

Determinants of Investor's Subscription Level of IPOs: Evidence from Indian Capital Market in Post Mandatory IPO Grading Regime

Souvik Banerjee

VIT Business School, VIT University, Chennai Campus
souvik.2005@gmail.com

K.T. Rangamani

VIT Business School, VIT University, Chennai

This research paper determines the factors that influence investor's appetite for Graded Initial Public Offerings (IPOs) between 2007 and 2013, in the context of Indian capital market. Company specific factors related to pre-issue financial position, corporate governance, and post issue promoter holding, firm age at the time of the issue, reputation of the lead manager of the issue, reputation of the credit rating agency, IPO Grade, and also market sentiment related factors like change in the money supply, Foreign Institutional Investor's (FII) inflow, Price to Earnings (PE) ratio of the market, and market return, are considered. Out of these factors, FII Inflow, Market PE, Money Supply, Debt to Equity (DE) ratio, and board size of the companies have statistically significant impact on the investor's interest in the IPOs in terms of subscription level. This is a significant addition to the existing literature.

JEL Classifications: E44, G14, G24, G34

Keywords: FII Inflow, Market PE, Money Supply, Investor Interest

INTRODUCTION

Capital market is an important channel, through which savings can be moved to productive sectors of an economy. Stock markets play a major role in the development of national economies (Bohnstedt, 2000). Developed equity market is one of the pillars on which success of a market oriented economy depends.

Grading of fixed-income instruments, is a universally accepted feature. However Indian capital market regulator, Security Exchange Board of India (SEBI), is credited with, coining a new concept, that is grading of equity instruments.

When India got independence in 1947, the country probably had the best formal financial markets in the developing world (Allen, Chakrabarti, & De, 2007). Indian equity market

has seen complete transformation, after the formation of SEBI in 1988. Post 1991, India's liberalization of the economy also gave impetus in that direction.

In the reforms initiated under SEBI, centralized power to determine pricing of equity issues gave way to information dissemination in the public domain. These led to stricter information disclosure norms, Book Building (BB) of Issues, IPO Grading, Applications Supported by Blocked Amount (ASBA), so forth.

Salient Features of the Indian Equity Market

According to SEBI guidelines,

a book built issue has to be allocated to Retail Institutional Investors (RII), Non Institutional Investors (NII), and Qualified Institutional Bidders (QIBs) in the ratio of 35: 15 :50 respectively. Retail investors are defined as the investors, who put less than Rs.200,000 in an issue.

QIBs are large institutional investors such as scheduled commercial banks, mutual funds, venture capital funds, and insurance companies who are registered with the SEBI. Any non-institutional investor, who bids for an amount greater than Rs.200,000 in an IPO, is considered a NII.

IPO Grading: In April 2006, SEBI introduced IPO grading. It was on a voluntary basis and optional until 30th of April, 2007. However, the experiment was not successful as indicated by the relevant data. During this period, around 40 companies tapped the primary market but only 4 companies approached Credit Rating Agencies (CRAs) for Grading. However, those 4 companies, also did not accept the Grade assigned. Reviewing the result of the optional IPO Grading, SEBI made IPO Grading mandatory with effect from May 1, 2007. However, in December, 2013, SEBI made IPO Grading optional again.

IPO grading framework:

Table 1.

IPO Grading Scale, as Circulated by SEBI

Grade / scale	Grading Definition
5/5	Strong Fundamentals
4/5	Above Average Fundamentals
3/5	Average Fundamentals
2/5	Below Average Fundamentals
1/5	Poor Fundamentals

Table 1 shows the accorded Grading scale. According to SEBI guidelines, Credit Rating Agencies (CRAs) are supposed to analyze companies, for the purpose of grading on the following parameters:

- a. Business Prospects and Competitive Position
 - i. Industry Prospects
 - ii. Company Prospects
- b. Financial Position
- c. Management Quality
- d. Corporate Governance Practices
- e. Compliance and Litigation History
- f. New Projects—Risks and Prospects

The costs of the Grading are to be borne by the IPO bound firm. Therefore there is likely to be conflict of interest between the rating agency (which is supposed to Grade the IPO) and the equity issuing firm, which is bearing the costs of this Grading process. However, there is a reputational stake for the rating agencies in the longer term, as the post listing relative performance of the companies, with respect to their Grade, would be tracked by investors and analysts alike.

Money supply: Money supply is the amount of money in circulation in an economy. The central bank of a country controls the money supply. For our analysis, we are using M3 or "broad money", as a proxy for money supply.

According to Reserve Bank of India (RBI), the Indian central bank, has:

1. M2 = Currency with the Public + Current Deposits with the Banking System + Savings Deposits with the Banking System + Certificates of Deposit issued by Banks + Term Deposits of residents with a contractual maturity up to and including one year with the Banking System (excluding CDs or Certificate of Deposit) + "Other" Deposits with the RBI
2. M3 = M2 + Term Deposits of residents with a contractual maturity of over one year with the Banking System + Call/Term borrowings from "Non-depository" Financial Corporations by the Banking System.

