

Signal irrelevance of corporate governance practices during Initial Public Offerings in India

Rekha Handa

DAV University, Jalandhar, India

Balwinder Singh

Guru Nanak Dev University, Amritsar, India

Sharad Sharma

RMIT University, Melbourne, Australia

Email: Sharad.sharma@rmit.edu.au

Abstract

A sample of initial public offerings (IPOs) of firms listed on the Bombay Stock Exchange between April 2003 and March 2014 has been used to investigate the relevance of corporate governance in the post-IPO capital market performance. Signal theory has been used to understand the phenomenon of post-IPO capital market performance vis-à-vis signal cast by corporate governance attributes. The study finds investors' indifference to governance mechanism put in place by IPO-firms in compliance with the listing requirements. The outcomes of the study provide essential feedback for IPO-firms and the Security Exchange Board of India, the Indian capital market regulator.

Keywords: *Initial Public Offering, Underpricing, corporate governance, Initial Returns*

Introduction

Corporate governance norms for listed businesses in India were introduced in the financial year 2000-2001 by the Indian capital market regulator, Security Exchange Board of India (SEBI). This was done by introducing Clause 49 to the listing requirements of the stock exchanges for publically traded corporations in India. Such reforms in any jurisdiction, although often only for appearances sake, are aligned with global corporate governance (CG) initiatives designed to overcome distrust and resentment of corporations that has been present since the days the corporate form came into existence (Denis, 2016; Brown and Caylor, 2009; Micklethwait and Wooldridge, 2005; Black and Khanna, 2007; Ravi, 2014). It becomes pertinent to understand if the investor, a perceived beneficiary for whose benefits such reforms are pursued, value such initiatives implemented in their jurisdictions.

India is an emerging economy with a less developed capital market (Dharmapala and Khanna, 2013; Ravi, 2014; Marszk, 2012; Kumar and Vashisht, 2009). The capital market institutional framework in India is in an evolving phase, similar to that of other emerging economies. The capital market institutional framework in emerging economies is less developed compared to developed economies like the United States and the United Kingdom (Mutyalala and Dasaraju, 2011; Ekkayokkaya and Pengniti, 2012). CG reforms in emerging economies with comparatively less developed capital market institutional frameworks follow the prevailing CG practices of the developed capital markets such as the United Kingdom and United States (Ekkayokkaya and Pengniti, 2012). For India, the formalisation of CG practices and the decision to converge with widely practised IFRS norms reflect the need for cross-border listings and responding to global institutional investor activism (Khanna and Palepu, 2004).

Whether CG reforms influence investors' assessments of the performance of firms is a matter of interest for both academicians as well the stakeholders of the initial public offering (IPO) process. Empirical investigations to understand CG consequences have been conducted in the context of developed capital markets, but less attention has been paid to the context of emerging markets with less developed institutions (Price et al., 2011; Ekkayokkaya and Pengniti, 2012; Leuz and Wysocki, 2008). A study of the relationship between CG attributes and IPO initial performance, particularly in the context of emerging economies will provide essential insights to participants in the IPO process in such economics and policymakers.

This study examines the relationship between CG practices of IPO-firms and the initial returns reflected in underpricing. IR is the amount by which that first-day closing price of an IPO firm's stock exceeds the IPO offer price (Deb and Marisetty, 2010). The study uses signalling theory to understand the impact of introducing CG practices on post-IPO capital market performance of firms. Extant capital market studies have also used signalling theory to explain the relevance of information available during the IPO process to various participants in estimating the post-IPO performance (Jain and Kini, 1994; Arik and Mutlu, 2015; Coakley et al., 2007; Jensen and Meckling, 1976; Pereira, 2012; Rock, 1986; Spence, 1973; Tsang and Blevins, 2015). The use of signalling theory in the context of capital market research is premised on the information asymmetry that exists between the initial investors or promoters of the firm, who are more informed on account of their past transactional relationships with the IPO firm, and IPO investors (Balatbat et al., 2004; Jain and Kini, 1994; Mikkelson et al., 1997; Lowry and Schwert, 2004; Daily and Dalton, 2001; Connelly et al., 2011). In these studies, signalling theory explains the relevance of various types of information available to the investors during the IPO process in the estimation of the expected post-IPO performance.

