CHAPTER 4
CHAPTER 4
Some Important Aspects of the Financial System

4.1 A Note on the Theory of the Financial System: The Financial Process

Financial system is the network of financial institutions and markets. The most basic function of any financial system is to facilitate payments in the economy because productive economic activity is highly dependent on the existence of satisfactory payment facilities. As the economy grows financial intermediation becomes crucially important. Financial system through the force of financial institutions and market helps in mobilization of savings and thereby enhance investments.

4.1.1 Saving and Investment

Financial system promotes saving by providing a wide array of financial assets as a store of value coupled with the varied services of financial institutions and financial markets. It improves opportunities available to savers, by enabling them to obtain higher yields on their savings and to hold them in more secure and more liquid forms. The preference of savers is altered by persuading them so that saving is ranked higher in their portfolio. In this way financial progress generally induces large savings out of the same level of real income.

Financial system enlarges the aggregate level of investment by breaking the straight jacket of internal finance. Investors are facilitated to produce a wide range of financial liabilities to suit their needs and preferences and hence those who do not have enough resources of their own, but have both the competence and willingness to organize production can make use of their entrepreneurial skill. Hence scarce resources, entrepreneurial and technical skills of the country are used in a better way.
The effect of a developed financial system on the level of saving and investment is understood well by considering saving and investment in a rudimentary economy, where there is no borrowing and lending. In such economy, some economic units would face with a situation in which some of their desired investment based on anticipated rate of return exceeding their actual saving. On the other hand still other economic units would find themselves in a situation where their actual saving exceed the amounts they would desire to invest given expected rate of return on many of these projects. The preferences and production opportunities of all units would not be the same; the rates of return on investment vary from agent to agent. In the absence of financial mechanism which allows borrowing and lending, there would be no possibility of transferring resources from those agents who could only achieve a low rate of return on investment to those who are able to invest more productively and hence agent would have to make best use of his own position.\(^2\)

In a rudimentary economy the time pattern of consumption of an individual should match with the time pattern of his income. Such budget constraint is broken when lending and borrowing takes place. By giving an individual opportunity to save by lending or dissave by borrowing financial system promotes saving and investment.

4.1.2 Financial System and Its Dual Function

Expounded by the theory of financial system is the role of financial system in transferring resources from savers to investors and helping both to hold or issue financial instruments with the characteristic they want. But taking saving as a whole there is a strong bias towards a preference for safety and liquidity, whereas on investment side the principal need is for long-term finance which must frequently be exposed to a significant degree of risk. Thus the crucially important task of financial system is to bring together savers and investors with matching mutual requirements.

It means that in the absence of financial institutions and markets the whole process of bringing savers and investors together, and agreeing terms would be
costly; it will be difficult for savers and investors to agree on terms that satisfy both.\textsuperscript{3}

Thus the other important function of the financial system besides breaking the straight jacket of budget constraint is to transfer the risk-bearing liabilities of ultimate borrowers into safe assets for lenders, transform long-term maturing liabilities into liquid assets and to reduce the cost incurred in the saving-investment process. The transformation of risk bearing asset into safe assets and term of maturity of liabilities (long-maturity liabilities into liquid assets) is what is known as asset transformation, which has to do with risk and maturity transformation.

4.1.2.1 Risk Transformation

Risk transformation\textsuperscript{4} is possible because of financial innovation—the division of liabilities into distinct categories with different degrees of risk exposure that is vitally important to the working of the financial system. This permits savers and institutions who are averse to risk to specialize in low-risk financial instruments while leaving other savers or institutions whose needs do not inhibit the holding of risky assets to specialize in the function of risk-bearing.

For instance, deposit-taking institutions like bank transform risk in such away that while the institution liabilities are safe, their loans inevitably bear some default risk. They transform risky assets into riskless liabilities by monitoring the risk of loss on each loan and by providing sufficient capital of their own to absorb any unexpected loss.

Whereas institutions like investment and unit trust which provide specialized fund management services, life insurance and pension funds which manage very large asset portfolio corresponding to their liabilities and to policy holders or members transform equity risk. Such institutions transform equity risk by spreading asset over a number of different holdings. Spreading ensures that there will be some degree of offsetting between losers and winners and reduces the risk to which the holder is exposed.
Financial market makes spreading of asset (diversification) a practical possibility. It gives individuals and institutions the ability to spread their asset portfolio among a number of instruments. But it's financial institutions that can efficiently diversify their portfolio because of high transaction cost involved in buying and selling of securities. This enables financial institutions to offer attractive service to individual investor with small financial resources.

4.1.2.2 Liquidity

Financial institutions and markets satisfy savers' desire for liquidity and at the same time investors need for long-term capital. Deposit-taking institutions like banks provide liquidity by issuing liabilities with maturity shorter than their asset. Organized market, by bringing large number of transactors in securities provides liquidity and ease to buyers and sellers. Professional market makers and discount houses add to liquidity in the market because they enable sellers to make sale without delay.

4.1.2.3 Transaction Costs

Financial market and institutions assist the users of the financial system by reducing the transaction costs they face. Costs can be in a form of time, trouble and actual expenses of conducting business. They reduce transaction costs in a number of ways such as provision of convenient place for business and hence reducing cost of searching a suitable counter part, standardized product thereby cutting information costs associated with scrutinizing individual financial instruments, specialization and scale of operation which enable them to acquire expertise and cut cost through the use of tested procedures and routines and centralized monitoring by a responsible authority to maintain the quality of the financial instruments traded. Competitions among the financial institutions and within the market keep down the cost of operation.

By reducing transaction costs faced by borrowers and lenders financial system cuts the gross cost of fund to borrowers and raise the net return to savers,
which in turn depending on savers and investors behaviour raise the level of investment and saving.\(^6\)

4.2 Financial System and Resource Allocation

Mobilizing sufficient financial resources for investment is necessary but not sufficient. Equally important is the quality of allocation of resources mobilized to various investment projects. For an economic take-off one has to be complemented by the other. But there are certain difficulties, which arise in the process of allocation of resources. For instance productivity risks, incomplete information concerning the likely return on projects and imperfect knowledge of the entrepreneur’s real abilities are some of the problems. These problems make the role of financial intermediation highly important.