Foreign Institutional Investment in Indian Equity Market

According to SEBI Issue of Capital and Disclosure Requirements (ICDR, 2009) guidelines of IPO, Qualified Institutional Bidders (QIB) should have at least 50% of the issue allocated to them and 35% allocated to retail investors as based on the book building process. FIIs participate in IPOs as part of QIB. FIIs were allowed in India, post liberalization (1991) opening up of the economy. Prior to that, the FIIs need to register with SEBI but today it has delegated the registration process to the designated depository participants.

Corporate Governance Practices in India

Indian Corporate governance is based on Anglo-Saxon model (i.e. corporate governance

model followed by the USA and the UK). Post independence (1947), the country's emphasis on socialism and government's increasing role in the economy led to the government becoming the predominant supplier of capital (equity and debt, through nationalized banks, development financial institutions, and insurance companies).

In the early 1990s, India opened its economy and it was a very significant event in the history of the Indian capital market. Prior to this, there was an attempt to increase the disclosure norms and align them to more advanced western economies. Reformation of the Indian corporate governance practices passed through different paths and intertwined with significant conflict between SEBI and the MCA (Ministry of Company Affairs, then DCA or Department of Company Affairs) (Afsharipour, 2009). It is also noteworthy, that major Asian economies issued new corporate governance codes to promote best practices in the Anglo-Saxon model after the 1997-1998 Asian financial crisis (He & Ho, 2009).

Stages in Development of Corporate Governance Culture in India

A number of committees were set up to upgrade the corporate governance standards and align with more advanced economies. Prominent among these committees are Bajaj committee (set up by industry body Confederation of Indian Industries or CII in 1995), Birla committee (constituted by SEBI in 1999), Murthy committee (constituted in 2002), and Naresh Chandra committee (appointed by Department of Company Affairs or DCA in 2002 to look into the audit and governance issues). Birla committee under the chairmanship of noted industrialist Mr. Kumar Mangalam Birla, submitted its report in the year 2000. Based on the Birla committee recommendations, SEBI introduced clause 49 of the listing agreement, which all listed companies (entities under Indian Companies Act, 1956) with Rupees three crore (Rupees 30 million) or more

as paid up share capital, or a net worth of Rupees 25 crore (Rupees 250 million), recorded any time in their history of existence, had to comply with, within three financial years, starting from 2000-2001. Corporate bodies like public and private sector banks, insurance companies, and so forth were kept out of the purview of this clause.

As India chose to follow the Anglo-Saxon model of corporate governance (as followed by the UK and the USA), there were many similarities, between clause 49 and the Cadbury committee (constituted by the London Stock Exchange) recommendations as well as the Sarbanes and Oxley Act, enacted in the USA.

Some of the salient features of the clause are as follows:

With respect to the board of directors, 50% of the director's should be independent directors, if the chairman is an executive director (or 33%, if the chairman is also an independent director). Nominees of financial institutions, who are large stake holders in several companies, are treated as independent directors.

The board must meet within three months of the previous meeting; any director at the most should be part of 10 committees, and chair at the most 5 of them.

LITERATURE REVIEW

The IPO is considered to be one of the most significant events in the life cycle of a company (Celikyurt, Selvilir & Shivdasani, 2010; Latham & Braun, 2010).

Although there is no precedent of formal certification in the equity market, informal certifications in the form of past performance by the company, the reputation of the merchant banker, which is acting as the lead banker, analysts recommendation, and so forth are available. Informal certification plays an important role as a signal for investors. There is a plethora of literature available regarding informal

certification's effect on a company's IPO. For example, regarding underwriter reputation, there is a vast body of research in the developed countries. Among the prominent studies are those of Logue (1973), Beatty and Ritter (1986), Titman and Trueman (1986), Maksimovic and Unal (1993) and Cater, Dark, and Singh (1998) wherein they found that the under-pricing of IPOs brought to the market by reputable underwriters is lower than those brought by non-reputable underwriters. However, according to some researchers, these informal certifications does not work in the Indian context (Khurshed, Paleari, Pande, & Vismara, 2011).

There are evidences that investors often fail to objectively assess IPOs as they suffer from behavioral biases (Ljungqvist, Nanda, & Singh, 2006). IPO grade should make the job easier, in this context, for the investors, as grade reduces fundamental quality of a company into "easy-to-use" symbol, that is, on a scale of 1 to 5 (Jacob & Agarwalla, 2012).

On the impact of IPO Grading on investor demand, Deb and Marisetty (2010) were of the view that retail investors show greater affinity to higher graded issues. They arrived at this conclusion from a small sample of 48 companies. Khurshed et al.(2011) argued that the grading positively influences the subscription pattern of the institutional investors, which in turn, positively impacts the retail subscription level. Banerjee, Rangamani, & Banerjee (2013) concluded, on the basis of a sample size of 162 companies, that the differences in retail investor's subscription level of IPOs of different grades is not statistically significant.

Market timing of IPOs have already attracted many researchers. According to a study on IPOs, they create clusters, to give the impression that they are taking advantage of windows of opportunity (Ibbotson & Jaffe, 1975). Scharfstein and Stein (1990), Bikhchandani, Hirshleifer, and Welch (1992), as well as Welch (1992) showed that some investors may ignore

their own information and follow the decisions of other investors.