The GC requirements stipulated by Clause 49 of the listing requirements of the Indian stock exchanges include, but are not limited to, optimal board size, board subcommittees, independence of directors, having female directors, the age of the directors and Board reputation. Our study focuses on the Indian IPOs listed on the Bombay Stock Exchange (BSE) between April 1, 2003, and March 31, 2012, exploring the relationship between the adoption of CG parameters of Clause 49 and underpricing (i.e., the existence of positive or negative IR). The study does not find significant differences between underpriced and overpriced firms that can be attributed to governance mechanisms. This implies that these governance mechanisms do not bring about significant changes in IR, implying irrelevance of the extent to which CG mechanisms are adopted as a signal for post-IPO capital market performance. Our findings confirm that the adoption of CG mechanisms at the time of an IPO is of no relevance for negotiating the issue price with underwriters.

The remainder of the study is organised as follows: Next section describes CG reforms globally as well as in India. A discussion of signalling theory and explanation of the research question follows. Thereafter the research design described. Penultimate section provides the findings and discusses the findings. The paper is then concluded.

Background

Studies that examine the relationship between various variables that exist at the time of the IPO and the capital market performance aim to provide information mainly to the investor community in addition to other participants of the IPO process such as pre-IPO owners, bankers, underwriters, fund managers, regulators and policymakers. These studies are undertaken in the belief that a more transparent process and informed participants will increase the confidence of the participants in the IPO process (Arik and Mutlu, 2015; Foo, 2013). IPO apart from providing an opportunity for private businesses to tap into a wider pool of public funds for its future growth provides investors with an option to invest their hard earned money and in the process facilitates essential capital creation for the economy. Unfortunately, global IPO activity has experienced negative growth in both numbers and value during the post-Global Financial Crisis phase due to a decline in investors' confidence in the IPO market as an avenue of investment (Brown and Caylor, 2009; Doidge et al., 2013; Mahmood et al., 2011). Poor CG has been observed to be one of the main reasons for the Global Financial Crisis that brought losses to retail investors and negatively affected their confidence in the capital market (Turnbull, 2012; Foo, 2013; Mahmood et al., 2011). During the last two decades, the damaging effect of corporate failures on household savings and economies has focused the attention of regulators and the policymakers on much-needed reforms in CG (Conyon et al., 2011). Often these reforms are initiated to bring back the confidence of the participants in the capital market process, by enabling easy and effective monitoring of the performance of companies through effective and efficient CG practices (Brown and Caylor, 2009).

Lack of investors' confidence in the capital market negatively affects their participation in IPOs, firms' capability of raising funds and cost of funding (Mahmood et al., 2011; Foo, 2013; Ritter, 1987; Ang and Brau, 2002; Li et al., 2018). Brown and Caylor (2006) observed a direct relationship between effective CG practices and investors' confidence. Dharmapala and Khanna (2013) in their study in the context of India, identified the lack of CG practices as the reason for low capital creation through the capital market. In India, SEBI responded to the demand for CG mechanisms by introducing various capital market reforms; "Clause 49" of the listing agreement of the Indian stock exchange is one such initiative.

Implementation of Clause 49 of the listing agreement and the subsequent amendments are aimed at avoiding CG failures and safeguarding shareholders interest, bringing back the confidence of the investors in the capital market.

Investigation of CG mechanisms as a signal of corporate performance to the capital market at the time of an IPO, thus becomes important as IPOs provide a unique setting for evaluating the effects of CG mechanisms as effective monitoring is all the more critical for firms going public in the face of aggravated agency conflicts (Brennan and Franks, 1997). A number of studies have recently attempted to investigate the relationship between attributes of corporate boards and IR using data from the United States (e.g., Certo et al., 2001; Howton et al.; 2001). These investigations of the relationship between CG and underpricing have been largely limited to developed economies.

