RPS/06/2012

STUDENT RESEARCH PROJECT

Green Shoe Options in India

Prepared by

Naveen Alle
Batch 2012, Masters Programme in Management Studies
Jamnalal Bajaj Institute of Management Studies (JBIMS)
University of Mumbai
Mumbai

Supervised by

Balkrishna Parab
Assistant Professor
Jamnalal Bajaj Institute of Management Studies (JBIMS)
University of Mumbai
Mumbai

National Stock Exchange of India Limited

March 2012

Student Research Project

Green Shoe Options in India

Prepared by Naveen Alle[1]

March 2012

Abstract

A green shoe option (GSO) provides the option of allotting equity shares in excess of the equity shares offered in the public issue as a post-listing price stabilising mechanism. This study examines whether companies need to include GSOs in their initial public offerings (IPOs), and explores the reasons for the indifference on the part of issuer companies and merchant banks in India towards GSOs. The aftermarket price performance of companies that included GSOs in their IPOs is analysed; however, the results of this analysis do not lead to any generalization due to the small number of companies that opted for GSO. Various suggestions such as making green shoe options mandatory, controlling occurrences of flipping by qualified institutional buyers, and so on are proposed by the author.

---

[1] Naveen Alle is a final-year student of the Masters Programme in Management Studies (MMS) at the Jamnalal Bajaj Institute of Management Studies. The author acknowledges the opportunity as well as the research grant provided by National Stock Exchange of India Limited and also acknowledges the constant support and guidance provided by Prof. Balkrishna Parab for the preparation of the paper. The student and the faculty acknowledge the valuable inputs of the following persons during the preparation of this paper: Nirmal Mohanty (NSE); Sajeev Kumar, Corporate Banking Division, Indian Bank; D. Venu, Vice President (Capital Markets Group), SBI Capital Markets Limited; Kishore Iyer, Assistant Vice President, Indbank Merchant Banking Services Limited; Hitesh Mandot, Senior Vice President (Corporate Finance and Investment Banking), Enam Securities Private Limited; Deepa Bahal, Senior Vice President and Head (Capital Market Execution), ICICI Securities Limited; B. Madhuprasad, Vice Chairman, Keynote Corporate Services Limited; and Satyajit Joshi, Vice President (Investment Banking), Kotak Mahindra Company Limited. The views expressed in the paper are those of the author and do not necessarily reflect the views of any of these other people or their organisations, or of JBIMS or of the NSE. The author can be contacted at naveenalle12@jbims.edu or navin.alle@yahoo.co.in.

Green Shoe Options in India

I Introduction

The primary market for securities plays an important role in the economic development of a country, by enabling companies to mobilise financial resources from the public for undertaking various projects. The primary market also enables members of the public to invest their savings in gainful investment; it allows them to participate directly in the profits of the corporate sector. The fact that 91 companies raised capital to the tune of INR 67,609 crore in 2010–2011 is proof of this role of the primary markets. In 2009–2010, a total of INR 57,555 crores was mobilised by 76 companies.[2]

Investors buy shares of companies in an initial public offering (IPO) in the hope that the shares would trade in the secondary market at a price higher than the original selling price. Investors would certainly be anxious if the price of the shares in the secondary market is highly volatile in the period immediately following the listing date. Such volatility is detrimental to investor confidence, to the image of the issuer company and the issue managers, and to capital markets at large. This necessitates some sort of price stabilisation mechanism. One such price stabilisation mechanism is the Green Shoe Option (GSO).

Green Shoe Options (GSOs), or over-allotment options, were introduced by the Securities and Exchange Board of India (SEBI), the Indian market regulator, in 2003 to stabilise the aftermarket price of shares issued in IPOs. A GSO provides the option of allotting equity shares in excess of the equity shares offered in the public issue as a post-listing price stabilising mechanism.[3] The objective of this mechanism is to reassure investors, especially small investors who are known as retail individual investors (RIIs), that they would have an exit route during the first 30 days after the listing of shares (called the GSO window period) at a price close to the issue price, due to the price stabilising activity of the merchant banks. The issuer company also benefits from this mechanism, as enhanced investor confidence will result in more bids from investors at better prices.

---

[2] SEBI Annual Report 2010-11 issued vide OTW/ 19501/ 2011 on June 23, 2011.
[3] Regulation 2(1)(o) of the SEBI (ICDR) Regulations, 2009.

The objective of this paper is to examine the GSO mechanism that was included by some companies in their IPO programmes since the introduction of GSOs, and to explore the reasons for the indifference to GSOs on the part of issuer companies and merchant banks. The paper will explore whether companies need to include GSOs in their IPOs. The rest of the paper is organised as follows. Section II explains the IPO process and discusses at what stage the decision is taken to incorporate the GSO option.. Section III explains the GSO process and the rationale behind GSOs. Section IV examines the over-allotment option mechanism in India and in some other countries The performance of share prices during the GSO window period of companies in India that have availed of GSOs in their IPO programmes are empirically analysed in Section V. The performance of the share prices of companies that did not avail of GSOs in India is analysed in Section VI; the reasons for the lack of enthusiasm among issuer companies and merchant banks in availing of GSOs in their IPO programmes are also discussed in this section. Section VII suggests ways to make the GSO mechanism more effective.

II IPO Process

To understand the Green Shoe Option (GSO) mechanism, one first needs to understand the initial public offering (IPO) process. When a company decides to launch an IPO, it hires a merchant bank to help it assess the number of shares that it can offer and at what price.[4] Based on this advice, the company fixes a price band (or a floor price) within which (or above which) the investors bid for the shares.

An IPO can be made through the fixed price method, the book building method, or a combination of both. When the issuer decides the issue price at the outset and mentions it in the offer document, it is commonly known as a fixed price issue. When the price of an issue is discovered based on the demand received from the prospective investors at various price levels, it is called a book built issue.

In a book built issue, the issuer company and the merchant bank solicit indications of interest from institutional investors in order to construct a demand curve. Book building is a process

[4] The issuer company appoints one or more merchant banks to manage the IPO process; usually, multiple merchant bankers are appointed. One merchant banker may take the responsibility of drafting the offer document; another is given the responsibility of pre-issue compliances, while someone else handles post-issue compliances. All the merchant bankers sign an agreement delineating the inter se sharing of responsibility. One of these merchant banks is designated as the lead manager.

of price discovery. The issuer discloses a price band[5] or floor price before the opening of the issue of the securities offered.

It is at this stage that the issuer company and the merchant bank decide whether to avail of the GSO. This decision is taken after considering various factors such as the level of confidence of the issuer company and the merchant bank about the price band determined by them, the expectation regarding investors' response, the market sentiment, and so on.

In order to manage the book building process, the issuer company designates one merchant bank as the book running lead manager (BRLM) or book runner. Once the issue is declared open, the BRLM accepts bids from investors. On the closing of the issue, the company, in consultation with the merchant bank, decides the cut off price, or the price at which shares will be allotted to the investors.

The issue price is not set according to any explicit rule; rather, it is based on the interpretation of the investors' indications of interest that is made by the issuer company and merchant bank. The price is set at a level at which demand exceeds supply, and the shares are allocated to the bidders at this price. Thus, the book building procedure resembles an auction, with some important differences. The most important difference is that the pricing and allocation rules are not announced early on, but are left to the discretion of the issuer company and the merchant bank.

