MN50324 Lecture 5

Separation of Ownership and Control

Introduction to Topic

- Researchers recognise that capital structure affects managerial incentives through cashflow rights AND control rights.
- Debt: hard claimants.
- Equity-holders: soft claimants.
- Share-holder interest hypothesis.
- Management entrenchment hypothesis.

• Insert slide 89 -92 of your pack.

Management Entrenchment Hypothesis versus shareholder interest hypothesis

- Capital Structure: Cashflow rights: Increasing leverage (debt ↑ outside equity ↓
- Manager owns more of the equity => works harder, takes less perks etc. V
- But, higher managerial share of equity => higher share of votes => V (mgmt entrenchment)
- Trade-off?

Empirical evidence

- De Miguel et al (2004): quadratic relationship.
- Silva et al (2006) cubic relationship



Two conflict groups

- Inside Mgrs versus outside equityholders.
- Minority shareholders versus blockholders.
- So, blockholders may reduce mgt entrenchment problems
- But conflicts between blockholders and minority holders.

Bebchuk

- Rent-protection theory.
- Developed versus emerging markets.
- Different legal systems/different investor protection/different cultures.
- Weak legal systems => large mgrl extraction of private benefits of control => entrenchment.
- Plus mgrl risk-aversion => desire for low equity stake => devices to separate ownership and control

Devices to separate ownership and control

- Dual class of shares.
- Majority (or supermajority) rules
- => 50% of votes required or 75% of votes required
- => management can hold large control rights with minimal cashflow rights (large votes with low equity)
- Mexican evidence: eg Castaneda Ramos

Bebchuk's model

• Manager's payoff:

V(sells.all.shares) = Y + B

Without a control struggle

$$V_{(keeps.half.the.shares)} = \frac{Y}{2} + \left(\frac{Y}{2} - \mu Var(\varepsilon)\right) = Y - \mu \frac{R}{4}$$

Therefore, without a control struggle, incumbent sells all of the shares (due to risk aversion).

Bebchuk (continued)

 If incumbent issues all the shares, an alternative manager can takeover by buying a block if

$$\frac{Y}{2} - \mu \frac{R}{4} + B - C_T \ge \frac{Y}{2}$$

Rival's bidding strategy:

$$\frac{Y}{2} - \mu \frac{R}{4} + B - C_T > P \ge \frac{Y}{2}$$

Bebchuk's results

- Risk-aversion induces incumbent to reduce shares
- Private benefits/entrenchment incentives induce mgr to maintain a minimum equity holding.
- High private benefits induces a take-over threat.
- => incumbent holds half the shares.

Limitations of Bebchuk's analysis

- Bebchuk only considers incumbent's entrenchment incentive
- He does not consider the incumbent's commitment (to high effort) incentive
- Does not consider dual class/supermajority in detail
- Other aspects of emerging markets

Fairchild and Garro Paulin (2007)

- We develop Bebchuk as follows:
- 1. We consider the manager's commitment AND entrenchment incentives
- 2. We consider the effects of the degree of riskaversion.
- 3. We consider defensive mechanisms: dualclass of voting equity + supermajority rules.
- 4. Market inefficiencies.
- 5. Govt motives (favouring incumbents or investors?)

The Model

- Players: Risk-averse incumbent, rival mgr, atomistic, price-taking outside investors (risk neutral).
- Corporate Governance: The corporate charter specifies exogenously given majority rule in voting contest. $\phi \in [0,1]$
- Plus: the social planner allows incumbent to issue a certain proportion of equity as non-voting. $\theta \in [0,1]$
- Incumbent deciding how much equity to issue at IPO (no debt). $\alpha \in [0,1], 1-\alpha$

Timeline

- Date 0: Social Planner chooses a proportion of equity that can be issued as non-voting (balance = voting). Majority rule exogenously given.
- Date 1: Incumbent decides how much equity to issue.
- Date 2: Incumbent exerts effort in running the business.
- Date 3: Rival appears and launches a hostile takeover battle.
- Date 4: payoffs occur, and manager in charge at date 3 gets private benefits.

Defining a non-contestable structure

 $\alpha \in [0, \alpha')$

Contestable structure: rival wins

 $\alpha \in [\alpha', 1]$

Non-contestable: incumbent wins

$$\alpha$$
' Determined by

$$\theta, \phi$$

Solve by backward induction

- First, take as given $\alpha \in [\alpha',1]$ (NCS)
- Incumbent's expected payoff

$$\prod_{M} = \alpha PR - \beta e^{2} - \mu Var(X) + B + (1 - \alpha)\overline{V}$$

Where $Var(X) = \alpha^2 R^2 P(1-P)$

And $P = \frac{1}{2} + \gamma e$

Optimal date 2 effort level

$$e^* = \frac{\alpha \gamma R}{2\beta - 2\mu \alpha^2 \gamma^2 R^2}$$

Date 1: Incumbent's choice of amount of equity

- NCS structure:
- Insert optimal effort into payoff => indirect payoff.
- Optimise:

$$\mu \in [0, \mu'] \Longrightarrow \frac{\partial \hat{\Pi}_{M}}{\partial \alpha} > 0 \forall \alpha \in [0, 1]$$

$$\mu \in [\mu', \mu'']$$
 N-shaped function

$$\mu \in > \mu'' = > \frac{\partial \hat{\Pi}_{M}}{\partial \alpha} < 0 \forall \alpha \in [0,1]$$

CS structure

- Next take as given CS structure.
- Incumbent sells all of the equity

$$\prod_M = R_r$$

Extreme risk-aversion $\mu'' < \mu$



21

Date 0

- Finally, move back to solve for SP's optimal choice of majority rule
- SP's payoffs
- Outsiders win the vote iff

$$(1-\alpha)(1-\theta) \ge \phi[\alpha + (1-\alpha)(1-\theta)]$$

SP's optimal choice of θ

•Depends on SP's alignment with shareholders or incumbent.

•Ability to 'fool' investors due to emerging inefficient irrational markets

•Extreme risk-aversion: incumbent wants to minimise cashflow rights while maximising control rights.

•High private benefits.