Chapter 18.2
Delegation of decision-making

Problem and model assumptions
○○○○

Delegated decision-making
○○○

Centralised decision-making
○○○○○

Summary
○○○○

Outline

■ Problem and model assumptions

■ Delegated decision-making

■ Centralised decision-making

■ Summary

Problem and model assumptions
○●○○○

Delegated decision-making
○○○

Centralised decision-making
○○○○○

Summary
○○○○

■ Problem and model assumptions

■ Delegated decision-making

■ Centralised decision-making

■ Summary

Ideas and their implementation

Ideas and their implementation

▶ Investment banks give staff significant responsibilities in providing advice to clients

Ideas and their implementation

▶ Investment banks give staff significant responsibilities in providing advice to clients

▶ It is usually the team working with a client that develops advice

Ideas and their implementation

▶ Investment banks give staff significant responsibilities in providing advice to clients

▶ It is usually the team working with a client that develops advice and then seeks to implement it for their client
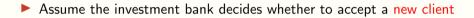
Ideas and their implementation

- ▶ Investment banks give staff significant responsibilities in providing advice to clients
- ▶ It is usually the team working with a client that develops advice and then seeks to implement it for their client
- ▶ In many other organisations, ideas are developed by managers and then implemented by employees

Ideas and their implementation

- ▶ Investment banks give staff significant responsibilities in providing advice to clients
- ▶ It is usually the team working with a client that develops advice and then seeks to implement it for their client
- ▶ In many other organisations, ideas are developed by managers and then implemented by employees

Signals about clients

Signals about clients

▶ Assume the investment bank decides whether to accept a new client

Signals about clients

▶ Assume the investment bank decides whether to accept a new client, the probability that it will generate surplus is $p = \frac{1}{2}$

Signals about clients

▶ Assume the investment bank decides whether to accept a new client, the probability that it will generate surplus is $p = \frac{1}{2}$

▶ Managers and employees obtain a signal with precision $\rho_i > \frac{1}{2}$

Signals about clients

▶ Assume the investment bank decides whether to accept a new client, the probability that it will generate surplus is $p = \frac{1}{2}$

▶ Managers and employees obtain a signal with precision $\rho_i > \frac{1}{2}$

▶ Bayesian learning gives the probability of the client generating a surplus after receiving the signal as $\hat{p}_i = \frac{p\rho_i}{p\rho_i + (1-p)(1-\rho_i)} = \rho_i$

Problem and model assumptions
○○●○

Delegated decision-making
○○○

Centralised decision-making
○○○○○

Summary
○○○○

Signals about clients

- Assume the investment bank decides whether to accept a new client, the probability that it will generate surplus is $p = \frac{1}{2}$
- Managers and employees obtain a signal with precision $\rho_i > \frac{1}{2}$
- Bayesian learning gives the probability of the client generating a surplus after receiving the signal as $\hat{p}_i = \frac{p\rho_i}{p\rho_i + (1-p)(1-\rho_i)} = \rho_i$

Remuneration of employees

Remuneration of employees

► Employees are working with the client

Problem and model assumptions
○○○●

Delegated decision-making
○○○

Centralised decision-making
○○○○○

Summary
○○○○

Remuneration of employees

▶ Employees are working with the client and have to exert effort to generate surplus, which costs them C

Remuneration of employees

- ▶ Employees are working with the client and have to exert effort to generate surplus, which costs them C
- ▶ Managers do not exert effort

Problem and model assumptions
○○○●

Delegated decision-making
○○○

Centralised decision-making
○○○○○

Summary
○○○○

Remuneration of employees

▶ Employees are working with the client and have to exert effort to generate surplus, which costs them C

▶ Managers do not exert effort as they are not involved in working with the client

Remuneration of employees

▶ Employees are working with the client and have to exert effort to generate surplus, which costs them C

▶ Managers do not exert effort as they are not involved in working with the client

▶ Employees are paid a wage w_S if surplus is generated

Problem and model assumptions
OOOO●

Delegated decision-making
OOO

Centralised decision-making
OOOOO

Summary
OOOO

Remuneration of employees

▶ Employees are working with the client and have to exert effort to generate surplus, which costs them C