As the issue price is determined based on the bids received from the investors, it is fair to expect that the aftermarket price of the shares will hover around this price, at least in the short run. In practice, it is observed that the aftermarket price is often significantly higher (underpricing) or significantly lower than the issue price (overpricing). This indicates a miscalculation in the pricing of the issue. However, research supports the claim that book building helps companies to reduce underpricing (Ritter, 1998).

III Rationale for including GSOs in IPO programmes

Investors in an IPO could be anxious about various things: before the allotment of shares, they are generally anxious whether they will get the shares; after they get the shares, they worry about how the secondary market will react in the period immediately following the day

[5] A price band is the range of prices within which the investors are required to submit their bids.

of listing. Will the market open above the issue price or will it open below? If the market price immediately following the listing day is higher than the issue price, it implies that the issue price was underestimated, a phenomenon known as underpricing. On the other hand, if the market price immediately following the listing day is lower than the issue price, it implies that the issue price was over-estimated, a phenomenon known as overpricing.

From the perspective of an investor, IPO underpricing as well as overpricing are worrisome. Underpricing may appear beneficial to those investors who were actually allocated shares in an IPO. However, Jenkinson and Ljungqvist (2001) reveal that such shares perform badly in the long run, after initial positive returns. Overpricing, which results in the shares selling at a price lower than the issue price, may cause panic among the most vulnerable investors, the retail individual investors (RIIs).

The inclusion of GSOs in the IPO programme of an issuer company can be justified on five grounds: avoiding panic among RIIs, signalling confidence in the IPO price, protecting the reputation of merchant banks, enhancing liquidity in the aftermarket, and favouring preferred clients.

A. Avoiding panic among small investors

Small investors anywhere are likely to panic if the price of the shares they received in an IPO were to fall immediately after listing. In their panic, they may try to sell their shares at low prices, and may exit the capital markets altogether in some cases. The price may fall in the immediate aftermarket because of the activities of flippers. Flippers, also known as stags in stock market jargon, are investors who bid for shares only to sell them on the listing day, hoping to make a huge profit in a short period. Aggarwal (2003) argues that GSOs can counteract the sales pressure generated by flippers.

In India, the SEBI is in favour of encouraging the participation of retail investors in the primary market for securities. Towards this end, it has taken various measures over the last few years. The minimum investment limit for RIIs has been raised to INR 2 lakh.[6] The minimum offer to public has been hiked to 25% of the issue; in an issue made through the book building process, a minimum of 35% of the net offer to public category is required to be

[6] Regulation 2(ze) of the SEBI (ICDR) Regulations, 2009.

made to RIIs.[7] It is in this context that the SEBI introduced GSOs to protect RIIs, and to reassure them that their interests would be taken care of by the issuer company, the merchant bankers, and the regulator.

B. Signalling confidence

The price at which the shares are issued in a book-built IPO is determined in two stages. In the first stage, the issuer company and the merchant banker decide the price band within which investors can bid or the floor price above which the investors are required to bid.[8] This price band or floor price is decided based on various qualitative and quantitative factors (Rukhaiyar, 2006). In the second stage, the issuer company and the merchant bank that are designated as the book running lead manager (BRLM) decide the issue price after receiving bids from the investors.[9] Thus, there is a lot of subjectivity in the IPO pricing.

Many investors, especially small investors, are usually unable to make up their minds whether to bid or not to bid for the shares at the stated price band, as they stand to lose if the price turns out to be unsustainable.

In this context, the issuer company and the merchant bank can signal confidence in the issue by availing of the GSO mechanism. By so doing, the merchant banks back up their claims of the price being fair by proposing to buy shares from the secondary market if their claims were to be disproved and the aftermarket price were to fall below the issue price.

Ritter (1998) proposes that by offering price support, the merchant bank signals that the issue is not overpriced; therefore, investors would be willing to buy at the offer price. Such a signal is expected to boost the confidence of investors in participating in the primary markets.

C. Merchant bank reputation

Merchant banks may prevail upon the issuers to avail of GSOs in their IPO programmes to retain or enhance their reputation. Given that the merchant bank plays an important role in arriving at the price band or the floor price; they risk facing the ire of the investors if the share trades at a price below the issue price in the immediate aftermarket. Thus, the

[7] Regulation 43(2) of the SEBI (ICDR) Regulations, 2009.
[8] Part II of Chapter III of the SEBI (ICDR) Regulations, 2009.
[9] Clause 13 (a) of Schedule XI of the SEBI (ICDR) Regulations, 2009.

reputation of a merchant bank may be affected if an issue managed by them has a bad opening. In the US, Beatty and Ritter (1986) found that the market share of merchant banks (underwriters) fell significantly after the issues managed by them fared poorly in the aftermarket. Merchant banks can prevent such a loss of reputation by availing of the GSO mechanism, and trying to prop up the price of the share if it were to fall below the issue price in the immediate aftermarket.

D. Liquidity

Investors expect the market to stay liquid and transparent when trading begins in the secondary market. Liquidity is defined as the ease with which shares can be traded at prices that reflect the underlying demand and supply conditions. Green shoe options help improve the liquidity of markets in two ways.

Firstly, due to the over-allotment of shares, more shares would go to the investors than it would have if GSOs were not present. The larger the number of shares in the hands of the investors, the greater the possibility there these shares will be traded in the secondary market. Prabhala and Puri (1998) showed that the over-allotment of shares under GSOs creates liquidity in the aftermarket.

Secondly, if the aftermarket prices of the shares were to go below the issue price during the GSO window period, the stabilising agent would buy shares from the market, thereby enhancing liquidity. The activities of the stabilising agents of the two Indian companies that availed of GSOs in 2009–2011 is quite instructive. In the case of Indiabulls Power Limited, a total of 363,014,907 shares[10] were traded during the GSO period, and the stabilising agents traded 29,847,654 shares[11], i.e., 8.22% of the total trading volume. In the case of Electrosteels Steel Limited, the stabilising agents traded 33,627,428[12] of the 303,443,016[13] shares traded during the GSO window period, i. e., 11.08% of the total trading volume. Although the figures of these two companies cannot be used to arrive at broad generalizations, they do indicate that GSOs can significantly enhance liquidity in the aftermarket.

---

[10] Computed from the trading volume data available on the Website of the National Stock Exchange of India Ltd. (NSE). http://www.nseindia.com
[11] Refer to Table 6.
[12] Refer to Table 6.
[13] Computed from trading volume data available on the NSE Website.http://www.nseindia.com

E. Favouring preferred investors

In some jurisdictions (especially in the US), merchant banks avail of the GSO so that they can issue shares to some of their preferred clients, who often happen to be institutional investors (Ritter, 1998). During the planning phase of IPOs, merchant banks go on a road show, meeting institutional investors and other sophisticated investors, in order to gauge the potential demand for the IPO and the price at which the shares could be sold. The merchant bank then makes a favourable allotment to such institutional investors.

Next, we compare GSOs in India with similar mechanisms in other countries.