Diversification of Productivity Risks

Productivity risk is the risk associated with the intensity of future demand. Productivity risk is detrimental to the efficient allocation of resources because, first it discourages productive investment by risk-averse economic agents, second it leads to inefficient technological choices.\(^7\)

If productivity is to be improved more specialized technologies need to be adopted. However, the choice of such technologies increases exposure to profitability shocks, which arise from the possible unforeseen variation in demand. In the absence of well-developed mechanism of financial system the investment-return risk may be diversified by "technological flexibility", which means choosing less specialized and less productive technologies. A developed financial system enables investors to reduce such risk by diversifying their investment, while still using more productive technologies. The high opportunity cost of technological flexibility (in terms of low productivity) makes developed financial system more attractive.\(^8\)

Saint Paul (1993) expounds that the technological dualism often found in developing countries has to do with the state of the financial sector. That is, technological dualism is interpreted as a form of diversification of technological
risk when it is impossible to effectively diversify productivity risks in the modern sector owing to the under-developed nature of the financial sector.\textsuperscript{9}

**Liquidity Management**

Most investments in real sector are illiquid, irreversible and the technology involved take long lead-time as a result of which investor suffers from liquidity shocks. The risk associated with liquidity shocks discourages investment in illiquid productive assets. By way of asset transformation financial system mitigates the adverse effect of liquidity shocks, which diverts resources from productive avenues.

**Evaluation of Projects**

In spite of diversification of productivity risks, there is a possibility of investing in unprofitable projects. The chances of investing in such projects are inversely related to the available information on the quality of the investment project and the competence of the entrepreneur who manages them. Because of the fixed cost it involves, gathering such information may not be undertaken by individuals. Financial institutions can gather such information on behalf of a large number of individuals, and spread the fixed cost over large number of investors. The effect is then an increase in the probability of investing in profitable avenue and increase in the efficiency of investment.

Pointed out above are the ways in which financial system through the force of financial market and financial institutions improves resource allocation. Nevertheless, financial intermediaries may fail to allocate resources more efficiently in less developed countries.

First, if the credit from the unorganized sector which used to be source of finance for productive long-term investment is transferred to financial institutions which in turn lead to finance short-term project, there is no improvement in credit allocation. Second, many potential borrowers may fail to avail themselves of financial institutions due to lack of collateral, knowledge, information etc. even if they have socially desirable operation. Third, because of high loan administration
costs financial institutions may become reluctant to finance some sectors. For instance the agricultural sector while directing resources to enterprises regardless of productivity by just considering ability and security.\textsuperscript{10}

4.3 Financial System and Growth

The traditional analysis of growth of the economy gave much attention to the real sector and financial system was thought to play passive role, which adopts itself to the financing needs of the real sector. However, the contemporary analysis suggests that financial development also have a causal influence on growth of the economy.

In his hypothesis of "sequential causality" Patrick (1966) made distinction between the "supply leading" and "demand following" financial development.\textsuperscript{11} Demand-following financial development appears as a consequence of the development of the real sector. That is financial sector grows as a result of the continual expansion of the markets and growing product differentiation, thus requiring more efficient risk diversification, and better control of transaction costs. Whereas the "supply-leading" financial development precedes the demand for financial services. While the demand following financial development plays passive role in growth process, the supply-leading financial development plays the role of mobilizing resources blocked in traditional sector, transferring them to the more productive sector which promotes growth and ensure that resources are used to finance the most dynamic projects.

The sequential causality hypothesis pointed out by Patrick indicates that while "supply-leading" financial development dominates the early stages of economic development, "demand-following" financial development becomes dominant after the maturity of the economy.

Goldsmith\textsuperscript{12} (1969) in his seminal work "Financial Structure and Development" suggested that financial development helped growth. However, in his later studies (1975) he took a more neutral stand by stating that causation may go either way. Gupta\textsuperscript{13} (1984) who made causality tests on some selected Asian and Latin
American countries pointed out that growth is the result of financial development. Gupta also pointed out that there was some evidence of causality from real to financial variables with even lesser evidence for two ways or simultaneous causality. Though his finding was highly supportive of Patrick’s suggestion that supply-leading economic growth should be encouraged, at least in the earliest stage of economic development, Gupta went on to point out that his findings should be treated with caution. Whereas study made by Jung (1986) indicates that the different indicators of financial development such as the ratio of narrow money to GDP and broad money to GDP do not unanimously support Patrick’s hypothesis of sequential causality.¹⁴

The Complementarily between the Financial and Real Sector

Townsend (1983), Greenwood and Jovanic (1990), Berthelemy and Varoudakis (1996) reveal a circular relationship between real growth and financial sector development. It is asserted that economic growth makes the development of intermediation system profitable and the establishment of such system permits faster growth in real sector and structural transformation of the economy.¹⁵

Berthelemy and Varoudakis write that economic growth influences the type of financial system that the economy can afford. That is when real per capita income is relatively low, the economy will choose to develop "simple" financial intermediaries, whose primary task will be to mobilize savings, diversify productivity risks and manage liquidity risks. Increasing per capita income enables the economy to develop more "sophisticated" financial intermediaries, which will also take on the more costly function of monitoring investment project and identifying the most profitable innovations.¹⁶

Zilibotti¹⁷ (1994) expounds that capital productivity depends positively on percentage of investment which are intermediated while the cost of intermediation depends on the size of financial market: capital stock potentially available for intermediation. According to him an economy with capital stock above certain threshold will have "thick" financial market that reduces the cost of intermediation

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because the fixed costs are spread over more agents. In this way a "thick" financial market encourages enterprises to use more intermediated resources which improve capital productivity and stimulate growth. Conversely, an economy with relatively small capital stock (and hence a 'thin' financial market) will be characterized by high intermediation margins. This has discouraging effect on the use of intermediated resources and justifies the limited size of the financial market and prevents growth from taking off.

In their model of reciprocal interaction between the real and financial sector Berthelemy and Varoudakis (1996) pointed out that owing to the learning effect, the technical efficiency of the financial sector is an increasing function of the volume of savings collected, so that the real sector exercises a kind of positive externality on the financial sector through the volume of saving. The size of the financial sector will have a negative influence on concentration and on margin of financial intermediation through the number of banks, which can co-exist, on the market. These competition effect work in the same direction as the technical efficiency effect by reducing intermediation margins as the financial sector develops.\textsuperscript{18} Summing up, the available vast literature on the financial development and growth reveals that the real sector and the financial sector complement each other.

