

Risk Disclosure and Performance: An Evidence from Indian IPOs

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Abstract:

Using a unique regulatory framework for IPO pricing in India, which allows us to estimate underpricing, we answer if risk disclosure section explains underpricing in the Indian settings. The current study uses both legitimacy theory and agency theory to create testable hypotheses. Our main findings are as follows. We document that disclosure of risk increases underpricing (i.e., offer price being lower) in the premarket and lowers aftermarket underpricing (i.e., the first-day closing price is lower). Collectively, we show that disclosure influences underpricing of IPOs.

Keywords: Risk, Disclosure, Initial Public Offering, Underpricing,

Introduction

This paper provides evidence on the narrative information disclosed in risk factor section of prospectus. As a novelty, we are among the first to investigate the relationship between narrative risk disclosure and IPO underpricing for a sample of Indian initial public offerings (IPO). More precisely, we decompose traditional underpricing into premarket and aftermarket components by taking use of an exclusive legislative framework pertaining to the pricing of Indian IPOs. This relationship constitutes the objectives of this study. The percentage difference between the IPO offer price and the stock's closing price on the first day of listing (offer-to-close price) is commonly used to measure underpricing. According to earlier research by Derrien (2005), Ljungqvist et al. (2006), and Clarke et al. (2016), traditional underpricing does not represent money that is intentionally left on the table in the premarket but rather is fuelled by first-day profits. Significantly, our setting is distinct in that we can estimate (a) the actual voluntary underpricing in the premarket, which is defined as the percentage difference between the offer price (OP) and the regulatory maximum (MAXP), and (b) the aftermarket underpricing, which is defined as the percentage difference between the first-day closing price (CP) and MAXP. According to prior IPO research, managers are more likely to disclose good information and keep unfavourable information to themselves when it comes to corporate disclosure (Hermalin and Weisbach 2007; Kothari et al. 2009). Managers may be concerned that revealing negative information would result in an undersubscribed offer as investors react to potential bad outcomes in the near future. Issuers may choose not to reveal some risk information due to a fear of revealing sensitive information (Verrecchia 1983). IPOs with uncertain language in the prospectuses have higher traditional underpricing and hence higher return volatility, according to Yan et al. (2019) and Loughran and McDonald (2013). The most common evidence is that the firm must choose between substantial traditional underpricing and disclosing information in the IPO prospectus because both strategies are expensive (Leuz and Verrecchia, 2000). Similarly, businesses seem hesitant to give extremely explicit information about potential risks due to a) heightened legal risk and b) sharing confidential information with rivals (Verrecchia, 2001). But according to Ljungqvist and Wilhelm, 2003; Leone et al., 2007, companies would be more inclined to reveal more detailed information if doing so decreased ex-ante uncertainty regarding the offering's worth once it began trading publicly, which would reduce traditional underpricing. On the other hand, when firms are more likely to experience severe traditional underpricing, they disclose more. Prior research suggests that managers are eager to establish a positive image of their organisation (Kothari et al. 2009b). Investment risk information necessitates a clear focus on the negative aspects. Managers that have a positive bias may find it difficult to provide appropriate warning signals. Moreover, managers could be reluctant to give detailed explanations of investment risk since they are less comfortable talking about an uncertain future that they can only partially control (Malmendier and Tate 2005a, 2005b). The challenge is that the aforementioned studies employ traditional underpricing, making it unclear whether the relationship between disclosure and underpricing results from voluntary premarket underpricing (i.e., a lower offer price) or from positive first-day returns (i.e., a higher closing price) in the aftermarket. In other words, it is hard to determine if traditional underpricing is greater (lower) as a result of the first-day listing price being climbed (decreased) in the aftermarket or the offer price purposefully being reduced (raised) in the premarket (Gao, 2010; Clarke et al., 2016; Reber and Vencappa, 2016). In essence, the argument from the two streams of literature mentioned above leads to an unaddressed problem: depending on the underlying risk of the issuers, corporations may choose to trade off either higher disclosure or underpricing (first strand) or both (second strand). To put it another way, previous research has not shown whether corporations employ voluntary underpricing in the premarket in conjunction with transparency as a method to reward investors, or whether greater disclosure lowers ex-ante uncertainty in the aftermarket. By breaking down traditional underpricing into voluntary and aftermarket underpricing and examining its relationship to particular use of profits disclosure, we attempt to address these problems. We establish important findings in the premarket and aftermarket using a sample of 224 initial public offerings (IPOs) from 2016 to 2022. First, we find that the disclosure of risk—increases actual voluntary underpricing in the premarket. Second, we find that disclosure of risk, such as financial risk, operation risk, and strategic risk, increases premarket underpricing. First, focussing on the aftermarket, we discover that risk disclosure reduces underpricing in the aftermarket. Second, we demonstrate that precise disclosure regarding different types of risks significantly and negatively affects initial returns. Third, we show that, even after adjusting for investor sentiment indicators, there is a strong negative correlation between risk disclosure and aftermarket underpricing. Our findings support the idea that increased transparency lessens the winners' curse problem by lowering ex-ante uncertainty after the listing period (Jagannathan et al., 2015; Clarke et al., 2016). Our findings contribute to the continuing debate over the importance of disclosure in IPO underpricing. The relationship between disclosure and underpricing has been explained by two opposing theories in previous research. Some research shows that disclosure and traditional underpricing have a negative relationship (Jog and McConomy, 2003; Leone et al., 2007; Autore, Bray and Peterson, 2009; McGuinness, 2019), while other research shows a positive relationship (e.g., Schrand and Verrecchia, 2005; Ekkayokkaya and Pengniti, 2012; Reber and Vencappa, 2016). As is evident, previous research has concentrated on traditional underpricing. One of the main obstacles is that it is difficult to determine whether disclosures lower ex-ante uncertainty in the aftermarket (i.e., first day returns are lower) or whether investors are willingly paid in the premarket (i.e., the offer price is lower). Informative risk disclosures reduce ex ante uncertainty regarding true share value (Ritter 1984; Beatty and Ritter 1986; Rock 1986). Ritter (1984), extending Rock's (1986) underpricing model, states that the concept of 'risk' for IPOs relates to informational differences and that 'riskier firms should have higher average initial returns than firms that are easier to evaluate' (Ritter 1984, p. 221). We add to the existing literature by developing a more precise measure of the novel disclosure variable, risk, that enables us to draw more confident conclusions about the validity of our hypothesis. In a nutshell we add to a growing literature that investigates how institutional variations between established and emerging markets can aid in the comprehension of underpricing channels (Fan, Wei, and Xu, 2011; Jagannathan et al., 2015).