Formal CG structures were only introduced in the last decade, and there is limited empirical evidence of their effectiveness. Black and Khanna (2007) observed an immediate positive effect of CG reforms in India on the market valuation of the firms if such reforms were observed to be practised, conveying information on the relevance of such reforms to investors. Dharmapala and Khanna (2013) explored the long-term effects of such reforms in India.

Extant research is aimed at explaining the relevance of various information types that is the available to prospective investors in terms of their impact on post-IPO performance. Studies have examined the relationship between variables such as market timing, ownership structure, intermediaries, age of the IPO firm, and IR, using underpricing as the proxy for such performance (Bruton et al., 2009; Young and Zaima, 1989; Derrien, 2005; Deb and Marisetty, 2010). Underpricing represents the difference between investment bankers' initial valuation of the firm and stock market's valuation of the firm at the end of the first day of public trading. Underpricing is also discussed as the wealth transfer from the founders and pre-IPO shareholders to new external investors during the IPO process, often phrased as "Initial shareholders leaving money on the table in IPOs" (Filatotchev and Bishop, 2002; Lin and Chuang, 2011; Loughran and Ritter, 2003). The phenomenon of underpricing is explained by way of efficient market hypothesis (i.e., stock price represents all the information available in the market) which contends that the price on the first-day listing of shares of the firm reflects the true value of the firm (Tsang and Blevins, 2015; Carter and Manaster, 1990). Thus underpricing, if any, represents 'information asymmetry' in the IPO process and is the outcome of the difference between the offer price and the IPO's first-day closing price, cited at two different points in time (Tsang and Blevins, 2015; Carter and Manaster, 1990; Cohen and Dean, 2005).

Theory and Research Question

The study uses signalling theory to explain the relationship between CG provisions and post-IPO capital market performance. The assumed existence of information asymmetry during the IPO process is due to different levels of information between two groups of participants: initial investors or promoters of the firm who are more informed on account of their past transactional relationship with the IPO firm and IPO investors (Lowry and Schwert, 2004; Daily and Dalton, 2001; Connelly et al., 2011). The existence of information asymmetry during the IPO process also puts on a par the good quality firm with the low-quality firm. To overcome this situation of undervaluation, good quality firms use various signals to highlight their unobservable good qualities. This is needed in the light of prevailing uncertainty in the minds of investors. Signalling theory has been used in the area of post-IPO research primarily on

two premises. First, for signals to be effective, they must be observable and acknowledged by the participants in the IPO process. Second, there should exist two groups representing two different level of information in relation to a particular variable in the context of an IPO firm (Spence, 1973; Rock, 1986; Tsang and Blevins, 2015; Daily and Dalton, 2001; Jensen and Meckling, 1976; Pereira, 2012; Jain and Kini, 1994). Signalling theory is premised on the notion that signals to the market help reduce the information asymmetry that is prevalent among the informed and uninformed investors in the primary market (Balatbat et al., 2004; Jain and Kini, 1994; Mikkelson et al., 1997). CG attributes as a signalling device should then be consistent with the two key criteria of an effective signal: they are observable and known in advance (i.e. occur before any transaction offer).

While deciding to enter the public domain through the IPO route, the IPO-firms take several measures to comply with the requirements of regulatory bodies which also serve as a signal of its professionalism and unobservable good qualities (Welbourne and Andrews, 1996). Clause 49 of the listing agreement of the Indian Stock Exchange prescribes various CG requirements and procedures that IPO-firms have to comply with. The IPO-firms are assumed to implement such processes in advance in preparation for IPO and signal these while bargaining higher issue prices. It is widely accepted that good CG systems are associated with a better corporate value which is a key element in corporate competitiveness and access to capital (Jensen and Meckling, 1976; Shleifer and Vishny, 1997). Sanders and Boivie (2004) suggest that CG parameters can serve as useful screening and sorting criteria that influence investors' valuations of the IPO firm when primary information sources are limited or obscure. Researchers also believe that certain CG related signals convey transparency, reduce investor anxiety and contribute to a reduction in the cost of capital through reduced underpricing (Ang and Brau, 2002; Ritter, 1987; Li et al., 2018).