IV Green Shoe Options in India and in other Countries

In this section, we review the working of the over-allotment option as a tool of stabilising the aftermarket price of shares issued in an IPO in countries such as the US, the UK, and Germany, and compare the same with the GSOs in India. The over-allotment option is known by different names in different countries; for instance, in the US, it is called the Green Shoe Option, in Germany it is known as the Over-Allotment Arrangement (OAA), and in the UK, it is known as the Market Stabilisation Measure.

A. GSOs in the US

In the US, it is very common for companies to include the GSO, officially known as the over-allotment option, for stabilising the aftermarket price. The US Securities and Exchange Commission (SEC) defines price stabilisation as "…transactions for the purpose of preventing or retarding a decline in the market price of a security to facilitate an offering."[14]

Aggarwal (2000) identifies three kinds of over-allotment mechanisms prevalent in the US: (a) pure stabilisation; (b) aftermarket short covering bid; and (c) penalty bid.

(a) Pure stabilisation

In the pure stabilisation mechanism, underwriters post a stabilising bid to purchase shares at a price that does not exceed the offer price if the distribution of shares is not complete. These stabilising bids are required to have a flag identifying them as stabilization bids. Such a flag

---

[14] SEC Release Number 34-38067, December 20, 1996, p. 81.

would send a clear signal to the market that the offering is weak and that stabilisation is required, which appears to be one of the reasons why underwriters avoid using pure stabilisation.

Underwriters are required to disclose information about pure stabilisation activities to the appropriate self-regulatory organisation (SRO), such as the New York Stock Exchange (NYSE) or the National Association of Securities Dealers (NASD).

(b) Aftermarket short covering bid

In an aftermarket short covering bid in the US, the lead managers initially sell shares in excess of the original number offered, thereby taking a short position prior to the offering. This short position may be "covered" or "naked." Covered and naked positions differ in the options available to the lead managers if the post-listing market price of the share is higher than the issue price.

In the case of a *covered* short position, if the post-listing market price of the share is higher than the issue price, the lead manager does not buy the shares from the secondary market, as this would result in a loss. Rather, the lead manager asks the issuer company to allot fresh shares at the issue price. On the other hand, if the post-listing market price of the share is lower than the issue price, the lead manager purchases the shares from the secondary market to close out its short position, as this would result in a profit. There is no possibility of incurring a loss in a covered short position. Customarily, the covered short position is 15% of the amount of the firm commitment of the underwriter.

In the case of a *naked* short position, if the post-listing market price of the share is higher than the issue price, the lead manager has no alternative but to buy the shares from the secondary market, resulting in a loss. If, on the other hand, the post-listing market price of the share is lower than the issue price, the underwriter purchases the shares from the secondary market, as it would result in a profit.

Naked short positions are created by lead managers when they believe that the issue size is greater than the demand for the shares. If this belief is proved correct, the aftermarket price will fall below the issue price, enabling the lead managers to close out their naked short position at a profit.

Regulation M of the SEC requires underwriters to make a generalised disclosure in the offer document that they may engage in transactions to cover a short position. The underwriters are also required to inform the relevant SROs (such as stock exchanges) of such activity if and when it occurs.[15]

(c) Penalty bid mechanism

A penalty bid mechanism involves imposing penalties on those syndicate members whose customers sell (flip) shares in the days immediately after the listing of shares. Syndicate members are brokers who receive a commission for getting their clients to bid for the shares at the IPO. The penalty usually involves reclaiming the whole or a part of the commission that was due to a syndicate member if his/her clients sold their shares immediately after listing. The lead merchant banks, called managing underwriters, are required to disclose the presence of penalty bids to the stock exchanges, and to maintain records of their scope, duration, and enforcement.[16]

The price support activity of underwriters was studied in Aggarwal (2000). The study found that underwriters in the US generally used a combination of aftermarket short covering and penalty bids, together with the selective use of the overallotment option to support price in the aftermarket.

A significant feature of the working of GSOs in the US is that the doctrine of unjust enrichment[17] is not invoked, unlike in India; i.e., the issuer company and the merchant banks are allowed to retain any profits that may arise during the process of aftermarket price stabilisation.

In the US, there is a variant of GSOs, called the Reverse GSO. In a reverse GSO, there is an agreement between the issuer company and the underwriter, that in the event of the price of shares falling in the GSO window period, the underwriter would buy the shares in the

---

[15] Regulation M was adopted by the SEC on December 10, 1996 and became effective on March 4, 1997. Securities Exchange Act Release No. 38067 (December 20, 1996), 62 FR 520 ("Adopting Release").

[16] SEC Rule M (100).

[17] The doctrine of unjust enrichment states that no one should be allowed to make profits unless he/she deserves the same. It is believed that the rationale for allowing GSOs in India is to protect and reassure small investors. If the stabilising agent or the issuer company, is allowed to retain the profits that accrue in the process of a GSO, it would lead to a conflict of interest, and the original purpose of the GSO would be lost. Hence, any profit that may arise in the GSO process cannot be retained by the stabilising agent or the issuer company; rather they have to transfer the same to the Investor Education and Protection Fund (IEPF).

secondary market and sell the same to the issuer company at the issue price, thereby earning a profit. This process is also expected to prop up the price of shares in the secondary market.[18]

B. GSOs in the UK

The Committee of European Securities Regulators (CESR) provides a broad framework of GSO regime to be followed by its member states. The responsibility for GSOs lies with the investments services firms, called stabilising managers. The possibility of stabilisation is required to be disclosed in the prospectus, and stabilisation activity must be recorded and disclosed in an appropriate manner (CESR (2002)).

The GSO regime in the UK allows an issuer company to over-allot shares to the maximum extent of 15%; the stabilising activity may be carried out for a maximum period of 30 days after listing (the GSO window period). However, the regulations explicitly mandate only a partial GSO, i.e., the stabilising agent can only buy the shares in the aftermarket at a price lower than or equal to the issue price.[19] Further, an explicit disclosure has to be made to the effect that although a claim is made that stabilisation may be undertaken, there is no assurance that it will in fact be undertaken, and that it may be stopped at any time.

C. GSOs in Germany

In Germany, the GSO, known as an Over-Allotment Arrangement (OAA), involves the merchant banker borrowing shares from pre-issue shareholders or directly from the issuer company. The merchant banker is required to return the shares within a fixed period of time, usually one month. Any profit resulting from the price stabilisation activity can be retained by the merchant banker.

Green shoe options are very popular in the German Neuer Markt, which is similar to the NASDAQ in the US. Franzke and Schlag (2003) report that during 1997–2002, it was rare to find an IPO in the Neuer Markt that did not include an OAA. The performance of GSOs in Germany was also studied by Oehler et al. (2006), who found that such price stabilisation measures were not effective in stabilising the aftermarket price of shares.

---

[18] Reverse GSOs are not allowed in India because of the explicit ban that prevents a company from buying its own shares (except in regulated buy-back of shares) under Section 77 of the Companies Act, 1956.
[19] Article 9 of the Buy-back and Stabilisation Regulation (FSA Handbook Release 118 dated October 2011).