Literature Review

Disclosure and premarket underpricing

We propose that voluntary underpricing in the premarket is increased when risk is disclosed. In our view, information uncertainty, disclosure and voluntary underpricing might be employed as strategies to attract investor interest. According to empirical study, underpricing rises with increased information in the utilisation of revenues, starting with Beatty and Ritter (1986). More recent research also shows that increased underpricing is linked to greater disclosure (e.g., Ekkayokkaya and Pengniti, 2012; Reber and Vencappa, 2016). Previous research shows a favourable correlation

between IPO underpricing and risk factor disclosure (Beatty and Welch, 1996; Arnold, Fishe and North, 2010; Katti, Lawrence and Raithatha, 2022). According to previous findings, companies that are at risk of lawsuit tend to release more information and undervalue their initial public offerings (IPOs) more than they should (Lowry and Shu, 2002; Hanley and Hoberg, 2012). Another viewpoint (Ljungqvist and Wilhelm, 2003; Leone et al., 2007) contends that companies that provide more information have reduced underpricing. Similarly, research shows that decreased underpricing is the result of more informational content in the IPO prospectus (Schrand and Verrecchia, 2005; Hanley and Hoberg, 2010; Loughran and McDonald, 2013). IPO companies have higher information asymmetry due to their shorter histories, less public formation, lack of secondary trading, and small number of significant owners. According to studies, greater disclosure may reduce ex-ante uncertainty, which would lower underpricing. The contrasting empirical evidence is outlined in detail in our review of the literature mentioned above. According to earlier research (Gao 2010; Reber and Vencappa, 2016), one valid explanation might be the offer-to-close price, a measure of traditional underpricing. In other words, previous studies are unable to determine independently whether the offer price has gone up or down or whether the price on the first day of listing has gone up or down, which leads to lower or higher traditional underpricing. The study by Clarke et al. (2016), which divides traditional underpricing into premarket and aftermarket returns, is the only exception in our context. In order to provide up for risk, we support the findings of Leone et al. (2007), Kavitha et al. (2023) and Clarke et al. (2016) by arguing that companies should reveal more detailed information in the prospectus and increase voluntary underpricing, especially in the premarket. Additionally, we refer other research (Aggarwal et al., 2002; Lu and Samdani, 2019; Ranganathan and Saraogi, 2021) that shows underwriters purposefully underprice initial public offerings (IPOs) in the premarket in exchange for knowledge of market demand from knowledgeable investors. A firm's disclosure strategy, according to Leuz and Verrecchia (2000), is a trade-off between the marginal benefit of disclosure (i.e., less adverse selection) and the costs (i.e., loss of private information). In this trade-off, high-risk issuers, which have greater information asymmetry, are likely to profit more from such disclosure than low-risk issuers do. According to Ekkayokkaya and Pengniti (2012), who continue this line of reasoning, high-risk corporations may still need to underprice more than low-risk issuers even if they disclose more. There would be even more underpricing of high-risk issues in the absence of precise disclosure. Collectively, we argue that firms with more information asymmetry that disclose more demonstrate higher underpricing. The aforementioned considerations suggest that a prospectus's disclosure of risk may either inform investors that the company is a good investment or that it is a riskier choice. We believe that risk disclosure in the prospectus is likely to lead to higher underpricing regardless of the firm's quality or level of risk. The above discussion leads to our first and second hypothesis, as follows:

H1: Disclosure of the risk is positively associated with actual voluntary underpricing in the premarket

H2: The relation between the narrative risk disclosure and actual voluntary underpricing (VUP) is positive for firms with greater information asymmetry.

Research Methodology

Sample and Variable description

We obtain our data from various sources. The SEBI website provides access to the prospectuses that include information regarding firm specific variables and issue specific variables. The prospectus has a section titled "Risk Factors".

Our dependent variable is actual voluntary underpricing. According to Clarke et al. (2016), we define expected voluntary underpricing, or EUP, as $(MAXP - MAXA)/MAXP$ and VUP as $(MAXP - OP)/MAXP$. The offer price in the premarket may be purposefully lowered (increased) if the VUP is positive (negative). The initial return (IR) is calculated as the difference between the first-day closing price (CP) and MAXP divided by MAXP. A positive (negative) IR indicates that the market-driven underpricing (closing price) is higher or lower. Traditional underpricing (TUP), like in previous research, is calculated as the difference between the closing price (CP) and offer price (OP) $(CP - OP)/CP$. Our primary focus is on risk disclosure (risk_disc) as a proxy for disclosure. According to Elsayed et al. (2019), we calculate risk disclosure by adding up all of the sentences that are connected to risk. A number of studies have shown this strategy to be effective, including Linsley and Shrivs (2006), Abraham and Cox (2007), Hill and Short (2009), Elzabar and Hussainey (2012), Miihkinen (2012), and Ntim et al. (2013). We adhere to a particular risk classification. The risk classification offered by ICAEW (1997) and later adopted by Linsley and Shrivs (2006) is applied. The six risk categories are as follows: financial risk, operation risk, empowerment risk, information processing and technology risk, integrity risk, and strategic risk (Table 3). We define these subcategories as a fraction of the risk disclosed. As far as the categorization of the risk is concerned, only six of the 26 risk terms listed by Elshandidy and Neri (2015)—which pertain to risk categorization—are positive (chance, gain, high, rise, peak, viable). Only two of the seven primary keywords selected by Linsley and Shrivs (2006) could be considered positive (opportunity and prospect). According to Abraham and Cox (2007), just five of the fifteen words that come before derivatives are positive (opportunity, prospect, potential, upside, and advantage). We also simultaneously control for firm and issue characteristics following prior IPO literature (Leone et al., 2007; Ljungqvist, 2007; Gao, 2010; Neupane and Poshakwale, 2012). We provide variable definitions in Appendix A1.

