ARTICLES

Securities Market Reforms in a Developing Country

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Liberalisation of securities market is necessary and inevitable but it entails putting in place appropriate market regulation to regulate conduct of participants and develop sound market practices and institutions.

MEANING AND NATURE

EFFICIENT transfer of resources from those having idle resources to others who have a pressing need for them is achieved through financial markets. Stated formally, financial markets provide channels for allocation of savings to investment. These provide a variety of assets to savers as well as various forms in which the investors can raise funds and thereby decouple the acts of saving and investment. The savers and investors are constrained not by their individual abilities, but by the economy's ability, to invest and save respectively. The financial markets, thus, contribute to economic development to the extent that the latter depends on the rates of savings and investment.

The financial markets have two major components: the money market and the capital market. The money market refers to the market where borrowers and lenders exchange short-term funds to solve their liquidity needs. Money market instruments are generally financial claims that have low default risk, maturities under one year and high marketability. The Capital Market is a market for financial investments that are direct or indirect claims to capital (Gart, 1988)[1]. It is wider than the Securities Market and embraces all forms of lending and borrowing, whether or not evidenced by the creation of a negotiable financial instrument *(Drake, 1980)*[2]. The Capital Market comprises the complex of institutions and mechanisms through which intermediate term funds and long term funds are pooled and made available to business, government and individuals. The Capital Market also encompasses the process by which securities already outstanding are transferred *(Dougall, 1986)*[3]. The Securities Market, however, refers to the markets for those financial instruments/claims/obligations that are commonly and readily transferable by sale.

The Securities Market has two interdependent and inseparable segments, the new issues (primary) market and the stock (secondary) market. The primary market provides the channel for sale of new securities, while the secondary market deals in securities previously issued. The issuer of securities sells the securities in the primary market to raise funds for investment and/or to discharge some obligation. The secondary market enables those who hold securities to adjust their holdings in response to changes in their assessment of risk and return. They also sell securities for cash to meet their liquidity needs. The price signals, which subsume all information about the issuer and his business including associated risk, generated in the secondary market, help the primary market in allocation of funds. This secondary market has further two components. First, the spot market where securities are traded for immediate delivery and payment. The other is futures market where the securities are traded for future delivery and payment. Another variant is the options market where securities are traded for conditional future delivery. Generally, two types of options are traded in the options market. A put option permits the owner to sell a security to the writer of the option at a predetermined price before a certain date, while a call option permits the buyer to purchase a security from the writer of the option at a particular price before a certain date.

Products and Participants

The Securities Market is a place where funds are raised to meet mostly the requirements of investment/liquidity through issue/sale of securities. There are a set of economic units who demand securities in lieu of funds and others who supply securities for funds. The demand for securities is equal to supply of funds and supply of securities is equal to demand for funds. These demand and supply of securities and funds determine, under competitive conditions in both goods market and Securities Market, the prices of securities which reflect the present value of future prospects of the issuer, adjusted for risks and also prices of funds. Given the future prospects, the higher the security price, the lower is the return, which becomes equal to price of funds. The Securities Market can, thus, be described equally as one for securities or one for funds depending on whether one looks at the price of securities or price of funds.

The demand for and supply of funds come from the same sources such as firms, households, government and foreign and they take various forms such as shares, debentures, bonds. The

1. GART, A, Handbook of the Money and Capital Markets, Quorum Books, New York, 1988.
2. DRAKE, PJ, Money, Finance and Development, Martin Robertson, Oxford, 1980.
3. DOUGALL, HE and JACE E GAUMNITZ, Capital Markets and Institutions, Prentice Hall, New Jersey, 1986.

demand comes from those who wish to invest but do not have resources. They create and exchange securities for funds and agree to pay an appropriate return to the supplier of funds. The supply of funds comes from those who have generally surplus budgets but do not have use for them. They exchange funds for securities. Funds pass in exchange for securities of different types. The suppliers of funds receive securities giving them certain rights to income and those issuing securities receive funds for investment.

The above simple mechani Securities Market assumes that the user and supplier of funds meet each other and exchange funds for securities. But it is really difficult to have such double coincidence of needs. The amount of funds to be provided by supplier may not be the amount required by the user. Similarly the risk, liquidity and maturity characteristics of the security issued by user may not match the preferences of the supplier. In such cases, both incur substantial search costs to find each other. Search costs are minimised if there are some intermediaries to match and bring suppliers and users of funds together. These intermediaries may act as agents to match the needs of users and suppliers of funds for a commission, help the users and suppliers in creation and sale of securities for a fee or buy the securities issued by users and in turn sell their own securities to suppliers to book profit.

Those who receive funds in exchange for securities and those who receive securities in exchange for funds often need the reassurance that it is safe to do so. This reassurance is provided by the law and by custom, often enforced by a Regulator. The Regulator develops fair market practices and regulates the conduct of the issuers of securities and intermediaries so as to protect the interest of suppliers of funds (investors) and ensure their continued support.

The participants in the Securities Market and their relationship are given in figure 1.