In a significant development in Germany, the Berlin Court of Appeal has ruled that on the exercise of the green shoe option, the issuer company must issue fresh shares, not at the IPO-issue price but at the prevailing higher price. This decision of the Berlin Court of Appeal has been widely criticized because the fact that the issuer company was going to issue fresh shares at issue price had been accepted and authorised by the company's shareholders.[20]

D. GSOs in India

The GSO facility was introduced in India by the SEBI on August 14, 2003. This facility was expected to be a major policy initiative to reassure investors, especially the RIIs. The rationale for the introduction of GSOs was stated as follows:

> Unexpected developments may have an adverse impact on price of newly listed securities. The facility of green shoe option introduced by SEBI facilitates the investment bankers to stabilize the post listing price of the security. This measure is expected to mitigate volatility and enhance investor confidence.[21]

The process of GSOs in India is described below.

The GSO process involves the appointment of a merchant bank as a stabilising agent (SA) by the issuer company; the SA enters into an agreement with promoters or other pre-issue shareholders to 'borrow' a certain number of shares from them. Pre-issue shareholders are usually the promoters or other individuals who were already holding shares in the company at the time of the IPO. The details of such an agreement have to be disclosed in the offer document. The extent of borrowed shares is restricted to 15% of the issue size.[22] The issuer company needs to pass a shareholder resolution for availing the GSO, for appointing a stabilising agent, and for carrying out the market stabilising activity in the aftermarket.

The shares borrowed from the pre-issue shareholders are allotted together with the shares being issued in the IPO; thus, the SA obtains the funds that need to be deposited in a separate bank account, known as the GSO bank account. In case the market price of the shares falls

---

[20] *International Law Office Newsletter*. Globe Business Publishing Ltd. Accessed on March 22, 2012. http://www.internationallawoffice.com/newsletters/detail.aspx?g=74ab24d1-7ff2-4bd0-9205-dd78ca2afc43
[21] SEBI Annual Report 2003–04, p. 9.
[22] Regulation 45(1)(d) of the SEBI (ICDR) Regulations, 2009.

below the issue price during the GSO window period, the SA can buy shares from the market with these funds. The GSO window period refers to 30 calendar days from the date of listing, during which time the stabilising activity can be carried out. The shares bought by the SA are kept in a separate dematerialised account, known as the GSO demat account. It is implied that the SA would sell the shares that were bought previously, if the market price rises significantly. In this regard, the SA has full discretion about the quantity, price, and timing of buying or selling. This stabilising activity is allowed for a maximum period of 30 days after listing.[23]

At the end of the stabilisation period, the SA would be left with a balance of cash, or shares, or both. If the aftermarket price did not fall below the issue price, the SA would not have engaged in any trading activity. In such cases, the SA would be left with cash proceeds from the over-allotment, which would be handed over to the issuer company. The company would then issue fresh shares to the promoters or other pre-issue shareholders from whom the SA had initially borrowed the shares.

If the aftermarket price of the shares fell below the issue price during the first 30 days after listing, the SA would buy shares from the market with the cash at its disposal. This activity would result in the SA having some shares in the GSO demat account, and/or cash. If the SA is left with the exact number of shares that it had borrowed from the promoters or other pre-issue shareholders, it would return the same to them. However, if the number of shares at the disposal of the SA is less than the number of borrowed shares, it would pay the issuer company to allot new shares to fill the shortfall. It is also possible that the SA is left with more shares than it had borrowed. The SEBI (ICDR) Regulations, 2009 (henceforward referred to as the SEBI Regulations) are silent about this possibility; it is expected that the SA would conduct its buying and selling programme in a manner that would ensure that such an eventuality did not occur. If any cash is left with the SA, this has to be transferred to the Investor Education and Protection Fund (IEPF) set up by the SEBI, after deducting reasonable expenses incurred by the SA.

A notable feature of the regulation of GSOs in India is the invocation of the doctrine of unjust enrichment; according to this, neither the issuer company nor the promoters or pre-issue

[23] Regulation 45(3) of the SEBI (ICDR) Regulations, 2009. The SEBI may permit the extension of the GSO window period, as was done in the case of Indiabulls Power Ltd., where the period was extended by one week.

shareholders can derive any profit from the stabilising activity. The profits, if any, would be used for protecting and educating investors. Another notable feature of the regulation of GSOs in India is that it is optional; it is left to the discretion of the issuer-company.

Apart from GSOs, the SEBI Regulations also contain an enabling provision for issuer companies to provide for a safety-net arrangement. The idea of a safety net is as follows: if the shares trade at a price below the issue price in the period immediately following the listing date, a specially designated entity would buy the shares from the investors. The issuer company and the merchant bank are required to ascertain the financial capacity of the designated entity, and make requisite disclosures in the offer document.[24]

The safety-net arrangement is solely intended to protect the interests of small investors. Thus, the regulations provide that such an arrangement should provide for an offer to purchase up to a maximum of 1000 shares from the "original resident retail individual allottees at the issue price within a period of six months from the last date of dispatch of security certificates or credit of demat account."[25]

This discussion shows that the working of GSOs in different countries is broadly similar, with their over-riding objective being the stabilisation of aftermarket prices. However, there are significant differences. A comparison of the characteristics of the GSOs in these four countries is presented in Table 1.

[24] Regulation 44 of the SEBI (ICDR) Regulations, 2009.
[25] Proviso to Regulation 44 of the SEBI (ICDR) Regulations, 2009.

Table 1: Comparison of GSOs in the US, the UK, Germany, and India

	US	UK	Germany	India
Regulatory Authority	Securities Exchange Commission (SEC)	United Kingdom Financial Services Authority (FSA)	German Federal Financial Supervisory Authority (FSA)	Securities Exchange Board of India (SEBI)
GSO Window Period	Around 14 calendar days from the listing day[26]	Mandatorily, 30 calendar days from the listing day[27]	Customarily, one month from the listing day	Mandatorily, 30 calendar days from the listing day[28]
Naked short position	Widely used	Rarely used[29]	Not allowed	Not allowed
Penalty bids	Allowed	Not allowed	Not allowed	Not allowed
Extent of Over-allotment	Customarily, 15–20% of the firm commitment of the underwriters	15% of the issue size	15% of the issue size	15% of the issue size
Retention of Profits	Allowed	Allowed	Allowed	Not allowed

The GSO process and the rationale for including GSOs in IPO programmes is discussed in detail in the following section.

The next section presents an empirical analysis of GSOs in IPOs made in India from 2004 to 2011.

V Empirical Analysis of GSOs in India

There has been a lot of research on IPO pricing; however, very little research has focussed on the inclusion of GSOs in IPO programmes. The underpricing of IPOs seems to have received greater attention than the phenomenon of overpricing. Aggarwal et al. (2002) Su and Fleisher

---

[26] See Agarwal (2000).
[27] Regulation 45(3) of SEBI (ICDR) Regulations, 2009.
[28] Regulation 45(3) of SEBI (ICDR) Regulations, 2009.
[29] See Jenkinson and Ljungqvist (2001).

(1997), and Hunger (2003) found that underpricing was rampant in the US during 1981–2000, reaching its peak during the dot-com bubble. Chowdhry and Nanda (1996) provided a justification for the aftermarket stabilisation of IPOs by underwriting syndicates, and showed that stabilisation dominates underpricing as a means of compensating uniformed investors of the adverse selection that they face. Lewellen (2003) studied the price effects and cross-sectional determinants of price support, and found price stabilisation to be extensive in the US, inducing significant price rigidity at and below the offer price. The pricing mechanism and the phenomenon of underpricing in Indian IPOs were analysed by Madhusoodanan and Thiripalraju (1997) and Jegadeesh et al. (1993).

