstract for the mechanism that enables the trading of company stocks. It is also used to describe the totality of all stocks, especially within a country, for example in the phrase “the stock market was up today”, or in the term “stock market bubble”.

Stock market is different from a stock exchange, which is an entity (a corporation or mutual organization) in the business of bringing buyers and sellers of stock together. For example, the stock market in the United States includes the trading of stocks listed on the NYSE, NASDAQ and Amex and also on the OTCBB and pink sheets.
2.2 History

In 12th century France, the courratier de change was concerned with managing and regulating the debts of agricultural communities on behalf of the banks. Because these men also traded with debts, they could be called the first brokers.

In early 13th century Bruges commodity traders gathered inside the house of a man called Van der Beurse, and in 1309 they institutionalized this, but until then informal meeting and become the Brugse Beurse. The idea quickly spread around Flanders and neighboring counties and Beurzen and soon opened in Ghent and Amsterdam.

In the middle of the 13th century, Venetian bankers began to trade in government securities. In 1351, the Venetian government outlawed spreading rumors intended to lower the price of government funds. Bankers in Pisa, Verona, Genoa and Florence also began trading in government securities during the 14th century. This was only possible because these were independent city states not ruled by a duke but a council of influential citizens.

The Dutch later started joint stock companies, which let shareholders invest in business ventures and get a share of their profits or losses. In 1602, the Dutch East India Company issued the first shares on the Amsterdam stock exchange. It was the first company to issue stocks and bonds.

The first stock exchange to trade continuously was the Amsterdam Beurs, in the early 17th century. The Dutch pioneered short selling, option trading,
debt-equity swaps, merchant banking, unit trusts and other speculative instruments, much as we know them.

Now, there are stock markets in virtually every developed country and most developing countries, with the world’s biggest markets in the United States, UK, Germany, France and Japan.

2.3 Stock Market Participants and Trading
Many years ago, worldwide, buyers and sellers were individual investors such as wealthy businessmen, with long family histories (and emotional ties) to particular corporations (think Ford). Over time, markets have become more institutionalized with buyers and sellers largely institutions e.g pension funds, insurance companies, mutual funds, hedge funds, investor groups and banks. The rise of institutional investor has brought with it some improvements in stock market operations, but not necessarily in the interest of the small investors or even of the naïve institutions, of which there are many.

Now, participants in the stock market range from small individual stock investors to large hedge fund traders, who can be based anywhere. Their orders usually end up with a professional at a stock exchange, who executes the order.

Most stocks are traded on exchanges e.g NYSE, which are places where buyers and sellers meet and decide on a price. Some exchanges are physical locations where transactions are carried out on a trading floor, by a method known as open outcry. The other type of exchange is a virtual kind e.g
Nasdaq, composed of a network of computers where trades are made electronically via traders at computer terminals.

Actual trades are based on an auction market paradigm where a potential buyer bids a specific price for a stock and a potential seller asks a specific price for a stock. When the bid and ask prices match, a sale takes place on a first come first serve basis if there are multiple bidders and askers at a given price.

The purpose of a stock exchange is to facilitate the exchange of securities between buyers and sellers, thus providing a marketplace (virtual or real). Really, a stock exchange is nothing more than a super-sophisticated farmers’ market providing a meeting place for buyers and sellers.

2.4 Importance of stock markets
Just as it is important that networks of transportation, electricity and telecommunications function properly, so is it essential that payments can be transacted, capital can be saved and channeled to the most profitable investment projects and that both households and firms get help in handling financial uncertainty and risk as well as possibilities of spreading consumption over time. Financial markets constitute an important part of the total infrastructure for every society that has passed the stage of largely domestic economies. Stock market which is part of the financial markets, perform the following functions in an economy:
I. **Raising Capital for Businesses:** The stock exchange provides companies with the facility to raise capital for expansion through selling shares to the investing public.

II. **Mobilizing Savings for Investment:** When people draw their savings and invest in shares, it leads to a more rational allocation of resources because funds, which could have been consumed or kept in idle deposits with banks, are mobilized and redirected to promote business activity with the benefits for several economic sectors such as agriculture, commerce and industry, resulting in a stronger economic growth and higher productivity levels.

III. **Facilitate Company Growth:** Companies view acquisitions as opportunity to expand product lines, increase distribution channels, hedge against volatility, increase its market share or acquire other necessary business assets. A takeover bid or merger agreement through the stock market is the simplest and most common way to company growing by acquisition or fusion.

IV. **Redistribution of Wealth:** By giving a wide spectrum of people a chance to buy shares and therefore become part owners (shareholders) of profitable enterprises, the stock market helps to reduce large income inequalities. Both casual and professional stock investors through stock price rise and dividends get a chance to share in the profits of promising business that were set up by other people.