Pastor and Veronesi (2005) argued that the number of IPOs change over time in response to time variations in market conditions. The IPO market serves as an economic indicator in both practice and academia due to its proven pro-cyclical nature (Lowry, 2003). During an economic expansion, IPOs experience a boom market; characterized by an increased number of firms tapping primary market to raise resources. Bear markets, occurring during a recession, exhibit low levels of IPO activity (Blum, 2011). Lowry (2003) and He (2007) recognized that variation in IPO volume cannot fully be explained by financing requirements, and identifying the economically significant factors contributing to the aggregate IPO fluctuations. Burgstaller (2009) suggested that firms issue equity following period of high stock market valuations to benefit from the accompanying low cost of equity. Loughran, Ritter, and Rydqvist (1994) concluded that issuers "time" their IPOs to float the issue when market sentiment is positive, consistent with the findings in Lee, Shleifer, and Thaler (1991) that more companies get listed, when investor sentiment is higher. Brau and Fawcett (2004) in a survey of 336 Chief Financial Officers, found that while considering an IPO, timing of the issue, is in top of their mind. Rosen, Smart, and Zutter (2005) found that firm quality does not differ significantly among firms that access primary market at the boom or the bust time.

There is also ample literature available on the relationship between money supply and equity market cycles. According to Sprinkel (1964), a bear stock market was predicted 15 months after each peak in monetary growth, and bull market was predicted 2 months after each monetary trough was reached. Homa and Jaffe (1971) in their research concluded that the average level of stock prices is positively related to the money supply. However, Pesando (1974) was of the

opinion that a structural and stable relationship between money supply and common stock prices was not there. Similarly, Kraft and Kraft (1977) used time series analysis and found no causal relationship from money supply to stock prices. Pearce and Roley (1983) examined the effects of money supply news on stock prices, and found a negative relationship between unanticipated increases in the money supply and stock prices. Jain (1988) also noted that announcements about money supply is significantly associated with stock price changes. Karamustafa and Kucukkale (2003) showed that money supply was co-integrated with stock returns with respect to the Turkish equity market.

Jiranyakul and Brahasrene and (2007) showed in the context of the equity market of Thailand, that money supply had a positive impact on the Thai stock market. Based on the studies we can hypothesize that the quantum change in the money supply (M3) can be taken as a factor that determines market condition. Similarly market return of the benchmark index of the equity market can be taken as a proxy factor for the market condition (Cosh, Guest & Hughes, 2006).

According to Shrivastav (2013) FIIs play a big role in shaping the sentiment of the Indian equity market and they also wield significant influence on its movement. Raj (2003), discussed about the FII investment inflow and its impact on the Indian economy. Analyzing daily flow data, he concluded that the stock market performance has been the sole driver of FII flows, though monthly data in the pre-Asian crisis(1998) period suggests some reverse causality. Kumar (2001) concluded that Indian Mutual Funds and FIIs are the most powerful force, that is driving the Indian equity market. According to Chittedi (2009), FIIs are responsible to a great extent for the liquidity as well as the volatility of stock prices in India. According to Sehgal and Tripathi (2009) FIIs display strong herding behavior based on quarterly shareholding pattern. Pal (2004), said

that foreign institutions with their huge volume of investment, can act as the market makers. So, it is evident that FII inflow is one of the basis of market sentiment. Banerjee (2013) proved that although there is significant difference in terms of prior market return in the time frame when fundamentally different companies accessed the primary market, there is no such proof in terms of change in the money supply in the economy in the post mandatory IPO Grading regime in the Indian capital market.

Similarly, some of the factors, that determine the investor interest are Return on Net Worth (RONW) of the IPO bound companies, issue size, post issue promoter holding (Jacob et. al., 2012). Whether grading is done by an international agency or a domestic agency are taken as an important factor of success of an IPO (Khurshed et. al., 2011). Financial performance of the company preceding the issue plays an important role, to signal to the prospective investors regarding the quality of the issue.

According to Bhushan (2013), Credit Rating Agencies (CRAs), exist primarily to evaluate the creditworthiness of corporate borrowers. Investment bank reputation, plays a positive role in the subscription level of institutional investors in the IPOs in the Indian context (Khurshed et. al., 2011).

Corporate Governance in the Listed Companies

In most of the publicly listed companies, there is a clear division between the shareholders, the board of directors, and the management. Even then certain functions overlap between these three stakeholder groups. It is important to appreciate, why these distinctions between the three groups are necessary.

From a non-promoter investor's point of view, the decision to participate in the stock exchange requires the knowledge and awareness of the available financial instruments, an assessment

of the risk-return trade off, and an act of trust, that the overall system is fair (Guiso & Jappelli, 2005). Many prospective investors shy away from the stock market because they have limited knowledge of stocks, how the stock market works, and asset pricing (Van Rooij, Lusardi, & Alessie, 2011). The decision to invest in stocks requires not only an assessment of the risk-return and, trade-off given the available data, but also an act of faith (trust) that the data in the possession of the investor's are reliable, and that the overall system is fair (Guiso, Sapienza, & Zingales, 2008).

