# Topic 7 Monitoring the Corporation: Corporate Governance

(Policing the Behaviour of Management)

1)	<b>External</b>	<b>Monitors</b>
,		

- -P Markets
- -C Markets

#### 2) The Free \_\_\_\_\_ Problem and the Tender Offer

-Why bad management remains

#### 3) <u>I\_\_\_\_\_ Monitors of management</u>

- -Expense Preference (utility theory)
- -Ex-post Settling Up

4) The Principle Agent Relationship and Ownership Structure

5) Expense Preference Under a Profit Constraint

6) The Unregulated Firm and Expense Preference

<u>Introduction:</u> We have assumed that the firm pursues the primary goal of \_\_\_\_ maximization. The firm's managers look after shareholder interests by maximizing firm profits.

#### But is this a realistic assumption?

Since it is very common for managers to be acting separately from shareholders in large firms, why should a manager look after the interests of shareholders <u>and</u> not the manager's interests?

The m\_\_\_\_ may be more interested in building an <u>empire</u>, devising massive <u>compensation</u> packages, having a large support <u>staff</u>, taking trips on company <u>jet</u>, etc...

The interests of shareholders can  $c_{\underline{\underline{t}}}$  with those of managers.

Who then m\_\_\_\_\_ the manager, such that the interests of the shareholders is of primary concern?

⊙ There are economic forces that constrain the behaviour of managers.

#### **External and Internal Monitors:**

The <b>product</b> and <b>capital</b> marke	ets are <u>external</u> mo	onitors that
limit the opportunistic actions of	of managers. C	markets
operate in such a way that they	create the proper i	ncentives
for managers to maximizestructure.	, regardless of	the market
Plus, there are <u>internal</u> monitor	rs of managerial pe	erformance.
The board of directors can	good performa	nce or
eliminate managers who do not	maximize profits	

#### **External Monitors: Product and Capital Markets**

In <u>competitive markets</u>, managers maximize profits by minimizing cost and by producing the profit-maximizing quantity. Any firm that does not cost minimize will <u>not</u> s\_\_\_\_\_ because \_\_\_\_ will be less than long-run average cost. Hence, competition in the <u>product market</u> motivates managers to pursue the goal of profit maximization.

**Product market** competition is an important <u>external</u> monitor in competitive industries.

The **capital market** also monitors management performance.

When a firm is offered to the	e public, it offers ov	wnership
shares called common	Owners of these	stock shares
become owners of the compa	any. When the firn	n's profits
increase, the value of the	also increases.	Shareholders
expect the management to m	aximize profits so	that the
prices reach a maximum.		

If management is *not* maximizing the profit of the firm, outsiders and/or current shareholders may begin to buy up shares in order to <u>c</u> the company and replace management with new managers who will pursue profitmaximizing strategies.

Hence, the capital market punishes bad management by replacing them.

#### **Studies have shown that:**

- 1) A management \_\_\_\_\_ leads to an improvement in the operating performance of a firm.
- 2) The capital market tends to \_\_\_\_\_ managements that do not improve the operating performance of firms.

#### **The Free Rider Problem and The Tender Offer**

management team that performs badly.

	es why each shareholder has little _ a management team that is not
•	dual shareholder has limited power over of a firm, since no one shareholder in a firm.
For firms with many arises when the	small shareholders, a <u><b>free-rider</b></u> problem market attempts to replace a

Situation: We will assume that an individual concludes the	hat
the current management is not maximizing	She
believes that new management would raise the profits	of
the firm. The individual decides to replace manageme	ent
by shares to gain a majority of shares through	a
tender offer. With a majority of shares, she can vote t	O
eliminate the current management.	
In a <b>tender offer</b> , an individual offers to pay a price	
than market price for each, provided shareholders	(
a specified number of shares.	

<u>Dilemma:</u> Does an individual stockholder sell his shares or \_\_\_\_ to see if the bidder can replace the current management with new management that will maximize profits?

**Compare:** Suppose profit is currently  $\Pi_0$  and the stock price is  $P_0$  with the existing management team.

With a new management team, the bidder expects profits will increase to  $\Pi_1$  and the stock price will rise from  $P_0$  to  $P_2$ .

The bidder offers a price of  $P_1$ , which is less than  $P_2$ , but greater than the current price  $P_0$ , to existing shareholders if 50% of the firm's shares are tendered.

If the majority does not tender, the takeover fails and no shares change hands.