The discussion leads us to form the following research question.

Are CG mechanisms put in place by the IPO firm to comply with the listing agreement of the Indian stock exchange relevant in explaining underpricing?

Sample and Methodology

The primary objective of this study is to examine the extent of underpricing among the Indian IPOs listed on the BSE and further analyse the differences among these IPO issuing firms on account of CG characteristics. The sample for this study consists of firms with IPOs in the period from April 1, 2003, to March 31, 2012, and which had them listed on BSE. IPO prospectuses prepared and submitted for the issue is the source of data on CG mechanisms of IPO-firms. Information on market prices of securities and benchmark index of the BSE is collected from The ACE Equity¹ database and BSE website (www.bseindia.com). Additional information about firm attributes and issue variables has been collected using the above sources as well as the Prowess and Capitaline databases.

The relationships between underpricing and CG variables are explored using t-tests to investigate if board structures and ownership patterns differ across the return continuum. Variables of interest (i.e., the governance variables) are categorized into those relating to the board structure and others indicating the ownership pattern. Listing day returns have been measured as raw returns (unadjusted)

¹ ACE Equity and Prowess and Capitaline databases are desktop based applications that provide comprehensive and analytical statistics of capital and financial performances of Indian corporates.

and market returns (those adjusted for market movements with SENSEX as the barometer). Market returns are referred to as IR during the study. Descriptions of variables included in the study are provided in Table 1.

Table 1: Research Variables Included for Study of CG and Returns

Variables	Description
Underpricing on listing day	1. Raw return - Closing price on the first trading day on the secondary market minus offer price, divided by offer price 2. MAER - Raw return minus the market return as measured by the BSE's sensitive index
Board related governance variables	
Board size	Total number of directors on the board
Board committees	Inverse of total number of board committees to assist the board
Independent directors	Percentage of independent directors on the board
Women directors	Percentage of women directors on the board
Age of board	Average of the individual age of all board members
Related members	Number of members on the board who are related to each other
Board reputation	The total number of board directorships held by non-executive directors at other firms
Ownership related governance variables	
Promoter ownership	Percentage of shares held by board of promoters (founders) at the time of issue
Block holder ownership	Number of shareholders holding shares more than 10% of total shares to denote concentrated ownership
Top 10 shareholding	Percentage of shares owned by the ten largest shareholders of a firm
Issue and firm-related variables	
Subscription ratio	Number of times the IPO has been subscribed: indicator of over or under subscription
Issue size	Logarithm transformation of proceeds received from issuing new shares (in million)
Issue price	The offer price of shares issued through IPO
Listing delay	Number of days between close of issue and listing on BSE
Total assets	Logarithm transformation of book value of total assets as expressed in millions of rupees
IPO age	Logarithm transformation of number of years between date of incorporation and IPO issue date

Results and Discussions

Initial Returns of IPOs

Table 2 shows underpricing of the equity issues listed on the BSE during 2003-2012². While the maximum returns stand at a high of 323 per cent, negative returns bring down the average IR to 22.9 per cent for raw returns and 21.6 per cent for market adjusted returns. The high values of standard deviation (more than 50) show that Indian IPOs exhibit quite a variation in their IR but are consistent with regards to the phenomenon of underpricing, implying positive IR.

² It was not possible to procure prospectuses for IPO firms for the years 2001 and 2002 from any of the sources mentioned before.