Corporate governance of IPO bound firms is important in this context. The presence of qualified independent directors, in the board of directors, is one of the cornerstones of good corporate governance practices. The independent directors should bring to the table, the relevant expertise and experience to advise the management on the future course to be taken. Since the independent directors are not expected to have any conflict of interest, their advice should strengthen the management and benefit all the shareholders, especially the non-promoter share-holders (Weisbach, 1988; Warner, Watts, & Wruck, 1988). There is plethora of literature available on presence of independent directors in the board and the firm quality. For example, companies with more independent directors, recognize bad news in their financial reporting earlier (Ahmed & Duellman, 2007). Certain studies concentrating on the emerging economies showed that greater representation of the independent directors in the board increased the quality of financial data disclosures (Peasnell, Pope & Young, 2000; Klein, 2002; Davidson, Goodwin-Stewart, & Kent, 2005).

Similarly, there are literature available on the size of the board and its relationship with the functioning of the companies. Larger board leads to issues of coordination and communication, and it affects the functioning of the board, resulting in poor performance of the companies (Lipton

& Lorsch, 1992; Jensen, 1993). This view point was also empirically proved Yermack (1996) and Eisenberg, Sundgren, and Wells (1998).

One of the salient features of Indian society is that, family continues to be one of the basic units (Chokkar, 2009). Family owned enterprise is a phenomenon that transcends national boundaries. According to some of the previous studies, more than half of the businesses worldwide are family owned (Timmons & Spinelli, 2007). In the Indian context the agency problem typically exists between the dominant or majority shareholders (in most of the cases promoter or promoter family, as they are called) and the minority shareholders (i.e. type two of the agency problem). About 70% of Indian firms are family controlled (Piramal, 1996). As seen in most of the Asian countries like the keiretsus in Japan and the chaebols in South Korea, India is dominated by business groups. In this scenario, it is possible to have independent directors, based on their proximity to the promoter group, irrespective of their competencies and exposure to other companies and relevant business models. This should lead to poorer corporate governance standards.

So the number of directors in the board and the number of independent directors as well as the quality of the independent directors should be the important factors to consider while investing in an IPO. These factors have significant impact on the timely and transparent dissemination of the relevant financial information in the public domain as well as financial performance of the concerned firm, thus affecting the firm quality.

OBJECTIVES OF THE RESEARCH

The objective of this research is to understand whether market specific and firm specific factors affect graded IPOs in the Indian capital market, as far as investor's appetite is concerned.

Among the firm specific parameter's being considered are (i) Pre issue return on net

worth (RONW) of the company, on a standalone basis; (ii) Pre issue debt to equity (DE) ratio of the company; (iii) Post issue promoter holding of the company; (iv) Firm age of the company, at the time of the IPO; (v) Issue size, in terms of the amount of money (in Indian Rupees) being raised in the IPO; (vi) Whether the IPO is managed by a reputed lead manager; (vii) Whether the IPO is graded by a reputed credit rating agency; (viii) Grade being obtained by the IPO; (ix) The number of directors in the board; (x) Number of independent directors in the board; and (xi) Whether majority of the independent directors have any other board membership.

Some factors related to the market sentiment are also being considered, they are: (i) Change in money supply (M3), (ii) Change in FII inflow, (iii) Market PE, and (iv) Market return.

In this research paper, it is intended to explore, whether certain firm specific as well as certain market sentiment related factors affect, the investor's subscription level.

THEORETICAL FRAMEWORK

There are not much literature available on positive market conditions or "hot" market conditions and their effect on investor interest or subscription level in an IPO, at the same time frame, especially in the context of Indian capital market. This research paper aims to bridge this gap in the literature. When Indian equity market is categorized into "hot" and "cold" periods, based on number of IPOs hitting the primary market, on the basis of three monthly moving averages, variation is seen in the subscription level (Jacob et. al., 2012). Similarly, significant role for investor sentiment in IPO markets (Krishnamurti, Thong, & Vishwanath, 2011) is being observed. In the current research endeavor, we will analyze subscription pattern and its dependence on factors, which are determinants of stock market movement, as established by the literature review.

The 'hot' IPO market is a topic of interest for researchers for long. For example Ibbotson and Jaffe (1975) and Ibbotson, Sindelar, and Ritter (1988, 1994) showed that there are pronounced cycles in the number of new issues per month.

Corporate governance related variables with respect to the board structure of the companies, past financial performance of the companies, issue size, firm age, IPO Grade and post IPO Promoter holding (PIPH) are taken into account, because these factors affect investor's subscription level of IPO's. For example, Jacob et. al. (2012) found significant correlation between overall subscription level and issue size as well post IPO Promoter holding (PIPH).

Investment bank and credit rating agency reputation are also taken in to account, while considering their effect on investor appetite.

These factors and their effect on investor appetite of IPOs is evaluated in this research paper, in the time frame, when IPO Grading was mandatory in Indian IPO market.

HYPOTHESES OF THE RESEARCH

Null Hypotheses of this paper are as follows:

- H01 – The IPO Grade being assigned to a company has no effect on the subscription level of the investors in the IPO.
- H02 – The reputation of the lead manager of the IPO has no effect on the subscription level of the investors in the IPO.
- H03 – The total number of directors in the board, has no effect on the subscription level of the investors in the IPO.
- H04 – The number of independent directors in the board, has no effect on the subscription level of the investors in the IPO.
- H05 – The size of the issue has no effect on the subscription level of the investors in the IPO.

H06 – The firm's age has no effect on the subscription level of the investors in the IPO.

H07 – The post issue promoter holding (in percentage) has no effect on the subscription level of the investors in the IPO.

H08 – The reputation of the credit rating agency, which has graded the IPO, has no effect on the subscription level of the investors in it.

