CHAPTER 3

DEPOSITARY RECEIPTS

3.1 Introduction

The trend towards the internationalization of financial markets has gained impetus during the last decades, driven mainly by the sophistication in IT and capital market participants, greater co-operation between financial regulators, the lowering of capital barriers across national boundaries and the liberalization of capital markets in emerging economies.

Many companies have been looking beyond their domestic financial markets, in an effort to enhance their global presence. They have intended to raise capital beyond the borders of their home market with the aim of expanding their offerings and shareholder bases. At the same time, investors around the world have been also looking beyond their national borders to take advantage of new opportunities for raising the risk-adjusted return on funds through geographic diversification of their portfolios. Despite of recognizing the benefits of global diversification, they also understand the challenges presented when investing directly in local trading markets, including inefficient trade settlements, uncertain custody services and costly currency conversions.

As foreign equity markets evolved and financial industry became increasingly globalized, financial engineers looked for ways to make foreign securities more accessible to the investors and in time, they hit upon the owner trust. Depositary Receipts (DRs) overcome many of the inherent operational and custodial hurdles of international investing and associated risks. DRs offer different companies new avenue and flexible mechanism to raise capital outside their home country in an efficient manner. At the same time they provide invests with international diversification.

In this chapter, initially we have an overview on the concepts related to DRs including; definition and structure, issuance and trading mechanics, their different formats, fungibility concept, motives for cross-listing of companies,
advantages of DRs, and finally review of global market for DRs and its evolution. Then in second part, there is overview of DRs in India and related policies, main factors affecting Indian companies’ decisions for cross-listing and their choice of stock exchanges. In the last part of the chapter, we investigate the efficiency of DRs of Indian origin companies in providing them with access to more developed and efficient markets to enhance their capital resources.

3.2 Depository Receipts (DRs) and related concepts

3.2.1 Definition of DR

Depositary receipt is defined as negotiable financial instrument issued by a bank to represent a foreign company’s publicly traded securities, which is traded on a local financial market (1).

DR is an innovative global finance vehicle and a negotiable certificate, denominated in US dollars, Euro or in a currency of host country, allowing an issuer to raise capital simultaneously in two or more markets through a global offering. They may be used in either the public or private markets inside the U.S. (i.e. American Depositary Receipt or ADR), or outside the U.S. (i.e. Global Depositary Receipt or GDR). They are marketed internationally, mainly to financial institutions.

They have served to reduce obstacles to investment between one market jurisdiction and another, facilitate cross-border trading and settlement, minimize transaction costs, and broaden the companies’ potential investor base. They although facilitate funding in a way that the same share is governed by two very different regulatory regimes, and traded in both regimes without needing any structuring (2).

3.2.2 DRs Issuance and Trade Mechanism

In order to establish a DR program, issuer selects a depositary, a custodian bank and an advisory team constituted of lawyers, accountants, and investment bankers. While the advisory team plays a crucial role during the initial floatation and listing process of the DR program, the role of the depositary and the custodian bank is crucial even after the initial floatation and listing process gets over. They are responsible for managing the issue on an on-going
basis. The issuer appoints custodian bank in consultation with the depositary bank. The issuer and the depositary bank enter into a depositary agreement that sets forth the terms of the DR program. The agreement stipulates the rights and responsibilities of the issuer, depositary and the investors investing in the DR program. The summary of roles and responsibilities are described in appendix A.

The issuer, on an on-going basis, deals only with the depositary bank in regards to payments, notices or rights/bonus issues related to the DR issues. The depositary agreement, as a general rule, sets forth an obligation of the depository to provide notice of shareholder meetings and other information about the issuer company to the investors so as to enable them to exercise their shareholders rights. While for GDR investors voting rights rests with the depositary bank, ADR investor are allowed to exercise their voting rights in individual capacity. Depositary bank is also responsible for secondary market transfers/cancellations of DRs. The depositary agreement also set out the amount payable as administration fee from the issuer for the services offered by the depository.

Depositary Receipts are issued by a depositary bank and backed by underlying shares of issuing companies. For this purpose the Depositary bank purchase a number of shares of the foreign security usually by a broker who has purchased the shares in the open market and deposit them in a trust established for this purpose (mostly a local custodian). The depository bank then issues a single-class securities representing interest in trust. The investor holding the DR has the ownership interest in trust which is different from the ownership of the foreign security. The trust owns the underlying foreign securities. Therefore investor’s claim on the foreign security is an indirect claim (3, pp.467-469).

Depositary Receipts are treated in the same manner as other host countries’ securities for clearance, settlement, transfer, and ownership purposes. They allow companies to have their stock trade in international capital market by reducing or eliminating settlement delays, high transaction costs, and other potential inconveniences associated with international
Each DR represents a certain number of underlying equity shares of the issuer traded in the home market. The Depositary sets the ratio of a single DR to per local currency equity share of the issuer. This ratio can be less than, equal to or greater than one based on the market value of the local currency shares of the issuer and is decided in a manner so as to make the price of a single DR trade in a range comfortable to the foreign investors. Appropriate ratio is decided by the Depositary bank at the inception of the DR program with consultancy of the issuer, investors, brokers, investment bankers and underwriters. In setting the ratio, three factors are decisive:

- First, the issuer decides the ratio in a manner so that DR prices conform to the price range at which most securities of companies in the issuer's industry generally trade.
- Second, issuer wants to conform to the average price range at which most shares listed on the stock exchange trade.
• Third, ratio is decided to give a sense of ‘just pricing’ to the prospective investors.

In the secondary market, DRs are issued or created in response to investors demanding their brokers to make a purchase. These brokers through international offices or through local brokers in the company’s home market purchase the underlying shares and deliver them to the depositary bank’s custodian. On the same day that the shares are delivered to the custodian bank, the custodian notifies the depositary bank. Upon such notification, DRs are issued and delivered to the initiating broker, who delivers the DRs to the investor. The depository bank can issue DRs into any jurisdiction for which there is widespread investor demand and will tailor the terms and conditions of the DRs to accommodate the legal jurisdiction concerned.

Holders of DRs can sell the DR, either to another investor in his/her own country (i.e. intra-market transaction), or cancel the DR, then underlying shares can be sold to an investor in the company’s home market (i.e. cross-border transaction).

In an **intra-market transaction**, the transaction is settled in the same manner as any other security purchase. Intra-market trading accounts for approximately 95% of all Depositary Receipt trading in the market and does not involve the issuance or cancellation of a Depositary Receipt. Accordingly, the most important role of a depository bank is that of Stock Transfer Agent and Registrar. It is therefore critical that the depository bank maintain sophisticated stock transfer systems and operating capabilities.

**A cross-border transaction** in DRs is executed to take advantage of the price differentials between the DR prices and the prices of equivalent underlying domestic shares. Besides, lack of liquidity in DR markets also prompts the cross-border transactions. The implicit option in DRs allows the holders to cancel them up to the issuing or depository bank, where upon the shares they representing will be released to the investor in the home market. In fact holders convert it into the number of shares it represents. The underlying shares are already listed in the domestic stock exchange and the depository releases them from its original inventory. The ‘exchange’ facility ensures a price linkage
between the two markets. Additionally, the Depositary Receipt holder would be able to request delivery of the actual shares at any time.

When executing a Depositary Receipt trade, brokers seek to obtain the best price by comparing the Depositary Receipt price in host country to the equivalent price of the actual shares in the home market. The continuous buying and selling of Depositary Receipts in either market tends to keep the price differential between the home market and host markets to a minimum.

In order to provide a regular trading market for DRs, in offering of new shares, part of which will be sold as Depositary Receipts, the company will deliver part of shares to the custodian. The depositary bank will then issue the corresponding Depositary Receipts and deliver them to the members of the underwriting syndicate. This pool of DRs provides a regular trading market where Depositary Receipts can then be issued, transferred or canceled (5).

The success of DR programs depends on various factors among which the most crucial factors may be classified as:

- The experience of lead investment banker
- The pricing of issue
- The road shows for institutional investors and analysts

### 3.2.3 Different Levels/Formats of DR

There are different formats of Depositary receipts and companies have a choice of different types of Depository Receipts’ facilities form two broad categories of:

- Un-sponsored DRs
- Sponsored DRs

#### 3.2.3.1 Un-sponsored DRs

Un-sponsored DRs are issued by one or more depositories in response to the market demand without a formal agreement with the company and its involvement. Un-sponsored ADR programs are exempted from the SEC’s reporting requirements and can only be traded on the over-the-counter market. For a depositary bank to establish an un-sponsored ADR program, the issuer must be exempt from the registration and reporting requirements.
The U.S. Securities and Exchange Commission’s (“SEC”) recent amendments to Rule 12g3-2(b)2, on October 10, 2008, have led to the automatic exemption from registration and reporting requirements. This automatic exemption (for qualifying issuers) has resulted in a large number of un-sponsored ADR programs being unilaterally established by depositary banks.

Since an issuer is not involved in the creation or the subsequent maintenance of an un-sponsored ADR program, it has limited influence on the treatment of ADR holders. Moreover, more than one un-sponsored program can be opened in a single issuer by competing depositary banks that can lead to investor confusion regarding services provided, fees been charged, and different programs for same issuer. All these are frustrating ADR holders expecting consistent treatment in relation to holding the same security (6).

3.2.3.2 Sponsored DRs

Sponsored DRs are the dominant form in the issuance of DRs. Traditionally; most ADR programs are sponsored and managed on behalf of an issuer by a single depository bank. Depositary bank is appointed by the company under a deposit agreement or service contract, and the issuer in conjunction with its depositary bank determines the terms and conditions of the program. This helps an issuer ensure that ADR holders are treated consistently. DR programs are either listed on a U.S. stock exchange and international exchanges or are traded in the over-the-counter markets (OTC).

In these types of DRs, there is control over the facility and flexibility to list on an exchange and to raise capital. There are three different types of sponsored ADR.

**Sponsored Level I Depositary Receipts:** The Sponsored Level I Depositary Receipt market is the fastest growing segment of the Depositary Receipt business. The sponsored level I DR programs are the simplest method for companies to access foreign capital market. The company does not have to comply with U.S. General Accepted Accounting Principles (GAAP), or full Securities and Exchange Commission disclosure. They are the vast majority of
sponsored DRs, allowing companies to benefit from publicly traded securities without changing their current reporting process. The level-I ADR programs are not allowed to list on the US stock exchanges, however, they are allowed to be traded on the US OTC markets and or on some stock exchanges outside the US. Though level-I ADR programs can not be used as a means of raising fresh capital from the capital markets, but they offer an easy and relatively inexpensive way for the issuers to estimate the interest of US investors in their securities and to familiarize their name to the US investors. There are also facilities to upgrade level I program to level II and level III programs.