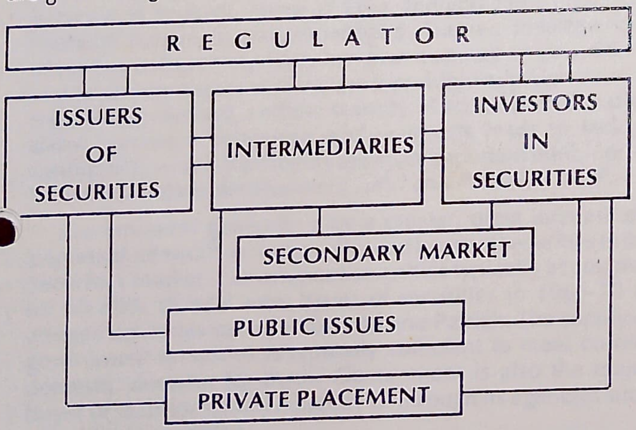

Figure 1: Participants in securities market

The Securities Market has essentially three categories of participants viz. the issuers of securities, the intermediaries and the investors, besides the Regulator. The issuers and the investors are the consumers of the services rendered by the intermediaries who bring them together. The investors are also consumers of securities issued by the issuers. Hence there are two products in the Securities Market, viz. the services of intermediaries and the securities of the issuers. The job of the Regulator is to ensure a high standard of service from intermediaries and ensure supply of quality securities and non-manipulated demand for them in the market. The absence of conditions for perfect competition, such as large number of suppliers and users of a product, homogeneity of product, free flow of perfect information and absolutely no barriers to entry and exit, in the Securities Market, more particularly in developing countries, makes the role of Regulator extremely important.

Functions of Securities Market

The Securities Market allows people to do more with their savings than they would otherwise could. It also provides financing that enables people to do more with their ideas and talents than would otherwise be possible. The people's savings are matched with the best ideas and talents in the economy. Stated formally, the Securities Market provides a linkage between the savings and the investment across the entities, time and space. It mobilises savings and channelises them through securities into preferred enterprises.

The Securities Market also provides a market place for purchase and sale of securities and thereby ensures transferability of securities, which is the basis for the joint stock enterprise system. The liquidity available to investors does not inconvenience the enterprises that originally issued the securities to raise funds. The existence of the Securities Market makes it possible to satisfy simultaneously the needs of the enterprises for capital and of investors for liquidity.

The liquidity the market confers and the yield promised or anticipated on security ownership may be sufficiently great to attract net savings of income which would otherwise have been consumed. Net savings may also occur because of other attractive features of security ownership, e.g. the possibility of capital gain or protection of savings against inflation.

A developed Securities Market enables all individuals, no matter how limited their means, to share the increased wealth provided by competitive private enterprise (*Jenkins, 1991*)[4]. The Securities Market allows individuals who can not carry an activity in its entirety within their resources to invest whatever is individually possible and preferred in that activity carried on by an enterprise. Conversely, individuals who can not begin an enterprise they like can attract enough investment from others to make a start. In both cases individuals who contribute to the investment made in the enterprise share the fruits.

The Securities Market, by allowing an individual to diversify risk among many ventures to offset gains and losses, increases the likelihood of long-term, overall success. Take the case of an investor who has the option either to put his entire funds in an investment with expected return u and associated risk d or distribute his funds on n investments with expected returns of u_1, u_2, ... u_n and associated risks d_1, d_2, ... d_n. Assuming that the investments in the second option are not positively correlated, the expected return of the portfolio becomes nu with risk equal to d/n. That is, the expected return from the portfolio increases in proportion to the number of elements in it, but risk increases in proportion only to the square root of the number of investments.

4. JENKINS, JERRY, "Capital Markets And Development: Essential And Irrelevant", in Steve Hanke and Alan Walters, eds., Capital Market And Development, ICS press, San Francisco, 1991.

Characteristics in a developing country

An understanding of the characteristics of the Securities Market in a developing country is essential for designing of reforms.

The supply of and the demand for corporate securities are, by its nature, very limited in developing countries. On the supply side, there are basic economic and institutional reasons for a dearth of corporate securities. Such economies are dominated by agriculture the activities of which are not corporatised. Public utilities are provided by public sector. The private industrial sector is small and weak. The activities that are in private hands and can warrant a corporate form of organisation are commonly controlled from abroad. Foreign companies do not have the need or desire to raise capital locally. The remaining domestic corporate entities are often not in need of further capital, or are unable to raise funds by public subscription. Many of them are reluctant to admit outside capital and risk dilution of control. Not only is the supply of corporate securities limited, but also many securities are issued by private placement so that the volume of truly public issues is small.

There are a number of a prior reasons for limited demand for securities in a developing country. Individual savings accrue to unsophisticated people who are financially inexperienced and have conservative attitude towards money. They prefer to store their resources in cows, jewellery or other tangibles that are less subject to taxation. Besides, the number of people having sufficiently high savings to spread their risks through a diverse portfolio is limited. There is little demand from FIs as the financial system is underdeveloped. Further, investment in securities is extremely risky because accurate information is scarce and the cost of obtaining it is prohibitively high. Market regulation is limited, and the scarcity of accurate information about corporate behaviour and prospects leads to lack of confidence, which is probably the most important inhibition to Securities Market development *(Wai and Patrick, 1973)*[5].

Governments generally play a greater, often increasingly important role both as issuer/seller and buyer of securities in the Securities Market. Government securities typically accounted for 60-80% of total new issues of securities in 1965-70 in thirteen countries surveyed by Wai and Patrick. The supply of government securities is typically sufficient to meet current domestic demand for them. Government is also the major buyer of securities, either directly or through its agencies such as public corporations.

The Securities Market in developing countries is highly fragmented. Rate of return to investment varies widely by region, size of investors and production activity. Some of these differences exist because of deliberate policy induced distortions *(Monke and Pearson, 1989)*[6]. The three components of inter temporal decision making, within which the entrepreneur maximises his utility, viz. *(1)* his endowment or owned deployable capital; *(2)* his own peculiar productive or investment opportunity; and *(3)* his market opportunities for external lending or borrowing over time outside his own enterprise, are badly correlated in a fragmented Securities Market. That is, entrepreneurs with potential production opportunities lack resources of their own, as well as access to external financing. Those with substantial endowments may lack 'internal' production opportunities and have no external investment outlets at rate of return that accurately reflect the prevailing scarcity of capital. The resulting dispersion in real rate of return reflects the misallocation of existing capital and represses new accumulation *(Mckinnon, 1973)*[7]. The consequences of fragmentation are illustrated in the figure 2.