H09 – The change in the money supply (M3) has no effect on the subscription level of the investors in an IPO.

H010 – The change in the inflow of FII investment has no effect on the subscription level of the investors in an IPO.

H011 – The prior market return has no effect on the subscription level of the investors in an IPO.

H012 – There are no effects of the market PE(Price to Earnings) ratio on the subscription level of the investors in an IPO.

H013 – The RONW of a company has no effect on the subscription level of the investors in its IPO.

H014 – The debt to equity ratio of a company has no effect on the subscription level of the investors in its IPO.

H015 – Whether majority of the independent directors of any company have any other board membership has no effect on the subscription level of the investors in its IPO.

RESEARCH METHODOLOGY

The number of subscription out of the total number of shares offered in the IPO is taken as the investors' appetite, that is, the dependent variable. In this paper 171 companies, which

raised capital through IPO process between 2007 and 2013, are analyzed. The sources of the data are the Capital Market (www.capitalmarket.com), RBI, SEBI Databases, as well as the Red Herring Prospectus (RHP) of the IPO bound companies. If any company is graded by more than two credit rating agencies, the higher grade is considered for the purpose of analysis.

Multiple regression is used as tool in SPSS 16.0 for the purpose of analysis. The overall subscription figure of the IPO is used as the dependent variable.

There are five Credit Rating Agencies (CRA) registered with SEBI to grade IPO bound companies. Among these CRAs, (1) CRISIL is an affiliate of Standard & Poor (S&P) a world renowned rating agency, (2) international rating agency Moody's is the largest shareholder of ICRA, (3) India Rating and Research (earlier Fitch India) is the Indian subsidiary of Fitch. S&P, Fitch, and Moody's are recognized as Nationally Renowned Statistical Rating Organizations (NRSRO) of the Securities and Exchange Commission (SEC) in the United States. Whereas CARE and Brick Work (BW) are India-based domestic credit rating agencies. In this paper, credit rating agencies are used as dummy variable, for the purpose of regression. The NRSROs are assigned the value of 1, where as the domestic agencies are assigned the value of 0.

Similarly, lead manager of the IPO is used as a dummy variable. Any Indian merchant banking company featured in top 10 list (by market share) in India is regarded as a reputed merchant banker. Same way, any multinational investment bank featured in the top 10 list worldwide is considered a reputed lead manager.

The Indian merchant bankers that are, in the top 10 list are: Kotak Mahindra Capital, Axis Capital (formerly Enam Securities), and SBI Capital. This is according to the data compiled by Bloomberg in the first seven months of calendar year 2013.

Among the multinational investment banks, top 10 investment banks worldwide as per the revenue are considered as reputed investment banker. According to data collated by the Financial Times, the United Kingdom, for the first three quarters of calendar year 2013, these banks are the top 10 investment banks worldwide: JP Morgan, Bank of America-Merill Lynch, Goldman Sachs, Citi, Deutsche Bank, Barclays, Credit Suisse, Wells Fargo, and UBS.

Reputed merchant bankers are assigned a value of 1, other merchant banks are assigned a value of 0.

The RONW and the DE ratio figures are collected from the RHP of individual companies. RONW is considered for the standalone company only, where as in DE ratio, total debt to equity ratio is considered.

For market return, three months prior (to IPO process) return of 30 share benchmark Bombay Stock Exchange Sensitivity Index (BSE Sensex) is considered. Similarly, for market PE, prior three months average PE of Sensex is considered. The change in money supply and FII investment inflow to India are also considered in the same fashion.

The post IPO promoter holding is taken in percentage form. It is the proportion of the total equity share that is being held by the promoter group after the IPO process.

The data related to total number of directors and the number of independent directors, as well as whether majority of the independent directors, have any other board membership, is collected from the RHP of the IPO bound companies. For the variable of the independent directors membership of other boards, dummy variable is used.

The firm age is calculated on the basis of its year of incorporation at the time of its IPO.

EMPIRICAL RESULTS AND ANALYSIS

The Table 3 shows, the regression equation is statistically significant even at 1% level. The collinearity statistics, showed that none of the variables are significantly correlated to each other.

Table 4 shows that, increase in FII Inflow, Market PE, and Money Supply are significant at 5% level. All these factors have a positive influence on the subscription level of investors. This is in confirmation with the existing

literature. Out of these factors, Money Supply (M3) increase has the biggest impact, followed by Market PE and FII Inflow. An increase in Money Supply, also increases the cash in hand for the investors, so it is natural that it influences the subscription level of IPOs positively. Higher Market PE increases market confidence, thus results in higher subscription level of IPOs. The same is true for FII Inflow, which positively influences market confidence especially in the Indian context.