In this section we discuss the methodology used in this study to analyse the data, evaluate the performance of GSOs, and present the findings of our analysis. First, we discuss the data and methodology.

Data and methodology

The current study focuses on the IPOs made in India from the time the first IPO was made on March 26, 2004 after the GSO mechanism was introduced by SEBI, up to and including the IPOs made until December 2011. This period saw 304 IPOs being made. The data relating to these IPOs was gathered from the commercial database Prime Database, the prospectus issued by the respective companies, and the SEBI bulletins and press releases. The information relating to whether or not the issuer company had opted for the GSO was gathered from the offer documents filed by the companies with the SEBI. The price data was obtained from the Website of the National Stock Exchange of India Limited (NSE).[30]Additionally, interviews were conducted with some prominent merchant banks to supplement the numerical data.

Of the 365 companies that made an IPO from August 2003 (when GSOs were introduced in India) to December 31, 2011, only 18 companies availed of the GSO facility in their IPO programmes. This data is summarised in Table 2.

[30] http://www.nseindia.com/products/content/equities/equities/eq_security.htm

Table 2: Number of Companies that Opted for GSOs in their IPOs in India from August 14, 2003 to December 31, 2011

Year	Number of IPOs	Number of Companies Opting for GSOs	Percentage of Companies Opting for GSOs
2003	3	0	0%
2004	21	2	9.52%
2005	43	3	6.98%
2006	60	6	10%
2007	86	5	5.81%
2008	30	0	0%
2009	17	1	5.88%
2010	66	1	1.51%
2011	39	0	0%
Total	**365**	**18**	**4.93%**

The evaluation of the aftermarket performance of companies that included GSOs is presented in the next section.

Evaluation of performance of GSOs

The aftermarket performance of the companies that included GSOs in their IPO programmes was evaluated on the basis of the following parameters: (a) listing day return (LDR); (b) mean daily return (MDR) during the GSO window period; (c) market-adjusted average daily return during the GSO window period; and (d) number of days when the closing price of the company's share was below the issue price in the GSO window period.

The listing day return (LDR) measures the return earned or the loss suffered by the stock on its first day of trading. This measure is significant because most investors and the media give a lot of importance to it, as this often signals the path the stock will take in the next few weeks. The LDR is calculated as the arithmetic rate of change of the closing price of the share on the day of listing to the issue price, as given below:

$$LDR = (P_{cld} / I_p) - 1 \qquad (1)$$

where P_{cld} is the price at the close of the listing day; and I_p is the price at which shares were issued.

Although the LDR is over-emphasised by the media and commentators, it is unfair to evaluate the performance of a stock based on the return of one day. Therefore, we calculated the mean daily return (MDR) of the stock over a period of 30 calendar days from the listing date. This period is also known as the GSO window period. The MDR is the arithmetic mean of one-day log returns, as given below:

$$\text{MDR} = \frac{1}{n}\sum (\ln (P_t/P_{t-1})) \qquad (2)$$

where P_t is the closing price of the company's share on each of the trading days during the GSO window period; P_{t-1} is the previous day's closing price; and n is the number of trading days during the GSO window period.[31]

The price of a stock changes due to factors specific to the company, as well as due to the changes in the market as a whole. Therefore, we refined the mean daily return (MDR) by adjusting for the changes in the market. The S&P CNX Nifty was taken as a proxy for the market. The adjustment was made by calculating the market-adjusted mean daily return (MAMDR). The MAMDR was calculated, following Miller and Reilly (1987), as the mean of the differential of the daily log returns of the issuer company and the S&P CNX Nifty during the GSO window period, as given below:

$$\text{MAMDR} = \frac{1}{n}\sum\left(\left(\frac{(1+Rit)}{(1+Rmt)}\right) - 1\right) \qquad (3)$$

where R_{it} is the daily log return of company i at time t; R_{mt} is the daily log return of the S&P CNX Nifty at time t; and n is the number of trading days in the GSO window period.

Our analysis of the data related to the companies that included GSOs in their IPO programmes is presented in the following section.

Analysis

From August 24, 2003 (the day GSOs were introduced in India) to December 31, 2011, 365 companies made IPOs in India. Of these companies, only 18 companies (4.93%) had included GSOs in their IPO programme (see Table 1). If we consider a more recent time period, we see that only two out of 122 companies (1.64%) included GSOs in their IPO programmes

[31] The mean daily return is calculated using the natural logarithm of the quotient of the current price and previous price because it is assumed that the share price returns are continuously compounded. The arithmetic measure, i.e., $(P_t - P_{t-1})$ -1, overstates the upward movement in the price of a stock as compared to the downward movement, thus creating a bias in the analysis.

from January 1, 2009 to December 31, 2011. A list of companies that included GSOs in their IPO programmes is given in Table 3.

Table 3: List of Companies that Opted for GSOs in their IPOs in India from August 14, 2003 to December 31, 2011

No.	Issuer Company	Opening Date	Listing Date
1	Tata Consultancy Services Ltd.	29 Jul 2004	25 Aug 2004
2	Deccan Chronicle Holdings Ltd.	25 Nov 2004	22 Dec 2004
3	3I Infotech Ltd.	30 Mar 2005	22 Apr 2005
4	HT Media Ltd.	4 Aug 2005	1 Sep 2005
5	Shree Renuka Sugars Ltd.	7 Oct 2005	1 Sep 2005
6	Entertainment Network (India) Ltd.	23 Jan 2006	15 Feb 2006
7	Jagran Prakashan Ltd.	25 Jan 2006	22 Feb 2006
8	B. L. Kashyap & Sons Ltd.	20 Feb 2006	17 Mar 2006
9	Prime Focus Ltd.	25 May 2006	20 Jun 2006
10	Parsvnath Developers Ltd.	6 Nov 2006	30 Nov 2006
11	Cairn India Ltd.	11 Dec 2006	9 Jan 2007
12	House of Pearl Fashions Ltd.	16 Jan 2007	19 Feb 2007
13	Idea Cellular Ltd.	12 Feb 2007	9 Mar 2007
14	Housing Development & Infrastructure Ltd.	28 Jun 2007	24 Jul 2007
15	Omaxe Ltd.	17 Jul 2007	9 Aug 2007
16	Brigade Enterprises Ltd.	10 Dec 2007	31 Dec 2007
17	Indiabulls Power Ltd.	12 Oct 2009	30 Oct 2009
18	Electrosteel Steels Ltd.	21 Sep 2010	8 Oct 2010

Table 4 shows the GSO window period (i.e., 30 days from the listing date) performance of the companies that included GSOs in their IPO programmes. Of the 18 companies that did included GSOs, the aftermarket closing price of six companies never went below the issue price during the GSO window period. As such, the SAs of these companies did not buy any shares from the market. At the close of the GSO window period, the SAs handed over the amount received by them on over-allotment of shares to the issuer company; the issuer company then made a further issue of shares at the cut-off price to the pre-issue shareholders who had lent their shares to the SA; finally, the SA closed the GSO bank account and the GSO, without any profit or loss.[32]