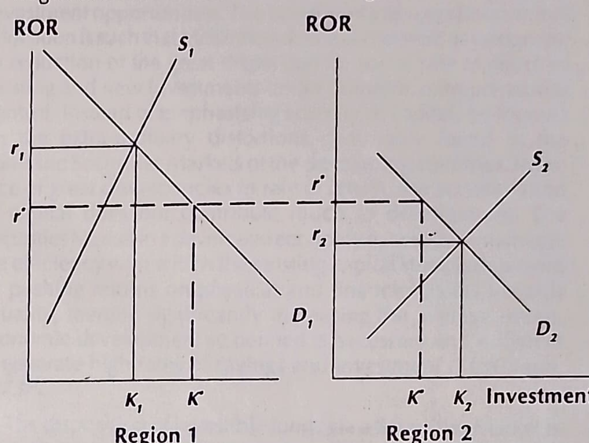

Figure 2: Rates of return in fragmented and integrated Securities Market

The figure shows fragmented Securities Market between two geographical regions. Other types of fragmentation can similarly be depicted. The demand curves for two regions, D_1 and D_2 represent the relationship between rate of return and investment. The supply curves, S_1 and S_2 represent the provision of investible funds by savers plus the transaction costs necessary to move funds from savers to borrowers. Region 1 is characterised by ample investment opportunities and limited availability of funds relative to region 2. Consequently, rate of return in region 1 (r_1) is higher than in region 2 (r_2). Because of the market failure, the rate of return in region 1 is above its socially optimum value and in region 2, less than it. If the Securities Market were integrated, supplies of capital would move freely from one region to the other. Each borrower of capital would face a single supply schedule. The market equilibrium and socially optimum rate of return would be r* found at the intersection of aggregate supply and demand functions (not shown). Total investment would increase in region 1 (K_1 to K^*) and decline in region 2 (K_2 to K^*).

The turnover of securities is typically low in developing countries. The new issues are bought for holding rather than trading. Occasional and intermittent sharp accelerations of turnover have been observed in connection with speculation. There is a scarcity of floating stocks in respect of scrips in good demand, concentration of business in relatively small number of scrips and thin trading in large number of listed scrips. The narrow and fragmented markets are susceptible to discontinuities in supply and demand - and also to manipulations-which

5. WAI, U TUN and PATRICK, HUGH T, Stock and bond issue and capital markets in less developed countries, International Monetary Fund Staff papers, July 1973.
6. MONKE ERIC A and PEARSON SCOTT R, The Policy Analysis Matrix for Agricultural Development, Cornell University Press, 1989.
7. MCKINNON, RI, Money and capital in economic development, Brooking Institution, Wasington DC, 1973.

produce wide fluctuations, volatility in stock prices and overheating of the market. This makes securities unattractive to investors.

In short, the Securities Market in developing countries is characterised by a limited number, volume and variety of stocks traded and by a narrow range of participants, with government often dominant.

SECURITIES MARKET AND ECONOMIC GROWTH

It is believed that a well functioning and unified Securities Market is conducive to sustained economic growth, as it ensures efficient allocation of capital by making capital available to the most profitable investment opportunity in the country. This allows risk spreading by capital raisers and investors and matching of their maturity preferences. This in turn stimulates investment and lowers cost of capital, contributing in the long term to economic growth. The Securities Market, thus, fosters economic growth to the extent that it—*(a)* augments the quantities of real savings and capital formation from any given level of national income, *(b)* increases net capital inflow from abroad, *(c)* raises the productivity of investment by improving allocation of investible funds, and *(d)* reduces the cost of capital.

It is reasonable to expect savings and capital accumulation to respond favourably to developments in Securities Market. The provision of even simple securities decouples individual acts of saving from those of investment over both time and space and thus allows savings to occur without the need for a concomitant act of investment. If economic units rely entirely on self-finance, investment is constrained in two ways: by the ability and willingness of any unit to save, and by its ability and willingness to invest. The unequal distribution of entrepreneurial talents and risk taking proclivities in any economy means that at one extreme there will be some whose investment plans may be frustrated for want of enough savings, while at the other end there will be those who do not need to consume all their incomes but who are too inert to save or too cautious to invest the surplus productively. For the economy as a whole, productive investment may thus fall short of its potential level. In these circumstances, the introduction of a Securities Market provides a bridge between ultimate savers and ultimate investors and creates the opportunity to put the savings of the cautious at the disposal of the enterprising, thus promising to raise the total level of investment and hence of growth. The indivisibility or lumpiness of many potentially profitable but large investments reinforces this argument. These are commonly beyond the financing capacity of any single economic unit but may be supported if the investor can gather and combine the savings of many. Moreover, the availability of yield bearing securities makes present consumption more expensive relative to future consumption and, therefore, people might be induced to consume less today. The composition of savings may also change with less savings being held in the form of idle money or unproductive durable assets, simply because more divisible and liquid assets are available. It is, however, generally viewed that the existence of Securities Market has relatively little effect on the aggregate rate of private savings at the level of development of developing countries, because there are sufficiently close financial substitutes to satisfy most would be owners of financial assets.

A Securities Market facilitates the internationalisation of an economy by linking it with the rest of the world. This linkage assists through the inflow of capital in the form of portfolio investment. Moreover, a strong domestic stock market performance forms the basis for well performing domestic corporates to raise capital in the international market. This implies that the domestic economy is opened up to international competitive pressures, which help to raise efficiency. But it is doubtful if they have hitherto attracted to developing countries any foreign capital which was not already so destined for other reasons *(Drake, 1977)*[8]. It is, however, very likely that existence of a domestic Securities Market will deter capital outflow by providing attractive investment opportunities within domestic economy.

