Private Placements to Owner Managers: Theory and Evidence

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Outline

- The Empirical Literature on Private Placements
- The Regulatory Setting in India
- The Theoretical Model (Generalization of Myers-Majluf)
- A Numerical Example
- The Empirical Hypotheses
- Data and Empirical Results
- Conclusions

Private Placements

Positive announcement effects

– In contrast to seasoned equity offerings

Explanations:

- Monitoring Hypothesis
- Certification Hypothesis
- Entrenchment Hypothesis

Extant Literature on Private Placements

Monitoring Hypothesis	Certification Hypothesis	Entrenchment Hypothesis
• Wruck (1989) • Private equity investors ensure better monitoring • ➔ better resource allocation of corporate resources • ➔ Positive announcement effect	• Hertzel & Smith (1993) • Private equity investors certify hidden value prospects in the firm in a credible manner • ➔ Positive announcement effect	• Dann and De Angelo (1978) • Passive investors give incumbent managers a free reign • ➔ Negative announcement effect • ➔ Managerial self-dealing (discounts)

Existing empirical evidence relevant to owner-managers:
positive announcement effects
(Barclay (2007),
some evidence of managerial self-dealing (discounts)
(Wu (2004), Baek et al (2006), Barclay (2007))

Summary of Existing Empirical Evidence

- Positive announcement effect
- Managerial self-dealing
  - discounts are larger when managers are involved
- Little evidence of post placement monitoring

➔ Entrenchment Hypothesis is supported?

Private placements of Equity to Owner-Managers: U.S.

Private placements of equity to owner-managers are infrequent in the US. Why?

- Managerial Risk Aversion → Diversification → aversion to own company shares
- Wealth constraints → infeasible to own significant amount of company shares

→Managers as a source of financing are virtually ruled out.

→Motivation for Myers-Majluf.

Elsewhere…

Private placements of equity to managers are quite common outside of the US, particularly in Asia. Why?

- Significant fraction of economy is driven by family businesses
    - Stand-alone companies
    - Group companies

➔ Owner-managers are an important source of financing in many economies.

Private Placements of Equity in India

Resource mobilisation through primary market

Rs. Crore

	2005	2006	2007	2008P
Debt	66	389	594	0
Equity	30.325	32.672	58.722	49.485
IPOs	9.918	24.779	33.912	18.393
Private placement	83.812	1,17,407	1,84,855	1,75,061

P: Provisional

Source: Ministry of Finance Economic Survey

Note: 1 Crore = 10 Million. 1 $ = Rs. 45 (approx.)
Private placement includes both equity and debt
Our sample issue amount of private placements of equity is around Rs. 31, 500 crores. 63% of our sample issue amount is raised by owner managers.

Key Concern: Managerial Self-Dealing

1. Timing
   - Asymmetric information helps managers

2. Manipulation
   - Possible expropriation of shareholders

➔Prevalence of Regulations

The World of Private Placements

A.1 Table A1.1: Regulations on Private Placements in a Sample of Countries

Regulation On	US	Singapore	New Zealand	India
Issue size	No restriction	Maximum 10% in 12 months period without share holder approval	Maximum 10% in 12 months period without share holder approval	No limit specified for the controlling owner. But for Qualified institutional buyer (QIB) it should not be more than 5 times the net worth of the issuing firm.
Pricing	No regulatory restriction	No regulatory restriction	A maximum 10% to the current market price	The issue price should be less than the higher of the below two conditions: 1. Average weekly high low prices six months before the issue announcement date; 2. Average weekly high low prices two weeks before the issue announcement date.
Resale restriction	No restriction for registered private placements, however, restrictions for un registered private placements	No regulatory restriction	No regulatory restriction	The shares allotted to the controlling owner (promoter) will be locked in for three years from the date of the allotment. (convertible securities are locked in for one year). The promoter's pre-preferential allotment shares will be locked in for six months from the date of the allotment.
Subscribers	For unregistered it has to be less that 35 accredited (sophisticated investors) and each should not invest more than US$5 million.	Cannot be sold to directors or associated persons	Cannot be sold to directors or substantial shareholders	Can be sold both to the substantial share holders, their relatives and friends, banks, private equity players, and QIPs.
Disclosure	Nothing specific	Nothing specific	Nothing specific	The purpose for which private placement is being made should be disclosed before issuing. After issuing, details relating to the utilization of funds raised through preferential allotment should be disclosed under separate heading in the annual report.

Sources: Chen et.al (2002) for Singapore, Anderson et.al (2006) for New Zealand, Barclays et.al (2007) for the US market, and SEBI website (www.sebi.gov.in) for the India market

Key Features of Regulation

Private placement of equity to owner-managers is not allowed.

And/or

Regulators exercise some control over the issue price.