[32] The information about the SAs' activity during the GSO window period was obtained from the daily compliance reports submitted by them to the NSE. This communication is uploaded on the NSE Website. http://www.nseindia.com

Table 4: Performance of Companies that Opted for GSOs in Indiafrom August 14, 2003 to December 31, 2011

No.	Issuer-Company	Listing Date	Issue Price	Days when Closing Price Was below Issue Price during GSO Window Period	Trading Days During GSO Window Period	Percentage of Days when Closing Price was below Issue Price during GSO Window Period (%)
1	Tata Consultancy Services Ltd.	25 Aug 04	850	0	23	0
2	Deccan Chronicle Holdings Ltd.	22 Dec 04	162	17	22	77.27
3	3I Infotech Ltd.	22 Apr 05	100	20	21	95.24
4	HT Media Ltd.	1 Sep 05	530	19	21	90.48
5	Shree Renuka Sugars Ltd.	1 Sep 05	285	0	21	0
6	Entertainment Network (India) Ltd.	15 Feb 06	162	0	20	0
7	Jagran Prakashan Ltd.	22 Feb 06	320	19	19	100.00
8	B. L. Kashyap & Sons Ltd.	17 Mar 06	685	0	18	0
9	Prime Focus Ltd.	20 Jun 06	417	23	23	100.00
10	Parsvnath Developers Ltd.	29 Dec 06	300	0	21	0
11	Cairn India Ltd.	9 Jan 07	160	21	21	100.00
12	House of Pearl Fashions Ltd.	19 Feb 07	550	20	20	100.00
13	Idea Cellular Ltd.	9 Mar 07	75	0	19	0
14	Housing Development & Infrastructure Ltd.	24 Jul 07	500	4	22	18.18
15	Omaxe Ltd.	9 Aug 07	310	4	21	19.05
16	Brigade Enterprises Ltd.	31 Dec 07	390	21	23	91.30
17	Indiabulls Power Ltd.	30 Oct 09	45	20	20	100.00
18	Electrosteel Steels Ltd.	8 Oct 10	11	18	21	85.71

Table 5 presents the listing day returns (LDRs), the mean daily returns (MDRs), and the market-adjusted mean daily returns (MAMDRs) of the companies that included GSOs in their IPO programmes in India. Seven of these companies posted a negative return on the listing day. The MDRs of ten of the 18 companies were negative; even after the MDRs were adjusted for market returns, ten of the 18 companies' MAMDRs were negative. This indicates that the average return of these companies' share price were not only below the issue price, but also below the issue price after adjusting their returns for the changes in the market portfolio, i.e., S&P CNX Nifty.

Table 5: Performance of Companies that Opted for GSOs in India from August 14, 2003 to December 31, 2011

No	Issuer Company	Listing	LDR	MDR	MAMD
1	Tata Consultancy Services Ltd. (TCS)	25 Aug 04	16.23%	0.83%	0.48%
2	Deccan Chronicle Holdings Ltd.	22 Dec 04	4.44%	-	-0.62%
3	3I Infotech Ltd.	22 Apr 05	-1.90%	0.04%	-0.06%
4	HT Media Ltd.	1 Sep 05	5.06%	-	-1.46%
5	Shree Renuka Sugars Ltd.	1 Sep 05	95.37%	1.91%	1.47%
6	Entertainment Network (India) Ltd.	15 Feb 06	63.40%	1.59%	1.30%
7	Jagran Prakashan Ltd.	22 Feb 06	-	-	-1.31%
8	B. L. Kashyap & Sons Ltd.	17 Mar 06	42.09%	3.00%	2.81%
9	Prime Focus Ltd.	20 Jun 06	-	-	-0.48%
10	Parsvnath Developers Ltd.	30 Nov 06	75.47%	2.03%	1.94%
11	Cairn India Ltd.	9 Jan 07	-	-	-0.87%
12	House of Pearl Fashions Ltd.	19 Feb 07	-	-	-0.96%
13	Idea Cellular Ltd.	9 Mar 07	14.27%	1.24%	1.26%
14	Housing Development & Infrastructure Ltd. (HDIL)	24 Jul 07	11.87%	- 0.12%	0.38%
15	Omaxe Ltd.	9 Aug 07	12.69%	0.35%	0.29%
16	Brigade Enterprises Ltd.	31 Dec 07	-2.59%	-	-0.56%
17	Indiabulls Power Ltd.	30 Oct 09	-	-	-1.53%
18	Electrosteel Steels Ltd.	8 Oct 10	2.27%	-	-0.18%
	Number of Negatives		**7**	**10**	**10**

A summary of the aftermarket activities of the SAs of the companies that had included GSOs in their IPO programmes in India is presented in Table 6.

Table 6: Stabilising Activity of SAs in the Aftermarket of Companies that Opted for GSOs in India from August 14, 2003 to December 31, 2011

Issuer Company	Listing Date	Shares Borrowed under GSO	Shares Purchased by SA	% of Shares Purchase to Shares Borrowed	Days when Closing Price was Below Issue Price	Number of Trading days during GSO Window	% of Days when Closing Price was Below Issue Price
TCS	25 Aug 04	8317880	0	0%	0	23	0
Deccan	22 Dec 04	1201960	0	0%	17	22	77.27
3I Infotech	22 Apr 05	3000000	0	0%	20	21	95.24
HT Media	1 Sep 05	696000	244059	35.07%	19	21	90.48
Shree	1 Sep 05	350880	0	0%	0	21	0
Entertainment	15 Feb 06	1200000	0	0%	0	20	0
Jagran	22 Feb 06	1505853	0	0%	19	19	100
BL Kashyap	17 Mar 06	250000	0	0%	0	18	0
Prime Focus	20 Jun 06	359711	0	0%	23	23	100
Parsvnath	29 Dec 06	3087800	0	0%	0	21	0
Cairn India	9 Jan 07	33000000	19914959	60.35%	21	21	100
House of Pearl	19 Feb 07	612060	108064	17.66%	20	20	100
Idea	9 Mar 07	42500000	0	0%	0	19	0
HDIL	24 Jul 07	4455000	129000	2.90%	4	22	18.18
Omaxe	9 Aug 07	1750000	933000	53.31%	4	21	19.05
Brigade	31 Dec 07	2493708	2493708	100%	21	23	91.3
Indiabulls	30 Oct 09	50900000	29847654	58.64%	20	20	100
Electrosteel	8 Oct 10	33627428	33627428	100%	18	21	85.71

As was discussed earlier, the aftermarket price of six of these companies never fell below the issue price during the GSO window period, and therefore, the SAs of these companies were inactive during the GSO window period. Surprisingly, the SAs of four companies remained inactive even though the aftermarket shares of their respective companies fell below the issue price during the GSO window period. This highlights the fact that the SEBI Regulations do not compel the SAs to intervene in the aftermarket even when the market price falls below the issue price. The SAs are granted complete discretion in deciding when and to what extent to intervene in the aftermarket. The market price of the remaining eight companies fell below the issue price, and their SAs did intervene in the aftermarket. However, only two of these companies purchased the full extent of the shares that had been over-allotted.

The success or failure of the SAs' intervention can be judged by looking at the LDRs, MDRs, and MAMDRs of the companies whose market price fell below their issue price. Five of the

12 companies (41.66%) actually posted a listed day gain before the market price fell below the issue price. Only two of the 12 companies (16.67%) showed positive MDRs and MAMDRs during the GSO window period.