Descriptives Statistics

Table I: *Descriptive statistics of risk disclosure*

Variable	Mean	Median	1st Quartile (N = 56)	2nd Quartile (N = 56)	3rd Quartile (N = 56)	4th Quartile (N = 56)
Risk_Disc	0.702	0.827	0	0.496	0.826	0.968
Strategy_Risk	0.092	0	0	0	0	0.097
Financial_Risk	0.321	0.204	0	0.496	0.204	0.623
Integrity_Risk	0.017	0	0	0	0	0
Operation_Risk	0.271	0	0	0	0	0.513
Info&Tech_Risk	0.21	0	0	0	0	0.362
Empowerment_risk	0.088	0.066	0	0.001	0.066	0.147

Note. This table provides the descriptive statistics of risk disclosure quartile wise. The sample consists of 224 IPOs listed on mainboard. Variable definitions are presented in Appendix A1.

Table I summarizes the descriptive statistics for the dependent variable risk and its subcategories. The average (median) value of risk is 70% (83%), implying that IPOs reveal negative risk for 70% of the total risk disclosed. On average, issuers report 9.4% and 32.1% of the risk for Strategic risk and financial risk, respectively, as well as 1.7% and 27% for Integrity risk and Operation risk. Information processing and technology risk and empowerment risk account for 21% and 8.8% of risk disclosure, respectively. The descriptive statistics for the control and independent variables are shown in Table II. VUP and EUP have average (median) values of 11.24% and 10.33% (12.49% and 12.17%), respectively. In contrast, the initial returns (IR) average (median) value is -3.21% (-5.74%). In comparison to Clarke et al. (2016), we report lower IR values and greater VUP, which we attribute to the varied sample selection methods and sample periods. Table II shows that the average (median) firm size is INR 69.582 billion (INR 2.548 billion), the average (median) IPO age at the time of listing is 15 years (13 years), the average (median) leverage is 30% (19%), and average (median) pre-promoter holdings are 74% (79%). Among issue-related characteristics, the average (median) underwriter rank is 7.5 (eight) out of the highest rank of nine. The average (median) issue size is 40% (36%). The average (median) numbers of specific objects and use of proceeds disclosed in our sample prospectus are around 2.57 (3.00) and 48 (50), respectively. Additionally, we exhibit the correlation matrix in Table 3, which indicates that risk disclosure has a negative association with IR and a positive correlation with UP. The correlations with the control variables are likewise generally in line with previous research.