▶ Managers do not exert effort as they are not involved in working with the client

▶ Employees are paid a wage w_S if surplus is generated and $w_F \leq 0$ if no surplus is generated

Problem and model assumptions
○○○●

Delegated decision-making
○○○

Centralised decision-making
○○○○○

Summary
○○○○

Remuneration of employees

▶ Employees are working with the client and have to exert effort to generate surplus, which costs them C

▶ Managers do not exert effort as they are not involved in working with the client

▶ Employees are paid a wage w_S if surplus is generated and $w_F \leq 0$ if no surplus is generated

▶ If no surplus is generated, the negative wage can be interpreted as losing a bonus

Problem and model assumptions
○○○●

Delegated decision-making
○○○

Centralised decision-making
○○○○○

Summary
○○○○

Remuneration of employees

▶ Employees are working with the client and have to exert effort to generate surplus, which costs them C

▶ Managers do not exert effort as they are not involved in working with the client

▶ Employees are paid a wage w_S if surplus is generated and $w_F \leq 0$ if no surplus is generated

▶ If no surplus is generated, the negative wage can be interpreted as losing a bonus

▶ Managers are rewarded through the profits they generate

Problem and model assumptions
○○○●

Delegated decision-making
○○○

Centralised decision-making
○○○○○

Summary
○○○○

Remuneration of employees

▶ Employees are working with the client and have to exert effort to generate surplus, which costs them C

▶ Managers do not exert effort as they are not involved in working with the client

▶ Employees are paid a wage w_S if surplus is generated and $w_F \leq 0$ if no surplus is generated

▶ If no surplus is generated, the negative wage can be interpreted as losing a bonus

▶ Managers are rewarded through the profits they generate

Problem and model assumptions
oooo

Delegated decision-making
●oo

Centralised decision-making
ooooo

Summary
oooo

Problem and model assumptions

Delegated decision-making

Centralised decision-making

Summary

Employees exerting effort

Problem and model assumptions
○○○○

Delegated decision-making
○●○

Centralised decision-making
○○○○○

Summary
○○○○

Employees exerting effort

▶ Expected wage: $w = \rho_E w_S + (1 - \rho_E) w_F$

Problem and model assumptions
0000

Delegated decision-making
○●○

Centralised decision-making
00000

Summary
0000

Employees exerting effort

- Expected wage: $w = \rho_E w_S + (1 - \rho_E) w_F$
- If no effort is exerted, no surplus is generated

Problem and model assumptions
oooo

Delegated decision-making
o●o

Centralised decision-making
ooooo

Summary
oooo

Employees exerting effort

- Expected wage: $w = \rho_E w_S + (1 - \rho_E) w_F$
- If no effort is exerted, no surplus is generated and the employees receives w_F

Problem and model assumptions
oooo

Delegated decision-making
o●o

Centralised decision-making
ooooo

Summary
oooo

Employees exerting effort

- Expected wage: $w = \rho_E w_S + (1 - \rho_E) w_F$
- If no effort is exerted, no surplus is generated and the employees receives w_F
- To exert effort, we need $w - C \geq w_F$

Problem and model assumptions
○○○○

Delegated decision-making
○●○

Centralised decision-making
○○○○○

Summary
○○○○

Employees exerting effort

- Expected wage: $w = \rho_E w_S + (1 - \rho_E) w_F$
- If no effort is exerted, no surplus is generated and the employees receives w_F
- To exert effort, we need $w - C \geq w_F$, or $w_S \geq w_F + \frac{C}{\rho_E}$

Problem and model assumptions
○○○○

Delegated decision-making
○●○

Centralised decision-making
○○○○○

Summary
○○○○

Employees exerting effort

- Expected wage: $w = \rho_E w_S + (1 - \rho_E) w_F$
- If no effort is exerted, no surplus is generated and the employees receives w_F
- To exert effort, we need $w - C \geq w_F$, or $w_S \geq w_F + \frac{C}{\rho_E}$
- To be an employee, we need $w - C \geq 0$