Table 2: Characteristics of Initial Returns of Indian IPOs

Statistics	Raw Return (RR) (%)	Market Adjusted Excess Return (MAER) (%)
Mean	22.90	21.61
Median	12.79	9.45
Std. Deviation	55.35	53.57
Minimum	-94.29	-101.78
Maximum	323.50	285.44
N	404	404

Further, an attempt is made to delve into finer details by taking the year of the issue into consideration. Table 3 presents the descriptive statistics for the sample and is split by year of issue. Of the total IPO companies, 263 across all years are underpriced giving positive IR to investors on the listing day while 141 of the 404 IPOs result in negative IR.

Table 3: Summary Statistics of Year-wise IPO Raw Returns

Year	N	Mean	Median	SD	Min	Max	Positive	Fair	Negative
2003	4	73.34	61.07	58.44	22.90	148.33	4	0	0
2004	20	48.75	37.17	69.71	-89.11	209.71	17	0	3
2005	55	46.07	31.53	63.38	-14.81	323.50	48	0	7
2006	65	27.41	15.80	44.10	-30.12	230.26	47	0	18
2007	98	34.21	15.67	59.92	-42.17	286.25	63	0	35
2008	37	-16.83	-6.64	45.13	-94.29	68.11	14	0	23
2009	20	4.37	1.35	35.99	-58.72	129.25	12	0	8
2010	63	10.89	6.00	35.08	-88.64	103.98	38	0	25
2011	37	3.51	-11.07	55.55	-69.83	153.50	17	0	20
2012	5	6.56	2.80	12.82	-5.00	25.68	3	0	2

The initial unadjusted returns of these IPOs are found to be positive on an average for all years for the sample except for the year 2008 when these returns are recorded at -16.83 per cent, coinciding with the global downturn which did not leave even the Indian capital market unaffected. Another distinct pattern that emerges is the decreasing IR over time; it can be attributed to the legislative initiatives aimed at normalising returns to ensure market efficiency. The tendency, however, of positive returns of individual IPOs remains strong as evidenced by the very high maximum values. None of the IPOs in any of the years delivers fair returns or is fairly priced when their offer price and listing day prices are compared, emphasising the existence of market anomalies which manifest as underpricing of IPOs.

Similarly, these returns, when adjusted for the returns of the market (i.e. against the SENSEX values) show almost similar results to raw IRs. When checking for some positive and negative market returns IPOs, again 263 are underpriced while the number of overpriced IPOs stands at 141, confirming the existence of a trend of positive returns to the investors in IPOs (underpricing). Table 4 presents market returns of sample IPO-firms by year, which establishes the existence of underpricing in Indian capital markets. Positive returns accrue to initial investors through the IR pattern exhibiting a decreasing trend with negative IRs reported in 2008-09, coinciding with the Global Financial Crisis.

The median values for market return also show a decreasing trend, indicating the effectiveness of government action taken to mitigate underpricing, which includes stringent rules for IPO pricing and associated mechanisms. Minimum values here do point to the existence of overpricing, but it remains

low both in number and quantum, but the predominance of positive returns remains. High values of standard deviations highlight huge variations within IRs.

Table 4: Summary Statistics of IPO Initial Market Adjusted Excess Returns by Year

Year	N	Mean	Median	SD	Min	Max	Positive	Fair	Negative
2003	4	65.40	52.31	54.47	21.61	135.36	4	0	0
2004	20	45.63	30.32	72.15	-101.78	203.38	17	0	3
2005	55	41.55	27.73	59.38	-12.81	277.40	48	0	7
2006	65	23.06	9.70	43.57	-30.32	230.89	47	0	18
2007	98	33.76	15.22	58.00	-28.69	285.44	63	0	35
2008	37	-11.27	-1.03	45.89	-101.55	84.87	14	0	23
2009	20	1.79	-1.25	37.70	-65.66	134.57	12	0	8
2010	63	10.16	4.11	34.84	-85.69	98.19	38	0	25
2011	37	4.48	-6.19	54.81	-75.06	144.52	17	0	20
2012	5	7.75	4.27	13.74	-4.42	29.22	3	0	2

Although the quantum of underpricing in Indian markets is declining, it is far from being non-existent and thus remains a prolific research area. Fairly priced IPOs are a distant dream (no IPOs in this category), keeping IPO pricing a contentious issue. Studies offer different explanations to this pervasive underpricing phenomenon.