Table II

Variables	Mean	Median	SD	Min	Max
UP(percent)	0.112	0.124	0.038	0	0.167
EUP(percent)	0.103	0.1220	0.039	0	0.165
IR(percent)	-0.031	-0.0570	0.26	-0.693	1.217
TUP(percent)	0.103	0.0490	0.287	-0.665	1.217
Total Assets (INR,Million)	69,582	2548.0000	8,45,960	59	1,36,12,627
Age (In years)	15.253	13.5000	15.056	1	152
Leverage(ratio)	0.302	0.1950	0.712	0	8.212
PrePromoterHolding(percent)	0.741	0.7930	0.243	0	100
UNDREP (Rank, 0-9)	7.575	8.0000	1.662	3	9
IssueSize (percent)	0.395	0.3580	0.301	0.061	3.69
NumObjects	3.574	4.0000	1.732	1	10
UseOfProceeds(nos.)	60.919	62.0000	14.979	0	120
NumofRisks(nos.)	48.353	50.0000	13.61	0	82
IssueRisks (nos.)	2.721	0.0000	3.632	0	14
TotalSub (in times)	19.109	3.2700	37.851	0.54	260.63
QIBSub(in times)	17.133	2.0400	38.41	0	400.44
RIISub (in times)	6.704	2.9650	12.096	0.03	140.84
Delay (in days)	16.282	15.0000	9.332	9	113
Big4 (dummy)	0.267	0.0000	0.443	0	1
InsidersSold(percent)	0.26	0.0000	0.367	0	0.995
Retain Ownership (percent)	0.719	0.7310	0.112	0.145	0.939
MOM (percent)	-0.002	0.0010	0.045	-0.163	0.097
TradingVol (ratio)	0.412	0.0620	0.771	0	3.467
SpecifityIndustry (percent)	0.682	0.6810	0.136	0.343	0.974
Startup (dummy)	0.81	1.0000	0.39	0	1

Note. This table reports the descriptive statistics for firm-and issue specific characteristics for the sample of 224 IPOs.

Results & Findings

Actual voluntary underpricing and risk disclosure. We begin our assessment of the relation between the risk disclosure and actual voluntary underpricing by employing the following baseline model: $UP_i = \alpha + \beta_1 Risk_i + \sum \beta_j FirmControl_i + \sum \beta_j IssueControl_i + \epsilon_i$ (1). for IPO firm i , where ϵ reflects the model's residual term. Equation (1) is estimated based on pooled ordinary least squares (OLS), with standard errors adjusted for heteroskedasticity and clustered at the industry level. All our regressions control for industry and year fixed effects. Table 4 presents the results of the relation between risk and VUP. Column 1 displays the findings of the base model after controlling for firm-level variables (TotalAssets, Age, Leverage, and PrePromoterHolding). We include issue characteristics (UNDREP, IssueSize, SpecObjects, InternalRisks, QIBSub, RIISub, Delay, Big4, InsidersSold, and RetainOwnership) in column (2). Finally, we divided risk into four subcategories in column (3): a) Strategic risk, b) Financial risk, c) Integrity risk, and d) Operation risk. According to our first hypothesis, premarket voluntary underpricing rises when risk is disclosed.

Table IV

Variable	I	II	III
RISK_DIS	0.0207***		0.017***
	(6.00)		(4.39)
FIN_RISK			0.037**
			(3.02)
OP_RISK			0.015***
			(3.50)
INTEGRITY_RISK			0.035*
			(1.89)
STRATEGIC_RISK			0.125
			(0.51)
INFO&TECH_RISK			0.110
			(0.49)
TOTALASSETS	0.005***	0.002*	0.002
	(4.49)	(1.82)	(1.45)
AGE	-0.001	0.000	0.000
	(-0.29)	(-0.07)	(-0.27)
LEVERAGE	-0.007	-0.005	-0.011
	(-0.58)	(-0.55)	(-0.94)
PREPROMOTERHOLDING	0.001	0.000	0.001
	(0.65)	(0.16)	(0.28)
UNDREP		0.002*	0.002*
		(1.90)	(1.71)
ISSUESIZE		0.010**	0.011
		(2.50)	(2.27)
NUMOBJECTS		0.000	0.000
		(-0.00)	(-0.11)
INTERNALRISKS		0.013**	0.014**
		(2.77)	(2.87)
QIBSUB		0.007***	0.007***
		(5.58)	(4.87)
RIISUB		-0.0105***	0.0103***
		(-5.67)	(-5.45)
DELAY		-0.001	-0.001
		(-0.36)	(-0.48)
BIG4		-0.004	-0.004
		(-0.64)	(-0.76)
INSIDERSOLD		-0.0127	-0.121
		(-1.23)	(-0.46)
RETAINOWNERSHIP		-0.005	-0.008
		(0.16)	(-0.28)
CONSTANT	0.052***	0.026	0.035
	(3.64)	(1.14)	(1.68)
INDUSTRY-FE	Yes	Yes	yes
YEAR-FE	Yes	Yes	Yes
N	224	224	224
ADJ. R-SQUARED	0.144	0.201	0.187