#### Do you sell your shares to the bidder?

Probably		!
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To illustrate why, examine the payoff matrix:

		Tender	offer
		Successful	Unsuccessful
Shareholder	Do Not Enter		
Decisions	Tender		

The shareholder may tender or not and the takeover is either successful or not.

If the bidder is unable to	get a majority and the takeover is
unsuccessful, the firm's _	do not change, no shares
change hands, and the pr	ice of the shares remains the same at
P <sub>0</sub> , whether the sharehold	ler tenders or not.

- Hence, the shareholder is <u>in</u>
- ❖ If the takeover is <u>successful</u> and the new management increases profits, such that the stock price increases, the shareholder's capital gain is  $(P_1-P_0)$ , if the stock is tendered, and  $(P_2-P_0)$ , if the stock is not tendered.

- Since the <u>bidder</u> will never offer a tender price as \_\_\_\_ as P<sub>2</sub> for the shares, because the bidder will not gain anything if the tender offer succeeds, the shareholder surmises that the tender price must be less than the \_\_\_\_ the bidder expects the stock price to reach.
- $\clubsuit$  The bidder hopes to buy the shares at the tender price of  $P_1$  and sell or retain them when the price reaches  $P_2$ .
- ❖ Hence, a shareholder will not tender the shares, but will wait until the price increases to P₂ before selling them.

The shareholder hopes that other shareholders \_\_\_\_\_ their shares, the tender offer succeeds and a new management increases profits. That way, the shareholder will gain from increased stock price by *not* tendering.

Shareholders get a <u>f</u> <u>ride</u> because of the tender offer. The bidder most likely has done her research and formed a new management strategy at her personal cost. She cannot charge other shareholders for this research or effort. Hence, shareholders benefit from the takeover without incurring the \_\_\_\_ of effort or initiating the tender offer.

If one shareholder devotes resources to improving management, then all shareholders benefit. Other shareholders *free-ride* on the efforts of the bidder/shareholder.

## If most shareholders behave this way, a takeover will fail and the non-profit maximizing management team remain in their jobs.

The	_problem red	duces the effe	ectiveness of the
capital market as	s a <u>m</u>	of manageri	al performance.

The capital market is an \_\_\_\_\_ and complicated means of disciplining management.

When the capital market acts, it signals that the internal monitors are ineffective.

In the next section we will examine how an internal monitor can affect management.

#### <u>Internal Monitors of Management</u>

There are **two** internal monitors:

- 1) concentrated \_\_\_\_\_ ownership
  - a few shareholders own 20-30% of the company
- incentive to collect data and monitor management decisions
- 2) the board of \_\_\_\_\_\_
  - monitor, evaluate and reward/punish management
  - can attenuate the consequences of the free rider problem

How does the board serve the shareholders?

#### **Expense Preference**

- The board of directors is an internal institution that monitors managerial performance and offers advice to the management.
- ➤ However, the board does not have the information or time to monitor management on a day to day basis.
- ➤ It assesses management, and either rewards or punishes the manager or CEO (Chief executive officer).

In large corporations, the CEO may have a great deal of power, such that she or he decides what projects the firm will undertake.

She or he may also indulge her/his own preferences:	for
some kinds of expenses that increase her/his <u>u</u>	_ and
raise the firm's .	

Example: Private planes, support staff, fancy furniture

- ➤ Or the manager may decide to err on the side of caution and not undertake projects that are potentially profitable, lowering the potential profits of the firm, but raising the manager's \_\_\_\_\_.
- Or the manager may decide to hire the wrong staff.

Example: hire a friend, when there is a more qualified worker available and willing to take the same salary.

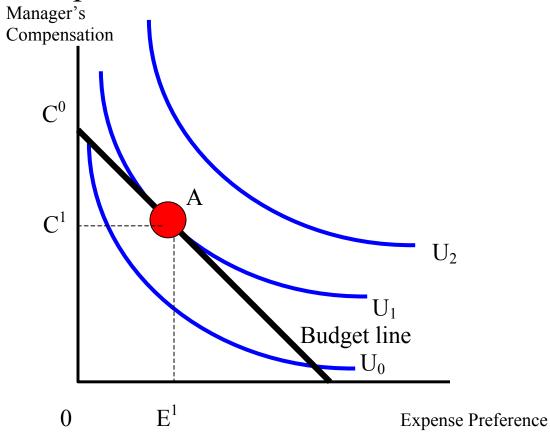
A CEO can raise expenses above	the <u>cost-</u>	amount
for a given quantity produced. T	he excess of exp	enses above
this amount is referred to as expe	ense	<u>•</u>
Expense preference is the	of expenses o	ver the level
that maximizes the firm's profits		