**Sponsored Level II and Sponsored Level III Depositary Receipts:** Level-II and Level-III ADR programs are listed on the US stock exchange(s), more widely covered by the US financial press and analysts, and hence substantially improves the visibility for issuer in the US financial press, promoting more active trading and a greater liquidity in the level-II and level-III ADR programs. Level-II and level-III ADRs may also be simultaneously listed on exchanges outside the US.

For issuing level-II and level-III ADR programs, the issuer must fulfill with the registration procedures as set out in the Securities Exchange Act of 1934 and the listing requirements of the stock exchange(s). For all intents and purposes, the issuers of level-II and level-III DR programs are regulated in exactly the same way as any other publicly listed US company.

The companies are not permitted to raise the fresh capital from the US markets through the issue of level-II ADR programs. In level-I and level-II ADR programs, brokers buy the already issued equity shares of the issuer in the issuer’s home market and deposit them with the custodian bank. However, companies that wish to raise fresh capital can do so by issuing the level III ADR programs. In a level-III program, the issuer raises fresh capital by offering the new shares to investors.

**Privately Placed and Offshore Sponsored Depositary Receipts (SEC Rule 144A / Regulation S):** In addition to the three levels of sponsored DRs programs, companies can access the markets by SEC Rule 144A providing
raising capital through private placement of sponsored DRs in the U.S. and/or Regulation S (Reg. S) program (adopted by SEC in 1990), for private placement outside the United States, with qualified institutional investors ( Qualified Institutional Buyers-QIBs) while avoiding some registration and regulation process. The distinguishing features of private placement DRs- SEC Rule 144A and Reg. S – is classified in Appendix B.

As per Rule 144A, a QIB is (i) any institution that owns and invests on a discretionary basis not less than US $100 million in securities of issuers that are not affiliated to it or (ii) an entity entirely owned by the QIBs. Rule 144A greatly increased the liquidity of privately placed securities by allowing QIBs to resell the Privately Placed - Rule 144A Depositary Receipts (RADRs) privately to the other QIBs without any holding period requirement. RADRs are traded by US market makers on a private screen-based listing service system known as PORTAL (Private Offerings, Re-sales and Trading through Automated Linkages) administered by the National Association of Securities Dealers.

Regulation S clarifies the conditions under which an issue is considered to be made outside the US, and hence not subjected to SEC regulations. An issue is considered to be made outside the US when the following three conditions are met: (i) the buyer is outside US territory; (ii) the securities are not offered or advertised in the US; and (iii) during a specific period (up to one year depending on how much interest there is in the securities in the US) the securities are not offered, advertised or sold to US investors directly or indirectly, with the exception of QIBs.

Private placement of ADRs is a comparatively cheaper and faster mode of raising the capital than level-III ADR offerings. They allow foreign issuers to assess investors’ appetite for their securities before listing or publicly offering their DRs to full spectrum of investors. Nowadays, different multiple Depository Receipt programs and structures are provided by depository banks, to facilitate offering structure and trading goals (7, 8).

**Global Depositary Receipts**: During 1990s, the surge in capital raised through DR programs prompted the emerging markets issuers to create several innovative DR programs. The issuers realized numerous advantages of floating
DR programs on the less stringent European markets or elsewhere, with easier and faster floating process and less regulatory requirements of SEC. This has led to the development of GDR programs and their several variants, allowing an issuer to raise capital simultaneously in multiple markets through a global offering.

GDR issues have a wider geographical coverage vis-à-vis an ADR or an EDR or SDR issue. A GDR offering allows the issuer to broaden shareholder base by simultaneously accessing the several capital markets outside their home market. GDRs are traded over-the-counter, and are also listed in some exchanges such as London or Luxembourg exchanges.

GDRs can be issued in either the public or private markets in the US or other countries. The flexibility of the GDR structure has made it a popular and rapidly growing capital-raising tool. Most GDR offerings consist of a US tranche that may be a level-III ADR program or privately placed RADR program. The non-US tranche is sold outside the US (typically in the European markets) in accordance with Regulation S. The links that exist between Euroclear and Clearstream International in Europe and DTC in the US allow for efficient and trouble-free settlement of securities between these two major markets.

Several region-specific DR programs have also evolved during the 1990s. DR program can be established to tap only specific region or capital market without offering shares in the US, such as Singapore DR (SDR), and European DR (EDR). The region-specific DRs allow the issuers to choose the investor base they wish to access. They enable the issuers to establish their presence in that market (9; pp.23-33, 10; pp.21-30). Table 3.1 represents different types of DRs’ programs and their key features.

### 3.2.4 Fungibility concept

Fungibility, in general, means interchangeability of any security of a class. As it mentioned before, the investors can convert their DRs into underlying shares in the company’s home market and sell their shares in that market. Fungibility provides the option for converting DR into underlying shares.
### Table 3.1 Depositary Receipt Programs by Type (11, 12; pp. 18-26)

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<thead>
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<th>Type</th>
<th>Un-sponsored</th>
<th>Sponsored</th>
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<td>Broaden Shareholder Base</td>
<td>Raise Capital</td>
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<td>Level I</td>
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<td>New/Existing shares</td>
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<tr>
<td>Description</td>
<td>Not sponsored by the issuer</td>
<td>Unlisted program in the US</td>
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<td>Trading</td>
<td>OTC</td>
<td>US OTC Market</td>
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<td>SEC Registration</td>
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<td>US Reporting Requirements</td>
<td>Exemption under Rule 12b-2(b) from Reporting</td>
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<td>Accounting Method</td>
<td>Financial statements must be partially reconciled to US GAAP</td>
<td>Financial statements must be fully reconciled to US GAAP</td>
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In an efficient market, two assets with identical attributes must sell for the same price. On similar grounds, an identical asset trading in two different markets should also trade at the same price. If the prices differ, a profitable opportunity arises to sell the asset where it is overpriced and buy it back where it is under-priced and this gives rise to arbitrage opportunities.

In a **two-way DR program** there is unrestricted flow between the market for DRs and underlying shares in the domestic market. This means investors in any company issuing DRs (ADRs/GDRs) can freely convert the DRs into underlying domestic shares. They can also reconvert the domestic shares into DRs, depending on the market movements for the stock. In fact, two-way fungibility provides investors and companies with the option to cancel and reissue of DRs according to the existing opportunities. The two way fungibility provides the company with the ability to:

- Increase the number of outstanding DRs,
• Increases liquidity of international investor market due to more available DRs,
• Increase the share price DRs due to increased demand, and more flexibility in acquiring companies overseas.

In the presence of two-way fungibility system, there are buy and sell orders above and below the prices at which stocks or DRs are transacting (depth). The provided flexibility to buy and sell leads to increase in the volume of orders and transactions (breadth). And the liquidity in transactions provides better price discovery process. As the result of two-way fungibility it is expected that any price deviation of two identical assets (i.e. DR and reference stock), lead to a profitable opportunities. Obviously, arbitrageurs can easily step in and exploit the opportunity till the point at which there is no profit opportunity, keeping the prices in the two markets from diverging by more than arbitrage transaction costs.

There are restrictive DR programs where the number of DRs from the initial overseas offering poses a limit. So, DRs can be cancelled and reissued, but only up to the initial offering size.

The one-way DR programs are the most restrictive, DRs that are issued may be cancelled over time but subsequent re-issuance is not permitted. Therefore it leads to gradual reduction in the number of DRs (13, 14).

3.2.5 Motives for Cross Listing and Depository Receipts

Companies across the world are increasingly tapping international markets and depository receipts have emerged as a favored method of companies to access international stock markets. DRs are used widely by companies to trade their shares conveniently and efficiently in the host markets. There have been various studies to examine factors affecting cross listing decision. Finance literature documents two major approaches to investigating the factors affecting firms’ cross listing decisions.

• The first approach is to examine managerial perceptions of factors that may influence firms listing decisions by conducting surveys of firms’ managers.
• The second approach is to analyze the capital market reactions to foreign listings and/or relate the firms’ foreign listing with fundamentals of foreign listed firms.

Number of studies conducted the managerial surveys of firms to investigate the factors that may influence firms’ foreign listings decisions. Among which the major motives may be access to extra sources and raising capital in an efficient manner, increase investors’ base and diversify it, increase visibility and prestige of companies, presence in international market. Limited access to external capital is a primary motive for foreign listing in Chaplinsky et al (15), Miller (16) and Stulz (17). Baker et al (18) and Lang, Lins and Miller (19) focus on the increased visibility; Lins, Strickland and Zenner (20), Doidge et al (21) concentrate on the relaxed financial constraints and greater financing possibilities which facilitate issuers’ access to external capital market.

In an early study, Choi and Stonehill (1982) found that, among Japanese and Korean firms, enhanced international corporate prestige and visibility was the most common reason for an interest in listing on a foreign exchange (22).

Nigam (1989) in the survey of cross listed Canadian firms, cited the lower cost of funding as the primary reason (85%), diversification of investor base (50%), parent or affiliate in the country of borrowing (43%), the presence of a foreign subsidiary, ease of borrowing funds (37%), the ability to attract new investors (30%), and publicity for the corporation’s name (30%) (23).

Keefe (1991) surveyed the corporate treasurers of several multinational corporations raising the funds from the foreign markets. Their major objectives were diversifying funding sources, attracting the new investors, creating a presence in the international markets and achieving a lower overall cost of capital (24).

Biddle and Saudagarvan (1991) pointed out that the firms may achieve financial, marketing, political, public relations and employee relations benefits by listing their securities on the foreign markets. In other words, firms may view the cross listing as an advertisement for the firm’s services and products (25).

Baker (1992) conducted a survey of seventy one NYSE firms listed on London, Frankfurt and Tokyo. Baker asserts the increasing visibility, broadening
the shareholder base, and increasing firm’s access to the financial markets, improving relations with the foreign financial community and increasing demand for the firm’s stock as the key objectives for foreign listing (26).