Problem and model assumptions
◦◦◦◦

Delegated decision-making
◦●◦

Centralised decision-making
◦◦◦◦◦

Summary
◦◦◦◦

Employees exerting effort

▶ Expected wage: $w = \rho_E w_S + (1 - \rho_E) w_F$

▶ If no effort is exerted, no surplus is generated and the employees receives w_F

▶ To exert effort, we need $w - C \geq w_F$, or $w_S \geq w_F + \frac{C}{\rho_E}$

▶ To be an employee, we need $w - C \geq 0$, or $w_S \geq -\frac{1 - \rho_E}{\rho_E} w_F + \frac{C}{\rho_E}$

Employees exerting effort

- Expected wage: $w = \rho_E w_S + (1 - \rho_E) w_F$
- If no effort is exerted, no surplus is generated and the employees receives w_F
- To exert effort, we need $w - C \geq w_F$, or $w_S \geq w_F + \frac{C}{\rho_E}$
- To be an employee, we need $w - C \geq 0$, or $w_S \geq -\frac{1-\rho_E}{\rho_E}w_F + \frac{C}{\rho_E}$
- As $w_F \leq 0$, the latter is more restrictive

Employees exerting effort

▶ Expected wage: $w = \rho_E w_S + (1 - \rho_E) w_F$

▶ If no effort is exerted, no surplus is generated and the employees receives w_F

▶ To exert effort, we need $w - C \geq w_F$, or $w_S \geq w_F + \frac{C}{\rho_E}$

▶ To be an employee, we need $w - C \geq 0$, or $w_S \geq -\frac{1-\rho_E}{\rho_E} w_F + \frac{C}{\rho_E}$

▶ As $w_F \leq 0$, the latter is more restrictive and $w_S = -\frac{1-\rho_E}{\rho_E} w_F + \frac{C}{\rho_E}$

▶ We then get $w = C$ and the employee breaks even

Problem and model assumptions
oooo

Delegated decision-making
o●o

Centralised decision-making
ooooo

Summary
oooo

Employees exerting effort

- Expected wage: $w = \rho_E w_S + (1 - \rho_E) w_F$
- If no effort is exerted, no surplus is generated and the employees receives w_F
- To exert effort, we need $w - C \geq w_F$, or $w_S \geq w_F + \frac{C}{\rho_E}$
- To be an employee, we need $w - C \geq 0$, or $w_S \geq -\frac{1 - \rho_E}{\rho_E} w_F + \frac{C}{\rho_E}$
- As $w_F \leq 0$, the latter is more restrictive and $w_S = -\frac{1 - \rho_E}{\rho_E} w_F + \frac{C}{\rho_E}$
- We then get $w = C$ and the employee breaks even

Problem and model assumptions
○○○○

Delegated decision-making
○●○

Centralised decision-making
○○○○○

Summary
○○○○

Employees exerting effort

- ▶ Expected wage: $w = \rho_E w_S + (1 - \rho_E) w_F$
- ▶ If no effort is exerted, no surplus is generated and the employees receives w_F
- ▶ To exert effort, we need $w - C \geq w_F$, or $w_S \geq w_F + \frac{C}{\rho_E}$
- ▶ To be an employee, we need $w - C \geq 0$, or $w_S \geq -\frac{1-\rho_E}{\rho_E} w_F + \frac{C}{\rho_E}$
- ▶ As $w_F \leq 0$, the latter is more restrictive and $w_S = -\frac{1-\rho_E}{\rho_E} w_F + \frac{C}{\rho_E}$
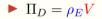- ▶ We then get $w = C$ and the employee breaks even

Investment bank profits

Problem and model assumptions
○○○○

Delegated decision-making
○○●

Centralised decision-making
○○○○○

Summary
○○○○

Investment bank profits

- ▶ Investment bank profits are the revenue

- ▶ $\Pi_D = \qquad V$

Problem and model assumptions
0000

Delegated decision-making
○○●

Centralised decision-making
00000

Summary
0000

Investment bank profits

▶ Investment bank profits are the revenue, if the client generates such

▶ $\Pi_D = \rho_E V$

Problem and model assumptions
oooo

Delegated decision-making
oo●

Centralised decision-making
ooooo

Summary
oooo

Investment bank profits

▶ Investment bank profits are the revenue, if the client generates such, less the wages paid to employees