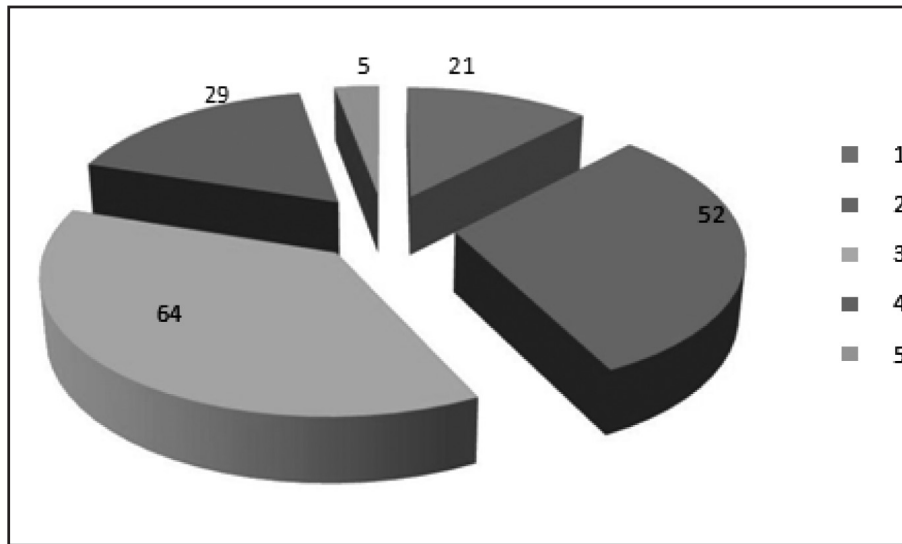


Figure 1: Grade wise distribution of 171 companies (the numbers 1,2,3,4, and 5 represent grade)

Table 2
Model Summary of the Regression Equation in SPSS

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.503 ^a	.253	.179	22.3500932

^a Predictors: (Constant), Credit Rating Agency Affiliation, Return on Net Worth(RONW), Independent Director Number, Independent Director Exposure, Money Supply, DE Ratio, Market Return, Firm Age, FII Inflow, Market PE, Issue Size, Post Issue Promoter Holding(PIPH), Investment Bank Reputation, IPO Grade, Board Size

Table 3
Output of ANOVA Test in SPSS

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25579.327	15	1705.288	3.414	.000 ^a
	Residual	75428.527	151	499.527		
	Total	101007.854	166			

^a Predictors: (Constant), Credit Rating Agency Affiliation, Return on Net Worth (RONW), Independent Director Number, Independent Director Exposure, Money Supply, DE Ratio, Market Return, Firm Age, FII Inflow, Market PE, Issue Size, Post Issue Promoter Holding (PIPH), Investment Bank Reputation, IPO Grade, Board Size

^b Dependent Variable: Subscription Level of Investors

Table 4

Coefficients of the Regression Equation

Model		Unstandardized Coefficients		Standardized Coefficients	Collinearity Statistics			
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-53.213	18.734		-2.840	.005		
	IPO Grade	3.743	2.620	.150	1.429	.155	.449	2.229
	FII Inflow	1.241	.639	.148	1.942	.054	.846	1.182
	Market Return	.708	.478	.116	1.481	.141	.809	1.235
	Market PE	2.248	.841	.208	2.674	.008	.820	1.219
	Money Supply	6.645	3.034	.165	2.190	.030	.873	1.146
	IB Reputation	5.252	5.054	.105	1.039	.300	.485	2.061
	Issue Size	.000	.001	-.031	-.383	.703	.775	1.290
	PIPH	-.012	.121	-.007	-.096	.924	.812	1.232
	Firm Age	.124	.111	.085	1.124	.263	.857	1.167
	DE Ratio	-2.506	1.357	-.134	-1.848	.067	.938	1.066
	RONW	-.038	.062	-.045	-.612	.541	.911	1.098
	Board Size	-3.153	1.682	-.281	-1.874	.063	.220	4.546
	Independent Director Number	5.287	3.354	.231	1.576	.117	.230	4.339
	Independent Director Exposure	-4.817	4.776	-.076	-1.009	.315	.867	1.153
Credit Rating Agency Affiliation	6.047	3.885	.118	1.557	.122	.855	1.170	

^a. Dependent Variable: Subscription Level of Investors

Factors like DE Ratio and Board Size are significant at 10% level. Both these factors are inversely related with the investor's appetite in the IPOs. Possible explanation is high DE ratio companies are considered to be risky investment option, due to high leverage as the interest outgo will be higher. Similarly, larger board size creates problem in fast and efficient functioning of companies, so investors do not like companies with bigger board size.

As a result, null hypothesis numbers 3, 9, 10, 12 and 14 are rejected. However, we fail to reject the rest of the null hypotheses.

These findings are significant addition to the existing literature, especially in the context of Indian capital market.

CONCLUSIONS

Among the market sentiment related variables, three variables (Money Supply, FII Inflow, and Market PE) have significant, positive influence on the investor interest in the IPOs. Only Market Return does not have any significant impact on the investor appetite. Whereas board size and DE ratio have negative impact on investor subscription level, these conclusions are drawn on the basis of IPOs of 171 companies, in a time frame of around six years (2007 to 2013) in the context of Indian IPO market.

No prior study in the Indian capital market carried out investigation related to so many diverse variables with respect to investor interest in the IPOs. So this research paper opens up new vistas in that respect.