V. **Corporate Governance:** By having a wide and varied scope of owners, companies generally tend to improve on their management standards and efficiency in order to satisfy the demands of these shareholders and the more stringent rules for public corporations.
by public stock exchange and the government. Consequently, it is believed that public companies (companies that are owned by shareholders who are members of the general public and trade shares on public exchanges) tend to have better management records than privatively held companies (those companies where shares are not publicly traded, often owned by the company founders and/or their families and heirs or otherwise by a small group of investors). However, some well-documented cases are known where it is alleged that there has been considerable slippage in corporate governance on the part of some public companies (e.g. famous Enron Corporation, MCI WorldCom, Pets.com, Webvan or Parmalat).

VI. **Creates Investment Opportunities for Small Investors:** As opposed to other businesses that require huge capital outlay, investing in shares is open to both the large and small stock investors because a person buys the number of shares they can afford. Therefore the stock exchange provides an extra source of income for small savers.

VII. **Government Raise Capital for Development Projects:** The Government and even local municipalities may decide to borrow money in order to finance huge infrastructure projects such as sewerage and water treatment works or housing estates by selling another category of securities known as bonds. These bonds can be raised through the stock exchange whereby members of the public can buy them. When the government or municipal council gets this alternative source of funds, it no longer has the need to overtax the people in order to finance these development projects.
VIII. **Barometer of the Economy:** At the stock exchange, share prices rise and fall depending, largely on the market. Share prices tend to rise or remain stable when companies or the economy in general show signs of stability. Therefore the movement of share prices can be an indicator of the general trend in the economy.

2.5 **Relation of Stock Market to Modern Financial System**

The financial system in most western countries has undergone a remarkable transformation. One feature of this development is disintermediation. A portion of the funds involved in saving and financing flows directly to the financial markets instead of being routed via banks’ traditional lending and deposit operations. The general public’s heightened interest in investing in the stock market, either directly or through mutual funds, has been an important component of this process.

Statistics show that in recent decades shares have made up an increasingly large proportion of households’ financial assets in many countries. In the 1970s, in Sweden, deposit accounts and other very liquid assets with little risk made up almost 60 percent of households’ financial wealth, as against less than 20 percent in the 2000s. The major part of this adjustment in financial portfolios has gone directly to shares but a good deal now takes the form of various kinds of institutional investment for groups of individuals, e.g. pension funds, mutual funds, hedge funds, insurance investment of premiums, etc. The trend towards forms of saving with a higher risk has been accentuated by new rules for most
funds and insurance, permitting a higher proportion of shares to bonds. Similar tendencies are to be found in other industrial countries.

In all developed economic systems, such as the European Union, the United States, Japan and other developed world countries, the trend has been the same; saving has moved away from traditional (government insured) bank deposits to more risky securities of one sort or another. But in developing countries, it is exactly the opposite that is happening with households’ savings.

2.6 The Behavior of the Stock Market

From past experience, it is known that investors may temporarily pull financial prices away from their long term trend level. Over-reactions may occur – so that excessive optimism (euphoria) may drive prices unduly high or excessive pessimism may drive prices unduly low. New theoretical and empirical arguments have been put forward against the notion that financial markets are efficient.

According to the efficient market hypothesis (EMH), only changes in fundamental factors, such as profits or dividends, ought to affect the share prices. But this largely theoretical academic viewpoint also predicts that little or no trading should take place – contrary to fact – since prices are already at or near equilibrium, having priced in all public knowledge. However, the efficient market hypothesis is sorely tested by such events as stock market crash in 1987, when the Dow Jones index plummeted 22.6 percent – the largest ever one day fall in the United States. This was part of the world-wide crash of stock markets which did not originate in
the United States. The event demonstrated that share prices can fall dramatically even though, to this day, it is impossible to fix a definite cause. A thorough search failed to detect any specific or unexpected development that might account for the crash. It also seems to be the case more generally that many price movements are not occasioned by new information; a study of the fifty largest one day share price movements in the United States in the post war period confirmed this (Source: Cutler, D. Poterba, J. & Summers, L. (1991), Speculative dynamics, Review of Economic Studies 58, pp. 520-546). Moreover, while the EMH predicts that all price movement, in the absence of change in the fundamental information, is random (e.g non-trending), many studies have shown a marked tendency for the stock market to trend over time for periods of weeks or longer.

Various explanations for large price movements have been promulgated. For instance, some research have shown that changes in estimated risk, and the use of certain strategies, such as stop-loss limits and VaR limits, theoretically could cause financial markets to overreact.