Any financial development that causes investment alternatives to be compared with one another is bound to produce allocational improvement over a system of segregated investment opportunities. The benefits of improved investment allocation is such that McKinnon defines economic development as reduction of the great dispersion in social rate of return to existing and new investments under domestic entrepreneurial control. Instead of emphasising scarcity of capital, he focuses on the extra-ordinary distortions commonly found in the domestic Securities Markets of the developing countries. In the face of great discrepancies in rate of return, the accumulation of capital does not contribute much to development. The Securities Market in a developed economy successfully monitors the efficiency with which the existing capital stock is deployed by pushing returns on physical and financial assets towards equality, thereby significantly increasing the average return. Economic development so defined is necessary and sufficient to generate high rates of savings and investment *(McKinnon, 1973)*[9].

The disposition of investible funds via a Securities Market is made in accordance with the apparent profit prospects of the companies that compete for share and debenture issues. Companies with high share prices are more secure and find it easier to raise funds to finance investments. Mutually reinforcing feedback effects between the Securities Market and the real economy exist, which propel the latter to higher levels of growth. Unfortunately relative profit rates may not reflect relative efficiencies between companies because profit rates may be distorted by market imperfections arising from monopoly power, tariff protection, import quotas, credit rationing and so forth. In such cases the allocative effect of the Securities Market may even be harmful. Moreover, the knowledge of individual savers - subscribers, acting en masse - is necessarily inadequate to make sharp marginal evaluations of the profit prospects of alternative investments. Accordingly, the marketability of new securities tends to be weighted in favour of large, well-known, long established and successful companies and against newer, smaller, domestic ones. It, therefore, appears difficult to determine whether if Securities Market necessarily improves the allocational efficiency.

In as much as the Securities Market enlarges the financial sector, promoting additional and more sophisticated financing, it increases opportunities for specialisation, division of labour

8. DRAKE, PJ, "Securities Market in Less—Developed Countries", Journal of Development Studies, Vol. 13, 1977, pp.73-91.
9. MCKINNON, RI, Money and capital in economic development, Brooking Institution, Wasington DC, 1973.

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and reductions in costs in financial activities *(Drake, 1977)*[10]. The Securities Market and its institutions help the user in many ways to reduce the cost of capital. They provide a convenient market place to which investors and issuers of securities go and thereby avoid the need to search a suitable counterpart. The market provides standardised products and thereby cuts the information costs associated with individual instruments. The market institutions specialise and operate on a large scale which cuts costs through the use of tested procedures and routines. *(Bain, 1992)*[11]

There are also other developmental benefits associated with the existence of a Securities Market. First, the Securities Market provides a fast-rate breeding ground for the skills and judgement needed for entrepreneurship, risk bearing, portfolio selection and management. Second, an active Securities Market serves as an 'engine' of general financial development and may, in particular, accelerate the integration of informal financial systems with the institutional financial sector. Securities directly displace traditional assets such as gold and stocks of produce or, indirectly, may provide portfolio assets for unit trusts, pension funds and similar FIs that raise savings from the traditional sector. Third, the existence of Securities Market enhances the scope, and provides institutional mechanisms, for the operation of monetary and financial policy. A flourishing Securities Market is invaluable for implementation of general official financial policy, which is less damaging to resource allocation than are selective controls.

LIBERALISATION OF SECURITIES MARKET

Interventions in the securities Market were originally designed to help governments expropriate much of the seigniorage and control and direct the flow of funds for favoured uses *(Hanke & Walters, 1991)*[12]. These helped governments to tap savings on a low or even no-cost basis. To reduce the ability of enterprises to compete for national savings, the Securities Market was suppressed through taxes, duties and strangulating regulations. In some economies governments used to allocate funds from the Securities Market to competing enterprises and decide the terms of allocation. The result was channelisation of resources to politically favoured uses rather than sound projects. This kept the average rate of return from investment lower than it would otherwise have been and, given the cost of savings, the resulting investment was less than optimum. What is worse is that intervention in the form of tariff protection, import licenses, and tax concessions distort rate of return and fragment the Securities Market. In such circumstances accumulation of capital *per se* means little, where rate of return on some investments are negative while extremely remunerative investment opportunities are foregone. This led mainstream development economists to argue that financial liberalisation is the road to higher levels of domestic savings/investment and more efficient allocation of capital *(Studart, 96)*[13].

10. DRAKE, PJ, "Securities Market in Less—Developed Countries", Journal of Development Studies, Vol. 13, 1977, pp.73-91.
11. BAIN, AD, The Economics of financial system, Oxford Blackwell, 1992.
12. Hanke, Steve and Walters Alan, "Financial and Capital Markets in developing company"—Capital Market and Development, ICS Press, San Francisco 1991.
13. STUDART, R, "The efficiency of financial systems, liberalisation and economic development", Journal of post keynesian economics, Vol. 18, Winter 1995-96, pp. 269-292.

The implication of intervention is illustrated in figure 3. The vertical axis represents cost of capital and rate of return on investment and the horizontal axis represents the amount of capital raised from the Securities Market. With intervention, the demand for investment is represented by *DdD,* which indicates lower average rate of return corresponding to sub-optimal resource allocation. As the level of investment increases to *OD,* the maximum permitted by the authorities, the average rate of return decreases as relatively less remunerative investments are approved. *SS* represents the supply of capital. This results in an investment of *K.* If, however, intervention is withdrawn, rate of return will go up causing a shift in demand for investment schedule to D_1D_1, which will be down ward sloping through out. This would result in higher investment and consequently income which would shift supply schedule of capital to *S'S'*. The investment would further increase to *K**and rate of return would improve to *r**. Rate of return improves because removal of intervention rations out low yielding investments. As the cost of capital goes up, the entrepreneurs are likely to switch to less capital-intensive technologies. Such technologies may not only raise the average productivity of capital, but also represent appropriate technology provided by relative availability and cost of labour and capital in the economy. Letting rate of return be determined by the market mechanism would reduce or even eliminate the costs involved in credit rationing arrangements and thereby enhance the efficiency of the economy as a whole. High rate of return would stimulate demand for financial assets and expand financial sector.