Securities and Exchange Board of India (SEBI) Issue Price Regulations

The issue of shares on a preferential basis can be made at a price not less than the higher of the following:

(1) The average of the weekly high and low of the closing prices of the related shares quoted on the stock exchange during six months **preceding** the *relevant date*;

or

(2) The average of the weekly high and low of the closing price of the related shares quoted on a stock exchange during the two weeks **preceding** the *relevant date*.

Securities and Exchange Board of India (SEBI) Issue Price Regulations: Example

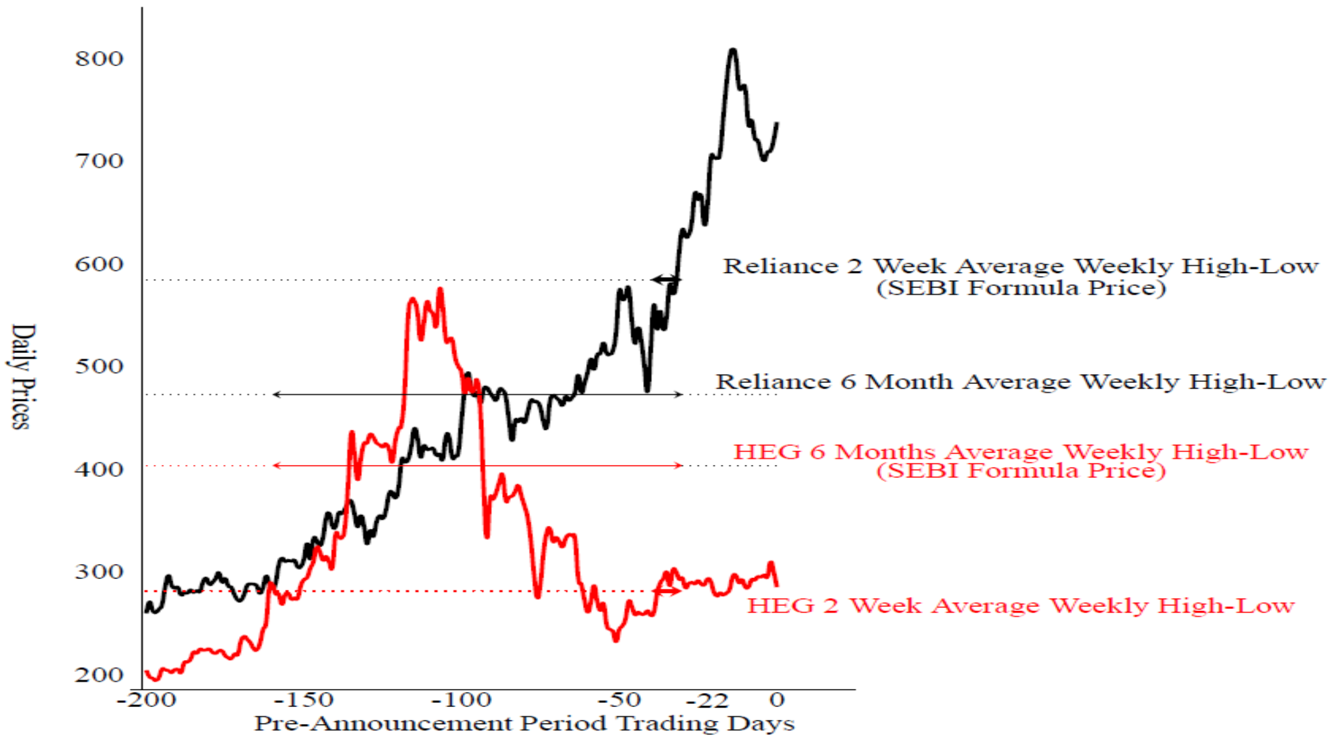


Figure 2: SEBI Formula Pricing Mechanism

The above figure depicts an example of the preferential allotments of two firms, namely Reliance Infra Limited and HEG Limited. The figure has number of trading days before the announcement date on the X-axis and the corresponding daily prices for those days on the Y-axis. As per the SEBI Formula price, the price should be the *higher* of either the two week average of the weekly High-Low prices or the six months average of the weekly High-Low prices (prior to 22 days before the announcement date). Hence for Reliance Infra the two weeks average weekly High-Low price is the formula price, whereas, for HEG, the six months average weekly High-Low price is the formula price.

Main Point of this Paper

- Theoretical model that shows that private placements of equity to owner-managers *mitigates* the Myers-Majluf underinvestment problem.
  - ➔Private placements to owner-managers are critical for capital formation and the growth of the economy.
- Empirical Evidence based on Indian capital market data confirms that asymmetric information is a key driver of private placements of equity to owner-managers.