4.4 Financial Market in Less-developed Countries of Africa

In less developed African countries financial markets are at rudimentary level when seen in the light of the degree of sophistication and advancements made in developed countries. The situation of the markets in LDCs is evidenced by the fact that markets are dominated by the urban centered commercial banks, which specialize in taking deposits and giving self-liquidating loans. This is true specially in sub-Saharan less developed African countries. These countries lack active money market where surplus units put their money for short period. The alternative is the commercial bank deposit and a few other deposits taking institutions. The situation of capital market is not different. Only rudiments of such market exist. In countries where stock exchange exists, for instance Ghana, Kenya, Nigeria and Zimbabwe,
the market is narrow and shallow. Ethiopia and several other countries do not have even the embryo of stock exchange. Table 4.1 gives the picture of capital market in Sub-Sahara Africa.

Table 4.1 Stock Market Capitalization and Number of Listed Domestic Companies In Selected Sub-Sahara Africa Countries and other Advanced Developing Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Stock Market Capitalization*</th>
<th>Number of Listed Domestic Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>483</td>
<td>1,846</td>
</tr>
<tr>
<td>Nigeria</td>
<td>1,372</td>
<td>3,646</td>
</tr>
<tr>
<td>Ghana</td>
<td>76</td>
<td>1,492</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>2,395</td>
<td>1,969</td>
</tr>
<tr>
<td>Coted Ivore</td>
<td>549</td>
<td>914</td>
</tr>
<tr>
<td>South Africa</td>
<td>137,540</td>
<td>232,069</td>
</tr>
<tr>
<td>Brazil</td>
<td>16,354</td>
<td>255,478</td>
</tr>
<tr>
<td>India</td>
<td>38,567</td>
<td>128,466</td>
</tr>
<tr>
<td>S.Korea</td>
<td>110,594</td>
<td>41,881</td>
</tr>
</tbody>
</table>

* In millions of US $


At this point it is appropriate to ask as to why financial markets did not flourish in most African countries.

The Reasons

Various explanations are given to the low development of the financial markets in these countries.

First, the underdeveloped economy of these countries lies at the base of the situation of the financial markets of less developed African countries. The term "underdeveloped economy" is a crude term, which encompasses several aspects such as the underdeveloped state of the real sector, lack of dynamic private sector with dashing spirit, information processing and transmission mechanism etc.

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Second, the development strategy chosen by most African developing countries not only influenced their financial markets, but also eliminated some of the important institutions. For instance stock exchanges were not allowed to function in most countries which followed the socialist economic policy. In such countries where the rudiments of stock exchange existed the pro-Soviet government treated them no better than casino, and had to be banned (e.g. Ethiopia). The pervasive interference by the governments of most developing countries played havoc with the financial markets, which were at the early stage of metamorphosis.

Third, most developing countries did not appreciate the influence of financial technology embodied in the quality and variety of financial instruments, developed by financial institutions, on saving and capital formation. In other words it is the lack of appreciation of the relationship between monetary and real variables. Writing on the situation of African countries Long (1983) stated:

... Policy makers in African countries have failed to follow an active policy of developing the domestic monetary and financial sector. Most developing African countries have formal plans for industrial development, education, infrastructure (telecommunication, roads, public utilities) foreign trade and agriculture, but regulation of the financial sector rather than its development seems to be the major objective policy. This is what happened in most less developed African countries for decades and with the end result that in 1990s the financial sector of these countries lag far behind the rest of the world.

Besides, certain factors on which financial technology depends are missing thereby hindering the development of financial market. These factors are the extent to which the business units depend on external sources for their finance and how much on internal financing, the degree of reliance on financial technique for promoting economic growth, the degree of the monetization of the economy and the degree of reliance on the financial intermediation by financial institutions.

The situation in most of the less developed countries is that first, business units depend on internal finance and debt financing rather than equity financing.
Family firms are reluctant to approach the public for fund because they do not want to cede control of their firms. On top of that lack of skill of issuing securities is another problem. It means that reliance on bank financing as a result of which security markets in countries where they exist is narrow.

Second, the non-monetized economy where large chunk of the population stores their wealth in kind is another problem that downplayed with the effort at developing the financial market. To develop financial market the rural community should be induced to express saving in financial form, so that resource can flow to the financial sector.

Third, the development of market, particularly the money market has been hindered by the oligopolistic structure of the banking sector with close relationship to monetary authorities. Because of the absence of developed market for short-term security banks make special arrangement for the management of the banks liquidity through transaction with central bank. Such arrangement reduces banks' incentive to seek the establishment of short-term security markets. The system of fixed interest rate regime, which did not allow interest rate to fluctuate in reaction to availability of fund and level of inflation, has also been one of the problems.

4.4.1 The Role of Money Market

The role of money market in the overall financial system is very important. Money market is a wholesale market for short-term money and financial assets that are close substitutes for money. It provides mechanism for matching short-term surpluses of the investor to the short-term requirements of the borrower; it provides the users of short-term money sources the means by which they can meet their requirements at reasonable prices. It provides the central bank a market mechanism for influencing liquidity and interest rates in the economy, as per the monetary policy. In short it fulfils the twin objectives of evening out short term liquidity imbalances and provides a connecting link between all the segments of the financial market by acting as an intermediary ensuring cross-flow of funds from one market to another.
4.4.1.1 Money Market and Financial Institutions

Money market boosts the operation of financial institutions in the economy. It enables financial institutions to borrow or lend funds between one another to meet mismatches in the liabilities and asset profile caused by efflux of funds from banking system into other financial market or by sudden surge in demand for funds whenever industrial or commercial activity picks up. A developed money market helps financial institutions to keep the non-earning asset like cash to minimum by investing the surplus in assets which are highly liquid or near-money assets thereby maintaining liquidity for day-to-day operations and meet contingencies. To cash rich financial institutions like insurance companies, money market acts as "parking funds" market which enables them to meet exigencies of claims requirements or other commitments without disturbing their main investment operations and at the same time earn a fair yield almost always risklessly. Institutions like insurance companies enjoy immense protection against unforeseen commitments in the form of large unexpected claim payments by encashing money market instruments at short notice.