▶ $\Pi_D = \rho_E V - w$

Problem and model assumptions
OOOO

Delegated decision-making
OO●

Centralised decision-making
OOOOO

Summary
OOOO

Investment bank profits

▶ Investment bank profits are the revenue, if the client generates such, less the wages paid to employees

▶ $\Pi_D = \rho_E V - w = \rho_E V - C$

Problem and model assumptions
○○○○

Delegated decision-making
○○●

Centralised decision-making
○○○○○

Summary
○○○○

Investment bank profits

▶ Investment bank profits are the revenue, if the client generates such, less the wages paid to employees

▶ $\Pi_D = \rho_E V - w = \rho_E V - C$

▶ Managers are paid out of these profits

Problem and model assumptions
oooo

Delegated decision-making
ooo●

Centralised decision-making
ooooo

Summary
oooo

Investment bank profits

▶ Investment bank profits are the revenue, if the client generates such, less the wages paid to employees

▶ $\Pi_D = \rho_E V - w = \rho_E V - C$

▶ Managers are paid out of these profits

■ Problem and model assumptions

■ Delegated decision-making

■ Centralised decision-making

■ Summary

Problem and model assumptions
oooo

Delegated decision-making
ooo

Centralised decision-making
o●oooo

Summary
oooo

Learning from two signals

Learning from two signals

▶ If the manager decides to accept the client, the employee has two signals

Problem and model assumptions
oooo

Delegated decision-making
ooo

Centralised decision-making
o●ooo

Summary
oooo

Learning from two signals

▶ If the manager decides to accept the client, the employee has two signals: his own and that of the manager

Learning from two signals

▶ If the manager decides to accept the client, the employee has two signals: his own and that of the manager

▶ The signal of the manager is positive

Problem and model assumptions
○○○○

Delegated decision-making
○○○

Centralised decision-making
○●○○○

Summary
○○○○

Learning from two signals

▶ If the manager decides to accept the client, the employee has two signals: his own and that of the manager

▶ The signal of the manager is positive as else he would not have accepted the client

Problem and model assumptions
OOOO

Delegated decision-making
OOO

Centralised decision-making
O●OOO

Summary
OOOO

Learning from two signals

▶ If the manager decides to accept the client, the employee has two signals: his own and that of the manager

▶ The signal of the manager is positive as else he would not have accepted the client

▶ The employee would update his beliefs in the probability the client produces surplus

Problem and model assumptions
oooo

Delegated decision-making
ooo

Centralised decision-making
o●oooo

Summary
oooo

Learning from two signals

▶ If the manager decides to accept the client, the employee has two signals: his own and that of the manager

▶ The signal of the manager is positive as else he would not have accepted the client

▶ The employee would update his beliefs in the probability the client produces surplus

▶ If the employee also receives a positive signal, we get $\pi_H = \frac{\rho_E \rho_M}{\rho_E \rho_M + (1-\rho_E)(1-\rho_M)}$

Problem and model assumptions
oooo

Delegated decision-making
ooo

Centralised decision-making
o●oooo

Summary
oooo

Learning from two signals

- If the manager decides to accept the client, the employee has two signals: his own and that of the manager

- The signal of the manager is positive as else he would not have accepted the client

- The employee would update his beliefs in the probability the client produces surplus

- If the employee also receives a positive signal, we get $\pi_H = \frac{\rho_E \rho_M}{\rho_E \rho_M + (1 - \rho_E)(1 - \rho_M)}$

- If the employee receives a negative signal, we get $\pi_L = \frac{\rho_M(1 - \rho_E)}{\rho_M(1 - \rho_E) + (1 - \rho_M)\rho_E}$

Problem and model assumptions
0000

Delegated decision-making
000

Centralised decision-making
00000

Summary
0000

Learning from two signals

▶ If the manager decides to accept the client, the employee has two signals: his own and that of the manager