Fanto and Karmel (1997) conducted a survey of CFOs and investor relation officers of the non-U.S. listed companies. The survey revealed that despite of significant cost upon foreign listing in the U.S., the foreign companies listed on the U.S. markets for the business reasons, for raising capital, particularly in the same markets from where its peer companies meet their capital requirements (27).

Foerster, Karoyli and Wiener (1998) in their study of the US listed Canadian firms, assert US listings as a conduit to: improve access to the external capital markets; increase the liquidity of securities on Canadian exchanges; increase the institutional investment and analyst coverage; and broaden the opportunities for strategic alliances and mergers in the US (28).

Yamori and Baba (1999) surveyed a mixed sample of overseas listed and non-overseas listed (NOL) Japanese firms. Japanese managers strongly perceived the positive effect of overseas listing in terms of increasing firm’s prestige and stockholder base (29).

Drexhage (1998) viewed the firm’s foreign listing as a means to raise the currency acceptable for making corporate acquisitions in the foreign countries (30). Baker et al. (1999) found that analyst and media coverage increases for the foreign listed firms leading to more visibility (31). Pagano et al (2002), however, argued that the companies already selling their popular brands in the foreign markets may find it easier to raise capital from the foreign markets. According to them firms tend to list on stock exchanges which are in geographical proximity and list most of the peer firms (32). Licht (2000) refers to cross listing of companies as a mean to establish Employee Stock Option Plan (ESOP) in the foreign market(s) so as to align interests of its foreign employees with the organization’s objectives (33).

Literature on foreign listings also record several other studies, which arrive at their conclusions by analyzing the stock market and financial data of firms. Numerous theoretical and empirical studies assessed the impact of
foreign listings on the returns, liquidity and volatility of the underlying domestic stocks. While some studies found positive impact, other studies found negative impact of foreign listings on the returns, liquidity and volatility of the underlying domestic shares. Mixed results of earlier studies indicate that the impacts of foreign listings may depend on the countries, stock exchanges, and economic environments. Similarly, studies on the impact of foreign listings on the issuer's cost of capital have recorded mixed results.

Some studies looked into the effect of liquidity on asset prices—higher liquidity results in lower transaction costs and lower cost of capital. Errunza and Losq (1985) showed how firms from emerging nations are able to reduce their cost of capital and increase firm value by issuing equity on foreign markets. According to them another source of value for a foreign listing is based on models of information asymmetry whereby firms seek to convey information about their quality to the market. High-quality firms from markets with low disclosure standards gain by listing in markets that have high disclosure requirements—foreign listing is a signal of higher quality, which then improves firm valuation (34). They asserted that theoretically, listing on the foreign markets should help in reducing the negative impacts of capital market segmentation on firms’ shares listed on the domestic markets (35).

Mittoo (1992), in the study of the cost-benefit trade-off of Canadian firms listed on stock exchanges in the US/UK, classified the major incentives among which, the managers cited the increase in liquidity of underlying shares as the primary motivation for cross-listing on US exchanges (36).

Domowitz, Glen and Madhavan (DGM, 1998) implied, “Though corporations view cross-listings as value enhancing, the changes in the liquidity and volatility, and the cost of trading associated with order flow migration following cross-listing may adversely affect the quality of the domestic market. Such changes are especially important for emerging markets facing new competition from well-established, highly liquid markets abroad, and are the source of increasing concern among policymakers.” Therefore the increasing number of DR programs from emerging countries may inhibit the development of their domestic equity markets.
As it was mentioned before, the empirical literature on foreign listing have found mixed evidences – while a majority of studies observed an increase in liquidity, a few studies also recorded decrease in liquidity. According to DGM (1998) the informational linkages between host and a domestic market play a vital role in determining the final impact of the foreign listings (37).

The empirical studies far have found that the effect of foreign listing on liquidity varies with firm specific, issue specific, market specific and country specific factors.

Bruner et al (1999) interviewed the investment bankers handling the ADR IPOs and documented that the managers of foreign firms listed on US markets believe that (i) their shares would be undervalued in their original markets, and (ii) they will obtain greater financial flexibility by listing their shares in the US (38).

Jithendranathan et al (2000) listed out the possible reasons for cross-listing as “availability of capital in large capital markets, lower costs of capital, enhanced liquidity and cost efficiency” (39).

Blass and Yafeh (2001) and Pagano et al. (2002) found that the average size of foreign listed firms was found significantly larger compared to the domestically listed firms (32). They imply that high quality innovative firms willingly incur additional costs to reveal their value and distinguish themselves from firms issuing domestically (40). Sarkissan and Schill (2004) concluded that firms tend to target overseas listing in markets that are larger, highly capitalized and have a more liberal tax environment (41). Cantale (1998) considers the cross listing as a signal. Firms use foreign listing as a signal of their quality by listing in countries with more rigorous accounting standards and disclosure requirements than those of their home country (42).

Similarly, Reese and Weisbach (2000) examine the influence of quality of the corporate governance framework in the home country of the firm. They provide evidence that firms from countries with weaker shareholder protection tend to foreign list their securities on countries with better investor protection regulations to protect the minority rights of shareholders. This in turn improves
(a) the credibility of firms’ financial statements, and (b) firms’ ability to access the external capital markets for their future capital requirements (43).

With the aim of analyzing the value and liquidity effects of DRs of companies from emerging markets, the cross listing DR programs of 628 firms from emerging markets have been examined for the period of 1980-2007. The analysis of DR programs reveals a significant and sustainable value and liquidity advantages gained by emerging-market companies over the long term. The results may be summarized as:

- Stock exchange-listed DRs (both ADRs and GDRs) add (on average) over 20% of shareholder value in their first year of trading as the international markets welcome the greater financial disclosure, transparency and signal of superior governance
- OTC-traded DRs (both ADRs and GDRs) add over 30% of value on average
- An upgrade from an OTC-traded DR to a stock exchange-listed DR program adds on average a further 60% of value as investors respond to the higher reporting standards
- Delisting a listed DR program to the over-the-counter trading market destroys 20% of value on average as it becomes clear that the additional financial reporting will be withdrawn
- Listed DRs improve home market liquidity by 40% on average, as access to, and visibility in, the issuer’s stock rises and is accompanied by greater and wider coverage by equity analysts
- OTC-traded DRs improve home-market liquidity by 48% on average

DRs additionally provide a strong signal of willing disclosure, greater transparency and superior governance, particularly important from emerging, less-regulated markets (44).

There has been increasing number of companies listed in international market, particularly from emerging economies. It is possible that large and strongest companies from emerging markets may rely more on the foreign markets and hence, the trading activity on their domestic exchanges will be
restricted to only small and illiquid issues. On other side foreign investors may choose to invest in DRs of emerging markets listed on their domestic stock exchanges and hence leave the exchanges in the emerging markets dry and illiquid. Therefore, this is a matter of increasingly concern to the stock exchange authorities, market intermediaries and the regulatory authorities in the emerging markets (12).

3.2.6 Advantages of DRs

The advantages and beneficial effects of DRs may be classified in two parts including: the advantages for issuing companies and the advantages for investors in the host markets.

3.2.6.1 Advantages to companies

The advantages to the issuing companies may be summarized as:

- Expanded market share through broadened and more diversified investor exposure with potentially greater liquidity, which may increase or stabilize the share prices. In other words, they can provide enhanced communications with global investors and shareholders. By enabling a company to tap international equity markets, DRs offer a new avenue for raising capital, often at highly competitive costs.
- Enhanced visibility and image for the company's products, services and financial instruments in a marketplace outside its home country.
- Flexible mechanism for raising capital and a vehicle or currency for mergers and acquisitions.
- Enables employees of foreign subsidiaries of companies to invest more easily in the parent company.
- DR ratios can be adjusted to help ensure that an issuer's DRs trade in a comparable range with those of its peers in the international market and get an international valuation as the Company is valued alongside its peer group.
- Establish/increase total global issuer liquidity by attracting new investors.
• Meet internationally accepted corporate governance standards (45, pp.40-42).

3.2.6.2 Advantages to investors

DR programs benefit investors with diversifying their portfolios internationally by removing or reducing different obstacles such as undependable settlements, costly currency conversions, unreliable custody services, poor information flow, unfamiliar market practices, confusing tax conventions and internal investment policy, discouraging institutions and private investors from venturing outside their local market. In fact, cost benefits and conveniences may be realized through DR, allowing those who invest internationally to achieve the benefits of global diversification without the added expense and complexities of investing directly in foreign financial markets. On other side many of investors do not or can not, invest directly outside of their countries, utilize DRs as a means to diversify their portfolios. The benefits may summarize as:

• Quotation and payments in U.S. dollars, Euro, or other host countries currencies
• Diversification without many of the obstacles that mutual funds, pension funds and other institutions may have in purchasing and holding securities outside of their local market (easy to purchase and hold)
• Elimination of global custodian safekeeping charges, potentially saving Depositary Receipt investors up to 10 to 40 basis points annually (46).
• Familiar trade, clearance and settlement procedures, in the same manner as any other security available in the investor’s home market
• Competitive U.S. dollar/foreign exchange rate conversions for dividends and other cash distributions
• Ability to acquire the underlying securities directly upon cancellation
• Facilitating comparison with other investments due to accessible price information (47, 48).
3.2.7 Evolution and growth of DR market

First DR in the form of American Depositary Receipts was introduced to the financial markets to address the concerns of the US investors interested in investing internationally, as early as 1927. In 1927, Morgan Guarantee Trust of New York (predecessor of current bank J.P. Morgan) created the first ever ADR program for a UK retailer ‘Selfridge Provincial Stores Limited’ when the investment bank J. P. Morgan launched the first ADR program for the UK’s Selfridges Provincial Stores Limited in response to a law passed in Britain prohibiting British companies from registering shares overseas without a British-based transfer agent, and thus UK shares were not allowed physically to leave the UK. Introduction of ADRs eased the process of investing in the UK stocks for the US investors. Another 17 ADR programs were opened around that time.

The early growth came to an abrupt halt at the time when stock markets crashed in 1929, and until early 1950s no fresh ADR programs were established. In its present form ADRs came into existence in 1955, when the SEC introduced its Form S-12 for registering all ADR programs. Australian and South African mining companies were the first to introduce DRs in a form as they exist today. Subsequently several Japanese firm also issued ADRs during 1960s. In 1970s and 1980s several more firms from other countries also adopted the DR route for raising capital and/or listing in major capital markets.