Model Description (1)

An Asymmetric Information Model of Private Placement of Equity to Owner-managers:

Firm Value:

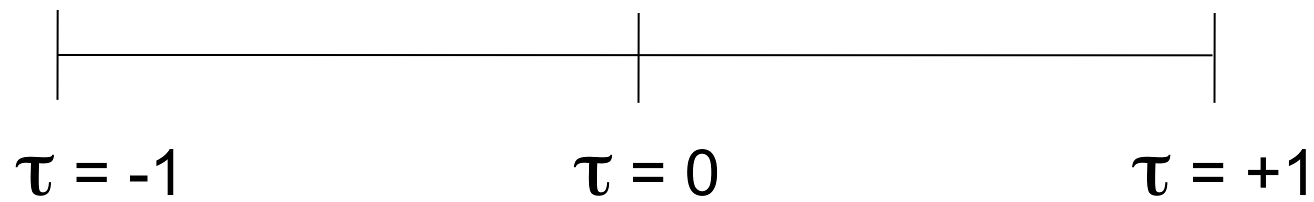
Value due to Assets-in-place (*AIP*) $\begin{array}{l} \nearrow s = \{l,h\} \\ \searrow 0 \end{array}$

Hidden Value (*HV*):
managers privately observe t $\begin{array}{l} \nearrow t \equiv U(-H,H) \\ \searrow 0 \end{array}$

NPV of an investment opportunity (*IO*): $-I \begin{array}{l} \nearrow x \\ \searrow y \end{array}$

Model Description (2)

Three Date Model:



τ= -1 to τ = 0: uncertainty about AIP is partially resolved to all investors
τ= -1 to τ = 0: uncertainty about HV is partially resolved *only* to owner-managers
τ= 0 is the Investment-Financing decision date
τ= +1 is the Liquidation date

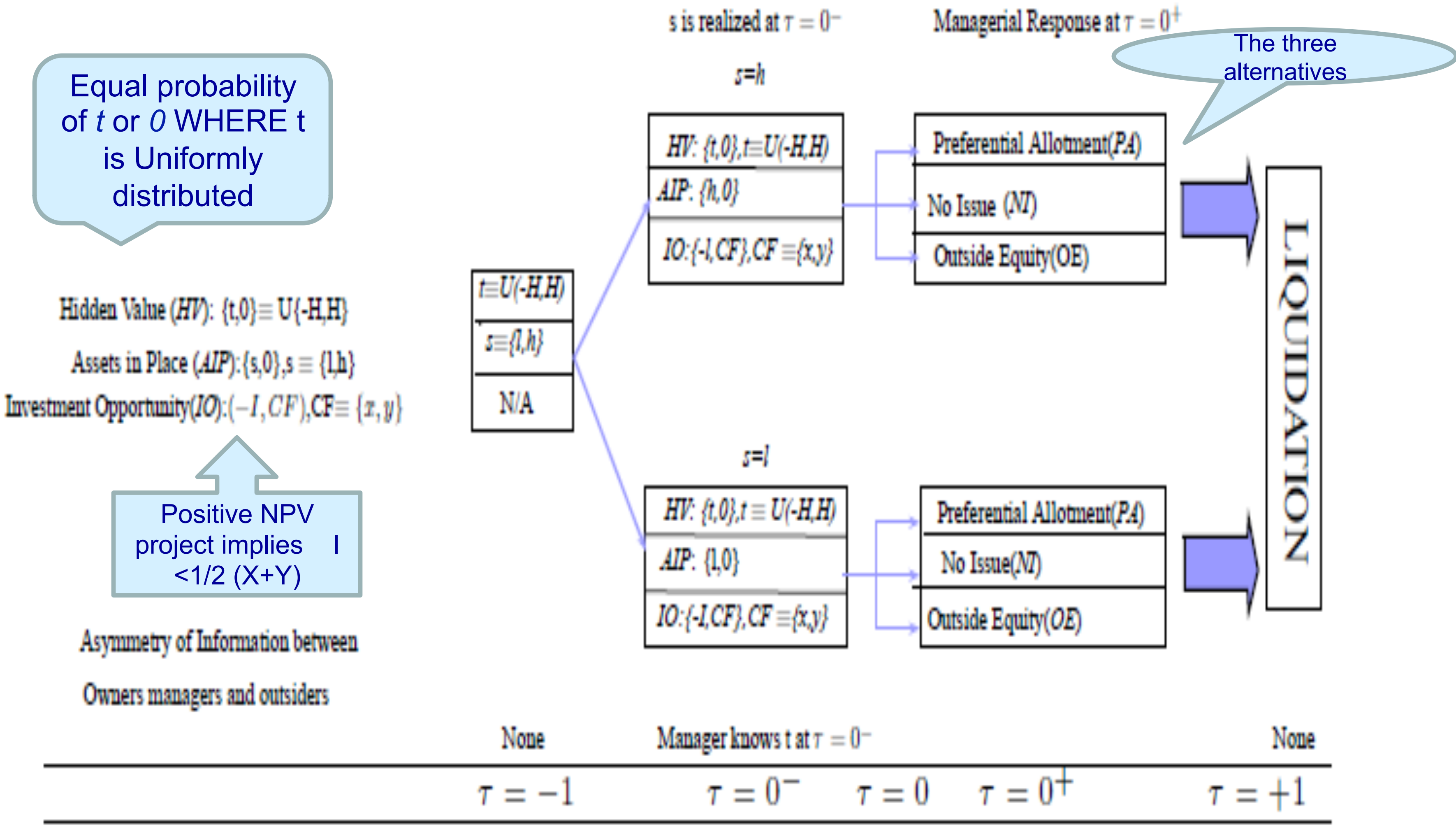
Managerial Decision at Date $\tau = 0$

Managers observes signal (t) of Hidden Value (HV), which takes the form {t,0}.