In sum a developed money market adds flexibility to the function of financial institutions, and conduct of the monetary policy. Banks enjoy the convenience of managing fluctuations in liquidity.

As it is pointed out, money market in African developing countries such as Ethiopia is at a rudimentary stage, in terms of the number, volume and diversified mix of instruments with varying degrees of liquidity, risks and returns to meet the distinct requirements of the investor and borrowers, the number of players which operate in the market, and the nature of settlement procedure.

4.4.1.2 The Requisite for the Development of Money Market

Because of the important role of money markets effort should be made to revamp it in an economy.

First, the development of money market requires sound macro-economic policy that encourages the financial system. Maintenance of sustainable real
exchange rate, safe asset around which transaction can be structured, publicly available timely information useful in assessing and monitoring the value of investments are so essential. The need for safe asset implies that there should be trade in government assets.21

Second, the development of money market requires investment in institution building. Callier (1996) writes that social infrastructure is necessary for markets to function properly. The social infrastructure, according to him, is the combination of a legal and regulatory framework, effective enforcement mechanism and a critical mass of skills and expertise that need to be acquired and developed. The legal and regulatory framework must provide the definition of the financial contracts, the right and duties of the parties, and the procedure to resolve disputes.22

Third, in a money market it should be possible to liquidate assets within a short period, so as to adjust liquidity position quickly and frequently. Frequent adjustment in the liquidity position of economic agents would require the cost of transaction to be low. If it is not possible to do so economic agents will prefer to manage their liquidity position by holding large liquid balances. But resorting to large liquid balances so as to manage liquidity position will undermine the effectiveness of indirect tools of monetary policy as well as the efficiency of the financial system. The efficiency of the financial system reduces because the cost of financial intermediation increases as agents hoard large amount of idle balances. The effectiveness of monetary policy would be affected, as the Central bank will not be in a position to influence interest rate or induce portfolio adjustment by banks.

The two main services of institutional infrastructure which are so essential in influencing the transaction cost are the payment system and settlement arrangement for the transfer of securities. That is a good payment system for transaction between financial institutions is a priority for the development of active money market. Besides, there should be safe, rapid and reliable clearing and settlement mechanism for the transfer of securities. The speed of the clearing and final settle-
ment procedures permits emergence of new instruments on the money markets because a faster settlement reduces the counter part of default risks. The modernization of the payment systems require rules which impose limits on the debit position of any participant so as to reduce risk of failing to honour obligations; investment in hardware and software needed for communication and data processing alone is not adequate.

Once primary money market started functioning, secondary market also becomes essential. Secondary market adds liquidity to the market. The market participants should be initiated to buy and sell rather than holding the paper to maturity. This would require the predictability of the supply of securities, or interest rate should be allowed to fluctuate according to the evolution of the liquidity of market; fluctuation will create an incentive for certain market participants to hold speculative position in the securities and add liquidity to the market.

4.4.2 Stock Market

The stock market of advanced developing countries such as India, Brazil, Argentina and East Asian countries have shown tremendous improvements. In sub-Saharan Africa countries like Nigeria, Kenya, Zimbabwe and others have stock exchanges. A small economy in transition, Mongolia, has built stock exchange. Even Communist China has stock market. What then should a less developed country like Ethiopia do to foster her economic development?

Stock market may affect economic activity through the creation of liquidity. Many profitable investments require a long-term commitment of capital, but investors are often reluctant to relinquish control of their savings for long period. By providing means to come and leave, liquid stock markets make investment less risky and more attractive. This means savers can sell quickly and cheaply the asset acquired if they need access to their savings or want to alter their portfolios. Companies also enjoy access to capital raised through equity issues. By facilitating long-term, more profitable investments liquid stock markets improve the allocation of capital and enhance growth.
Stock market is also viewed as a means by which foreign portfolio investment is attracted. Portfolio investment is considered as one way to mitigate the problem of decrease in flow of fund from foreign banks and institutions on a voluntary basis to the developing countries. This view is based on the belief that institutional investors in advanced countries make an effort to diversify their portfolio and hence invest in stock market of developing countries and thereby funds flow to these economies.

In spite of these positive contributions of stock market to the growth of an economy a view that developing countries should give priority to the development of their banking system is held by some. Therefore, it is appropriate to consider such views also.

4.4.2.1 Stock Market vs. Banks

The link between stock market and banks as a spur to economic growth is of much interest to understand how the two interact. Levine (1996) made an inquiry on the relation between stock market and banks in promoting the growth of an economy. His study was based on the sample of 38 countries classified into four groups on the basis of the liquidity of their stock market and level of development of banks. The study made revealed that those countries with both liquid stock market and well-developed banks grew much faster than countries with both illiquid market and underdeveloped banks. Further, greater stock market liquidity is associated with faster future growth no matter what the level of banking development. Similarly greater banking development implied faster growth no matter what the level of stock market liquidity. From the study which covered the period between 1976 and 1993 Levine asserts that each (stock market and bank) on its own is a strong predictor of future economic growth.

From the same study Levine concludes, when an economy consists of both liquid stock market and developed banks the two complement rather than replace each other. Also the two might, independent of each other, boost economic growth. But no strong reason is given as to why markets and banks promote
economic growth independent of each other. Rather some arguments are given in terms of the difference in the type of service they give.\textsuperscript{25}

That is while stock markets offer opportunities primarily for trading risks and boosting liquidity, banks focus on establishing long-term relationship with firms because they seek to acquire information about projects and managers and enhance corporate control. However, banks and stock market overlap with respect to some of the services they provide. That is both help savers to diversify and acquire assets. Also both provide information which investors need to make profitable investments and serve as a source of fund for increased investment.

On the other hand those who argue in favour of the bank based financial system give more credit to banks. Some of the points brought forth are: Even in advanced countries except UK, bank finance is the most important source of outside funds. Also the supposed positive contributions of stock market namely: encouragement of saving, more efficient allocation of investment resources, the discipline of corporate management through competitive selection in the market for corporate control are doubted as to whether they materialize or not. Also some of the negative features in stock market i.e., speculation, lack of long-term investor commitment to corporation, short-termism, may play a significant role in putting the stock market dominated economies at a competitive disadvantage in relation to economies with bank-based financial system. The proposition made is then developing countries should attempt to foster bank based financial system along the line of Japan and Germany, as the bank based financial system has a proven record of successfully promoting industrial development in these countries.