DRs have designed to overcome the imposed limitations and as time passed, different regulations of ADR changed its form. The new regulatory framework introduced by the SEC in 1985, leading to emergence of range of DR instruments, as known today. Advent of different ADR programs one impulse for revival of activity on ADR market. The introducing of Rule 144A gave rise to private placement depository receipts which gained popularity quickly. While DRs were originally constructed solely for the needs of American investors, but due to their increasing popularity, they extended gradually to other parts of the world. In 1990, first DR in form of Global Depository Receipt (GDR) was introduced by Citibank for Samsung Corporation allowing Samsung to raise capital in the US and Europe through one security issued simultaneously into both markets (2, 10).
Prior to 1990, firms from developed markets such as Australia, Hong Kong, Japan, the Netherlands, Sweden and the UK dominated the DR market. During the 1990s, emerging markets experienced substantial reduction in funding from the official sources and a very high economic growth rate. In order to meet the capital needs of the growing economies, emerging markets were forced into rely on the private flows of funds through foreign private investment in these economies. Simultaneously, the investing norms for institutional investors in the developed economies have been relaxed by their governments. The regulatory changes introduced by SEC during 1990s attracted fresh foreign issuers to the US market under Rule 144A, that increased the liquidity and marketability of privately-placed ADRs (49). All these regulatory changes besides the massive wave of privatizations of public enterprises during 1990s also contributed to growth in number of international offerings particularly from the emerging markets. Depositary Receipt Programs from emerging markets have been an instant hit amongst international, because emerging markets:

- Represent a fast growing part of the world economy
- Deliver superior returns
- Are attractively valued
- Represent huge marketplaces
- Are underweighted in global portfolios

Unlike the firms from developed markets, historically using DRs for listing purposes, most of the firms from emerging markets have used DRs for mobilizing international capital (50). Since 1992 a majority of new capital-raising DR programs have been issued by the emerging market firms. Many newly listed companies from emerging markets have had their initial public offerings in mature markets, bypassing local markets completely.

There has been low correlation between developed markets and emerging markets (51). The correlation between developed and emerging markets continues to be lower despite of changing in correlations among nations (52). Therefore interest in the DR programs from emerging countries is also due to the greater diversification potential of these programs from the perspective of an international investor.
To demonstrate the power of emerging markets; issuers from emerging markets, during the year 2004, completed 96% of the year’s DR capital raising among which 71% of all DR capital raisings were completed by companies from China, Taiwan, India, and Brazil. In the year 2005 issuers from India, Taiwan, and Korea accounted for the majority of all DR capital raisings by number of transactions. During 2006, more than 47% of all DR capital raisings were collected by issuers from Russia, Kazakhstan, Korea, China, and India. Since 2005, for four straight years issuers from BRIC countries (i.e. Brazil, Russia, India, and China) have continued to dominate DR market in terms of capital raising, trading value, DR outstanding value, and new DR stock exchange listing. In the year 2007, issuers from the BRIC countries accounted for approximately 50% of the year’s DR trading value and 63% of DR capital raisings. During the year 2008, DR issuers from the “BRIC” countries accounted for 56% of DR capital raisings, 54% of DR trading value.

DR programs were initiated in the form of ADR and this format has been the dominant form for a while. However, there has been increasing tendency of new sponsored DR programs towards GDR under private placement and non-U.S. offering rules since the year 2002. Particularly, this trend has been fostered after strengthening of U.S dollar during the year 2005. For fourth consecutive year since 2005, more than half of all new DR programs were private placement GDR issued under rule 144A and/or regulation S, and remained most popular DR program type. The trends of new sponsored DR programs towards GDR format is presented in figure 3.2.

![Fig. 3.2 New Sponsored DRs (53).](image-url)
The following facts are indicative of the growth experienced by DR market:

- Till 1981 there were only five countries, viz., Hong Kong, South Africa, Japan, Australia and the United Kingdom that had any DR program. The number of countries that have issued their DR programs has gone up from 24 in 1990 to 78 in 2001 and 80 in 2008.

- The total number of DR programs, has grown from 924 in 1992 to over 1558 programs in December 2001, and more than 2900 programs at year end 2008, among which 2130 were sponsored DR programs from 77 countries.

- Average annual capital raised by DR programs through initial public offering and follow on issues has increased from $10.11 billions during 1990-1994 to $17.86 billions during 1997-2001, and $31.60 billions during 2004-2008. The annual capital raisings through DR programs for the period of 1999-2008 is presented in figure 3.3.

![Fig. 3.3 Annual DR Capital Raisings (53).](image)

However, from an historical perspective, the changes in IPO volume (the decline in IPO) have been consistent with market downturns. Since 1994, IPO volume levels rebounded after each market downturns. Given these variations, capital raised through new issues has been varied over this period. The variation in IPO values and the corresponding events is presented in table 3.2.

- The total annual trading value in listed DRs increased from $125 billions in 1992 to $1185 billions in 2000 at compound annual growth rate of 32.5 percent. There has been predominantly increasing trend in annual
trading value since 2002. In 2008, liquidity and trading in the global depositary receipts (DR) markets reached unprecedented levels, while capital raised by new issuers declined as turbulent financial markets forced issuers to delay their capital raising plans. DR market liquidity reached all-time high in 2008 with trading value around $4.4 trillions, representing a 33% increase with compare to 2007. Total annual trading value and volume of DRs for the period of 1997-2008 is presented in figure 3.4.

- The demand by investors for Depositary Receipts has been growing between 30 to 40 percent annually, driven in large part by the desire of retail and institutional investors to diversify their portfolios globally (55).

<table>
<thead>
<tr>
<th>Year</th>
<th>June YTD DR IPO value</th>
<th>Event Description</th>
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<td>1994</td>
<td>6525.7</td>
<td>Mexican peso devaluation</td>
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<td>1995</td>
<td>2863.8</td>
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<td>6129.4</td>
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<td>3046.6</td>
<td>Russian default</td>
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<td>1999</td>
<td>4242.3</td>
<td></td>
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<tr>
<td>2000</td>
<td>6912.0</td>
<td>Global market downturn</td>
</tr>
<tr>
<td>2001</td>
<td>2448.5</td>
<td>September 11th attacks, War in Afghanistan</td>
</tr>
<tr>
<td>2002</td>
<td>2950.6</td>
<td>U.S. recession</td>
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<tr>
<td>2003</td>
<td>342.9</td>
<td>War in Iraq</td>
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<td>2004</td>
<td>1703.0</td>
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<td>4759.2</td>
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<td>2006</td>
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<tr>
<td>2007</td>
<td>17142.7</td>
<td>U.S. market downturn - October 9, 2007</td>
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<tr>
<td>2008</td>
<td>3589.5</td>
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3.3 Overview of DRs in India and policy changes

The Indian stock market remained largely outside the global integration process until the early 1990s. In line with the global trend, reform of the Indian stock market began with the establishment of the Securities and Exchange Board of India (SEBI) in 1988. The process gained momentum after the widespread economic reforms in 1991. Among the other significant measures of global financial integration, the structural reforms received a major impetus, when the Indian corporate sector was allowed to tap global markets through DRs since April 1992. It was stipulated that a company, interested in raising funds through foreign listing, obtain prior permission of the Department of Economic Affairs, Ministry of Finance, and Government of India. An issuing company seeking such permission was required to have a consistent track record of good performance for a minimum period of three years. India regards issuance of DRs as a form of foreign direct investment (FDI). Therefore,
ordinary shares issued against the Depository Receipts were to be treated as direct foreign investment in the issuing company. Since there are company and industry limits on permitted FDI, the number of shares eligible to be purchased for creation of DRSs is limited and controlled, ultimately by Ministry of Finance and the RBI. It was stipulated that the aggregate of the foreign investment made either directly or indirectly should not exceed 51% of the issued and subscribed capital of the issuing company.

With the opening up of the financial markets, Indian companies joined the worldwide rush to raise capital by issuing Depositary Receipts. India entered the international arena in May 1992, with the first GDR issue by Reliance Industries Ltd. on Luxembourg Stock Exchange (LuxSE) in November 1992, followed by Grasim Industries with GDR program listed on the LuxSE.

Indian companies can raise foreign currency resources abroad through the issue of ADRs/GDRs, in accordance with the Scheme for issue of Foreign Currency Convertible Bonds (FCCBs) and Ordinary Shares (Through Depository Receipt Mechanism) Scheme, 1993 and guidelines issued by the Central Government there under from time to time.

The company can issue ADRs/GDRs if it is eligible to issue shares to person resident outside India under the FDI Scheme. However, an Indian listed company, which is not eligible to raise funds from the Indian Capital Market including a company which has been restrained from accessing the securities market by the Securities and Exchange Board of India (SEBI) will not be eligible to issue ADRs/GDRs.

Unlisted companies, which have not yet accessed the ADR/GDR route for raising capital in the international markets, would require prior or simultaneous listing in the domestic market, while seeking to issue such overseas instruments. Unlisted companies, which have already issued ADRs/GDRs in the international market, have to list in the domestic market on making profit or within three years of such issue of ADRs/GDRs, whichever is earlier.

Till the year end 1993, DR markets witnessed a lull period resulting from the securities scam and the consequent fall in the domestic markets. Patil
attributed the small size of Indian DR issues during this period to the limited overseas demand for Indian papers and the existing costly procedure of flotation in the domestic market (57).

There was a surge in number of Indian GDR programs during 1994 and again during 1996. A high degree of foreign listing activity by the Indian firms during 1994 and 1996 was also attributable to the increased allocation of investible funds by the international investors to the emerging markets like India; and desire of many Indian firms to raise the funds during the boom phase of the domestic markets to get a better pricing for their DR programs.

With Indian firms looking for their capital needs outside the domestic country, the Indian government began to usher in widespread reforms by opening up opportunities within the domestic stock market. A major improvement in the Indian stock market came in 1995 when the new electronic National Stock Exchange (NSE) began operations whereby a new clearing corporation and a new depository were in place. This generated renewed interest and increased trading volumes in the Indian stock market in 1995-96, and consequently, we find a dip in the amount of capital raised through depository receipts. Additionally, uncertain domestic political environment resulted in infrequent fresh DR listing during 1995.