Manager has to make an Investment-Financing decision:

1. Whether to invest in the project or not (NI)
2. If the decision is to invest, then whether to finance it with Outside Equity (OE) or a Preferential Allotment (private placement to owner-managers) (PA)

The Model Time Line



Manager's choice of financing depends upon the private signal of "*t*" observed at τ = 0-

Proposition 1

Proposition 1. If the investment opportunity is such that its $NPV >= \overline{NPV}(s)$, $(s = l, h)$, *the owner-managers' investment-financing decision can be summarized by three threshold levels or cut-off values for the value of the private signal observed by owner-managers* (t). *The cut-off,* $\widehat{t}^{NI-PA}(s)$, *denotes the cut-off level of* t *below which the owner-managers prefer to forgo the investment opportunity (the underinvestment alternative denoted as* NI*) and above which they prefer to go for a preferential allotment (*PA*). In a similar vein,* $\widehat{t}^{OE-NI}(s)$ *and* $\widehat{t}^{OE-PA}(s)$ *denote the cut-off levels that determine the choice between outside equity and underinvestment and between outside equity and preferential allotment, respectively. The threshold cutoffs for the* NPV *of the investment opportunity and the value of the private signal* (t) *are given below:*

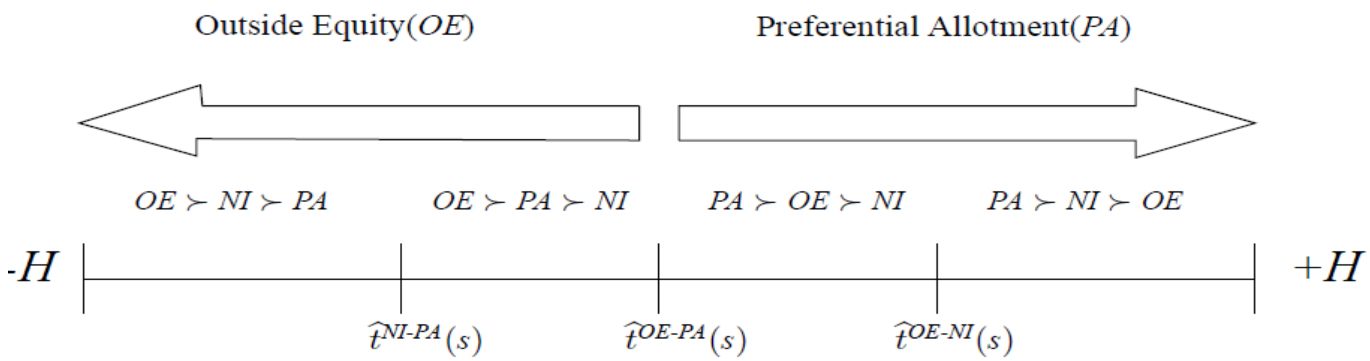
$$\overline{NPV}(s) = \frac{(1-\alpha)\frac{(h-s)}{4}(\frac{x+y}{2})}{s+x+y+\frac{(h-s)}{4}}, s = l, h \tag{4.1}$$

$$\widehat{t}^{NI-PA}(s) = \left[s+x+y+\frac{1}{4}(h-s)\right]\left[\frac{I-\alpha\frac{x+y}{2}}{I(1-\alpha)}\right] - (s+x+y) < 0, s = l, h \tag{4.2}$$

$$\widehat{t}^{OE-PA}(s) = \frac{(s+x+y)(1-\alpha)\frac{(h-s)}{4}}{(s+x+y)+\frac{\alpha}{4}(h-s)} \geq 0, s = l, h \tag{4.3}$$