The remark made by Levine (1996) is important.\textsuperscript{26} That is all countries do not need domestic stock markets. They do, however, need easy access to liquid stock markets where residents and domestic firms can buy, sell and issue securities. It is the ability to trade and issue securities easily that facilitates long-term growth not physical location of the market.
Whatever it may be the development of capital market in developing countries require vigorous and healthy private sector operating within the economy. The growth of the economy should be adequate to increase savings because without it the capital market is not likely to develop; the prospect of future growth should be such that the potential need for capital by business enterprises expand faster than the saving internally generated by these enterprises and by borrowing from friends and business associates outside of the capital market; financial stability i.e., control of inflation; well management of balance of payment and exchange rate stability are essential. In the absence of these conditions it is not easy to revamp stock market in less developed countries.

4.4.3 Summing Up

The situation in less developed sub-Saharan Africa countries is that majority of the population is in the rural and semi-urban areas, have little or no acquaintance with the sophistication needed to trade instruments of money and capital markets, and hence instruments of the financial market appeal to a limited number of investors who are experienced in financial matters. Further financial markets are located in urban areas if at all they exist.

It means that to connect numerous pockets scattered over the country and mobilize savings, institutions that could reach individuals in both urban and rural area are imperative. This is the only way by which saving scattered among millions of pocket can be gathered. For instance, other than banks, financial institutions like mutual fund are crucially important. Lack of skill, transaction cost, size of financial means in hand and others keep away so many from making investment in capital market, even in advanced countries. The experience of several countries, for instance India, high-light the crucial role of mutual funds and other similar institutions which gather small savings, and hence create pool of fund which can be invested in productive avenues, and enable small savers to take share in the benefit from investment, which otherwise would not be possible to an individual of small means. This depends on the caliber of funds in mobilizing savings, identifying best avenues and managing the investment.
Whereas capital market is absolutely essential for the investment need of institutional (foreign, domestic) investors, for corporate sector’s need to mobilize fund by issuing securities and for the investment need of individuals who have the means and skill to play in the capital market.

4.5 Interest Rates

The terms of exchange prevailing in the financial market have crucial economic functions. For instance the decision of an economic unit to lend or borrow is directly or indirectly affected by the rate of interest and asset prices. In a market economy prices are at the centre of the process of resource allocation. People with resources are persuaded by a high price to make them available to others. This section is devoted to the review of the role of interest rate in an economy.

4.5.1 Interest Rate Differential

In reality, far from the assumptions in theoretical analysis, borrowing and lending are done at different rates of interest in a highly segmented market. Funds do not flow easily from one segment to the other, because of various kinds of barriers, which are impregnable in developing countries. There may be competitiveness in one segment, but between segments wide differential of interest rate prevail.

But what are these differences due to? Why do some borrowers pay more than others do? Explanations are given on the basis of benchmark the risk-free (risk of default) rate of interest on government securities.

The interest rate on securities varies with its term to maturity. Under normal situation the long-term securities bear higher rates of interest than short-term because of the tendency of borrowers to borrow long and lend short. To persuade either lenders or borrowers to depart from their preferred maturities and to provide a margin for those financial intermediaries who help bridge the gap through maturity transformation, higher rate of interest is needed, which may be expected to rise with the term of maturity.
Liquidity, which is related to marketability and term of maturity, is another factor, which contributes to interest rate differential. Other things being the same, asset-holder or creditor generally prefer more liquid to less liquid assets and hence a lender would charge a lower rate of interest on more liquid debt than on a less liquid debt.

The rate of interest is affected by the risk of default that the borrower may fail to honor his obligations. Thus loading is made for risk of default. The uncertainty associated with the flow of income from an investment (for instance equity) also contributes to interest rate differential. The holder of risky assets demands some compensation for their exposure to risk. Thus loading factor for risk of default and compensation for uncertainty of flow of income make interest rate higher than the risk-free rate.

The differences in lending practices, elements of monopoly and oligopoly, government policies and the like contribute to interest rate differential in the market. Lenders like banks have certain formalities to which the borrower should adhere. For instance disclosure about the state of business loan outstanding from other sources, networth of the business, strict adherence to margin requirement, banks charge on goods purchased with bank loan, maintenance of proper book of account and the like. Some borrowers prefer to avoid all these formalities and restriction even at the cost of paying a higher rate of interest. Lenders, which give loan without such formalities, charge high rate of interest. On the other hand some loan agents give a package of special services for which they include extra charge in the rate of interest.

The interest rates charged by some lenders, particularly the rate charged outside the organized markets, carry an element of monopoly gain. The excess rate of interest in such cases may have little to do with default risk, term to maturity, or lender cost of servicing the loan. In developing countries lending rates are not uniform because of the policy of the government or monetary authority to give credit to priority sectors at concessional rate.
Summing up, the rate of interest charged for a loan of any term comprises of the risk free rate for that term, loading for default risk, loading for servicing costs and loading for profit. The differences in rates charged for a loan of differing term is due to liquidity premia and expected future rate of interest. The expectation of inflation is reflected is the difference between the nominal and real rates.  

4.5.2 The Role of Interest Rate in Developing Countries

Till early 1970s the classical-neoclassical monetary theories of growth and the Keynesian theory generally influenced interest rate policies. According to the classical-neoclassical monetary theories of growth, the high interest rate has a direct positive impact on saving and therefore investment. Whereas under the Keynesian theory, low interest policy bolster investment and income resulting in higher saving. Later on Mckinnon (1973), Shaw (1973) and others came up with a critique of both classical-neoclassical theories as well as the Keynesian alternative. Nevertheless, Mckinnon's policy implications and that of classical-neoclassical are identical with slight differences.