Moving ahead from the domestic stock exchange, the Government of India took another major step. The Government permitted financial services companies like banks, non-bank finance companies and financial institutions, to access the foreign stock markets. This brought about another round of new foreign listings. As a further step, the mandatory three-year good performance track record was relaxed for financing investments in infrastructure sectors, such as power generation, telecom, petroleum exploration and refining, ports, airports and roads. This encouraged foreign listings by related firms such as, BSES Ltd. (power), VSNL (telecom) and MTNL (telecom) in 1996 and 1997. This period also witnessed the foreign listing of State Bank of India (bank) and ICICI (finance), through private placements.
Foreign listings and issuance activity during 1997 and 1998 was brought down by the changing political and economic conditions in India and Asia including; the economic crises in the South-east Asian markets.

Since 1999-2000, the Ministry of Finance continued to liberalize the procedures and environment for the Indian corporate sector for acquiring capital from domestic and foreign sources, which has been reflected in the growing market for DRs. End-use restriction on issue proceeds were removed. During this period, software companies were allowed to issue DR without reference to RBI up to US$ 100 million. Foreign listing activity by Indian firms regained momentum during 1999 with the successful ADR issue by Infosys Technologies Ltd. as the first exchange traded of Indian origin ADR trading in NASDAQ. Indian companies have issued ADRs since the early 1990s, however most of these earlier issues were privately placed, so exchange traded ADR has been relatively recent phenomenon in case of Indian origin companies.

During 2000, there were an increasing number of Indian foreign listings resulting from the new policy of Government of India. On Jan 20, 2000, RBI gave General permission to Indian companies for issue of DRs, in order to simplify the procedure, under the Foreign Exchange Regulation Act (FERA)-1973 (58). Besides, the necessary permissions under FERA-1973 for issue and export of ADRs/GDRs and acquisition of ADRs/GDRs by foreign investors have also been granted. The Government of India has made certain changes in the guidelines to further liberalize the operational procedures by dispensing with the track record scrutiny process and the two-stage approval by the Ministry of Finance, Department of Economic Affairs for ADR/GDR issues. On May 3, 2000, for the first time the resident employees of Indian software were allowed to purchase foreign securities under the ADR/GDR linked Employees Stock Option (ESOP) Schemes. On July 20, 2000, FIs were permitted to raise capital through issue of Global Depository Receipts (GDRs) or American Depository Receipts (ADRs) within the limits prescribed for Foreign Direct Investment by the Government of India (59). More modification in the procedures of issuing DR programs by software, information technology, telecommunication, biotechnology and pharmaceutical firms in the foreign markets was carried out.
during 2000, with the main aim of attaining a better valuation for firms; and to meet requirements of large amount of funds, not easily available from the Indian markets.

During 2001-02, overseas business acquisitions through the DR route were permitted under the automatic/simplified approval mechanism for Indian companies engaged in (i) Information technology and Entertainment software; (ii) Pharmaceuticals; (iii) Biotechnology; (iv) Any other sector as notified by the Government from time to time. Indian companies, engaged in IT software and IT services, were permitted to issue DR linked stock options to permanent employees (including Indian and overseas working directors) of its subsidiary companies incorporated in India or outside and engaged in IT software and IT services. During this period there was a decline in GDR issues, which was the reflection of the global slowdown in developed markets, including the US, owing to a recession setting in the US and the war in Iraq.

During 2002-2003 the guidelines were issued for two-way fungibility. The DR programs were initially started in India as one-way programs. Under the one-way fungibility, once a company issued DR, the holder could convert the ADR/GDR into shares of the Indian company, but it was not possible to reconvert the equity shares into ADR/GDR. Over a period of time, these programs resulted in decline of the outstanding balance of DRs, leading to lower liquidity of DRs for the international investors. The process of global financial integration received a major impetus when two-way fungibility for Indian DRs was introduced in 2002, whereby converted local shares could be reconverted into GDR/ADR subject to sectoral caps (60).

The 2002 amendment to the issue of Foreign Currency Convertible Bonds and Ordinary Shares (through DR mechanism) Scheme, 1993, opened the door to the limited two-way convertibility of DRs, through which the re-issuance of DRs once cancelled is permitted but restricted by the initial offering size. This has been done with the aim of:

- Facilitating market forces to trigger a realignment of prices,
- Minimizing the widely divergent premium/discount levels prevailing between DR prices and the domestic stock prices,
• Providing an active DR market, particularly with considering the GDR market that has been largely inactive for the past couple of years.

The result of limited two-way fungibility guidelines of the RBI was that, not only corporations and depository banks could create DR, but also investors owning DRs have the option to break them into ordinary shares, or purchase ordinary shares to convert them back into DRs. In fact, it enabled a non-resident investor to purchase local shares of an Indian company through an Indian stock broker and convert them into DRs that were eligible to be traded on the international stock exchanges. However, the reconversion of broken DR into new DRs is the subject to FDI limitation. The equity shares in India could be converted to DRs only to the extent of the ‘headroom’ (i.e. the number of DRs cancelled and converted into underlying Indian equity or maximum number of DRs that can be issued on demand from foreign investors). According to these guidelines transactions will be demand-driven and would not require company involvement or fresh permissions. All SEBI registered brokers would act as intermediaries in the two-way fungibility of DRs. A foreign investor is permitted to place an order with an Indian stock broker to buy local shares, with an intention to convert them into depository receipts. The stock broker has to apply to the domestic custodian bank for verification and approval of the order. Once the approval is granted, the broker purchases local shares on the Indian stock market and delivers them to the domestic custodian for further credit to the overseas depository. The overseas depository issues proportional Depository Receipts to the foreign investor (45, pp.43-44).

During 2004, rules were more relaxed, and RBI permission to issue ADR/GDR linked ESOPs was relaxed. The coverage of the facility to acquire such ESOP was expanded later to include employees of all companies in the knowledge based sectors vide Guidelines dated September 15, 2000 (Annex-I) issued by the Ministry of Finance, Government of India (61).

There was a sudden increase of depository receipts in 2005-06 due to the Monetary Policy of 2005-06. There was a major revision to the guidelines on DRs for unlisted companies. Unlisted Indian companies were allowed to sponsor an issue of ADRs or GDRs with an overseas depository against the
shares held by its shareholders. Further, the facility of sponsored ADR/GDR offering by unlisted companies was to be made available to all categories of shareholders of the company whose shares are being sold in the ADR/GDR market overseas.

Foreign Currency Convertible Bonds and ordinary shares (through Depository Receipt Mechanism) scheme, 1993 was amended and more simplified during 2005-2006 (62). The huge increase in issues of DRs during this period was also attributable to the booming Indian stock markets that offered the corporate sector the opportunity to issue equities abroad (63). The boom in the Indian industry is being translated into growing domestic production and exports, along with companies setting up new capacities. Indian companies have raised a record level of capital in 2005-06 both from the domestic capital markets and foreign capital markets. Some companies went in for simultaneous offerings in domestic and foreign markets. The expansion of the Indian corporate sector coupled with relaxation in DR norms by the Ministry of Finance, resulted in suitable rise in the amount of capital raised through DR issues in 2005-06. Indian companies began to enter new markets like the Singapore stock exchange and the Dubai stock exchange to enlarge their investor base even further in addition to the major markets in US and Europe (i.e. NYSE, NASDAQ, LSE, and LuxSE). This has been increase in terms of number of new issues and number of companies listed in international market as well as capital raisings which continued till 2007.

During 2006-2007, India experienced the growth rate above 9% (9.6%) for second successive year. There has been remarkable growth of 49.8% in capital raised from international capital markets during this period. However, the number of issues (i.e. IPO and follow on) declined in the same period with compare to the previous year. During 2006-2007, there has been amendment in Disclosure and Investor Protection Guidelines (DIP Guidelines) by the SEBI, to permit listed companies to raise fund from the domestic market by making private placement of specified securities with Qualified Institutional buyers (QIBs). The process called as Qualified Institutional Placement (QIP) and the securities so issued constitute the fully paid-up capital of the company. The
Amendment defines the specified securities as equity shares, fully convertible debentures, partly convertible debentures or any securities other than warrants, which are convertible into or exchangeable with equity shares at a later date. The guidelines are intended to encourage Indian companies to use QIP rout to raise fund rather than raising fund through the DRs (ADR/GDR) or FCCBs, and to make Indian market more competitive and efficient (64).

Master circular No. 02/2007-08 with further modifications, has explained the latest rules and concepts regarding issues of shares by Indian companies under DRs (65). India has continued its trend of healthy equity exports. In terms of new issues, there has been decline with compare to the previous year. During 2007-2008, there have been 28 new issues (IPO and follow on) against 40 new issues for the period of 2006-2007. There has been also decline in the number of companies listed in international markets. But, the resource raisings by Indian companies through DRs increased sharply by 56.2%. Despite of decline in new offering, particularly in the year 2008, India has been the second country after Russia with 16 new sponsored DRs (new offerings), and it ranked as the leading nation for total available sponsored DRs. Figure 3.5 presents total sponsored DRs by the countries by the end of the year 2008 (53).

**Fig. 3.5** Total sponsored DRs by countries by the year end 2008 (53).
During the year 2008, Indian companies and companies from three other countries including Brazil, Russia, and China (BRIC companies), dominated new DR programs, representing 53% of new DR issuers, and 52% of capital raisings in DR form (56). Capital raisings of Indian companies through the issuance of DR programs for the period of 1992-2008 is presented in figure 3.6.

![Fig. 3.6 Capital raising of Indian companies from international markets through DRs, 1992-2008. Source of data: The RBI Annual Reports and Bank of New York.](image)

### 3.4 Main factors affecting cross-listing in India

The decision to list or not to list abroad has become increasingly significant for the corporate managers in view of growing internationalization of financial markets. While an increasing number of companies are listing their securities on the foreign markets, many other companies still confine their listings only to the domestic stock exchanges. The untapped domestically listed emerging markets’ firms have prompted competition amongst major international stock exchanges for attracting maximum foreign listings to their market places (66, 67)

Analysis of the descriptive statistics of foreign listed (FL) and non-foreign listed (NFL) Indian firms by Kumar (2003), indicates that:

- The absolute sizes of the firms have bearing on foreign listing decisions
- Firms list on the foreign exchanges to support their capabilities for raising debt
• Firm's profitability does not seem to be related to the firm's foreign listing status
• Firms list on foreign markets to facilitate their exports
• ADR listing firms seem to be a little bit innovative and operate in the high-tech sector(s) compared to the NFL and GDR listing firms

Managers of Indian companies listing DRs, perceive significant benefits of listing on foreign markets. DR listing are perceived:

• To achieve fair valuation through improving the trade efficiency of firm's stocks
• To increase the absolute number and the proportion of foreign shareholders
• To increase firm's prestige and visibility in domestic as well as host country's markets
• To increase the credibility of firms' financial statements for foreign investors/analysts, and domestic investors and analysts

In pursuing of improving credibility, visibility and prestige of firms, while ADR issuing firms emphasize on both domestic and host market for this end, more emphasizes of GDR issuing firms have been on domestic market with regard to visibility and foreign market with reference.