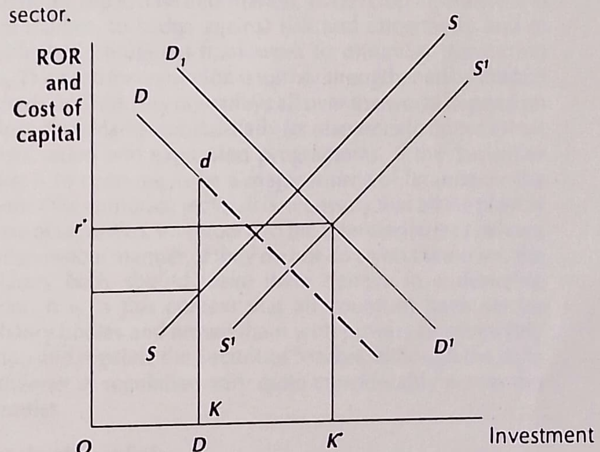

Figure 3: Effect of liberalisation of securities market

One of the bitter fruits of intervention has been the shrinkage of the financial sector. When subject to effective expropriation through suppressed return on investment, people naturally seek a proper reward elsewhere, either through capital flight, through a retreat to underground or through the hoarding of goods that would depreciate less than a bank deposit does. People keep their savings out of the financial markets. The underground sector allocates the resources, but relatively inefficiently. Another major consequence has been insulation of developing countries from international capital markets. The domestic market is shielded from competition. A third main effect is that the financial sector inhibits, instead of promotes, efficient change in industry and commerce. Rigidity of the financial system begets rigidity in the economy that it services.

The system of regulated return and rationing of resources to selective uses reduces the availability of resources and channels most of them to politically preferred units which tend to be large employers of labour and are sheltered from the winds of change by trade restrictions and sometimes by outright subsidies. As relative prices change, the cost of maintaining such inefficient enterprises becomes very high *(Hanke and Walters, 1991)*[14].

These theoretical arguments are often not supported by empirical evidence. To quote from a World Bank paper: "Financial reforms, whether comprehensive or sweeping or measured or gradual, does not seem to have made any significant difference to the saving or investment activities in the liberalised economies. It was believed until recently that removal of repressive measures would boost saving. The survey in this paper of the consequences of reforms does not reveal any systematic trend or pattern in regard to saving (and also investment), though it clearly demonstrates that reform has greatly contributed to the financialisation of savings" *(Cho, 1989)*[15].

Misallocation of resources can result because of distorting interventions or the presence of market failure either in the goods market or in the Securities Market, which are interlinked. Improvement in allocational efficiency, therefore, requires removal of distortions from both the markets. Correction in Securities Market is almost instantaneous whereas it takes time in goods market. That is why liberalisation in the Securities Market should follow liberalisation in the goods market, and why such structural reforms should be preceded by macroeconomic stabilisation. The careful sequencing of different components of financial sector reforms and macroeconomic reforms is crucial to prevent destabilising financial flows and potential crises *(McKinnon, 93)*[16].

REGULATION OF SECURITIES MARKET

Liberalisation does not mean scrapping of all the codes and statutes. It rather means replacement of one set by another more liberal code/statute, which is at times referred to as reregulation in the literature. This regulation or reregulation simply means laying down the rules, which influence the way in which private sector agents carry out their activities. Reforms aim at liberalisation, while regulations appear to restrict liberalisation. This apparent contradiction has generated a continuous, often subjective debate on the extent and nature of regulation, among and between the regulators, those regulated, policy makers and economists. It is generally agreed, however that regulation has a very important and critical role in ensuring that the liberalised markets operate in an efficient and fair manner and the risks of systemic failure are minimised.

As discussed earlier, the Securities Market is hardly perfect. A sort of cartelised oligopoly often prevails. Three sets of factors interact with one another to cause market failure in the Securities Market. These are—*(a)* Human characteristics: people are self interested, they value consumption and dislike effort, they are risk averse and they have bounded rationality. *(b)* Economic environment: economic transactions take place without perfect information, the collection, maintenance and use of which require formidable cost, property rights are not well defined and the production technology is lumpy and indivisible. *(c)* Securities Market features: the Securities Market is information driven, the transactions are carried out through intermediaries, the scale of operations of most of the players is very small, the various players are spatially dispersed and there is high degree of risk and uncertainty. For example, the flow of information in the Securities Market is not instantaneous and all the participants in the market do not possess the same quality and quantity of information at any point of time. Some have access to additional information, some get information after a lapse of time, some have only misinformation and disinformation and some others never get information. This happens because the spatially dispersed small operators fail to break the information barrier raised by a group of sophisticated operators. As the various players in the market act and react on the basis of full and accurate information, inadequate information or misinformation and the self interested players operate opportunistically in guile, the prices of securities, both in primary and secondary market, do not reflect the fundamentals of the issuer. The asymmetry of information, thus, makes market imperfect, transaction costs high and prices fail to allocate the resources efficiently.