However, the number of companies that included GSOs in their IPO programmes in India was so small in comparison to the IPOs during the period that was studied (4.93%) that it was not possible to make any meaningful generalizations. Therefore, a comparative study of the companies that included GSOs and the companies that did not along the lines of that conducted by Franzke and Schlag (2003) was not attempted in this study.

In the next section, an analysis of the performance of the companies that did not include GSOs in their IPO programmes in India is presented.

VI Performance of companies that did not include GSOs

In this section, we study the aftermarket performance of the companies that made IPOs in India from 2009 to 2011 without availing of the GSO mechanism. One possible reason for companies not including GSOs is that they were confident their shares would trade in the immediate aftermarket at or above the issue price. The purpose of this analysis is to evaluate the aftermarket performance of these companies during the GSO window period, in terms of listing day returns (LDRs), mean daily returns (MDR) during the GSO window period, and market-adjusted mean daily returns (MAMDR) during the GSO window period. The analysis will show whether the confidence of these companies was justified or not.

As was discussed earlier, only two of 122 companies included GSOs in their IPO programmes from 2009 to 2011. The aftermarket performance of the 120 companies that did not include GSOs is listed in Table 7.

Table 7: Performance of Companies that did not include the GSO Mechanism in India from January 1, 2009 to December 31, 2011

Year		Negative LDR	Negative MDR	Negative MAMDR	Number of IPOs
2009	Absolute	6	7	9	16
	Percentage	37.50%	43.75%	56.25%	
2010	Absolute	22	33	33	65
	Percentage	33.85%	50.77%	50.77%	
2011	Absolute	20	23	24	39
	Percentage	51.28%	58.97%	61.54%	
Total	Absolute	48	63	66	120
	Percentage	40.00%	52.50%	55%	

During the period of study, 48 of the 120 companies (40%) posted a negative LDR. The year-wise break up was 6 (37.50%), 22 (33.85%), and 20 (51.28%) for the years 2009, 2010, and 2011, respectively.

In terms of mean daily returns, 63 of the 120 companies (52.50%) posted a negative MDR during the GSO window period. The year-wise break up was 7 (43.75%), 33 (50.77%), and 23 (58.97%) for 2009, 2010, and 2011, respectively.

The performance was no different when analysed in terms of market-adjusted mean daily returns (MAMDR). A total of 66 of the 120 companies (55%) posted a negative MAMDR during the GSO window period. The year-wise break up was 9 (56.25%), 33 (50.77%), and 24 (61.54%) for the years 2009, 2010, and 2011, respectively.

When we looked at the aftermarket performance of the IPOs during the GSO window period, we found that the performance improved marginally as the issue size grew. For the purpose of this analysis, we divided the companies into three groups: (a) Small issues: issue size less than or equal to INR 100 crore; (b) Moderate issues: issue size between INR 100 and 500 crore; and (c) Large issues: issue size greater than INR 500 crore. Table 8 displays the results of this analysis.

Table 8: Aftermarket Performance of IPOs in 2009–2011 according to Issue Size

Issue Size (INR Crore)	Negative LDR	Negative MDR	Negative MAMDR	Total IPOs
0–100	20	31	32	51
	39.22%	60.78%	62.75%	
100–500	19	22	23	48
	39.58%	45.83%	47.92%	
> 500	9	10	11	21
	42.86%	47.62%	52.38%	
Total	48	63	66	120
	40%	52.50%	55%	

It can be observed that 20 of the 51 small issues companies (39.22%) had a negative LDR. The figure was 19 of 48 companies (39.58%) for moderate issues, and 9 out of 21 (42.86%) for large issues.

In terms of mean daily returns during the GSO window period, 31 of the 51 small issues companies (60.78%) earned a negative MDR. The figure was 22 out of 48 companies (45.84%) for moderate size issues; for large issues, the figure was 10 out of 21 companies (47.62%).

When evaluated according to the MAMDRs during the GSO window period, 32 of the 51 small issues companies (62.75%) earned a negative MAMDR. The number was 23 out of 48 (47.92%) for the moderate issues companies; for large issues companies, the figure was 11 out of 21 companies (52.38%).

From the above analysis, it becomes clear that the investors, especially the RIIs, would have benefited greatly if the companies had included GSOs in their IPO programmes. Having discussed the need to include GSOs in IPO programmes, we explore the reasons for the indifference of companies and merchant banks towards GSOs in the following section.

The data clearly makes a case for issuer companies and merchant banks to opt for GSOs. Why then are they indifferent to the expectations of investors? Moreover, why are they not availing the price stabilising mechanism facilitated by the SEBI? To get answers to these questions we interviewed the senior managers of some prominent merchant banks.

Reasons for indifference towards GSOs

The data reveals that there is a case for issuer companies and merchant banks to avail the facility of GSOs to reassure investors, especially RIIs, and to discourage them from exiting the capital markets. What then is the reason for this indifference to GSOs on the part of issuer companies and merchant banks? From our interaction with market participants and merchant banks, various reasons emerged, such as the uncertainty about the effects of GSOs, the interference with market forces, the unfair advantage to merchant banks, the merchant banks' unwillingness to bear additional responsibility, the lack of incentives, the absence of market discipline, and so on. These reasons are discussed in some detail in the rest of this section.

A. Uncertainty about impact of GSOs

Our interviews with merchant bankers revealed that many issuer companies and quite a few merchant banks were unsure of the effects of GSOs. There was a feeling that the GSOs facility was highly constrained by the limit of 15% over-allotment and the 30-day stabilisation period. The general opinion was that there was no guarantee that the stabilisation programme would in fact be successful. In this scenario, these issuer companies and merchant banks felt that the panic and fear of the retail individual investors (RIIs) would only increase.

B. Interference with free play of market forces

Some investors felt that the practice of GSOs was questionable as it artificially propped up share prices, thereby interfering with the free play of market forces. It was suggested that starting from the pre-SEBI days, RIIs were led to believe that investing in an IPO would guarantee them positive initial returns. The GSO would merely reinforce these attitudes. Further, any aftermarket price stabilisation would deprive "value investors" from purchasing shares from naïve investors when the price falls in the immediate aftermarket.

C. Unfair advantage for merchant banks

Merchant banks that are designated as stabilising agents get high fees for availing of the GSOs. Such high fees for merchant banks were felt to be unjust as they face limited risk in implementing GSOs (Espinasse, 2010).

D. Unwillingness of merchant banks to accept additional responsibility

The issuer companies and merchant banks that we interacted with felt that the legal and regulatory compliances were cumbersome, and that the consequent risks had increased manifold. In this scenario, they were not prepared to take any additional responsibility for a facility that was optional to begin with.

E. Lack of incentives

According to the GSO regulations, merchant bankers are not allowed to earn a profit from the aftermarket price stabilising activity. This was one of the major concerns highlighted by merchant bankers in a survey conducted by *The Economic Times*; a typical response was "Unlike in the US, SEBI does not permit merchant bankers to make money in trading. They will have to buy the stock if the price falls below the offer price, but they are not allowed to sell even if the stock value goes up. We are required to stabilise the price around the offer price for which we get a fixed fee" (Anand, 2002).[33]

Any profits arising from the price stabilisation activity need to be transferred to the Investor Protection and Education Fund (IPEF) established by the SEBI.[34] In this scenario, issuer companies, promoters and pre-listing shareholders, and merchant banks did not see any incentive to opt for GSOs.