Comparison of IPO-Firms with Positive and Negative Initial Returns

The previous section demonstrated that Indian IPOs have been generating positive returns for initial investors. To obtain deeper insights into the behaviour of IRs, they are segregated into IPOs with positive returns (underpriced IPOs) and IPOs with negative returns to find out whether the two types of IPOs vary with respect to the CG practice of the firms that made the IPOs. We examine whether the raw returns and market adjusted returns of these two categories of firms differ from each other based on their CG practices.

Table 5 presents descriptive statistics of the CG variables and other variables controlled in this study of the sample firms separated into positive IR and negative IR firms based on raw returns. Firm variables included in the study are subscription ratio, issue size, issue price, listing delay, total assets and age of IPO firm due to their inherent potential to influence IRs.

The subscription ratio, indicating the number of times the issue has been subscribed (oversubscribed), shows significantly different values for firms with positive returns and those generating negative first-day returns. Overpriced IPOs have a mean subscription ratio of 5.36 in contrast to 26.71 times for underpriced IPOs. A striking difference is also observed for maximum values of these two classes on account of subscription ratios.

A high subscription ratio is indicative of high demand, indicating better performance. Firms with positive returns have been found to have a higher subscription ratio on average than those with negative returns.

For issue size, which represents the total value of shares offered through the IPO, the mean values are found to be higher for firms generating positive returns, but the difference is not statistically significant. Though median and maximum values along with other descriptive statistics on issue size differ between firms with positive IRs and negative IRs, they fail the test of statistical significance.

Table 5: Comparisons of IPO Firms across Positive and Negative Raw Returns

Variable	Sample	N	Mean	Median	Std. Dev	Min	Max	t-value	Sig. Value
SR	Negative	141	5.36	2.34	8.22	0.00	59.25	-10.1	0.00
	Positive	263	26.77	17.33	29.67	0.30	175.88		
Issue Size (Rs. mn)	Negative	141	3498.81	917.01	11230.40	21.61	117000.00	-0.47	0.63
	Positive	263	4066.01	918.03	13503.15	60.04	154750.90		
Issue Price (Rs.)	Negative	141	162.37	105	182.89	10	1310	-0.98	0.32
	Positive	263	182.17	120.00	182.17	10	1100		
LD (No. of days)	Negative	141	25.57	20	42.66	12	404	1.06	0.28
	Positive	263	21.59	21	16.18	12	266		
Tot. Assets (Rs. mn.)	Negative	141	10002.33	1129.51	44592.00	10.94	474115.63	-1.66	0.09
	Positive	263	21387.82	1226.42	91884.31	25.61	925222.44		
IPO Age (years)	Negative	142	14.81	12.22	13.05	0.31	99.90	-0.34	0.72
	Positive	262	15.28	12.30	12.85	0.65	102.47		
Board Size	Negative	146	7.67	7	2.384	4	20	-0.72	0.46
	Positive	258	7.84	8	2.183	4	15		
Board Committees	Negative	146	3.61	3	1.11	2	10	0.57	0.56
	Positive	257	3.54	3	1.29	1	10		
Proportion of ID	Negative	146	49.78	50	8.04	25	75	0.25	0.80
	Positive	258	49.55	50	9.38	0	80		
Proportion of WD	Negative	146	4.56	0	7.29	0	33.33	-0.74	0.45
	Positive	258	5.17	0	8.57	0	40		
Age of Board (yrs.)	Negative	145	51.79	52	5.57	34.50	65.43	0.07	0.94
	Positive	258	51.75	52.88	5.78	32.57	66.42		
Related Members	Negative	138	8	1.94	1.44	0	7	0.36	0.71
	Positive	250	8	1.88	1.60	0	7		
Board Reputation	Negative	145	24.52	12	36.11	0	301	-0.74	0.46
	Positive	258	27.24	13.50	34.93	0	223		
Promoter Ownership (%)	Negative	145	83.89	90.25	18.23	34	100	0.68	0.49
	Positive	258	82.57	89.01	18.96	6	100		
Block holders	Negative	146	2.68	3	1.26	1	6	1.10	0.27
	Positive	258	2.54	2	1.24	0	6		
Top 10 (%)	Negative	146	92.99	99.11	11.21	53	100	0.47	0.63
	Positive	258	92.43	97.87	11.73	26	100		