Other research has shown that psychological factors may result in exaggerated stock price movements. Psychological research has demonstrated that people are predisposed to 'seeing' patterns, and often will perceive a pattern in what is, in fact, just noise. (Something like seeing familiar shapes in clouds or ink blots.) In the present context this means that a succession of good news items about a company may lead investors to overreact positively (unjustifiably driving the price up). A period of good returns also boosts the investor's self-confidence, reducing his

Another phenomenon— also from psychology— that works against an objective assessment is group thinking. As social animals, it is not easy to stick to an opinion that differs markedly from that of a majority of the group. An example with which you may be familiar is the reluctance to enter a restaurant that is empty; people generally prefer to have their opinion validated by those of others in the group.

In one paper the authors draw an analogy with gambling. (Source: Stephen Morris and Hyun Song Shin, Oxford Review of Economic Policy, vol. 15, no 3, 1999) In normal times the market behaves like a game of roulette; the probabilities are known and largely independent of the investment decisions of the different players. In times of market stress, however, the game becomes more like poker (herding behavior takes over). The players now must give heavy weight to the psychology of other investors and how they are likely to react psychologically.

We are also liable to succumb to biased thinking. An example is when supporters of a national football team (or a favorite stock), for instance, are overconfident about the chances of winning (or the stock moving up).

The stock market, as any other business, is quite unforgiving of amateurs. Inexperienced investors rarely get the assistance and support they need. In the period running up to the recent Nasdaq crash, less than 1 per cent of the analyst's recommendations had been to sell (and even during the 2000 - 2002 crash, the average did not rise above 5%). The media amplified the general
euphoria, with reports of rapidly rising share prices and the notion that large sums of money could be quickly earned in the so-called new economy stock market. This later magnified the gloom which descended during the 2000-2002 crash, so that by summer of 2002, predictions of a DOW average below 5000 were quite common.

To end this section on the behavior of the stock markets, it will be worthwhile to share with the readers of this study a famous quote from the preface to a published biography about a well-known and long term value oriented stock investor, Warren Buffet. (1) Buffet began his career with only 100 U.S. dollars and has over the years built himself a multibillion-dollar fortune. The quote illustrates something of what has been going on in the stock market during the end of the 20th century and the beginning of the 21st century.

“With each passing year, the noise level in the stock market rises. Television commentators, financial writers, analysts, and market strategists are all over talking each other to get investors' attention. At the same time, individual investors, immersed in chat rooms and message boards, are exchanging questionable and often misleading tips. Yet, despite all this available information, investors find it increasingly difficult to profit. Stock prices skyrocket with little reason, then plummet just as quickly, and people who have turned to investing for their children's education and their own retirement become frightened. Sometimes there appears to be no rhyme or reason to the
2.7 Empirical Evidences about Stock Market

Different studies have been carried out by financial economists on the implications of stock market development for various components of an economy. Relationships have been found to exist between stock market development and those aspects of an economy, even though some have been controversial, while other relationships have shown clear and significant correlation.

In this section, review and summary empirical findings are made of three studies, which investigated the relationships between stock market development and financing choices of firms by Demirguc-Kunt and Maksimovic (1996); stock market development and financial intermediaries: stylized facts by Demirguc-Kunt and Levine (1996) and stock market development and long run growth by Levine and Zervos (1996).

2.7.1 Stock Market Development and Financing Choices of Firms

In many developing countries with emerging stock markets, banks are fearful of stock market development because they think that stock markets will reduce the volume of their business. This article under review empirically analyzed the effects of stock market development on firms’ financing choices using data from thirty developing and industrial countries from 1980 to 1991.
Finance literature suggests that stock markets serve important functions even in those economies in which a well developed banking sector already exists, the reason being that equity and debt financing are in general not prefect substitutes. Equity financing has a key role in the management of conflicts of interest that may arise between different stakeholders in the firm. Stock markets also provide entrepreneurs with liquidity and with opportunities to diversify their portfolios. Stock trading transmits information about the firm’s prospects to potential investors and creditors.

The article empirically explored the effect of financial market development, particularly stock market development, on the financing choices of firms. It compared the relationship between the choice of capital structure and financial market development in the sample. It investigated the extent to which the variation in the aggregate debt-equity ratios within these countries can be explained by (a) the level of development of the country’s financial markets, (b) macroeconomic factors (c) the differences between the tax treatment of debt and equity securities and (d) the firm specific factors that have been identified in the corporate finance literature as determining financial structure.

The study found that in general there is a significant positive relationship between bank development and leverage and a negative but insignificant relationship between stock market development and leverage. However, when the study broke down the full sample into sub samples and control for other variables of firm financing, an interesting relationship between leverage and stock market development emerges. For stock markets that are already developed, further development leads to a substitution of equity for
debt financing. By contrast, in developing stock markets, large firms become more levered as the stock market develops, whereas small firms do not appear to be significantly affected by stock market development.