Note. This table presents the estimates for the models in equation (2)

$$VUP_i = \alpha + \beta_1 Risk_Dis_i + \beta_2 Fin_Risk_i + \beta_3 Op_Risk_i + \beta_4 Strategic_Risk_i + \beta_5 Info\&Tech_Risk_i + \beta_6 TotalAssets_i + \beta_7 Age_i + \beta_8 Leverage_i + \beta_9 PrePromoterHolding_i + \beta_{10} UNDREPI + \beta_{11} IssueSize_i + \beta_{12} SpecObjectsi + \beta_{13} InternalRisksi + \beta_{14} QIBSub_i + \beta_{15} RIISub_i + \beta_{16} Delay_i + \beta_{17} Big4_i + \beta_{18} InsidersSold_i + \beta_{19} RetainOwnership_i + DInd + DYear + \epsilon_i (2).$$

The dependent variable is UP for all models. The independent variable is risk_disclosure in columns (1) and (2). Column (1) presents the baseline model by controlling for firm-level factors. Column (2) controls for firm-and-issue-related factors. Column (3) presents the results for risk disclosure, financial risk, Integrity risk, strategic risk, empowerment risk and information and technology risk while controlling for firm-and issue specific factors. The regressions are performed by OLS and include industry and year fixed effects. The t-statistics (in parentheses) are adjusted for heteroskedasticity and clustered at the industry level. *, **, and *** denote significance at the 10%, 5% and 1% levels respectively. Variable definitions are presented in Appendix A1.

Our findings in Column (I) of Table IV demonstrate a positive and substantial relationship between risk disclosure and UP, implying that increasing risk disclosure leads to greater underpricing. Column (II) shows similar results: risk is positive and highly significant.

While our primary evidence differs from Leone et al. (2007), who concentrate on traditional underpricing, our findings corroborate hypothesis 1. In line with other studies (e.g., Beatty and Ritter, 1986; Miller 1977; Harrison and Kreps 1978; Ritter 1991; Ritter and Welch 2002), we contend that risk disclosure serves as a substitute for information asymmetry. In short, premarket underpricing is the price that companies pay to draw investors to the issue (Reber and Vencappa, 2016; Ekkayokkaya and Pengniti, 2012). Our results have important economic implications as well. We demonstrate the average correlation between a one standard deviation rise in risk and a 15.23% 14 greater premarket IPO underpricing.

The results are mainly in line with the findings of the IPO literature (Leone et al., 2007; Ljungqvist, 2007; Ekkayokkaya and Pengniti, 2012; Reber and Vencappa, 2016) with regard to the estimates of the control variables. More specifically, institutional buyers' (QIBs) oversubscription results in higher voluntary underpricing, while retail investors' (RIIs) oversubscription results in lower voluntary underpricing. The findings on QIBs are consistent with the arguments presented by Benveniste and Spindt (1989) and Hanley (1993). In India, underpricing is used as an incentive when the issuance is oversubscribed, namely because of the predetermined restrictions of allocation to QIBs (i.e., 50%) (Neupane and Poshakwale, 2012). We find a positive relation between the financial risk and voluntary underpricing (UP). This finding is in line with Ding (2016), who report a positive relation between informativeness of risk disclosure and traditional underpricing.

Our final conclusion, shown in column (3) of Table 4, indicates a positive relationship between the Integrity risk and actual voluntary underpricing in the premarket. Chemmanur and Yan (2009) validate our findings by stating that companies with more asymmetric knowledge communicate their inherent value to investors and customers through a mix of equity underpricing and product market advertising. When considered collectively, our data supports the idea that issuers that disclose risk in their prospectuses indicate a greater degree of uncertainty about the IPO value, which boosts premarket underpricing.