The time gap between the close of issue and listing of securities on BSE referred to as listing delay is 22 days on average for positive returns firms while it stands at 26 days for firms with negative returns. Minimum value though, is 12 for both categories, while the maximum is as high as 404 days for overpriced IPOs. However, these differences again are not statistically significant. The mean age of IPO-firms generating positive IRs is higher than their counterparts with negative returns, but the differences lack statistical significance. Total assets value of IPO-firms at the time of IPO is also studied for both types of firms and is found to be significantly higher for firms with positive returns. Substantial differences are also observed in maximum values of total assets across the two types of firms. Total assets of underpriced IPO-firms are almost double that of underpriced ones.

The ratio of independent directors, board committees, and the age of board members show almost equal mean values across all firms, and there is no evidence of any significant differences among firms with positive and negative returns. Firms with more reputable directors, a larger board, and more women as directors on board leave more money on the table, i.e. they are underpriced, but the

differences between underpriced and overpriced firms lack statistical significance as shown in Table 5. With regards to ownership variables, although there is a lower percentage of promoter ownership, lower number of block holders and a lower percentage of shares retained by top ten owners for firms generating positive returns to IPO investors. The differences between underpriced and overpriced IPO-firms in relation to these variables are not statistically significant. Differences in means between underpriced and overpriced firms exist only on account of subscription ratio and total assets, but not on account of CG measures.

Table 6: Comparisons of IPO Firms across Positive and Negative MAERs

Variable	Sample	N	Mean	Median	Std. Dev	Min	Max	t-value	Sig. Value
SR	Negative	147	5.95	2.35	8.71	0.00	59.25	-8.19	0.00
	Positive	257	26.85	17.25	30.20	0.30	175.88		
Issue Size (Rs. mn.)	Negative	147	3899.12	917.00	12092.17	21.64	117000	0.02	0.98
	Positive	257	3876.91	919.40	13248.66	60.05	154750.94		
Issue Price (Rs.)	Negative	147	163.07	106.50	181.55	10	1310	-1.09	0.27
	Positive	257	184.72	120	188.61	10	1032		
LD (No. of days)	Negative	146	25.46	20	42.08	12	404	1.05	0.29
	Positive	258	21.60	21	16.33	12	266		
Tot. Assets (Rs. mn.)	Negative	148	11673.11	1086.21	59088.36	10.97	615007.84	-1.23	0.21
	Positive	256	20788.02	1226.42	88122.14	25.64	925222.47		
IPO Age (years)	Negative	148	14.15	12.22	10.97	0.31	70.45	-1.02	0.30
	Positive	256	15.51	12.30	13.84	0.65	102.47		
Board Size	Negative	147	7.63	7	2.38	4	20	-1.00	0.31
	Positive	252	7.86	8	2.18	4	16		
Board Committees	Negative	147	3.56	3	1.08	2	10	-0.00	0.99
	Positive	251	3.57	3	1.31	1	10		
Proportion of ID	Negative	147	49.27	50	7.85	25	75	-0.72	0.47
	Positive	252	49.93	50	9.49	0	80		
Proportion of WD	Negative	147	5.09	0	7.71	0	33.33	0.14	0.88
	Positive	252	4.97	0	8.42	0	40		
Age of Board (yrs.)	Negative	147	51.76	52.38	5.79	34.50	65.43	-0.08	0.93
	Positive	251	51.81	52.71	5.65	32.57	66.42		
Related Members	Negative	142	2.01	2	1.46	0	7	1.16	0.24
	Positive	241	1.82	2	1.57	0	6		
Board Reputation	Negative	146	25.83	13	39.29	0	301	-0.17	0.85
	Positive	252	26.48	12	33.21	0	182		
Promoter Ownership (%)	Negative	146	85.47	92.38	17.39	34	100	1.91	0.05
	Positive	252	81.80	87.15	19.11	6	100		
Block holders	Negative	147	2.67	3	1.25	1	6	0.91	0.36
	Positive	252	2.56	2	1.25	0	6		
Top 10 (%)	Negative	147	94.03	99.42	10.43	59	100	1.66	0.09
	Positive	252	92.07	97.47	11.86	26	100		