The results have important implications. In many developing countries with emerging stock markets, banks are fearful of stock market development because they think that stock markets will reduce the volume of their business. Instead, the results imply that initial improvements in the functioning of a developing stock market produce a higher debt-equity ratio for firms and thus more business for banks. These results also suggest that in countries with developing financial systems, stock markets and banks play different yet complementary roles. Thus policies undertaken to develop stock market need not affect existing banking systems adversely. The results are consistent with the conclusion of Demirguc-Kunt and Levine (1996) that stock market and financial intermediary development precede simultaneously.

2.7.2 Stock Market Development and Financial Intermediaries: Stylized Facts
World stock markets are booming and emerging stock markets account for a disproportionate share of this growth. Yet economists lack a common concept or measure of stock market development.

The above named article under review gave empirical content to the phrase “stock market development” by collecting and comparing a broader array of empirical indicators of stock market development than any study before it. Using data on forty-four developing and industrial countries from 1986 to
1993, they examine different measures of stock market size, market liquidity, market concentration, market volatility, institutional development and integration with world capital markets. Since each indicator suffers statistical and conceptual shortcomings, they use a variety of indicators, which provide a more accurate depiction of stock markets than any single measure. Furthermore, stock market development like the level of economic development is a complex and multifaceted concept. No single measure will capture all aspects of stock market development. Thus, the goal was to produce a set of stylized facts about various indicators of stock market development that facilitates and stimulates research into the links among stock markets, economic development and corporate financing decisions.

After describing each of the stock market development indicators, the article examined relationship among them. An enormous cross-country variation was found in the stock market indicators. For example, five countries had market capitalization to gross domestic product (GDP) ratios greater than 1, and five countries had market capitalization to GDP ratios less than 0.10. It found attractive correlation among indicators. For example, large stock markets are more liquid, less volatile and more internationally integrated than smaller markets; countries with strong information disclosure laws, internationally accepted accounting standards and unrestricted international capital flows tend to have larger and more liquid markets; countries with markets concentrated in a few stocks tend to have smaller, less liquid and less internationally integrated markets and internationally integrated markets are less volatile.
The article also documented the relationship between the various stock market indicators and measures of financial intermediary development. Since debt and equity are frequently viewed as alternative sources of corporate finance, stock markets and banks are sometimes viewed as alternative vehicles of financing corporate investments (Demirguc-Kunt and Maksimovic 1996). Consequently, the article documented cross country ties between stock market development and financial intermediary development. It used the measures of the size of the banking system, the amount of credit going to private firms, the size of the nonblank financial corporation and the size of private insurance and pension companies. It found that most stock market indicators are highly correlated with the development and efficient functioning of banks, nonblank financial corporations and private insurance and pension companies. Countries with well developed stock markets tend to have well developed financial intermediaries.

2.7.3 Stock Market Development and Long-Run Growth

Is financial system important for economic growth? One line of research argues that it is not and another line stresses the importance of financial system in mobilizing savings, allocating capital, exerting corporate control and easing risk management. Moreover, some theories provide a conceptual basis for the belief that larger, more efficient stock markets boost economic growth. The article under review examined whether there is a strong empirical link between stock market development and long-run growth.

The article documented theoretical disagreement which exists about the importance of stock markets for economic growth. Mayer (1988) argues that even large stock markets are unimportant sources of corporate finance.
Stiglitz (1985, 1994) says stock market liquidity will not enhance incentives for acquiring information about firms or exerting corporate governance. Moreover, Devereux and Smith (1994) emphasis that greater risk sharing through internationally integrated stock markets can actually reduce saving rates and slow economic growth. Finally, the analyses of Shleifer and Summers (1988) and Morck, Shleifer, and Vishny (1990a, 1990b) suggest that stock market development can hurt economic growth by easing counterproductive corporate takeovers.

The article used cross country regressions to examine the link between stock market development and economic growth. To conduct this investigation, it needed measures of stock market development. Theory does not provide a unique concept or measure of stock market development, but it does suggest that stock market size, liquidity and integration with world capital markets may affect economic growth. Consequently, the study used a conglomerate index of overall stock market development constructed by Demirgus-Kunt and Levine (1996).

The article further built on Atje and Jovanovic’s (1993) study of stock market trading and economic growth in two ways. First, it used indexes of stock market development that combine information on stock market size, trading and integration. Second, it controlled for initial conditions and other factors that may affect economic growth in light of the evidence that many cross county regression results are fragile to changes in the conditioning information set (Levine and Renelt 1992). Thus it gauged the robustness of the relationship between overall stock market development and economic growth to changes in the conditioning information set. It found a strong
correlation between overall stock market development and long-run economic growth. After controlling for the initial level of GDP per capita, initial investment in human capital, political instability and measures of monetary, fiscal and exchange rate policy, stock market development remains positively and significantly correlated with long-run economic growth. The results are consistent with theories that imply a positive relationship between stock market development and long-run economic growth. The results are inconsistent with theories that predict no correlation or a negative link between stock market development and economic performance.