Conclusion

We examine the relationship between risk disclosure and IPO underpricing in the pre- and aftermarket using a sample of 224 IPOs. Despite the fact that this matter has been the subject of an increasing amount of research in developed markets, the particular regulatory structure of our environment forces us to re-examine it. We share a number of new findings. First, we show that risk disclosure considerably boosts actual voluntary underpricing in the premarket. In particular, we show that the established positive relationship is stronger for firms with greater information asymmetry, i.e., those that are small, have higher issue-related risks, and have lesser retained ownership by pre-IPO shareholders. Second, voluntary underpricing is substantially larger for enterprises identifying different kind of risks. As we shift our attention to the aftermarket, we identify three major outcomes. Initially, we discover that risk disclosure considerably lowers aftermarket initial returns. Schrand and Verrecchia (2005) and Leone et al. (2007) contend that transparency lowers ex-ante uncertainty and aids investors in more accurately estimating the dispersion of secondary market prices, and this result is in line with their findings. Second, we find that disclosing specific type of risk considerably reduces initial returns. Finally, we show that the level of transparency lowers initial returns in the aftermarket, particularly in IPOs with high investor emotion. Importantly, consistent with previous research, we find that risk disclosure reduces traditional underpricing. To sum up, our premarket results are consistent with information asymmetry models, and investor sentiment models validate the aftermarket results reported.

Appendix

Definition of variables

Variable	Definition
UP	Voluntary Underpricing calculated as (MAXP – OP)/MAXP
IR	Initial Returns (CP – MAXA)/MAXP
TUP	Traditional Underpricing is defined as (CP – OP)/OP
Risk_Disc	Fraction of number of risk (negative) sentences to total sentences in risk factor section.
Fin_Risk	Fraction of number of sentences related to financial risk to total sentences
Integrity_Risk	Fraction of number of sentences related to integrity risk to total sentences
Operation_Risk	Fraction of number of sentences related to operation risk to total sentences
Strategic_Risk	Fraction of number of sentences related to strategic risk to total sentences
Empowerment_Risk	Fraction of number of sentences related to empowerment risk to total sentences
Info&Tech_Risk	Fraction of number of sentences related to information and technology risk to total sentences
Age	One plus the difference in years since the firm was incorporated up to the year of listing.
TotalAssets	Natural log of the IPO's preceding year total assets.
Leverage	Natural log of the IPO's preceding year long-term debt to total assets.
PrePromoterHolding	Natural log of the IPO's promoter (insider) holding prior to the issue.
UNDREP	Underwriter reputation is defined as the average rank of all the lead underwriters of the issue. Rank for each underwriter is based on their relative market share.
IssueSize	Ratio of the shares issued during the IPO by shares outstanding prior to the IPO.
NumObjects	Natural log of the total number of objects listed in the IPO prospectus.
No.ofuseofProceeds	Natural log of the total number of use of proceeds reported in the IPO prospectus.
IssueRisks	Natural log of the total number of issue-related risks reported in the IPO prospectus.
TotalSub	Natural log of the IPO's total level of subscription.
QIBSub	Natural log of the subscription by QIBs
RIISub	Natural log of the subscription by RIIs.
Delay	Natural log of the difference in days between the offer date and the listing date.
Big4	Dummy variable that takes the value 1 if the IPO is audited by the Big 4 audit firms
InsidersSold	Ratio of shares sold by pre-IPO shareholders by the total number of shares sold in the IPO
RetainOwnership	Percentage of stock retained by pre-IPO shareholders (one minus the fraction of total number of shares sold in the IPO by shares outstanding on the listing day)
MOM	Return of one-month market index (BSE Sensex) prior to the date of IPO listing
TradingVol	Ratio of shares traded on the listing day by shares outstanding on the listing day.

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