McKinnon criticized Keynesian model as short-term oriented and irrelevant to LDCs. On the other hand the neoclassical monetary theory was criticized for positioning a comparative relationship between real money balances and capital accumulation. Mckinnon's argument is that the competitive relationship between real money balances and capital accumulation would imply that an increase in the demand for say, real money balances following high real interest rate would lead to reduction in investment. He asserted a complementary relationship between investment in real assets and real money balances. Further he stated that an increase real money balances would mean greater efficiency and therefore would raise output sufficiently to offset the declining share of output allocated to investment. Therefore, according to him the real interest rates are warranted to build up real money balances, increase financial intermediation, and unification of financial markets, thereby ensuring efficient utilization of resources particularly the scarce capital.
Though there is disagreement on the possible effect of interest rate on macroeconomic variables such as saving, investment and the rate of growth of output mainly because of empirical works which sometimes yield conflicting results, the truth is that real interest rate influences some macroeconomic variables. Particularly in an economy where market plays significant role interest rate exercises a pervasive influence over economic decisions and performance. This means that the role of interest rate varies among countries depending on the development of the financial sector, the degree of separation of saving and investment decisions and the freedom given to capital movement in and out of country. The role of interest rate is then less in countries with large unmonitized sector than in highly monitized economies.

The Role of Interest Rate

1. It influences the allocation of income. That is the rate of interest influences the way income earner allocates his income between present and future consumption. Positive real interest rate provides incentive to save more by making present consumption more costly than future consumption. However, whether or not saving respond to change in the rate of interest depends on the relative strength of income and substitution effect.  

2. It influences the distribution of wealth between financial assets and real assets.

That is interest rate influences the way economic agents distribute the existing stock of wealth between financial assets and real assets such as commodities, precious metals and the like. It influences the composition of saving in favour of financial assets. Financial assets are the vehicles through which real resources are transferred from surplus unit to those who are equipped to invest more efficiently. This function of interest rate is highly important in the context of less developed countries, where savers tend to compare the nominal return on his financial asset which include money with the return on holding commodities the rate of return on which is given by the expected increase in their prices.
Empirical evidences based on the experience of Asian and Latin American countries suggest that saving is likely to increase with interest rate, especially when the rate of interest becomes positive in real terms after having been maintained by administrative action at substantially negative real levels. When real rate of interest becomes positive the form in which savings are held shift from inflation hedge real savings to financial savings, which is most important. The demand for domestic interest-bearing financial assets may result in substantial rise in domestic resource available for investment, which is most desirable. For instance Lyani and Saracoglu (1983) based on the evidence from selected countries write that the volume of financial saving (measured by broad money) is sensitive to the return on deposit.34

3. Investment: Through its influence on saving interest rate may also influence the level of investment. But more important is its influence on the efficiency of investment. That is it disqualifies projects whose returns are below the market equilibrium rate of interest. Hence capital is used more productively.

The complementarity hypothesis asserts that in LDC, increased real rate of interest raises the level of investment. The assertion made by Khatkhate (1988) is interesting. He expounds that the gross investment/income ratio and the level of the real rate of interest have positive relationship. That is the higher the real rate of interest the higher should be the ratio of investment to income. This appears contradictory but Khatkhate argues that what is crucial from the point of view of investment is the differential between the rate of interest and the rate of profit with the rise in the level of the real rate of interest. He argues that this differential will narrow but so long as the marginal rate of profit on marginal investment is equal to more than the real interest rate, investment will remain unimpaired.35

Interest rate plays more pervasive role than just pointed out. Through the effect on saving and investment and demand for money interest rate—like wages and exchange rate—also exert a substantial influence on aggregate demand, output, and employment. The level of interest rate affect the ability of domestic credit expansion, influence public sector revenues and expenditures, and have signifi-
cant effect on balance of payments. The interest rate policy chosen by authorities is an important factor in determining the appropriate stance of other demand management policies.36

What can be said is then together with other important variables such as foreign interest rates, expected change in exchange rate, the expected rate of inflation the rate of interest has a vital role to play. The positive interest rate, as the monetarists would say about money, also matter, but not as the policy instrument capable of carrying the whole burden of reforming the economies of LDCs as is emphasized by monetary orthodoxy.37

4.6 Financial Repression

Financial repression is all policies and regulations which prevent financial intermediaries from operating in accordance with their technological potential.38 The most common form of financial repression involves the implicit taxation of the financial intermediaries by imposing low-yield required reserves, ceiling on interest rates paid or charged, inflation tax levied on cash receipts. The extent of this implicit taxation can be measured by the amount, which the government can save in interest payments on required reserves held by banks, on public debt with capped interest rates and on the amount of unremunerated money balances subject to the inflation tax.39

In inflation prone economies the intervention of the government in the financial system in a form of controls on the rate of interest accentuate financial repression. Since in most cases deposit and loan rates are expressed in nominal terms, a marked increase in the rate of inflation will result in making real rates of interest on deposits, loans and financial assets negative. In addition to loan interest rate ceiling, the imposition of credit by specialized financial institutions at highly subsidized interest rates and the marked differential between domestic and foreign rates of interest accentuate repressive influence.
4.6.1 Interest Rate Ceiling and Consequences

Regardless of the inflationary environment in the economy most developing countries exercised controls on interest rates financial institutions pay to depositors and charge borrowers. Such governments argued in favour of low interest rate on the basis of various reasons such as promotion of investment, counter balancing of the adverse effect of unorganized markets, protection of the poor and the like. But in reality the ceiling of interest rate has disadvantages.

1. Discourages Savings in a Form of Financial Assets

The distortion caused by uneconomically low interest rate paid by the banks is reflected on the savings that banks do not receive because the would be savers decide to invest in their own households. Savers would prefer to put their money in any means available to hedge inflation than put in government paper or with bank which pay highly negative real interest rate. The response by potential depositors by strictly limiting their savings in financial form result in financial repression. Whether the social and private yield of such saving investments is zero or negative, savers would still prefer them so long as the yield on them is less negative than those available on monetary assets.