F. Absence of market discipline

In a mature market, if the aftermarket price of the shares falls significantly, the investors would hold the merchant banks responsible for the same. In such an event, the credibility of the merchant banks would take a hit. This would adversely affect their chances of getting further business because investors would keep away from the issues managed by them.

However, investors in India, especially the RIIs, appear to be indifferent to ascribing responsibility. In the face of this lack of market discipline, merchant banks in India have no reason to shirk the additional responsibilities associated with GSOs and talk about the lack of incentives.

---

[33] Comment attributed to Mr. Jatin Sanghvi, Senior Vice-President, JM Morgan Stanley.
[34] Regulation 45(9) of the SEBI (ICDR) Regulations, 2009.

VII Suggestions

The GSOs provision was introduced by the SEBI in 2003 as a mechanism for reassuring RIIs that the aftermarket price of the shares they were allotted in an IPO would be maintained at least in the first month of listing. However, we found that most issuer companies and merchant banks were indifferent to GSOs, and such options were rarely availed. Various reasons for this indifference emerged, such as the uncertainty about the effects of GSOs, the unwillingness to bear additional responsibility, the lack of incentives, the absence of market discipline, and so on.

Based on our findings, we propose the following suggestions: make GSOs mandatory; control flipping by qualified institutional buyers (QIBs); disclose the track record of merchant banks; and tighten IPO norms, especially for small IPOs.

A. Make green shoe options mandatory

On the face of it, the suggestion to make GSOs mandatory may sound preposterous to many people. Currently, GSOs are not mandatory in any country. However, given the SEBI's objective of increasing the participation of RIIs, and the peculiar nature of the capital markets in India, we feel that the suggestion to make GSOs mandatory is reasonable.

B. Control QIB flips

When an issuer company is unable to satisfy the eligibility criteria related to past track records, they are allowed to make an IPO if they are able to get qualified institutional buyers (QIBs) to make a significant investment. The implicit assumption is that the QIBs are sophisticated investors who would take a long-term investment view of the investment.

C. Disclose track record of merchant banks

Merchant banks seemed to be indifferent to the aftermarket price movement. They claimed this indifference was justified because the compliance work of IPOs was already voluminous, and they were not in any position to assume additional responsibilities and risks. Merchant banks in India are able to get away with this attitude because the investors do not show any interest in disciplining them, for instance, by boycotting the issues managed by them. In order to facilitate such market discipline, the regulator may need to mandate an additional disclosures requirement regarding the aftermarket returns for each merchant bank.

D. Tighten norms for small IPOs

The performance of small IPOs (with an issue size less than INR 100 crore) has been dismal. There is a definite need to re-examine the IPO norms for such small issues. The implicit assumptions and expectations from QIBs and project appraisal agencies in such small issues also need to be re-examined. Further, this issue needs to be studied in detail by independent researchers.

VIII Conclusion

Based on the analysis of the aftermarket price performance of the companies that availed of the GSO facility in their IPO programmes, it could be concluded that GSOs were not effective in stabilising the prices in the period immediately following the listing date. However, broad generalizations cannot be made due to the small size of the companies, both in absolute terms and as a proportion of the companies making IPOs. Of the companies that did not include the GSO facility in their IPO programmes, a disproportionately large number of companies performed poorly. This led us to propose that GSOs be made mandatory; some penalties would need to be imposed on QIBs who sell in the immediate aftermarket; merchant bankers would need to disclose their track record; and the IPO norms would have to be tightened, especially for small issues.

References

Aggarwal, R. (2003). "Allocation of Initial Public Offerings and Flipping Activity." *Journal of Financial Economics*, 68(1), pp. 111–135.

Aggarwal, R. K. (2000). "Stabilisation Activities by Underwriters after Initial Public Offerings." *Journal of Finance*, LV(3), June 2000.

Aggarwal R. K., Krigman and Womack. (2002). "Strategic IPO Under Pricing Information Momentum and Lockup Expiration Selling." *Journal of Financial Economics*, 66, pp. 105–137.

Anand, M. S. (2002). "Green Shoe Spells Dough for Merchant Bankers." *The Economic Times*, April 2, 2004.

Beatty, R. and Ritter, J. R. (1986). "Investment Banking, Reputation and the Pricing of Initial Public Offerings." *Journal of Financial Economics*, 15, pp. 213–232.

CESR. (2002). "Stabilisation and Allotment: A European Supervisory Approach." Committee of European Securities Regulators, Reference CESR/02-020B, April 2002.

Chowdhry, B. and Nanda, V. (1996). "Stabilisation, Syndication, and Pricing of IPOs." *Journal of Financial and Quantitative Analysis*, 31(1), March.

Espinasse, P. (2010). "An Unwelcome Spotlight on the Greenshoe." *Wall Street Journal*, December 17, 2010.

Franzke, S. A. and Schlag, C. (2003). "Over-Allotment Options in IPOs on Germany's Neuer Markt: An Empirical Investigation." Paper presented at the Finance Brown Bag Seminar at Goethe University, Germany.

Hunger, A. (2003). "Market Segmentation and IPO-Under Pricing: The German Experience." *Working Paper*, February, Ludwig-Maximilians-Universität München, Institut für Kapitalmarktforschung und Finanzierung.

Jegadeesh, N., Weinstein, M. and Welch, I. (1993). "An Empirical Investigation of IPO Returns and Subsequent Equity Offerings." *Journal of Financial Economics*, 34, pp. 153–175.

Jenkinson, T. J. and Ljungqvist, A. (2001). *Going Public: The Theory and Evidence on How Companies Raise Equity Finance*. *Second Revised Edition*. Oxford University Press.

Lewellen, K. (2003). “Risk, Reputation, and the Price Support of IPOs.” *Working Paper 4453-03*, December, MIT Sloan School of Management.

Madhusoodanan, T. P. and Thiripalraju M. (1997). “Under Pricing in Initial Public Offerings: The Indian evidence”, *Vikalpa*, 22, pp. 17–30.

Miller, R. E. and Reilly, F. K. (1987). “An Examination of Mispricing, Returns, and Uncertainty New Evidence from the Canadian Market.” *Financial Management*, 16(10), pp. 33–38.

Oehler, A., Rummer, M. and Smith, P. N. (2006). “Does Stabilisation by Means of Initial Short Covering Help IPOs to Perform Well During the First Days of Trading?” *Working Paper*, University of York.

Prabhala, N. L., and Puri, M. (1998). “How Does Underwriter Price Support Affect IPOs?” *Working Paper*, Yale University.

Ritter, J. R. (1998). “Initial Public Offerings.” *Contemporary Finance Digest*, 2, pp. 5–30.

Rukhaiyar, A. (2006). “IPO Pricing is the Factor of Numbers and Perception.” *Financial Express*, April 3, 2006.

Su, D. and Fleisher, B. M. (1997). “An Empirical Investigation of Under Pricing in Chinese IPOs.” *Working Paper*, January, Department of Economics, Ohio State University.