REFERENCES

- Ahmed, A. S., & Duellman, S. (2007). Accounting conservatism and board of director characteristics: An empirical analysis. *Journal of Accounting and Economics*, 43(1), 411-437.
- Allen, F., Chakrabarti, R., & De, S. (2007). *India's financial system*. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1261244
- Afsharipour, A. (2009). Corporate governance convergence: Lessons from the Indian experience. *Northwestern Journal of International Law & Business*, 29(2), 335-402.
- Banerjee, S. (2013). Do weaker companies list in stronger market conditions? An empirical study from the Indian equity market. *SIES Journal of Management*, 9(2), 62-73.
- Banerjee, S., Rangamani, K.T. & Banerjee, M. (2013). IPO grading and its effect on appetite of retail investors. *Anvesha-The Journal of Management*, 6(3), 1-6.
- Beatty, R., & Ritter, J. (1986). Investment banking, reputation, and the under pricing of initial public offerings. *Journal of Financial Economics*, 15(1), 213-232.
- Bikhchandani, S., Hirshleifer, D., & Welch, I. (1992). A theory of fads, fashion, custom, & cultural change as informational cascades. *Journal Of Political Economy*, 100(5), 992-1026.
- Bhushan, H. (2013). Credit rating agencies in India: Have we done enough? *DLSU Business & Economic Review*, 22(2), 37-53.
- Blum, R. (2011). IPO timing determinants (Unpublished doctoral dissertation). Duke University, Durham. Retrieved from <http://econ.duke.edu/uploads/assets/BlumRachel.pdf>
- Bohnstedt, A. (Ed.). (2000). *Recent development in Uganda's finance sector: crises of transition?* (FSD series No. 3). Kampala: Bank of Uganda.

- Brau, J. C., & Fawcett, S. E. (2004). Initial public offerings: An analysis of theory and practice. *The Journal of Finance*, 61(1), 399-434.
- Burgstaller, J. (2009). When and why do Austrian companies issue shares. *Empirica*, 36(3), 229-244.
- Carter, R., Dark, R., & Singh, A. (1998). Underwriter reputation, initial returns, and the long-run performance of initial public offering stocks. *Journal of Finance*, 53(1), 289-311.
- Celikyurt, U., Sevilir, M., & Shivdasani, A. (2010). Going public to acquire? The acquisition motive in IPOs. *Journal of Financial Economics*, 96(3), 345-363.
- Chittedi, K.R. (2008). Volatility of Indian stock market and FIIs. *The India Economy Review*, 15(31), 22-34.
- Chokkar, J. S. (2009). Leadership and culture in India: The GLOBE Research project. Retrieved From http://www.hs-fulda.de/fileadmin/Fachbereich_SW/Downloads/Profs/Wolf/Studies/india/india.pdf
- Cosh, A., Guest, P. M., & Hughes, A. (2006). Board share ownership and takeover performance. *Journal of Business Finance and Accounting*, 33(3-4), 459-510.
- Davidson, R., Goodwin-Stewart, J., & Kent, P. (2005). Internal governance structures and earnings management. *Accounting and Finance*, 45(2), 241-267.
- Deb, S. S., & Marisetty, V. B. (2010). Information content of IPO grading. *Journal of Banking & Finance*, 34(9), 2294-2305.
- Eisenberg, T., Sundgren S., & Wells M. (1998). Larger board size and decreasing firm value in small firms. *Journal of Financial Economics*, 48(1), 35-54.
- Guiso, L., & Jappelli, T. (2005). Awareness and stock market participation. *Review of Finance*, 9(4), 537-567.
- Guiso, L., Sapienza, P., & Zingales, L. (2008). Trusting the stock market. *The Journal of Finance*, 63(6), 2557-2600.
- He, P. (2007). A theory of IPO waves. *Review of Financial Studies*, 20(4), 983-1020.
- He, L. & Ho, S. J. K. (2009). The Anglo-Saxon corporate governance model in Asia. *Journal for Global Business Advancement*, 2(1), 173-190.
- Homa, K. E., & Jaffee, D.M. (1971). The supply of money and common stock prices. *The Journal of Finance*, 26(5), 1045-1066.
- Ibbotson, R., & Jaffe J. (1975). Hot issue markets. *The Journal of Finance*, 30(4), 1027-1042.
- Ibbotson, R. G., Sindelar, J., & Ritter, J. (1988). Initial public offerings. *Journal of Applied Corporate Finance*, 1(2), 37-45.
- Ibbotson, R. G., Sindelar, J., & Ritter, J. (1994). The market's problems with the pricing of initial public offerings. *Journal of Applied Corporate Finance*, 7(1), 66-74.
- Jacob J. & Agarwalla S. K. (2012). *Mandatory IPO grading: does it help pricing efficiency?* (Working Paper No. 2012-12-07). Indian Institute of Management, Ahmedabad.
- Jain, P. G. (1988). Response of hourly stock prices and trading volume to economic news. *Journal of Business*, 61(2), 219-231.
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48(3), 831-880.
- Jiranyakul, K., & Brahmaasrene, T. (2007). The relationship between government expenditures and economic growth in Thailand. *Journal of Economics & Economic Education Research*, 8(1), 93-103.
- Karamustafa, O., & Kucukkale, Y. (2003). *Long run relationships between stock market returns and macroeconomic performance: Evidence from Turkey*. (Econ WPA No. 0309010). Retrieved from: <http://ideas.repec.org/p/wpa/wuwpfi/0309010.html>
- Khurshed, A., Paleari, S., Pande, A., & Vismara, S. (2011). *Grading, transparent books and initial public offerings*. Retrieved from <http://www.unibg.it/dati/persona/1823/4211-Grading%20paper.pdf>