Similar exploration is undertaken for market returns wherein, again, firms are classified as those with positive returns and others which deliver negative returns to investors as measured on the listing day. Results of this analysis are presented in Table 6. Results are shown for all firm variables, issue variables and the governance proxies considered in the study.

With regards to subscription ratio, the results are along the same lines as in the case of raw returns as discussed above, making it an important and significant point of distinction between the two categories

of firms. For all other firm variables and those relating to IPOs, no significant statistical differences between underpriced and overpriced IPOs were found, although variation in mean values is noted. Except for listing delay and issue size, firms with negative returns have lower mean values than firms with positive returns for all other variables.

On the whole, when comparing firms with positive and negative returns, the mean differences are found to be significant only for subscription ratio and total assets (in case of raw returns), highlighting that firms differ on some firm and IPO-related variables. Thus, higher subscription ratios and a larger pool of total assets emerge as characteristics of IPOs that generate positive returns for their initial investors. For CG variables, the differences regarding various parameters are not found to be significant except for promoter and block holder ownership. Underpriced firms are not found to be different in relation to governance from those with negative returns. Our findings confirm criticisms in the extant literature about the superfluous usage of arguments on signal relevance on information asymmetry (Tsang and Blevins, 2015). Ekkayokkaya and Pengniti (2012) argued that since prevalent CG practices are due to CG reforms in the relevant jurisdiction, they have a similar influence or signal relevance on underpricing in IPOs.

Conclusion

In this paper, we investigate the signal relevance in relation to under/overpricing of IPOs of various CG provisions required under Clause 49 of the listing agreement of the BSE. For this, a sample of IPOs listed on the BSE between April 2003 and March 2014 has been used to investigate the relevance of CG in the post-IPO capital market performance.

The outcome of the study confirms that Indian IPOs exhibit quite a variation in their IRs. The observance of underpricing of Indian IPOs conveys that the intensive regulatory and legal measures have not been completely successful in weeding out information asymmetry and bringing in transparency to the IPO process. IRs for the IPOs is found to be positive on average for all years of the sample except for the year 2008, which reflects the negative effects of the Global Financial Crisis. Another distinct pattern which emerges is the decreasing IRs over time, which can arguably be attributed to legislative initiatives introduced by the Indian government, aiming at normalising returns to ensure market efficiency. It can, therefore, be concluded that although information asymmetry during the IPO process as reflected in the quantum of underpricing in Indian markets is declining, the existence of it calls for more research on this topic. We only observed a relationship between promoter and block holder ownership and IRs as these two variables differed significantly between underpriced and overpriced firms. However, contrary to our expectations, CG characteristics do not emerge as a differentiating criterion among underpriced and overpriced firms. Our findings lead to the conclusion that CG mechanisms in India need to be further strengthened to make the issuers and investors rely on them as a decision criterion when pricing stock returns.

The findings highlight that there do not exist two groups in terms of initial returns with varied information levels on CG variables at the time of the IPOs. Efforts by IPO-firms to signal firm quality through CG practices seem to be futile in the Indian capital market. This can arguably be because investors assume CG practice to be non-existent prior to listing of firms.

We also speculate on the need for research to understand if the application of CG provisions will have any signal relevance to understanding the follow on public offer market or accounting performance.

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