This inherent tendency of the Securities Market to fail necessitates the existence of a regulatory body to regulate the conduct of all the participants in the market, to arrange for maintenance of property rights, to promote provision of full, accurate and up to date information, to develop insurance and future markets to hedge against risk and uncertainty and to provide an institutional framework to minimise transaction costs. The need for regulation is further strengthened by the fact that trade and industry nowadays all over the world depend on the Securities Market substantially for resources to finance their modernisation and expansion programmes. If the Securities Market is to continue to be a major source of finance for the growth of the corporate sector, it is necessary that all the players (issuers of securities, investors and the intermediaries) behave in a responsible manner. If they do not do so on their own, the regulatory body should make them behave in a desirable manner. It is in this context that all countries have set up regulatory bodies and armed them with powers to effectively develop and regulate the Securities Market, although the style and manner of regulation vary quite considerably across the economies.

Rationale of Regulation

The purpose of regulation is not to displace competitive pressures, but to correct for market imperfections which produce sub-optimal outcomes and distort consumer choice. In that respect regulation reinforces the efficiency of competition rather than impedes it. Provided regulation is properly constructed and does not exceed what is necessary to correct for market failures, it buttresses competitive pressures and contributes to maximising consumer welfare. The rationale behind regulation, therefore, is to increase the efficiency of

14. HANKE, STEVE AND WALTERS ALAN, "Financial and Capial markets in Developing country", in Steve Hanke and Alan Walters, eds., Capital Market And Development, ICS press, San Francisco, 1991.
15. CHO, JY and KHATKATE DEENA, Lessons of Financial Liberalisation in Asia: A Comparative study, Discussion paper 50, World Bank, 1989.
16. MCKINNON, RI, The order of economic liberalisation: financial control in the transition to a market economy, John Hopkins University Press, 1993.

markets and is based on three principal strands of analysis *(Llewellyn, 95)*[17]:

(I) The correction of identified market imperfections and failures that reduce consumer welfare and distort competitive and market mechanisms. There are many potential market imperfections in Securities Market such as inadequate information, asymmetric information, difficulty in ascertaining the quality of contracts at the point of purchase, imprecise definitions of products and contracts, under-investment in information, agency costs and principal-agent problems. In a regulation free environment, these imperfections impose costs on consumers. An informed judgement about the purchase of products and services cannot be made unless consumers know the true costs of the product; the precise nature and full terms of the product or contract; the basis upon which a product is offered or what is the benefit to an agent. These are real investment cost to the consumer. A high degree of information disclosure is required to make consumers effective in the market place. If the regulation requires the issuer or intermediaries to provide necessary information, this adds cost to them but reduces cost on consumers. It is, however, grossly insufficient to assert that the existence of market failure implies that there is a case for regulation. Regulation should be brought in only if there is a specified set of criteria or procedures for deciding what fits within the scope of the enunciated policy, and also an administrative apparatus for implementing the policy *(Krueger, 1990)*[18].

(II) There are potentially substantial economies of scale to be derived from collective regulation and supervision of issuers and intermediaries (suppliers). As investment contracts are long term in nature and often involve a fiduciary role in a principal-agent relationship, there is need for continuous monitoring. In the absence of regulation and supervision by a specialist agency, which offers certain minimum standards, consumers are required to spend time, effort and resources in investigating and monitoring suppliers. This entails two types of costs: *(a)* substantial duplication and hence excessive social costs as all consumers are duplicating the same process, *(b)* the loss of economies of scale that are derived through a specialist regulator/supervisor acquiring expertise and establishing effective authorisation and monitoring system. In the absence of such an agency, an occasional consumer would find investigation and monitoring excessive and free-rider problem are likely to arise. With such an agency, the consumers in effect delegate to the regulator and supervisor at least some of the monitoring responsibilities and in the process reap the benefits of economies of scale.

(III) Signalling minimum standards of quality enhances confidence in markets. With a known asymmetric information problem, risk averse consumers may exit the market altogether. In its extreme form the market breaks down completely as potential investors know there are high and low quality products but they cannot distinguish them ex ante, while the suppliers can make the distinction but are unable to communicate the distinction with credibility. When consumers know there are low quality products in the market, good suppliers and their products may become tarnished by the generalised reputation of poor products and suppliers. In such a case, the regulator is to set minimum standards and thereby remove the bad products from market.

The objective is to protect consumers against lack of information, asymmetric information, deliberate malpractice and mismanagement, that is from market failure but not against risks, which would mean regulating away the very essence of finance. No regulatory system can or should relieve the consumer of responsibility for exercising judgement and care in deciding how to use his money. If he makes a foolish decision on the basis of adequate disclosure, he can not look to any regulator to make good the loss arising from his own misjudgement.

The regulation of Securities Market has a number of objectives, that include appropriate structure of the market, the financial integrity of intermediaries and investor protection *(Stoll, 1993)*[19]. These are accomplished respectively by three basic forms of regulatory intervention—organisational, prudential, and protective *(Pardy, 1992)*[20]. First, the organisational controls provide for the establishment and operation of various organisations and hence determine the structure of the market. This is influenced by the attitude of the regulators towards fragmentation of the market. If fragmentation is considered bad, the regulators require all trading to take place in a central market and limit competition and desirable innovations in trading systems. An alternative approach is to encourage competition but demand transparency of markets. In fact, competition is enhanced by transparency because investors can readily compare prices and cost of trading services. The most widely used tool of organisational intervention is licensing and entry requirements. The regulator restricts the business to those fulfilling certain criteria. These aim to allow for contestability of the market and impose entry criteria such as financial soundness and technical competence so that the stability of the system as a whole is protected. The regulators impose prudential controls on intermediaries and impose margins on issuers and investors in order to ensure financial integrity of the markets. These help to overcome market externalities such as possible systemic contagion from the financial failure of an intermediary and reduce bankruptcies or delays in the performance of contracts by intermediaries. This gives confidence that a consumer will not suffer loss for the failure of an intermediary. The regulator imposes protective controls which governs the relation among participants. This requires the issuers and intermediaries to maintain proper records in the prescribed manner and make available full and accurate information to the interested parties on time. The objective is to provide for the full disclosure and wide dissemination of accurate information about the companies who have issued or are issuing securities, to prevent various forms of market rigging, to protect the interests of minority shareholders; and to encourage the development of specialised financial services and institutions.