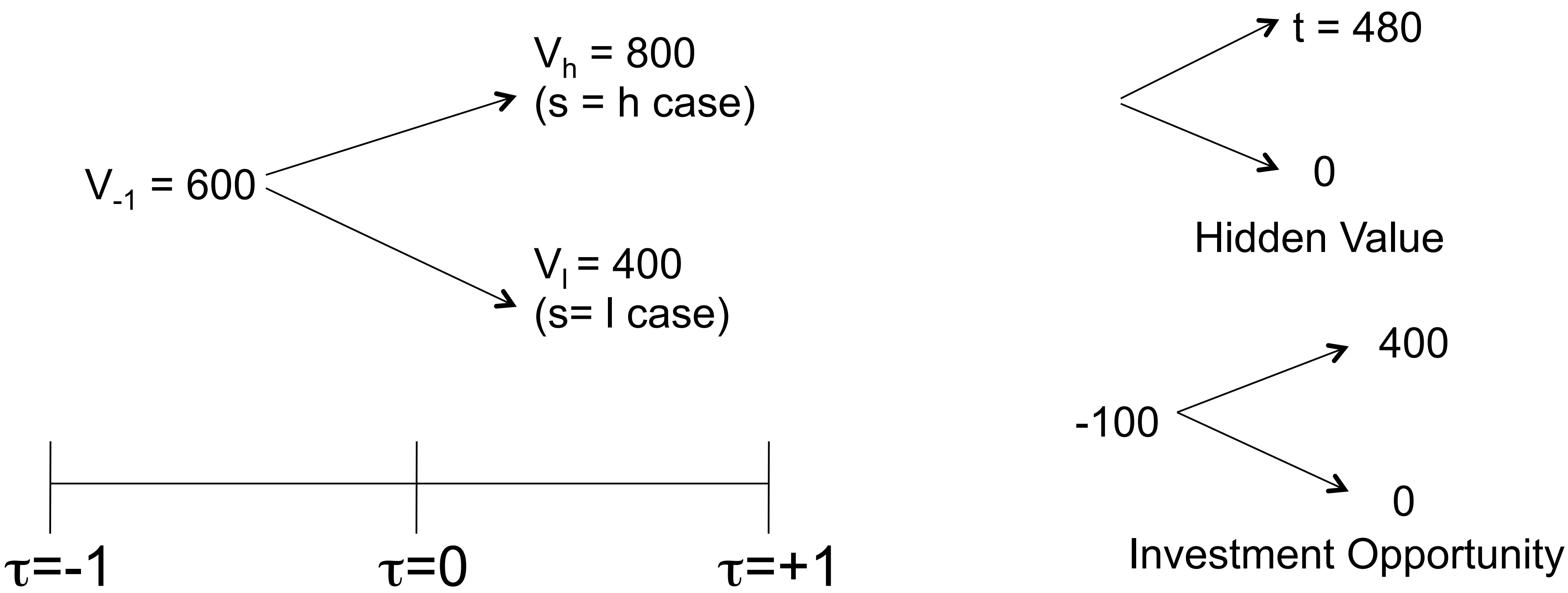
$$\widehat{t}^{OE-NI}(s) = [(s+x+y)]\left[\frac{\frac{(x+y)}{2}}{I} - 1\right] > 0, s = l, h \tag{4.4}$$

Manager's Optimal Investment-Financing Decision: Proposition 1



To the left (low *t*), Outside Equity (OE) is optimal
To the right (high *t*), Preferential Allotment (PA) is optimal
No issue (NI) is NEVER OPTIMAL!
PROVIDED NPV > NPV (s),

Numerical Example



Number of shares = 20, Owner-managers hold 40% of shares (= 8 shares).

V_{-1}: Date t = -1 value of assets-in-place (AIP)

V_h, V_l: Date t=0 value of AIP when s = h, l

Dilution Effect when s = l

Market value (s = l) = 400

Price per share = 400/20 = 20

Investment opportunity has an NPV = -100 + (400+0)/2 = 100

Number of new shares issued: = 100/20 = 5 shares

Expected Hidden Value (HV) = t/2 = (480+0)/2 = 240

Full Information Value given Expected Hidden Value = (400+240) = 640

Full Information Value per share = 640/20 = 32

➔ DILUTION per share: 32-20 = 12

Additional Premium due to SEBI

SEBI-mandated issue price is based on the historical average market value = (400+600)/2 = 500

SEBI-mandated issue price = 500/20 = 25

➔ Additional Premium due to SEBI = 25-20 = 5

Owner-managers as buyers

Market price = 20, Full Information Value = 32, SEBI-mandated issue price = 25

As buyers, owner-managers

- Gain 12 (dilution effect)
- Lose 5 (SEBI regulations)

➔Net gain = +7

[Or, as buyers owner-managers buy shares at 25, when the full information value is 32.]

Owner-managers as buyers and sellers

This gain experienced by buyers will cause a loss (-7) to the firm's owners. Since, owner-managers own only 40% of the firm, they lose only a fraction of the total loss (40% of -7) = -2.8 as sellers

➔ OWNER MANAGERS (as buyers and seller) get [(+7) + (-2.8)] = 4.2,

➔ OR equivalently, (1-40%) of [12 – 5] = 4.2,

where the dilution effect is 12 and additional premium due to SEBI is 5.