#### **Ex Post Settling Up**

Although the board of difference of the the expense preference.		1
The board can link the more preference.  The board would of manager at specific	evaluate and sett	to expense the up with the
The board of directors coand at the end of the year results for the year.	<b>-</b> •	

If the manag	er incurred costs by indulg	ging in his own
agenda, the b	ooard reduces total	by reducing
the bonus.		
Ex post settling	up means the board reduc	es compensation
dollar for	for the increase in cost.	This way the board
of directors can	adopt a policy that makes	the manager pay
for any increase	in expense preference.	

### Example: The Trade-Off Between Preference and Compensation



In this model, the manager maximizes <u>u</u> by selecting a market basket of expense preference and compensation.

The board sets the <b>manager's compensation</b> at a level $C^0$	•
with the understanding that the manager will maximize	
•	

If the board finds that the manager indulged in his expense preference and did not maximize \_\_\_\_\_, it will reduce the manager's compensation, dollar for dollar, with the increase in expense preference.

The straight line represents the manager's budget constraint between compensation and expense preference. The \_\_\_\_\_ is -1 (compensation decreases by \$1 for every \$1 increase in expense preference.)

To determine the point where the manager maximizes his utility, examine the manager's \_\_\_\_\_function.

In this diagram there are several indifference curves for the manager.

The manager maximizes utility at point A where indifference curve  $U_1$  is tangent to the budget line.

The manager prefers combination of  $C^1$  and  $E^1$ , to  $C^0$  and no expense preference because his utility is only  $U_0$ .

The manager pays for the expense preference, not the shareholders.

- The example assumes that the board of directors is an independent body, and has enough information to evaluate the manager's performance.
- ➤ Often, though, managers are members of the board and have a great deal of influence on the evaluation.

Note: Often the board of directors has \_\_\_\_\_\_ information in order to make the necessary adjustments to the manager's compensation to offset increases in expense preference. It is more likely to react once there are obvious differences in expected output and costs to the firm.

## The Principal Agent Relationship and Ownership Structure

- The **manager** is the **a**\_\_\_\_ in a corporation.
- The **shareholders** are the **p**\_\_\_\_\_ in a corporation.

Often the principal cannot monitor the management decisions of the agent *perfectly*.

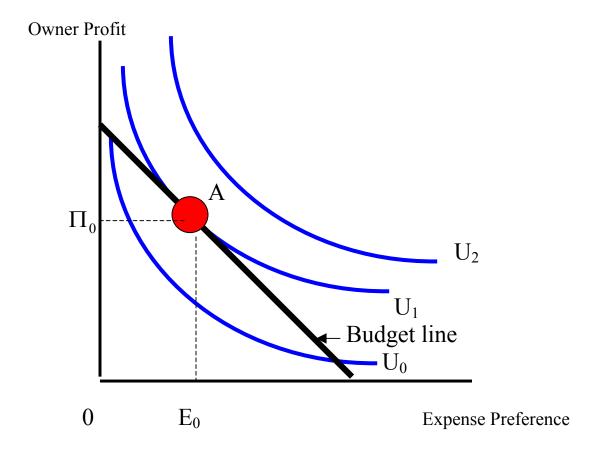
A <u>principle-agent relationship</u> exists whenever an agent makes decisions that affect the <u>well-being</u> of the principal.

Previously, we assumed that the manager did not \_\_\_\_ any part of the firm.

## How does the managerial behaviour change when the manager is also an \_\_\_\_ of the firm?

When there is a single owner of the firm, he or she receives any profit or incurs any loss of the firm.

If the manager is the sole \_\_\_\_\_, he makes a trade-off between the <u>profits of the firm</u> and <u>expense preference</u> instead of a trade-off between compensation and expense preference.



In the graph above, total profits are on the vertical axis and expense preference is on the horizontal axis.

Any expense preference reduces the profits of the managerowner dollar for dollar, since the manager is the owner.

The budget line illustrates the trade-off between profits and expense preference.

The owner's indifference curve  $U_1$  is <u>tangent</u> to the budget line at point A.