Costs of Regulation

Implementation of regulation imposes direct and indirect costs on participants in the Securities Market. Economists

17. LIEWELLYN, DAVID T, "Regulation of retail investment services", Economic Affairs, Vol. 15, Spring 1995, pp. 12-17.
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emphasise four reasons why regulation is costly *(Gowland, 90)*[21]. First, there are costs that arise from moral hazard, which refers to changes in private sector behaviour which, occurring in response to some institutional or other change, usually produce counter-productive effects. When a regulatory or supervisory authority is created, an implicit contract is perceived as being created between consumers and the regulator. The danger is that the consumer assumes, because there is an authorisation procedure, that specific aspects of regulation are established, and that the supplier of products is in some sense authorised and supervised, so that the institution is therefore safe. This creates an impression that the consumers need not take care with respect to the suppliers with which he deals. This becomes a moral hazard of regulation that less care need be taken.

Second, there are direct cost of auditing and monitoring compliance, both for the participants regulated and the authorities who impose regulation and monitor compliance. These include administrative costs incurred by the regulator and the regulated, the cost of dedicated capital to comply with regulations and contribution to funds needed to compensate the clients of other firms which have failed. These are direct resource costs of the regulatory system - people, equipment and building - which would have been used for other purposes. Third is the loss of economic welfare caused by participants carrying out fewer transactions than they otherwise would. It might even divert business from the over-regulated country to less-regulated countries. These two types of costs are illustrated in figure 4:

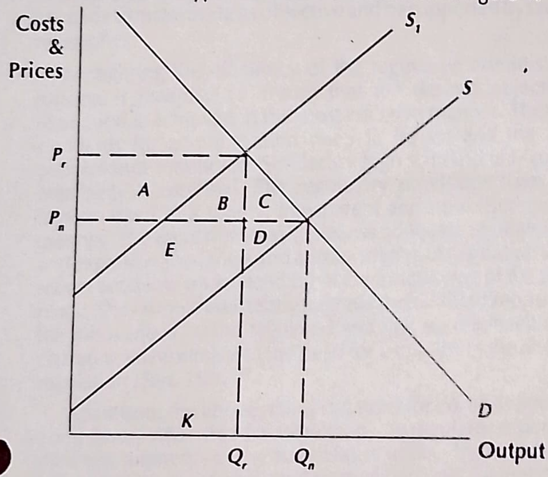

Figure 4: The Effects of Regulation

The figure shows the equilibria of a competitive industry before and after imposition of regulatory regime. The original equilibrium is at P_nQ_n where the demand for the industry's product *(D)* intersects the supply curve *(S)*, which is also the marginal cost curve. After the regulatory regime is imposed, the effective supply curve is *S'* equal to old marginal cost curve plus the cost of regulation. The new equilibrium is P_rQ_n; hence

Loss of consumers surplus = $A + B + C$
Loss of producers surplus = $E + D - A$
Total loss $=A+B+C+E+D-A= B+C+D+E$
of which Compliance cost = $B + E$
Welfare cost because of lower output = $C + D$

21. GOWLAND, DAVID The Regulation of Financial Markets in the 1990s, Edward Elgar Publishing Ltd., 1990.

The compliance as well as the welfare cost reflects a loss of economic efficiency as participants behave differently from how they would have acted without regulation.

Fourthly, regulation acts as a barrier to change and so preserves an inefficient structure of products and their provision. It creates barrier to entry and exit. This might lessen competition, raise costs and lead to static inefficiency. As *Stigler (1971)*[22] argues, regulation is acquired by the industry and is designed and operated primarily for its benefit in contrast to benefits to public at large. Regulation is a means whereby powerful co-ordinated interest groups, often, perhaps usually, the main established companies in the industry, transfer wealth from the less co-ordinated, usually the customer, to themselves. There is also possibility of regulation stifling financial innovation and thereby causing dynamic inefficiency. Novelty is a disturbing experience for the established players including the authorities and regulators, as it upsets the tidiness of life *(Goodhart, 1988)*[23].

By all accounts regulation is not a cost-less exercise. The costs of regulation increase sharply after a stage with the volume of regulation. However, the benefits from additional regulation decrease. As the benefits and costs of regulation behave in diametrically opposite ways, one has to carefully balance the marginal benefits with marginal costs to determine the extent of regulation. Regulation should be carried until marginal benefits from regulation equals its marginal cost. In terms of figure 5, this is achieved at *Q*, which is considered optimum level of regulation. It must, however, be remembered that optimum level of regulation and supervision falls short of eliminating all possibility of consumers making wrong decisions.

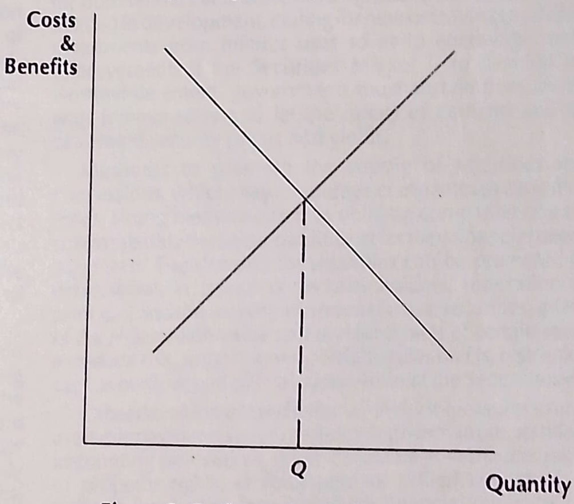

Figure 5: Optimum level of Regulation

To recapitulate, regulation is not a costless public service. It is not a virtue by itself and may not always succeed in correcting/arresting market failure. It can be distortionary and mis-allocating at times. Inappropriate design and administration of regulation could raise the costs of regulation so that the costs exceeded the benefits of regulation. There could be a high opportunity loss for the market participants and for the economy