Announcement Period Returns

$\tau = -1$	$\tau = 0-$	Hidden Value(t)	Financing Choice	Issue price as per SEBI formula price is at:	Announcement effect($\Delta P(s)$)
$V_{-1} = \frac{h+l}{4} + \frac{x+y}{2} - I$	s=h: $V_b(s=h) = \frac{h}{2} + \frac{x+y}{2} - I$	$t \geq \hat{t}^{OE-PA}$	PA	$V_b(s=h)$ Market Value	$H/2$
		$t < \hat{t}^{OE-PA}$	OE	$V_b(s=h)$ Market Value	$-H/2$
	s=l: $V_b(s=l) = \frac{l}{2} + \frac{x+y}{2} - I$	$t \geq \hat{t}^{OE-PA}$	PA	$Max\lfloor V_{-1}, \frac{V_{-1}+V_b(s=l)}{2} \rfloor$ Past Average	$\frac{1}{16}\frac{[(s+x+y)(1-\alpha)(h-s)]}{[(s+x+y)+\frac{\alpha}{4}(h-s)]} + \frac{H}{4}$
		$t < \hat{t}^{OE-PA}$	OE	$V_b(s=l)$ Market Value	$\frac{1}{16}\frac{[(s+x+y)(1-\alpha)(h-s)]}{[(s+x+y)+\frac{\alpha}{4}(h-s)]} - \frac{H}{4}$

Positive

Positive

WE ALSO SHOW THAT ANNOUNCEMENT PERIOD RETURNS DECREASE WITH PROXIES OF MANIPULATION

Empirically Testable Hypotheses from the Model

Undervaluation Hypotheses

- ***H1***:*On average, the overall announcement period returns should be positive.*
- ***H2***: *Announcement period returns should be more positive for preferential allotments that occur after a low price path.*
- ***H3***: *Announcement period returns should be positively correlated with volatility of returns.*
- ***H4***: *Conditional on a preferential allotment being made after a low price path, announcement period returns should be negative correlated with owner-manager's pre-issue equity in the firm.*
- ***H5***: *On average, the announcement period returns should be negatively correlated with firm leverage.*

Manipulation Hypotheses

- ***H6***: *On average, announcement period returns should be decreasing with the stock's illiquidity.*
- ***H7***: *On average, announcement period returns should be positively (negatively) related to the abnormal return (abnormal volume) in the six month period prior to the announcement).*

Hypothesis based on Existing Literature

- **H8**: Preferential allotments made to business group affiliated firms should experience lower announcement period return compared to those made for non group affiliated firms.

- **H9**: Preferential allotments made to private equity investors should experience a higher positive announcement return than those made to banks and financial institutions.

Data Description

- 175 PRIVATE PLACEMENTS on Bombay Stock Exchange (BSE), 2001-2009

  Final Matched Sample: 164 Placements

  - 91 placements to Owner-Managers
  - 73 Placements to Private Equity players
  - Rest to Banks/Financial Institutions
- 42 industries

  → no concentration of any one industry
- Average firm size is Rs. Crore 1,956 (~ $431 million)
- Average managerial holding is 42%

Indian Preferential Allotments Data

Table 1: Descriptive Statistics of Preferential Allotments of Equity in India

Firm Level Variables	All firms	Group Affiliated firms	Stand Alone firms	Difference (t-value)	Low Price Path	High Price Path	Difference (t-value)	Owner-Manager	Non Owner-Manager	Difference (t-value)
N	164	107	57		102	62		91	73	
Panel A: Firm Characteristics										
Market Cap. (In Rupees Crores)	1956.35	2554.89	853	1701.89(3.00)***	1758.69	2275.16	-516.47(-0.77)	2200	1646	554.66(0.77)
Illiquidity x 10^{-4}(% Return/Rupee Volume)	6.18	3.52	11.10	-7.58(-3.70)***	6.72	5.32	1.41(0.66)	7.33	5.19	2.14(1.03)
Volatility (%)	4.01	4.05	3.94	0.106(0.38)	4.18	3.74	0.44 (1.63)	4.07	3.97	0.099(0.36)
Interest coverage ratio	6.03	2.10	15.13	-13.02(-3.19)***	7.26	3.99	3.26(0.22)	10.69	2.51	8.17(2.07)**
Debt-Equity ratio	0.93	1.01	0.78	0.22(0.48)	0.68	1.33	-0.648(-1.37)	0.47	1.13	-0.66(-1.46)
Panel B: Issue Characteristics										
Issue size to Owner-Manager equity(%)	60.00	72.00	35.00	37.19(0.82)	77.90	31.45	46.44(1.07)	32.44	82.77	-50.00(-1.15)
Issue size to outstanding shares(%)	16.00	15.60	16.82	-1.21(-0.43)	17.25	14.01	3.24(1.18)	15.04	16.84	-1.80(-0.66)
Panel C: Investor Characteristics										
Owner-Manager's subscription(%)	45.00	43.00	50.80	-7.80(0.19)	59.70	40.30	19.40(-2.07)			
Private Equity subscription(%)	44.70	49.50	35.20	14.30(2.10)**	65.00	35.00	30.00(0.30)			
Bank subscription(%)	10.30	7.50	14.00	-6.50(-0.71)	66.67	35.33	33.34(1.34)			
Panel D: Ownership Characteristics										
Owner-Manager's equity(%)	42.39	40.68	46.03	-5.35(-1.45)	42.83	41.70	1.13(0.32)	44.92	41.79	3.12(0.93)