The <u>manager's</u> is maximized when profits are  $\Pi_0$  and expense preference is  $E_0$ .

The owner who indulges pays for the indulgence through **lower** \_\_\_\_\_.

The last two examples represent two **extremes**.

- manager has no ownership
- manager has total ownership

In both cases it is the m\_\_\_\_ who pays for the expense preference.

In reality, the manager usually owns a certain percentage of the total shares and the board uses ex post settling up to monitor management.

It has been seen that as the share of ownership of the firm falls, the behaviour of the manager changes.

◆ Suppose the owner sells 25% of the ownership claims on profits and retains a 75% share of any profits. If outsiders purchase 25% of the rights to profits, *how much will they be willing to pay*?

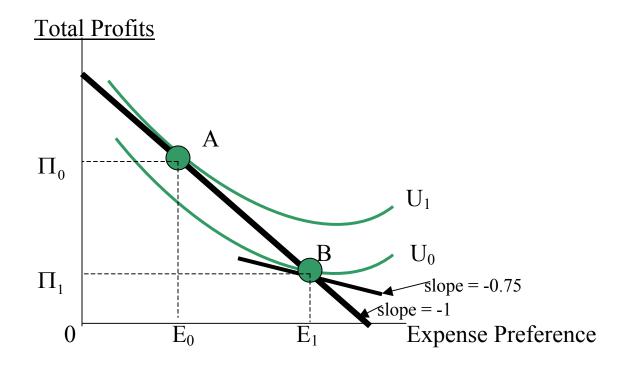
When the manager is the sole \_\_\_\_\_ of the firm, the profits of the firm are  $\Pi_0$ . Hence, outsiders might be willing to pay 25% of  $\Pi_0$ .

⊗ But, we have not considered how a change from full to partial ownership affects the b of the manager.

After selling off 25% of the ownership rights, the manager faces a different trade-off between profits and expense preference.

- →Before, a \$1 increase in expense preference costs the owner-manager \$1 in profits.
- Now, the manager can indulge in expense preference of \$1 and lose only \_\_¢ in profits, since the new owners collectively suffer a loss of the other 25¢. The partial owner no longer faces a dollar for \_\_\_ trade-off between expense preference and profits.

Because the relative \_\_\_\_\_ of increasing expense preference declines for a partial owner, the manager-owner behaves differently from a full owner by increasing expense preference and decreasing \_\_\_\_\_ of the firm by more than a sole owner would.



If the new owners can anticipate the increase in expense preference, they will pay only \_\_% of  $\Pi_1$ , where  $\Pi_1$  is the \_\_\_ of the firm after expense preference increases to  $E_1$ .

As a result of this change in ownership, total \_\_\_\_\_ will decrease.

### Two conditions must be satisfied if the manager is to maximize utility:

- 1) The manager must be *on* the \_\_\_\_\_ line that describes the firm's trade-off between profit and expense preference
- 2) The manager must maximize utility, such that the <u>slope</u> of manager's budget constraint equals the slope of the manager's \_\_\_\_ function.

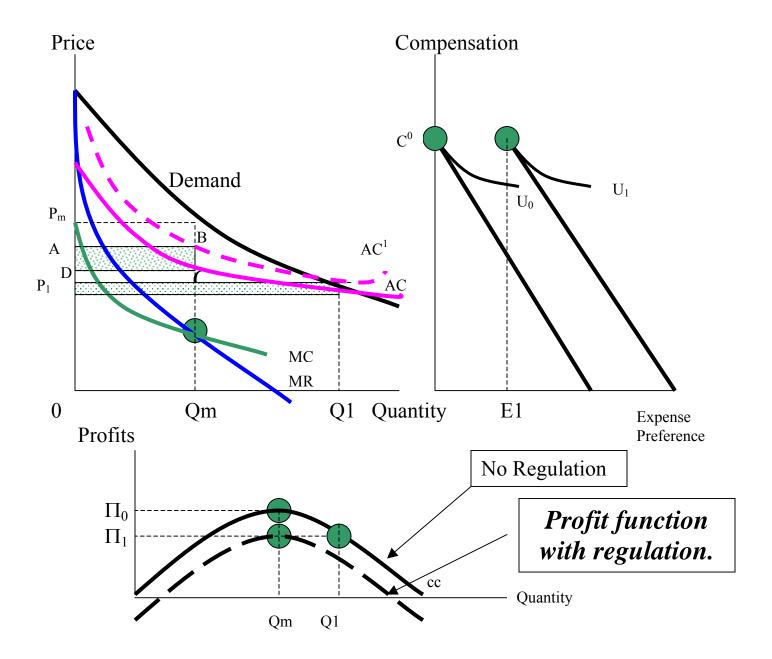
On the diagram, the manager's budget line has a slope of -0.75.