22. STIGLER, GJ, "The theory of economic regulation", Bell Journal of Economics and Management Science, Vol. 2, 1971, pp. 3-21.
23. GOODHART, C, "The costs of Regulation", in A. Seldon (ed.), Financial Regulation or Over-Regulation, IEA Readings No. 27, London: Institute of Economic Affairs, 1988, pp. 17-31.

resulting from inappropriate regulatory provisions, delays and constraints on innovation, efficiency and dynamism. Hence, each piece of existing and proposed regulation and supervision should be tested by the following three criteria:

(a) Can the regulation really *(i)* curb monopoly tendencies/ unfair trade practices, or *(ii)* correct for likely market failures due to externalities and thereby reduce systemic risks and contain fraudulent practices, or *(iii)* correct for natural asymmetry of position (in terms of information) among the various participants?

(b) Is the regulation justified by the optimising principle that seeks to equate the benefits and costs at the margin? The total (direct and indirect) social costs of regulation should be lower than total (direct and indirect) social benefits.

(c) Can the regulation be implemented ?

At any point of time, these tests should be applied to find out which regulatory provision needs to be introduced, modified or removed. However the tests would often result in controversial findings as these depend substantially on subjective assessment of people carrying out the tests. As far as possible, efforts should be made to make the tests objective and be supported by credible researches.

Monitoring the efficiency of the regulation administration process is essential to ensure that the desired objective of regulation is achieved in the most effective manner. Therefore, standards for administration need to be set and the actual performance monitored. Similarly a high standard of regulatory credibility is essential. The regulatory provisions have to be implemented in a timely, transparent and non-discriminatory manner. The regulator should possess adequate regulatory skill and expertise. Designers and administrators of regulation should reflect adequate understanding of the functioning of the market place. They should constantly upgrade their skills to keep up with the innovations by the regulated and link up feedback on the changing environment to the need for a change in the design of regulation *(Sen, 1996)*[24].

Apart from the above, there is a need for co-ordination and consistency when there is more than one regulator supervising different segments of the financial markets. There should be interaction between the regulators of banking, insurance and Securities Market. The greater the number of laws, the greater the chance of inconsistency among them, which certainly create a burden on market participants. These inconsistencies, if coupled with a number of supervisory agencies, create inefficiency in the enforcement of regulation *(Kiriwat, 1994)*[25]. This becomes worse when an institution carries on several activities falling under the jurisdiction of different supervisors. *Merton (1993)*[26], therefore, argues for functional regulation as more consistent with dynamics of change. This establishes uniform regulation across all participants in any one activity and is therefore more equitable and less confusing. It is necessary to clarify lines of supervisory authority and to co-ordinate between supervisors so that regulations and laws do not duplicate, conflict or leave gaps in coverage either in law or in practice. This is essential to overcome the problems that arise when a single institution like a bank has to answer to several regulators *(Pardy, 1992)*[27].

DEVELOPMENT OF SECURITIES MARKET

Besides liberalisation and regulation, the reforms should also include positive measures to promote the market. Measures for fostering the Securities Market should be introduced as part of a general programme for economic and financial development. Two specific measures viz. curbing inflation and freeing interest rates are singled out for emphasis if the Securities Market is to germinate and flourish *(Wai and Patrick, 1973)*[28]. Inflation has deleterious effect on the real value and the yield of securities where the values of securities and the expected yield thereon are fixed in nominal terms. Either inflation is curbed or the holders of securities are compensated by means of indexation or some such similar measure. As regards interest rate, the general agreement is that a market determined rate would be higher than the rate that prevails currently in the organised sectors of developing countries. Freer, and higher, interest rates would promote the integration of organised and unorganised financial markets, encourage enterprises and activities other than those which flourish under financial repression. High rates of interest for both lenders and borrowers introduce the dynamism that is needed in development, calling for new net savings and diverting investments from inferior uses so as to encourage technical improvement. If the Securities Market is to develop to any worthwhile extent, governments must abstain from interfering with interest rates and let the forces of demand and supply determine security prices and yields.

Measures to promote the supply of securities include concessions, which may encourage companies to issue them. At times, strong measures such as obliging companies of a certain size to tap only the Securities Market for their financial needs, are suggested. The demand for securities can be promoted by tax concessions in favour of security holders, indexation of the principal and the income of nominal value securities, guarantee of the redemption value and dividend rates of certain securities to reduce risk, imposition of portfolio rules on FIs, restrictions on capital outflow and official supervision of the Securities Market.

Other developmental efforts may include measures to organise a reliable payments system and clearing mechanism, standardised accounting procedures, good corporate governance, provision of property rights, development of skilled personnel and a uniform legal code through which financial contracts can be enforced.

The development of Securities Market involves costs. First, there are costs of creating Securities Market infrastructure such as buildings, communication facilities, market supervision, staff training etc., many of which are borne by private enterprises. Costs are also incurred in the operation of market. The Government budget would also suffer a fall in revenue as a result of tax incentives granted to promote demand and supply of securities.

The Securities Market reforms package, particularly in a developing country essentially has three components, viz. liberalisation, regulation and development. All these require considerable expertise and involve substantial cost. If these measures are not properly designed and implemented, the reforms may cause damage to the market rather than help it. ☐

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27. PARDY, ROBERT, "Institutional Reform in Emerging Securities Markets", WPS 907, World Bank, May 1992.
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