Announcement Period Effects

Table II: Announcement Effects of Preferential Allotments of Equity in India

Panel A: Overall Announcement Effects			
	All		
CAR (-1,+1) (%)	0.87(1.73)		
CAR (-5,+5) (%)	3.48(3.77)***		
CAR (-10,+10) (%)	6.18(4.19)***		
Panel B: Announcement Effect Based on the Formula Price			
	Low Price Path	**High Price Path**	**Difference(t-value)**
CAR (-1,+1) (%)	1.53(2.39)**	-0.20(-0.25)	-1.73(-1.69)
CAR (-5,+5) (%)	4.54(3.59)***	1.79(1.40)	-2.75(-1.53)
CAR (-10,+10) (%)	9.06(4.58)***	1.58(0.77)	-7.47(-2.62)**
Panel C: Announcement Effects based on the level of Volatility			
	Below Median	**Above Median**	**Difference(t-value)**
CAR (-1,+1) (%)	0.29(0.49)	1.88(2.2)**	1.60(1.50)
CAR (-5,+5) (%)	2.70(2.33)**	4.20(2.98)***	1.50(0.83)
CAR (-10,+10) (%)	6.70(2.2)**	6.08(3.86)***	0.61(0.23)
Panel D: Announcement Effects based On Ownership level			
	Below Median	**Above Median**	**Difference(t-value)**
CAR (-1,+1) (%)	1.08(1.53)	0.63(0.87)	-0.45(-0.44)
CAR (-5,+5) (%)	2.81(2.48)**	4.23(2.83)***	1.42(0.76)
CAR (-10,+10) (%)	5.45(2.71)***	7.0(3.21)***	1.55(0.52)
Panel E: Announcement Effects based on the Interest Coverage Ratio			
	Below Median	**Above Median**	**Difference(t-value)**
CAR (-1,+1) (%)	0.80(0.69)	1.10(1.90)	0.30(1.50)
CAR (-5,+5) (%)	2.74(2.98)***	3.92(2.33)**	1.18(0.64)
CAR (-10,+10) (%)	7.03(2.20)**	5.11(3.86)***	-1.92(0.66)
Panel F: Announcement Effects based on the Issuer Type			
	Stand-Alone Firms	**Group Firms**	**Difference(t-value)**
CAR (-1,+1) (%)	1.90(2.2)**	0.30(0.49)	-1.60(1.50)
CAR (-5,+5) (%)	4.31(2.33)**	3.02(2.98)***	-1.29(0.61)
CAR (-10,+10) (%)	10.87(3.86)***	3.61(2.20)**	-7.27(2.23)**

Panel G: Announcement Effects based on the Investor Type

	Owner-Managers(OM)	Private Equity Firms(PE)	Banks(B)	(PE-OM)	(B-OM)	(B-PE)
CAR (-1,+1) (%)	0.93(1.31)	0.49(0.65)	1.61(1.13)	-0.44(-0.43)	0.68(0.43)	1.12(0.70)
CAR (-5,+5) (%)	4.20(3.29)***	2.10(1.37)	3.24(1.35)	-2.10(-1.05)	-0.96(-0.35)	1.14(0.40)
CAR (-10,+10) (%)	7.82(3.71)***	4.50(2.10)**	1.25(0.33)	-3.30(-1.11)	-6.58(-1.50)	-3.25(-0.74)

Determinants of Announcement Effects

Table 3: Determinants of Announcements Effects of Preferential Allotments of Equity in India

Variable Name	Regression 1	Regression 2	Regression 3	Regression 4
Dependent Variable: CAR(-10,+10)				
	All firms	All firms	All firms	Low Formula Price firms
N	162	162	162	99
Intercept	19.81(3.21)***	17.94(2.50)***	17.95(2.49)***	22.22 (2.43)***
Panel A: Firm Characteristics				
ln(Market Cap)	-2.11(-2.26)**	-1.66(-1.61)	-1.42(-1.34)	-2.40(-1.71)
Group dummy	-2.34(-0.75)	-3.08(-0.97)	-3.61(-1.10)	-2.60(-0.61)
Volatility(%)	18.50(2.83)***	18.36(2.76)***	18.08(2.71)***	27.80(3.12)***
Interest coverage ratio	0.009(0.41)	0.010(2.48)***	0.001(2.35)**	0.020(3.35)***
Panel B: Issue Characteristics				
Issue size to Owner-Manager equity (%)		0.001(0.23)	0.002(0.46)	0.003(0.53)
Issue size to outstanding shares (%)		0.080(0.96)	0.083(0.98)	0.196(1.46)
Instrument type dummy		1.301(0.38)	0.660(0.19)	0.212(0.04)
High Price Path dummy		-5.65(-1.95)**	-5.78(-1.99)**	
Panel C: Investor Characteristics				
Owner-Manager dummy			–	–
Private Equity dummy			-1.87(-0.51)	-8.64(-1.96)**
Banks dummy			-4.81(-1.01)	-8.92(-1.50)
Panel D: Ownership Characteristics				
Owner-Manager's Equity				0.00(0.06)
Year dummies	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes
Adj. R-squared(%)	13.01	14.49	13.95	27.04
p-value > F	0.000	0.000	0.000	0.000