At point B, the slope of the manager's indifference curve is -0.75, and the budget constraint is \_\_\_\_\_ to this indifference curve.

Conclusion: The more that management is separated from ownership, the higher the \_\_\_\_\_ preference and the lower the \_\_\_\_\_. The smaller the fraction of profits owned by the manager, the greater the incentive for the manager to indulge in expense preference.

#### **Expense Preference Under A Profit Constraint**

Assumption: firms are scrutinized by regulators if become too	they
We will see how a profit constraint changes the behave managers, such that profit regulation can allow a man paying for an increase in expense preference.	ager to
Assume: manager of a regulated is not an of the will receive a compensation package equal to Co	wner.



Assume for an unregulated monopolist manager, that the manager's \_\_\_\_ is maximized when he receives compensation of  $C_0$  and zero expense preference.

Profit maximizing price is Pm and the profit maximizing quantity is Qm.

The profits are  $\Pi_0$ . (diagram 3)

The budget constraint illustrates the manager's trade-off between compensation and expense preference. The manager is on indifference curve  $U_0$ .

The **profit function** of the unregulated monopolist is **cc**.

#### **The Profit Constraint**

Next, assume the firm faces a profit	that is less than	
$\Pi_0$ :		
$\Pi_0 > \Pi_1$ .		
TP1 4 1 1 1 1 1	1 .1 1 .	

That is, the monopolist becomes \_\_\_\_\_ and the regulator places a profit constraint of  $\Pi_1$ .

#### What happens?

The regulator does not have enough \_\_\_\_\_\_ to know whether the firm is producing any quantity at \_\_\_\_\_ total cost. If profits are higher than the profit constraint, the regulator imposes a limit and enforces it by reducing price until profits equal  $\Pi_1$ .

### The manager can comply with the profit constraint in two ways:

1) The manager can lower the \_\_\_\_\_ from Pm to  $P_1$  and sell more units,  $Q_1$ . This way profits fall to the regulated maximum,  $\Pi_1$ . The firm is still a cost-efficient producer since it is producing  $Q_1$  units at the lowest total cost, so that it remains on cc. The manager receives  $C^0$  in compensation before and after the firm operates under a profit constraint.

2) The manager can \_\_\_\_\_ his tastes and allow \_\_\_\_\_ to increase until profits fall to  $\Pi_1$  while still producing the profit maximizing quantity Qm. This is shown as a shift in the average cost function upward (AC<sub>1</sub>). The rectangular area measures the increase in expense preference. The trade-off between profits and expense preference is illustrated by the budget line BL<sub>1</sub>.

When a firm is forced to comply to a profit constraint, the manager can increase expense preference without a decrease in compensation. The manager's \_\_\_\_\_\_ increases and the expense preference increases to  $E_1$ , the manager's budget constraint becomes  $BL_1$ , and his compensation is still  $C^0$ . The manager moves to a higher indifference curve  $U_1$ .

## The manager would most likely choose option \_\_\_.

With a profit constraint, the cost of being an inefficient manager and indulging in expense preference decreases.

A common criticism of regulated firms is that they are run in\_\_\_\_\_, have inflated \_\_\_\_\_, and are less demanding to work for.

With a profit constraint, the manager receives  $C^0$  in compensation and increased utility because expense preference increases from zero to  $E_1$ .

#### The Unregulated Firm and Expense Preference

When an unregulated firm does not minimize cost, it indicates that:

- 1) the internal monitor is ineffective or
- 2) product competition is weak

A takeover attempt signals that internal monitors are not working to force a firm to operate at minimum \_\_\_\_.

Outsiders believe they can introduce new management in order to increase profit and lower costs.

It is not unusual for a firm's management to receive less
when the firm produces results that are similar to
other firms in the industry, even it is not maximizing profits

Managers will most likely be left to operate independently until something within the industry forces the shareholders to take note, such as a sudden change in \_\_\_\_\_ or increased competition from new firms.

It is only then do shareholders take a closer look at the firm's research and development capabilities, compensation packages, community service activities, asset allocation, etc..