- Klein, A. (2002). Audit committee, board of director characteristics and earnings management. *Journal of Accounting and Economics*, 33(3), 375-400.
- Kraft, J., & Kraft, A. (1977). Determinants of common stock prices: A time series analysis. *The Journal of Finance*, 32(2), 417-425.
- Krishnamurti C., Thong, T.Y., & Vishwanath, S.R. (2011). *Grey market for Indian IPOs: Investor sentiment and after-market performance*. Retrieved from http://www.researchgate.net/publication/228120340_Grey_Market_for_Indian_IPOs_Investor_Sentiment_and_After-Market_Performance/links/09e415058660b78ec0000000
- Kumar, S. (2001). Does the Indian stock market play to the tune of FII investments? An empirical investigation. *ICFAI Journal of Applied Finance*, 7(3), 36-44.
- Latham, S., & Braun, M. (2010). To IPO or not to IPO: Risks, uncertainty and the decision to go public. *British Journal of Management*, 21(3), 666-683.
- Lee C.M. C., Shleifer A., & Thaler R. H. (1991). Investor sentiment and the closed-end fund puzzle. *The Journal of Finance*, 46(1), 75-109.
- Lee, Y. S., Rosenstein, S., & Wyatt, J. G. (1999). The value of financial outside directors on corporate boards. *International Review of Economics and Finance*, 8(4), 421-431
- Lipton, M., & Lorsch, J. W. (1992). A modest proposal for improved corporate governance. *Business Lawyer*, 48(1), 59- 77.
- Ljungqvist, A., Nanda, V., & Singh, R. (2006). Hot markets, investor sentiment, and IPO pricing. *The Journal of Business*, 79(4), 1667-1702.
- Loughran, T., Ritter, J. R., & Rydqvist K. (1994). Initial public offerings: International insights. *Pacific-Basin Finance Journal*, 2(2-3), 165-199.
- Logue, D. (1973). On the pricing of unseasoned equity issues, 1965-69. *Journal of Financial and Quantitative Analysis*, 8 (1), 91-103.
- Lowry, M. (2003). Why does IPO volume fluctuate so much? *Journal of Financial Economics*, 67(1), 3-40.
- Maksimovic, V., & Unal, H. (1993). Issue size choice and under pricing in thrift mutual-to-stock conversions. *Journal of Finance*, 48(5), 1659-1692.
- Pal P. (2005). Recent volatility in stock markets in India and foreign institutional investors. Retrieved from http://www.networkideas.org/featart/nov2004/volatility_stock_markets.pdf.
- Pastor, L., & Veronesi, P. (2005). Rational IPO waves. *Journal of Finance*, 60(4), 1713-1757.
- Pearce, D. K. & Roley V.V. (1983). The reaction on stock prices to unanticipated changes in money: A note. *Journal of Finance*, 38(4), 1323-1333.
- Peasnell, K.V., Pope, P.F., & Young, S. (2000). Accrual management to meet earnings targets: UK evidence pre and post Cadbury. *British Accounting Review*, 32(4), 415-445.
- Pesando, J. E. (1974). The supply of money and common stock prices: further observations on the econometric evidence. *The Journal of Finance*, 29(3), 909-921.
- Piramal, G. (1996). *Business maharajahs*. New Delhi, India: Penguin Books.
- Raj, C. (2003). Foreign institutional investments. *Money and Finance*, 2(7), 61-81.
- Rosen, R. J., Smart, S., & Zutter, C. J. (2005). *Why do firms go public? evidence from the banking industry*. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=686473
- Scharfstein, D. S. & Stein J. C. (1990). Herd behavior and investment. *American Economic Review*, 80(3), 465-479.
- Sehgal S., & Tripathi N. (2009). Investment strategies of FIIs in the Indian equity market. *Vision*, 13(1), 11-18.
- Shrivastav, A. (2013). A study of influence of FII flows on Indian stock market. *Gyanpratha-ACCMAN Journal of Management*, 5(1).

- Retrieved from <http://accman.in/images/feb13/Shrivastav%20A.pdf>
- Sprinkel Beryl (1964). *Money and Stock Prices*. Homewood, Illinois: Richard Irwin, Inc.
- The Gazette Of India (2009). *Securities and exchange board of India (issue of capital and disclosure requirements) regulations, 2009*. Retrieved from <http://www.sebi.gov.in/guide/sebiidcrreg.pdf>
- Timmons, J.A., & Spinelli, S. (2007). *New venture creation, entrepreneurship for the 21st century* (7th ed.). Boston, MA: McGraw Hill, Irwin.
- Titman, S. & Trueman B. (1986). Information quality and the valuation of new issues. *Journal of Accounting & Economics*, 8(2), 159-172.
- Van Rooij, M., Lusardi, A., & Alessie R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics*, 101(2), 449-472.
- Warner, J.B., Watts R.L., & Wruck, K.H. (1988). Stock price and top management changes. *Journal of Financial Economics*, 20(1-2), 461-492.
- Welch, I. (1992). Sequential sales, learning, and cascades. *Journal of Finance*, 47(2), 695-732.
- Weisbach, M. (1988). Outside directors and CEO turnover. *Journal of Financial Economics*, 20(1-2), 431-60.
- Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 40(2), 185-212.