Prior Period Abnormal Returns: Summary Statistics

Table 4: Summary Statistics of Cumulative Abnormal Return and Volume in Pre-Announcement Period

Panel A: Prior Period Abnormal Returns and Volume

Event Windows	Mean	t-value	Median	Event Windows	Mean	t-value	Median
CAR (-22,-32)	5.13	1.35	2.66**	*CAV (-22,-32)*	2783781	1.40	172445
CAR (-22,-154)	37.39	10.18***	32.24	*CAV (-22,-154)*	2366700	2.25**	1323750
CAR (-22,-250)	52.01	14.02***	47.17	*CAV (-22,-250)*	2468467	2.66	1108527

Panel B: Correlation Analysis

	CAR(-22,-32)	*CAR(-22,-154)*	*CAR(-22,-250)*	*CAV(-22,-32)*	*CAV(-22,-154)*	*CAV(-22,-250)*
CAR(-22,-32)	1					
CAR(-22,-154)	0.3365	1				
CAR(-22,-250)	0.2924	0.7451	1			
CAV(-22,-32)	0.2369	0.1288	0.093	1		
CAV(-22,-154)	0.0425	0.0742	0.1019	0.6623	1	
CAV(-22,-250)	0.0072	0.0419	0.0962	0.5152	0.9721	1

Testing Manipulation Hypotheses

Table 5: Determinants of Announcement Effects of Preferential Allotments of Equity in India in the Presence of Manipulation

	Regression 1	Regression 2	Regression 3	Regression 4	Regression 5
Dependent Variable: *CAR(-10,+10)*					
N	162	162	162	162	162
Intercept	27.02(2.71)***	25.05(2.46)***	22.63(1.95)**	27.51(2.73)***	27.10(2.70)***
Panel A: Firm Characteristics					
ln(Market cap)	-0.12(-0.10)	-0.37(-0.29)	-0.35(-0.27)	-0.12(-0.10)	-0.10(-0.08)
Group dummy	-6.67(-1.20)	-6.74(-1.26)	-5.94(-0.95)	-6.82(-1.23)	-6.71(-1.20)
Volatility	10.72(2.62)***	12.28(2.87)***	11.90(2.80)***	10.55(2.59)***	10.71(2.61)***
Interest coverage ratio	0.001(1.98)**	0.001(1.91)**	0.001(1.90)**	0.001(1.98)**	0.001(1.98)**
Panel B: Issue Characteristics					
Issue size to Owner-Manager equity	0.003(0.56)	0.003(0.74)	0.002(0.42)	0.002(0.55)	0.002(0.55)
Issue size to outstanding shares	0.056(0.68)	0.027(0.34)	0.020(0.24)	0.057(0.70)	0.056(0.68)
Instrument type dummy	0.29(0.18)	0.48(1.25)	0.64(1.01)	0.37(1.20)	0.27(1.17)
High Price Path dummy	-6.11(-2.15)**	-6.75(-2.40)**	-7.83(-2.62)***	-6.41(-2.20)**	-6.27(-2.17)**
Panel C: Purchaser Characteristics					
Owner-Manager dummy	-	-	-	-	-
Private equity dummy	-0.15(-0.05)	-0.78(-0.25)	-0.52(-0.16)	-1.16(-0.05)	-0.001(0.00)
Banks dummy	-5.48(-1.19)	-5.28(-1.17)	-4.01(-0.86)	-5.43(-1.18)	-5.40(-1.17)
Panel D: Manipulation Environment					
Ln(Illiquidity)	-1.36(-2.14)**	-1.37(-2.19)**	-0.88(-1.99)**	-1.39(-2.81)***	-1.35(-2.13)**
Panel E: Prior Period Abnormal Returns and Volume					
CAR(-22,-32)		0.21(2.30)**			
CAR(-22,-154)			0.006(1.73)*		
CAV(-22,-32)				0.000(0.49)	
CAV(-22,-154)					0.000(0.33)
Year dummies	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes
Adj. R-squared (%)	14.93	17.51	16.14	14.45	14.38
p-value>F	0.000	0.000	0.000	0.000	0.000

To Summarize...

- We show that private placements to owner-managers can mitigate the Myers-Majluf (1984) underinvestment problem.

- We provide empirical evidence consistent with the implications of our model (after controlling for alternative explanations).

- Our findings are relevant for security market regulators in high growth emerging economies.