• ADR listings are additionally perceived to ease future access to foreign capital markets, and to be motivated by the behavior of other firms of same industry in the international arena.
• In addition to the first four beneficial effects, GDR listings are perceived to facilitate the company's task of performing mergers and acquisitions in foreign markets.

While ADR issuing firms perceive the increased possibility of getting involved in legal proceedings to be the only significant barrier to their decision to list on the foreign exchanges, GDR listing firms perceive the firm's absolute size to be the only significant barrier to their decision to list on foreign markets. GDR listing companies consider three factors to be most influential in determining their readiness to tap the international market as follow:
• Strong domestic market for their securities;
• Firms becoming dominant player in the domestic market;
• Longevity and maturity of firms operations.
While in case of ADR listing companies these factors have been:
• A high level of transparency and disclosures by the firm;
• Firm becoming a dominant player in the domestic market;
• Enactment of a better corporate governance code by the firm (68).

3.5 Indian Companies’ Choice of Stock Exchange
The managerial choice of stock exchange for purpose foreign listings is mainly influenced by the prestige of the stock exchanges and the choice of listing venue(s) by peer firms. A more prestigious exchange attracts more listings and also firms tend to list on exchanges where peer firms belonging to same industry are listed. Easy and faster listing on GDR markets was given as an additional reason by GDR listing firms for preferring to list on London and Luxembourg exchanges.

DR issues took place in the early 1990s, have been primarily motivated by the existing costly procedure of floatation in the domestic market (57). GDR has been the preferred mode with the majority of listings in the Luxembourg or the London Stock Exchange in view of their less stringent disclosure requirements. DR programs by the Indian firms were initially listed at the LuxSE due to the mild securities’ regulations and the easy listing norms of the Luxembourg market vis-à-vis the requirements under the US GAAP (i.e., Generally Accepted Accounting Principle). The choice of LuxSE for initial foreign listings by Indian firms were in consonance Foerster et al (1993)’s assertion that initial foreign listings by firms of any country are accomplished on markets which are easier to enter (69).

In second phase many Indian firms listed their DR programs at the LSE. Besides, a majority of the Indian GDRs were issued pursuant to the US Rule 144A and/or Regulation S of the Securities Exchange Commission, which enabled their trading in the US market too mainly through the PORTAL system. Indian companies have issued ADRs since the early 1990s, but most of these earlier issues were privately placed. However, since 1999, fresh Indian DR programs
have been accomplished at the stringent US stock exchanges due to its higher global visibility, particularly for the new-economy stocks. Therefore, exchange-traded ADRs of Indian origin have been a relatively recent phenomenon. Nowadays there are number of active Depository Receipts of Indian origins have been listed on American exchanges like the New York Stock Exchange (NYSE) and the National Association of Securities Dealers Automatic Quotation (NASDAQ).

The temporal shift in choice of foreign listing venues by the Indian firms could be attributed to prescription of higher mandatory levels of financial disclosures and transparency for the Indian firms by the SEBI. During the early nineties, most Indian firms did not have level of financial transparency as desired by the US GAAP and SEC, so they refrained from listing on the US exchanges. However, during 1990s, Indian financial market regulators introduced several reforms to improve the level of financial transparency of the Indian firms. These financial sector reforms positively influenced the capability of Indian firms to tap the US markets. Therefore, of late, many Indian firms have listed their DR programs on the US exchanges also including NASDAQ and NYSE. It seemed that gradually US exchanges are becoming more favorable destination for fresh DR listings by the Indian firms as well as companies from other countries. This observation was in consonance with the Pagano et al. (2002)’s finding that European exchanges have been losing out to US exchanges in attracting the fresh foreign listings (32). However, since 2002 there has been increase in the new listings in Non-U.S stock exchanges which has continued, and fostered after 2005. The attractiveness of European regulatory regime, strengthening of U.S dollar in the year 2005, increasing costs associated with litigation and corporate governance regulations with listing in the U.S. (announced by Committee on Capital Markets Regulation in 2006), have been some of effective factors in these process (70). The U.S-listed DR establishment of Indian companies has remained at lower levels while the Luxembourg Stock Exchange has been the favored exchange for Indian issuers. Fully two-thirds of the LuxSE’s DR listings are from Indian companies, and all of 2008’s new DR listings on the exchange were from India. Foreign listing of Indian companies through DR programs for the period of
1992-2008 is summarized in table 3.3.


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<td>1</td>
<td>6</td>
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<td>1</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>29</td>
<td>25</td>
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<td>9</td>
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<tr>
<td>Singapore</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
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<td>0</td>
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<td>6</td>
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<tr>
<td>Dubai</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
<td>2</td>
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</tr>
</tbody>
</table>

Source of data: Bank of New York

**3.6 Study of DR markets of Indian origin companies**

**3.6.1 Aim of study**

Depository receipts as an innovative financial instrument have designed to provide different governments and companies with access to international capital market and additional sources of capital. And at the same time provide investors from host countries with diversified investment choices of foreign companies stocks containing lower risk than direct investment in companies’ home market.

Besides all the motives for cross-listing, for companies especially from emerging countries DRs have been used as a favored instrument to tap more developed market with wider base of investors to enhance their sources of capital. The main purpose of this study is to examine the efficiency of host markets for DR programs. More specifically, we examine the efficiency of DRs as a structured financial instrument in providing companies to access more developed and efficient market places to raise capital.

**3.6.2 Theoretical background**

The efficient market hypothesis is associated with the idea of a “random
walk". This is a term loosely used in the finance literature to characterize a price series where all subsequent price changes represent random departures from previous prices. The logic of the random walk idea is that if the flow of information is unimpeded and information is immediately reflected in stock prices, then tomorrow’s price change will reflect only tomorrow’s news and will be independent of the price changes today. News is by definition unpredictable and, thus, resulting price changes must be unpredictable and random. As a result, prices fully reflect all known information, and even uninformed investors buying a diversified portfolio at the tableau of prices given by the market will obtain a rate of return as generous as that achieved by the experts.

What is obvious, the market pricing is not always perfect. We know that markets have made egregious mistakes. The psychological factors influence securities prices and this can not be denied. But Benjamin Graham (1965) inserts that while the stock market in the short run may be a voting mechanism, in the long run it is a weighing mechanism. True value will win out in the end, and there is no way in which investors can reliably exploit any anomalies or patterns that might exist. The original empirical work supporting the notion of randomness in stock prices looked at such measures of short-run serial correlations between successive stock-price changes. In general, these works supports the view that the stock market has no memory – the way a stock price behaved in the past is not useful in divining how it will behave in the future (71).

By the start of the twenty-first century, the intellectual dominance of the efficient market hypothesis had become far less universal. With emphasized psychological and behavioral elements of stock-price determination, it came to believe that future stock prices are somewhat predictable on the basis of past stock price patterns as well as certain “fundamental” valuation metrics.

Work by Lo and MacKinlay (1999) found that short-run serial correlations are not zero and that the existence of “too many” successive moves in the same direction enable them to reject the hypothesis that stock prices behave as random walks. There does seem to be some momentum in short-run stock prices (72).

Moreover, Lo et al (2000) asserts through the use of sophisticated nonparametric statistical techniques that can recognize patterns, some of the
stock-price signals used by “technical analysts” such as “head and shoulders” formations and “double bottoms”, may actually have some modest predictive power (73).

Economists and psychologists in the field of behavioral finance find such short-run momentum to be consistent with psychological feedback mechanisms (bandwagon effect). The behavioralists offered another explanation for patterns of short-run momentum – a tendency for investors to under-react to new information. If the full impact of an important news announcement is only grasped over a period of time, stock prices will exhibit the positive serial correlation found by investigators. However, that must be considered that; First, while the stock market may not be a mathematically perfect random walk, it is important to distinguish statistical significance from economic significance. The statistical dependencies giving rise to momentum are extremely small. Odean (1999) suggests that momentum investors do not realize excess returns, due to the large transaction costs involved in their execution to exploit whatever momentum exists (74). Second, the evidence on systematically occurrence of such effects included in behavioral hypothesis, in the stock market is often rather thin.

Eugene Fama (1998) surveys the considerable body of empirical work on “event studies” that seeks to determine if stock prices respond efficiently to information, and finds that apparent under-reaction to information is about as common as overreaction, and post-event continuation of abnormal returns is as frequent as post-event reversals. He shows that many of “anomalies” arise only in the context of some very particular model, and the results tend to disappear when exposed to different models. Certainly, whatever momentum displayed by stock prices does not appear to offer investors a dependable way to earn abnormal returns and predictable pattern (75).

Obviously, as long as stock markets exist, the collective judgment of investors will sometimes make mistakes. Undoubtedly, some market participants are demonstrably less than rational. As a result, pricing irregularities and predictable patterns in stock returns can appear over time and even persist for short periods. Moreover, the market cannot be perfectly efficient or there would be no incentive for professionals to uncover the information that gets so quickly
reflected in market prices (76). Many predictable patterns seem to disappear after they are published in the finance literature. The key factor is whether any patterns of serial correlation are consistent over time. The general problem with these predictable patterns or anomalies, however, is that they are not predictable from period to period and even if they are, these non-random effects are very small relative to the transactions costs. Burton (2003) points out such apparent patterns were never sufficiently large or stable to guarantee consistently superior investment results (71). It is obvious that, with the passage of time and with the increasing sophistication of our databases and empirical techniques, we will document further apparent departures from efficiency.