2. Leads to Credit Rationing

Gonzalez-Vega (1984) and the World Development Report (1987) point out that, though it sounds attractive, the idea of cheap credit to small borrowers and small scale industry improve the distribution of income and wealth is an illusory in practice. Because as interest rate drops, the banking system may attempt to direct a large proportion of its loan portfolio to the most credit worthy borrowers, which led to unequal distribution of wealth. This is what is described as "the iron law of interest rate restriction": as government regulated ceiling becomes more restrictive the share of credit granted to large borrowers increase. Agrawala (1983), in his study of price distortion, pointed out that there is no evidence that price distortions may help equity in addition to creating serious administrative problem and corruptions.
Faced with low interest rate financial institutions lend parts of the credit to the preferential borrowers and lends the remainder to the customers. That is they will lend to those borrowers with high reputation or whose collateral is relatively riskless, or to those which have special connection with them. Under such lending practices there is no mechanism to ensure that savings are channeled to economically most deserving projects. Banks regularly concentrate their lending on a few chosen customers and lead to them all credit they can justify; yet the marginal productivity of the projects of these borrowers may be almost as low as the interest charged by the banks. Further, credit rationing inhibits innovation as new enterprises, or those introducing technologies with which banks are unfamiliar tend to be discouraged.

3. Control on interest rate makes eligible for the demand of fund projects that would automatically be disqualified on the basis of an equilibrium interest rate and cause the use of the available scarce saving at the expense of more deserving projects.

4. Diversion of Loan: Credit extended at subsidized interest may fail to enhance the productive capabilities of the preferred sectors since it is possible to regulate the channel of credit, not its use. For instance studies made on some African countries reveal diversion of credit among borrowers in African agriculture. The cheap credits made available were used for consumption. Undirected credit may work against the interest of small farmers as small loans earmarked for the provision of production credit by a rural bank may end up strengthening the traditional village system of consumer loan.

5. Choice of inappropriate technology: Low interest rate may also encourage investment in capital intensive equipment, which exacerbate the already high unemployment in developing countries. Such technology presupposes the availability of working capital and foreign exchange, the demand for which aggravates shortage of both credit and foreign exchange.
6. Inhibit financial deepening: financial repression keeps finance shallow and prohibit the deepening of the financial system of a country.49 What financial repression does is that it discourages the growth of financial assets or financial savings. It hinders the growth of financial institutions such as banks, insurance companies, markets and the like.

In sum an economy under interest rate ceiling regardless of the level of inflation or any kind of repressive measure incurs costs which are detrimental to growth. First, the economy incurs cost of the loss of efficiency resulting from the distortion of interest rate (Particularly the loss of efficiency of resource allocation). In this sense financial repression disarms the financial system of its important tool in the allocation of resource. Second the loss of saving as a result of the dissuasive effect on financial savings. Third, costs connected with the limitations on the possibilities for financial sector expansion caused by the compression of interest rates. The whole process of intermediation will be repressed. There will be little room for innovations in the financial sector, as the institutions will have little incentive to do so.

4.7 Financial Liberalization

The financial liberalization theory suggests an alternative to repression policies. It asserts that improved growth is possible through the reform of the financial sector.50 For instance in the McKinnon and Shaw models, they suggested that a financially repressed economy should raise the institutional interest rate or reduce inflation. The financial liberalization theory propounded since the pioneer work by McKinnon and Shaw is based on key relations among financial and real variables that is: First, a positive real deposit rate raises the saving rate. Second, a positive correlation between the degree of financial deepening and growth rate. Third, increased real rate raises the level of investment. Fourth, increased real deposit rate promotes economic growth.

However, it should be noted that high real interest per se might not be beneficial to the growth of the economy. Particularly high real interest rate, which do
not bear any relation to the marginal productivity of capital, but rather are a reflection of various forms of country risk or lack of credibility of economic policy. Under such circumstances high real interest rate may have a negative impact on investment and economic growth.

Several countries that followed the policy of interventionism deliberately or slipped into it by inadvertence or due to economic myopia have turned around to the policy of liberalization, and many of them have enjoyed the good fruit of the reform, which have taken place in their financial sector. Ethiopia is also among the countries, which recently embarked on financial sector reform marching ahead slowly but surely on the path of financial liberalization. In a liberalized financial environment the role of government becomes even more. This aspect is considered next.

4.8 Government and the Financial System

Government plays vital role in the financial system. It supervises the activities of the financial system in order to prevent failure by the institutions and fraudulent dealing in markets. Ensuring that financial institutions are able to honour their commitments, that savers access to the information they need to form a proper judgment about the prospects and risks attached to the financial assets they buy and that dealings in the market is fair are the tasks of the government.

However, controls and regulations on institutions and markets are not without cost. If rigid they are liable to lead to inefficiency and stifle new developments. The experience of South East Asian Countries (though some of them faced problem after 1997) reveal that government regulation of the financial system promote economic growth. Stiglitz and Mariou Uy (1996) observe that the government in fast growing Asian-Pacific countries (the then Asian Tigers) placed themselves at the centre of the economic stage by controlling the financial system, and allocated savings to those industries earmarked for growth according to coordinated investment plans. They also point out that in East Asia financial sector interventions incorporated design features that improved the chances of success and reduced
opportunities for abuse: interventions that did not work out were dropped unhesitatingly; and policies were adopted to reflect changing economic conditions.\textsuperscript{52}

Whereas, the situation in most developing countries was contrary to the experience of South East Asian Countries. Fry (1995) observe that financial policies in developing countries neglected the role of financial system in mobilizing domestic resources. Government regulations of the financial system in developing countries have more frequently retarded than promoted economic development. Further, he commented that, the Asian success is atypical. Government policies in these economies have generally been well formulated and well executed.\textsuperscript{53} Thus the East Asian experience convey that the government regulatory measures have to be market oriented.

