VOTING RIGHT AND THE CONTROL OF THE FIRM

Does the distribution of voting rights to the shareholders play a role in shifting the control of the firm from the incumbent management to a superior rival (if he exists)?

Grossman, S. and O. Hart (1988), "One Share-One Vote and the Market for Corporate Control", *Journal of Financial Economics* **20, 175-202.**

A firm, that is willing to sell its shares and wants to get the maximum market price per share, chooses the rule:

→**"one share-one vote"**

THE MODEL

Dual class shares $\rightarrow A$ and B

- Class A has the right to:
    - a fraction s_A of the profits of the firm
    - a fraction v_A of voting rights.

- Class B has the right to:
    - a fraction s_B of the profits of the firm
    - a fraction v_B of voting rights.

$$s_A + s_B = 1; \qquad v_A + v_B = 1$$

- Assume: different fractions of voting rights:

$$v_A > v_B$$

- one share-one vote is a particular case:

$$s_A = v_A = 1$$

- Control to a management team (inside owner)
- Total value of the firm:
  → two components:

- income flow to <u>shareholders</u>:

  <u>Public (security) benefits</u> → y

- benefits flow to <u>management</u>:

  <u>Private benefits</u> → b

Example of private benefits:

- Social influence;
- Same coworkers;
- Interests in other activities that can be supported through the management of the firm

In each period of time, the firm is managed by a specific management team:

- Incumbent → *I*
  Under *I*'s management, the total value of the firm is:

  $$V^I = y^I + b^I$$

- Rival management team→ *R*

  able to realize a value of the firm:

  $$V^R = y^R + b^R$$

t = -1

- The firm chooses the voting structure and selects a management team from a population of which it only knows the expected value they are able to generate

t = 0

- The ability of *I* and *R* are common knowledge and *R* decides whether to take over the firm.
- If *R* decides to take over the firm, *I* decides whether or not to resist the takeover.

t = 1

- The firm ends its activity and its residual value is distributed to shareholders.
- A takeover is successful if *R* gets at least 50% of the votes in his favor.

- Shareholders may:
  i) sell their shares to *R;*
  ii) sell their shares to *I*;
  iii) retain their shares.

- Since:

$$v_A > v_B$$

⟹ *R* and *I* only compete for getting shares of class *A*

- Shareholders' interest:
  highest value of y.

- Control of the firm will go to the one (between R and I) who is able to pay the highest price per share

  (even if not able to produce high y)

- The optimal voting structure for shareholders is the one which ensures the control of the firm is assigned to the part that can generate the highest public benefit.

Four cases in the analysis:

i) b^I is small with respect to: b^R, y^I, y^R;

ii) b^R is small with respect to: b^I, y^I, y^R;

iii) b^I and b^R are small with respect to: y^I, y^R;

iv) b^I and b^R are great with respect to: y^I, y^R

i) b^I is small with respect to: b^R, y^I, y^R

- **The best response of *I* to *R*'s offer:**

  I , for the class of shares *A,* can bid not much more than $s_A y^I$

  (b^I is small)

  If *I* makes an offer, this must be winning (in his intentions) and so it is not in his interest to offer less than $s_A y^I$

- **The problem of *R*** is to identify the bid which prevents the I's reaction and that is profitable

- Two states of the world are possible:

  a) $y^R \geq y^I$

  b) $y^R < y^I$

a) $y^R \geq y^I$ → R is at least as competent as I. The best strategy for R is to bid marginally more than $s_A y^R$ ($> s_A y^I$)

→ I will not make any counter-offer.

b) $y^R < y^I$

- R can prevent *I*'s counter-offer only offering to buy the shares at a «price» greater than $s_A y^I$

- Loss for *R*:

$$\left| s_A \left(y^R - y^I \right) \right| \equiv L$$

⟹ The bid will be offered by *R* if and only if:

$$b^R > \left| s_A \left(y^R - y^I \right) \right|$$

Summarising:

1. $y^R \geq y^I$

→ *R* gets the control with a bid marginally greater than $s_A y^R$

→ Market value of the firm $\to y^R$

(or marginally greater)

2. $y^R < y^I$ and $b^R < \left| s_A \left(y^R - y^I \right) \right|$

$\longrightarrow$ *R* doesn't get the control

$\longrightarrow$ Market value of the firm $\rightarrow y^I$

3. $y^R < y^I$ and $b^R \geq \left| s_A \left(y^R - y^I \right) \right|$

⟶   *R* gets the control with a bid
marginally greater than $s_A y^I$

⟶   Market value of the firm:

$$s_A y^I + s_B y^R \equiv s_A y^I + (1 - s_A) y^R \equiv L + y^R$$

NOTICE case **3**:

- *R* is less competent than *I*
- *R* gets the control if the private benefit he enjoys are big   enough to compensate the loss of income that his administration generates.

- The greater s_A the less likely that R gets the control.

  (Remember: $b^R \geq \left| s_A \left(y^R - y^I \right) \right|$)

  $\longrightarrow$ It is in the the owners' interest choosing:

$$s_A = 1 \quad \text{for each } v_A > v_B$$

$\Rightarrow$any pair   [$v_A > v_B$; $s_A = 1$] is efficient

and hence:

$\Rightarrow$also the pair [$v_A = 1$; $s_A = 1$] is efficient

ii) b^R is small with respect to: b^I, y^I, y^R

Can be analysed by applying the same logic used for the case *i*) just changing the roles.

iii) b^I and b^R are small with respect to: y^I, y^R

- In this case the two competitors (*R* and *I*) do not have private benefits through which subsidize the bids that their own skill would not be able to subsidize,

      control goes to the most skilled

      management, whatever the voting

      structure.

iv) b^I and b^R are great with respect to: y^I, y^R

- It is in the interest of shareholders to induce the greatest competition between *R* and *I*.

- However, this result is not obtained by taking them to compete on the public component of the value of the firm, but on the private component and to this end

→ one share-one vote is not necessarily efficient.

(E.g. Companies in the media sector)