3.6.3 Hypothesis, Sample, Data Source, Methodology, and Findings

Following the Efficient Market Hypothesis and Random Walk idea, we explore whether the prices of DRs of Indian origin companies in the host markets follow a random walk behavior. In other words, whether host markets for DRs have been efficient. The testable hypothesis of our research are:

- **H₀**: DRs’ markets are not efficient, and prices are predictable, suggesting the existence of serial correlation between stocks price changes in the long run.
- **H₁**: DRs’ markets are efficient and all subsequent price changes represent random departures from previous prices.

The study focuses on fourteen Indian companies’ DRs program trading in New York Stock Exchange (NYSE), NASDAQ, and London Stock Exchange (LSE). The sample selection has been based on the availability of related data for the period of study. The list of companies is presented in Table 3.4. All these companies have raised capital through the new issue of DR program in related host markets. The DRs’ programs of the sample companies have different listing dates. The study assesses these programs for the period of 04/01/2002-02/01/2009 (seven years). The data is the closing prices of DRs’ programs, on weekly bases. The data collected for the period of study is mainly derived from the website of J.P. Morgan and Bank of New York as the two major Depositary banks.
The random walk hypothesis in the simplest form suggests that changes in price of a stock should have a mean value of zero. Formally the model asserts that the price should evolve according to the stochastic difference equation. A key concept underlying time series processes is that of stationarity. A time series is said to be stationary (covariance stationary) when it has three characteristics:

- Exhibits mean reversion in that it fluctuates around a constant long run mean;
- Has a finite variance that is time-invariant;
- Has a theoretical correlogram that diminishes as the lag length increases.

In other words, a time series variable is stationary if the means, variances, and covariances do not change over time. Stationarity is important because if the

**Table 3.4 List of Sample Companies**

<table>
<thead>
<tr>
<th>Company's Name</th>
<th>Symbol</th>
<th>Exchange</th>
<th>Industry</th>
<th>Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFRATRA Projects Ltd.</td>
<td>INFY</td>
<td>NASDAQ</td>
<td>Computer Services</td>
<td>12/Jan/1999</td>
</tr>
<tr>
<td>ICICI Bank Ltd.</td>
<td>IBN</td>
<td>NYSE</td>
<td>Banks (Money Center)</td>
<td>31/Mar/2000</td>
</tr>
<tr>
<td>REDIFF.COM</td>
<td>REDF</td>
<td>NASDAQ</td>
<td>internet</td>
<td>15/Jan/2000</td>
</tr>
<tr>
<td>TATA Communications Ltd.</td>
<td>TCL</td>
<td>NYSE</td>
<td>Specialty Communications</td>
<td>13/Aug/2000</td>
</tr>
<tr>
<td>WIPRO Ltd.</td>
<td>WIT</td>
<td>NYSE</td>
<td>Multi-Industry</td>
<td>20/Oct/2000</td>
</tr>
<tr>
<td>Dr. REDDYS Laboratories Ltd.</td>
<td>RDY</td>
<td>NYSE</td>
<td>Health Care (Drugs/Pharms)</td>
<td>13/Apr/2001</td>
</tr>
<tr>
<td>State Bank of India</td>
<td>SBKFF</td>
<td>LSE</td>
<td>Banks (Money Center)</td>
<td>4/May/2001</td>
</tr>
<tr>
<td>SATYAM Computer Services Ltd.</td>
<td>SAY</td>
<td>NYSE</td>
<td>Computer Services</td>
<td>18/May/2001</td>
</tr>
<tr>
<td>HDFC Bank Ltd.</td>
<td>HDB</td>
<td>NYSE</td>
<td>Banks (Money Center)</td>
<td>20/Jul/2001</td>
</tr>
<tr>
<td>RANBAXY Laboratories Ltd.</td>
<td>RXZF</td>
<td>LSE</td>
<td>Health Care (Drugs/Pharms)</td>
<td>28/Sep/2001</td>
</tr>
<tr>
<td>BAJAJ Holdings &amp; Investment</td>
<td>BJJDF</td>
<td>LSE</td>
<td>Miscellaneous Transportation</td>
<td>28/Sep/2001</td>
</tr>
<tr>
<td>LARSEN &amp; TUBRO</td>
<td>LTOUF</td>
<td>LSE</td>
<td>Multi-Industry</td>
<td>28/Sep/2001</td>
</tr>
<tr>
<td>MAHANA AGAR Telephone Nigom</td>
<td>MTE</td>
<td>NYSE</td>
<td>Telephone (Local)</td>
<td>30/Nov/2001</td>
</tr>
</tbody>
</table>
series is non-stationary then all the typical results of the classical regression analysis are not valid, leading to spurious regression. On the other hand, shocks to stationary time series are necessarily temporary and the effects of shocks will dissipate and the series will revert to its long run mean level (77). As such, long term forecasts of a stationary series will converge to the unconditional mean of the series. Therefore as the first step, all time series of closing prices related to the fourteen companies were checked for stationarity. For this purpose, the statistical tests including Ljung-Box-Pierce Q statistics and Augmented Dickey-Fuller test to check unit root, are being adopted. The results of the statistical tests on the companies’ weekly prices indicate the existence of unit root and non-stationary data. The results assert the random walk phenomenon. This means the best prediction of the price of a stock is equal to its present price plus a purely random shock or error term. In other words the results of stationary tests assert that there is no reliable forecasting pattern in host markets for the sample DR programs guaranteeing consistently superior investment results.

By definition series with a unit root called difference stationary series, can be transformed into stationary series by differencing. Taking the first difference of all fourteen time series of prices we obtain stationary time series in which the price change sequence- equal to a constant plus a white noise disturbance- is stationary. In fact all price time series are integrated of order one or in other terms they are difference stationary of degree one. As Nathan Balke notes,” the presence of a stochastic trend implies that fluctuations in a time series are the result of shocks not only to the transitory or cyclical component but also to the trend component.” That is, disturbances or shocks to such time series will permanently alter their level (78). The practical significance of a stationary is from the point of long term forecasting which are more reliable while those made from a difference stationary will be unreliable and sometimes very hazardous. And as it mentioned before, the existence of random walk phenomenon in the markets for our sample DR programs have approved the absence of any reliable long run forecasting pattern.

Furthermore, in order to forecast evaluation, using Box-Jenkins methodology, the appropriate univariate auto-regression model is estimated for all
difference stationary time series prices. The forecast evaluation is done for the best fitted equation of each time series. The Bias Proportion, Variance Proportion, and Covariance Proportion of forecast evaluation related to different series are summarized in table 3.5 showing static forecasting evaluation, and table 3.6 that represents the dynamic forecasting evaluation.

### Table 3.5 Static or one step ahead forecast evaluation

<table>
<thead>
<tr>
<th>Company's Name</th>
<th>Bias Proportion</th>
<th>Variance Proportion</th>
<th>Covariance Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFOSYS Technologies Ltd.</td>
<td>0.000137</td>
<td>0.545636</td>
<td>0.454165</td>
</tr>
<tr>
<td>SIFY Ltd.</td>
<td>0.000176</td>
<td>0.675631</td>
<td>0.324293</td>
</tr>
<tr>
<td>REDIFF.Com</td>
<td>0.000606</td>
<td>0.632547</td>
<td>0.367447</td>
</tr>
<tr>
<td>State Bank of India</td>
<td>0.001149</td>
<td>0.500730</td>
<td>0.498121</td>
</tr>
<tr>
<td>RANBAXY Laboratories Ltd.</td>
<td>0.000000</td>
<td>0.675735</td>
<td>0.324206</td>
</tr>
<tr>
<td>BAJAJ Holdings &amp; Investment</td>
<td>0.000264</td>
<td>0.592528</td>
<td>0.407446</td>
</tr>
<tr>
<td>LARSEN &amp; TUBRO</td>
<td>0.000616</td>
<td>0.568608</td>
<td>0.430775</td>
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<tr>
<td>ICICI Bank Ltd.</td>
<td>0.000116</td>
<td>0.446652</td>
<td>0.553022</td>
</tr>
<tr>
<td>TATA Communications Ltd.</td>
<td>0.000566</td>
<td>0.430850</td>
<td>0.563044</td>
</tr>
<tr>
<td>WIPRO Ltd.</td>
<td>0.000174</td>
<td>0.561552</td>
<td>0.430274</td>
</tr>
<tr>
<td>Dr. REDDYS Laboratories Ltd.</td>
<td>0.000023</td>
<td>0.641085</td>
<td>0.358912</td>
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<tr>
<td>SATAYAM Computer Services Ltd.</td>
<td>0.000059</td>
<td>0.563051</td>
<td>0.446890</td>
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<tr>
<td>HDFC Bank Ltd.</td>
<td>0.000807</td>
<td>0.455702</td>
<td>0.543491</td>
</tr>
<tr>
<td>MAHANAGAR Telephone Nigam</td>
<td>0.000276</td>
<td>0.667438</td>
<td>0.332241</td>
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</tbody>
</table>

### Table 3.6 Dynamic forecast evaluation

<table>
<thead>
<tr>
<th>Company's Name</th>
<th>Bias Proportion</th>
<th>Variance Proportion</th>
<th>Covariance Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFOSYS Technologies Ltd.</td>
<td>0.000199</td>
<td>0.970648</td>
<td>0.029153</td>
</tr>
<tr>
<td>SIFY Ltd.</td>
<td>0.000333</td>
<td>0.953907</td>
<td>0.045760</td>
</tr>
<tr>
<td>REDIFF.Com</td>
<td>0.000002</td>
<td>0.972779</td>
<td>0.027220</td>
</tr>
<tr>
<td>State Bank of India</td>
<td>0.001379</td>
<td>0.961604</td>
<td>0.037017</td>
</tr>
<tr>
<td>RANBAXY Laboratories Ltd.</td>
<td>0.000004</td>
<td>0.906321</td>
<td>0.093675</td>
</tr>
<tr>
<td>BAJAJ Holdings &amp; Investment</td>
<td>0.000019</td>
<td>0.955613</td>
<td>0.003369</td>
</tr>
<tr>
<td>LARSEN &amp; TUBRO</td>
<td>0.000998</td>
<td>0.998662</td>
<td>0.000340</td>
</tr>
<tr>
<td>ICICI Bank Ltd.</td>
<td>0.000400</td>
<td>0.944923</td>
<td>0.054677</td>
</tr>
<tr>
<td>TATA Communications Ltd.</td>
<td>0.002669</td>
<td>0.802825</td>
<td>0.194767</td>
</tr>
<tr>
<td>WIPRO Ltd.</td>
<td>0.000126</td>
<td>0.953468</td>
<td>0.046406</td>
</tr>
<tr>
<td>Dr. REDDYS Laboratories Ltd.</td>
<td>0.001311</td>
<td>0.605431</td>
<td>0.393259</td>
</tr>
<tr>
<td>SATAYAM Computer Services Ltd.</td>
<td>0.000054</td>
<td>0.996746</td>
<td>0.001200</td>
</tr>
<tr>
<td>HDFC Bank Ltd.</td>
<td>0.000467</td>
<td>0.520684</td>
<td>0.076849</td>
</tr>
<tr>
<td>MAHANAGAR Telephone Nigam</td>
<td>0.000185</td>
<td>0.783323</td>
<td>0.216482</td>
</tr>
</tbody>
</table>
The bias proportion tells us how far the mean of the forecast is from the mean of the actual series. The variance proportion tells us how far the variation of the forecast is from the variation of the actual series. The covariance proportion measures the remaining unsystematic forecasting errors. The bias, variance, and covariance proportions add up to one. If the forecast is "good", the bias and variance proportions should be small so that most of the bias should be concentrated on the covariance proportions* (79).