Government ownership of financial institutions is in most cases criticized. Fry (1995) writes, government ownership per se produce no special issue of concern. The worst combination is bad management facing bad macroeconomic policies. Further he asserts that the problem is compounded when public sector financial institutions are obliged to pursue selective or directed credit policies that have social or political objectives. Weak management combined with policy directives to lend on non-economic criteria is a recipe for insolvency. Fry makes important remark stating that institutions owned by the government perform well when faced with competition from private institutions. Complete ownership of financial institutions by the government invariably reduce the efficiency and flexibility of the financial sector.\textsuperscript{54}

Government borrowing in the financial sector is a moot point. The view held is that government should refrain itself from borrowing which fuel inflationary pressure. Government should stand on an equal footing with private sector borrowers for investible fund. Large public sectors borrowing requirement (PSBR) that demand financing from shallow domestic financial system invariably lead to inflation of crowd out private sector borrowing. Thus fiscal discipline on the part of the government is very essential.
The view that government should provide deposit insurance scheme to enhance the efficiency of financial system in mobilizing deposit and allocating resource is widely held. However, the viability of deposit insurance scheme is another point of consideration. For instance Diaz-Alejandro (1985) comments that deposit insurance like any other insurance scheme is vulnerable to moral hazard consequences. McKinnon (1993) emphasize the adverse selection problems that arise with deposit insurance when inflation is high and unstable. Moris (1990) state that like financial liberalization, deposit insurance works well when banks are regulated and supervised efficiently. Weak supervision and government guarantees of deposit permit the banks to assume imprudent risk. Whereas Polizetto (1990) is of the view that in any event, adequate regulation and supervision are crucial prerequisite for both financial stability and flexibility. Whatever the opinions may be, deposit insurance facility is important to meet the genuine need of financial institutions.

The legal environment is so crucially important for financial intermediation. Without conducive legal frame work the financial sector hobbles. This has been the problem in most developing countries. Banks face difficulties in securing loans and in obtaining legal redress in the event of non-payment. The government should install laws which enable owners to establish clear cut titles to both movable and immovable property, and also allow lenders to take collateral and collect debt more easily. In the absence of adequate protection under existing laws, lenders will be reluctant to widen their range of borrowers.

In sum, government has important role to play in the financial system. Financial system cannot be left to complete laissez-fair policy. Prudential regulations and efficient supervisory mechanism are essential. Nevertheless, the attempt to avoid malpractice and risks of failure in the financial system should not blunt the edge of competition. There is always a cost in controlling. Therefore, and financial institutions should not be put in a straightjacket of legislation that would destroy responsiveness, flexibility and dynamism. There should be a balance
between the benefit of competition and security which regulation offers. The
government has to be a regulator and facilitator not the agency to interfere.

4.9 Notes and References

1. People may have a tendency to discount future needs as present needs seem to be urgent
and those of future are uncertain and remote. This is what Hershleifer, J and Glazer, A.
(1992) terms as High time Preference. Saving institutions put considerable effort in to
persuading people of the advantage of funds available in future.

2. Bain, A.D.(1981) commented, since financial markets and institutions give consumer as well
as producer access to credit there is a possibility that the net supply of saving may actually
be reduced, because it would be rational for consumers to choose to borrow in excess of
their current income if they expected income to be larger in future ... Even in such case the
average productivity of investment which did take place would rise.

3. This is what Hicks, J. (1939) in his book, Value and Capital, Oxford University Press, terms
as "The Constitutional Weakness of Unintermediated Financial Market".

4. Risk cannot be totally eliminated. It must be borne by some one. For instance the risk of
business investment is borne by the owners of the financial asset, which form the firm's
equity capital.

5. Active financial market is crucial for the transformation of maturities and provision of
liquidity to savers. Even banks ability to transform maturity ultimately depends upon their
continued access to markets so a to maintain stable degree of liquidity in their asset
portfolio.

6. See note No. 2, Because of the improved liquidity and lower risk the amount of wealth
required for precautionary needs may be reduced, which may theoretically reduce the level
of saving. However, the improvements in the characteristics of financial instruments make
savings through financial system more attractive.

Growth, OECD, Paris.


15. Ibid, pp.50.


22. Ibid.

23. Ibid.


25. Ibid.

26. Ibid.

28. All theories of the rate of interest necessarily postulate that all borrowings and lendings are done through perfectly homogenous bonds in one fully integrated market. However, in practice, even in the most well developed financial markets variety of loan contracts and instruments are used in several imperfectly competitive and segmented markets. Thus the working of credit market generate variety of interest rate and loan contracts and not the rate of interest and the homogenous bonds of economic theory and hence interest rate differential.

29. As the "current" money is traded for "future" money the effect of price change comes into the picture. Changing price results in losses of purchasing power. Thus the nominal rate of interest need to be adjusted for price changes. In this sense the nominal rate comprise of two components: the real rate and the expectation of the change in price. If no adjustment is made for change in prices nominal rate becomes negative in real terms.


32. Ibid, pp.46.

33. If between the two, income effect is stronger, an upward movement in interest rates would tend to lower the saving rate rather than raise it. This means to know whether interest rate would necessarily have positive impact on volume of saving empirical work is required so as to see whether income effect dominates the substitution effect or vice versa.

34. Lyani, A. and Soracoglu, R. (1983), "Importance of Interest Rate in Developing Economies", Finance and Development, (June); Gupta, K.L. (1984), Op. cit. Observe that the substitutability relationship is not a universal truism. There are times when complementarity rather than substitutability becomes true. That is even in the presence of high real interest rate which would normally cause substitution the expected and actual inflation rate) may be so highly variable that savings in real assets will be stimulated.


40. Artificially low interest rate in the banking system may encourage intermediation through the informal circuit such as curb market, Polak, J.J. (1989), *Op.cit.*


43. McKinnan, R.I. (1973), *Op.cit.* Given a variable and high inflation rate, ceiling deposit and loan rate become negative in real terms, which weakens the ability and willingness of banks to lend to small borrowers. Since administrative costs and potential default risks inherent in small-scale lending cannot be covered with low lending rate the trickle of available finance flows to completely safe borrowers ... p.73.; Shaw, E.S. (1973), *Op.cit.* Because of such low ceiling, banks and others keep a privileged place in their loan portfolio for established borrowers, especially trading firms with long records of stability. They have little incentive to explore new and less certain lending opportunities. p.86.


50. Some countries preferred to open up their financial sector slowly, step by step. For instance India. Other countries like the South East Asian Countries opened their financial sector along with the real sector. Countries like South Korea have been examples of successful financial reform. However, the recent adverse development in South East Asia since 1997 is a good sign for the countries, which have embarked on liberalization of the financial sector. The experience of India indicates that there is a potential of learning while reforming at slow pace. Yet there are also certain disadvantages, and the benefit of opening slowly should be compared with the cost.
51. Real interest rates may also reflect such factors as the presence of fragile financial structure, a poor regulatory environment, and the lack of a proper legal framework to safeguard property rights. All these factors cause high-risk premia to be embodied in interest rates.