The large variance and bias proportion indicates that the forecasts are not tracking the variation in the actual series. This proportion has been more than 0.50 in 86% of static forecast (short-term forecasting) evaluation, and more than 0.90 in 79% of dynamic forecast (long-term forecasting) evaluation. The results indicate that there may be some degree of predictable patterns in static forecasting -not so strong lasting for long period of time. However, when it comes to dynamic forecasting-based on different proportions presented in table 3.6-there is no reliable and predictable pattern, guaranteeing a consistent forecast regarding market to superior investment results. Therefore markets for these companies’ DRs are consistent with random walk phenomenon, asserting the market efficiency, and this is compliant with our alternative hypothesis. In fact beside all other incentives to cross listing, as explained before, access to more developed and efficient markets has been one of the major motives that are facilitated through DR programs, particularly by firms from emerging markets to raise capital.

3.6.4 Limitation

This study is carried out only with considering the market of DRs in the host county. It might be more sophisticated if we considered the DRs home market related to corresponding shares(underlying shares), along with the host country’s market to compare their behavior and asses the possible controversial effect. There have been some factors limiting this study only to the host countries’ markets regarding to DRs’ programs such as:

- In case of India there is no tracking system and reliable sources of data

* - For more detail see reference no. 79, Chapter 12.
regarding the transactions of underlying shares of DRs’ programs, their conversions and reissues.

- With considering the total amount of underlying share issued, the amount of related DR program is small.
- The two ways fungibility in India is limited to the initial amount of issue for each DR program. In fact, the market is not completely driven by demand.
- The major proportions of transactions in DRs are intra-market transaction and cross border transactions have been less than five percent of total transactions.

3.7 Conclusion

DR is an example of financial engineering activity in the field of creation of new products (financial instruments) and strategies which can be used for enhancement of capital resources. In fact, with identifying the needs from both sides (issuers and investors), and knowledge regarding the associated risks, financial engineering shape any type of asset, in formalized form to address different requirements. Financial Engineering as an important profession within the financial services industry has been providing wide varieties of financial instruments and strategies to address the end users’ requirements. While some of these products have been successful and accepted in marketplace and have achieved widespread uses, some have failed and discontinued. The new products to succeed must feature distinguishing characteristics of product itself, the underlying market and potential size of demand for such characteristics and the regulatory environment. The distinction of the value of new financial products is the main factor to provide demand and growth of market for the innovative products.

The review of market for DRs’ programs shows remarkable growth in worldwide DRs’ markets which has been driven by increasing demand for this instrument. The fast growth of market for DRs, increasing number of countries and companies engaged in DRs, particularly from emerging countries assert the success of this innovative product to overcome some limitations in cross country investment; provision of wider capital base; changing the pattern of risk and
reducing it; and providing safer equity baked by companies' shares, all in an efficient manner. Particularly, for fast growing emerging countries, DRs have approved to be an efficient tool for providing extra sources of capital through international markets. In other words, the ability of DR programs to meet different requirements of investors and issuers has been the main force behind the increasing demand for this instrument. The success of DR’s programs in providing different beneficial effect from the investors’ and issuers’ point of view, as explained in this chapter, can not be denied.

Along with all incentives behind the use of DRs, the access to more efficient and developed market can be an important motive for companies specially from emerging markets to enhance their capital resources and diversify their investor basis. These markets are characterized by naturally wide investor bases interested in investment in foreign companies’ shares while avoiding the risks associated in direct investment in their markets, better performance, and higher liquidity.

To investigate the efficiency of DR for providing companies with access to efficient and developed markets, we examined the efficiency of host markets for the sample DR programs of fourteen Indian companies. The results of the study of host markets for the DR programs have been consistent with the random walk idea, asserting the efficiency of the markets. In fact, using DRs has enabled the companies to tap developed and efficient international market at lower cost and risks to enhance their capital resources. The efficiency of DR as an instrument used for tapping efficient international market may become more clear where by the end of 2008, four stock exchanges (NYSE, NASDAQ, LSE, LuxSE ) accounted for 94% of all new sponsored Dr programs listed on exchanges, and 98% of total Sponsored DR listed on exchanges. During the same period, 97% of worldwide trading value of DRs, have been in three exchanges viz. NYSE, NASDAQ, and LSE.
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(61) (DIR Series) Circular No.14 dated October 1, 2004
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### Appendix A: Summary of Roles and Responsibilities of different players in DR market.

#### Legal council (issuer’s and depositary’s)
- **At time of offering**
  - Prepare (issuer council) and/or review (depositary council) offering circular and interact with authorities.
  - Prepare draft deposit agreement (depositary’s bank counsel).
  - Submit requisite documents to local regulatory authorities and exchanges (issuer and placement agent counsels).
- **Ongoing**
  - Manage compliance with securities laws, rules and regulations and perfect any securities law exemption.
  - When appropriate corporate action support.

#### Accountants
- **At time of offering**
  - Prepare company’s accounts for insertion into the prospectus.
  - Review prospectus and interact with authorities.
- **Ongoing**
  - Audit and prepare accounts.

#### Custodian
- **At time of offering**
  - Receive local shares in issuer’s home country and confirm receipt.
- **Ongoing**
  - Hold shares in custody for the account of depositary.
  - Receive and deliver shares in accordance with depositary’s instructions.

#### Issuer
- **At time of offering**
  - Prepare documentation working with advisors.
  - Interact with listing authority and respond to all questions.
  - IR/PR targeted program.
- **Ongoing**
  - Provide depository and custodian with notices of dividends, right offerings and other corporate actions, including notices of annual and special shareholder meetings.
  - Ongoing compliance with stock exchange and international regulations, including disclosure and reporting.
  - Execute internationally focused investor relations plan.
  - Keep market informed of development through press releases.
  - Regular meetings with institutional investors holding company DRs.

#### Depository
- **At time of offering**
  - Provide advice/perspective on type of program, exchange or market on which to list or quote and advise on ADR ratio.
  - Appoint custodian.
  - Coordinate with all parties for timely launch.
  - Coordinate with legal counsel on Deposit Agreement and securities law matters, as appropriate.
  - Announce DR program to market.
- **Ongoing**
  - Coordinate with issuer to announce and process corporate actions such as dividends and shareholders meetings.
  - Work with issuer to maintain active DR program.

#### Investor Relations advisor/firm
- **At time of offering**
  - Develop long-term plan to raise awareness of issuer’s program in the markets in which GDRs will trade.
  - Develop communications plan and information materials for launch activities (road show and presentations to investors, launch day promotion, meetings with financial media).
- **Ongoing**
  - Coordinate with issuer’s advertising and public relations teams on specific program plans to support and develop company image.
  - Continue to work with the issuer to maintain visibility and investor knowledge in the capital markets.
  - Arrange regular meetings for issuer with investors to keep them informed of developments and results.

#### Investment banks/underwriters
- **At time of offering**
  - Advise on size, pricing and marketing of offering, type of program to launch and exchange or market on which to list or quote, and ratio of depositary shares to ordinary shares.
  - Act as placement agent or underwriter in offering.
  - Conduct road shows with management/introduce issuer to institutional and other investors.
  - Line up selected dealers and co-underwriters.
- **Ongoing**
  - Cover issuer through research reporter/promote DRs to investors.
  - Advise on road shows, investor meetings, investors to target.
## Appendix B: DR Programs (Reg S/144 A) Options - Key Features

<table>
<thead>
<tr>
<th>Objective</th>
<th>Reg S only (non US)</th>
<th>144 only (US)</th>
<th>Reg S/144A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raised equity in the international markets outside the US and develop/broaden investor base</td>
<td>Raise equity in the US among QIBs and develop/broaden US investor base</td>
<td>Raise equity in US and international markets and develop/broaden US and international investor base</td>
</tr>
<tr>
<td>Disclosure/Accounting</td>
<td>Depends on international exchange selected - Deposit Agreement</td>
<td>Home market (unless investors request US GAAP) - Deposit Agreement</td>
<td>Depends on international exchange selected - Deposit Agreement</td>
</tr>
<tr>
<td>Legal Documents and Exemptions</td>
<td>Prospectus prepared in accordance with international exchange requirements</td>
<td>Exemption from registration under the Securities Exchange Act of 1934, as amended, pursuant to 12g3-2(b) - Prospectus</td>
<td>Exemption from registration under the Securities Exchange Act of 1934, as amended, pursuant to 12g3-2(b) - Prospectus prepared in accordance with international exchange requirements</td>
</tr>
<tr>
<td>Reporting Requirements</td>
<td>Depends on exchange and/or regulator - Under Rule 12g3-2(b) English language versions of home country disclosure must be furnished to the SEC or posted on the company’s website</td>
<td>In the US markets, information disclosure in accordance with rule 12g3-2(b) - Outside the US, requirements depend on the exchange and/or regulator</td>
<td></td>
</tr>
<tr>
<td>Trading</td>
<td>London, Luxembourg, Hong Kong, Singapore, etc.</td>
<td>PORTAL</td>
<td>PORTAL plus London, Luxembourg, Hong Kong, Singapore, etc.</td>
</tr>
</tbody>
</table>