▶ The signal of the manager is positive as else he would not have accepted the client

▶ The employee would update his beliefs in the probability the client produces surplus

▶ If the employee also receives a positive signal, we get $\pi_H = \frac{\rho_E \rho_M}{\rho_E \rho_M + (1-\rho_E)(1-\rho_M)}$

▶ If the employee receives a negative signal, we get $\pi_L = \frac{\rho_M (1-\rho_E)}{\rho_M (1-\rho_E) + (1-\rho_M)\rho_E}$
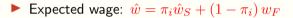
▶ We find that $\pi_H \geq \pi_L$

Learning from two signals

▶ If the manager decides to accept the client, the employee has two signals: his own and that of the manager

▶ The signal of the manager is positive as else he would not have accepted the client

▶ The employee would update his beliefs in the probability the client produces surplus

▶ If the employee also receives a positive signal, we get $\pi_H = \frac{\rho_E \rho_M}{\rho_E \rho_M + (1-\rho_E)(1-\rho_M)}$

▶ If the employee receives a negative signal, we get $\pi_L = \frac{\rho_M(1-\rho_E)}{\rho_M(1-\rho_E) + (1-\rho_M)\rho_E}$

▶ We find that $\pi_H \geq \pi_L$

Wages of employees

Wages of employees

▶ Expected wage: $\hat{w} = \pi_i \hat{w}_S + (1 - \pi_i) w_F$

Problem and model assumptions
oooo

Delegated decision-making
ooo

Centralised decision-making
ooo●oo

Summary
oooo

Wages of employees

- Expected wage: $\hat{w} = \pi_i \hat{w}_S + (1 - \pi_i) w_F$
- Exert effort if $\hat{w} - C \geq w_F$

Wages of employees

- Expected wage: $\hat{w} = \pi_i \hat{w}_S + (1 - \pi_i) w_F$
- Exert effort if $\hat{w} - C \geq w_F$
- This gives $\hat{w}_S \geq w_F + \frac{C}{\pi_i}$

Problem and model assumptions
oooo

Delegated decision-making
ooo

Centralised decision-making
ooo●oo

Summary
oooo

Wages of employees

- Expected wage: $\hat{w} = \pi_i \hat{w}_S + (1 - \pi_i) w_F$
- Exert effort if $\hat{w} - C \geq w_F$
- This gives $\hat{w}_S \geq w_F + \frac{C}{\pi_i}$
- To ensure the employee exerts efforts regardless of his signal, we set wages such that this is fulfilled for $\pi_i = \pi_L$

Wages of employees

- Expected wage: $\hat{w} = \pi_i \hat{w}_S + (1 - \pi_i) w_F$
- Exert effort if $\hat{w} - C \geq w_F$
- This gives $\hat{w}_S \geq w_F + \frac{C}{\pi_i}$
- To ensure the employee exerts efforts regardless of his signal, we set wages such that this is fulfilled for $\pi_i = \pi_L$
- This gives us $\hat{\hat{w}} = \rho_M \hat{w}_s + (1 - \rho_M) w_F = w_F + \frac{\rho_M}{\pi_L} C$

Wages of employees

- Expected wage: $\hat{w} = \pi_i \hat{w}_S + (1 - \pi_i) w_F$
- Exert effort if $\hat{w} - C \geq w_F$
- This gives $\hat{w}_S \geq w_F + \frac{C}{\pi_i}$
- To ensure the employee exerts efforts regardless of his signal, we set wages such that this is fulfilled for $\pi_i = \pi_L$
- This gives us $\hat{\hat{w}} = \rho_M \hat{w}_s + (1 - \rho_M) w_F = w_F + \frac{\rho_M}{\pi_L} C$

Investment bank profits

Problem and model assumptions
○○○○

Delegated decision-making
○○○

Centralised decision-making
○○○●○

Summary
○○○○

Investment bank profits

- ▶ We have $\Pi_C = \rho_M V - \hat{\hat{w}}$

Investment bank profits

▶ We have $\Pi_C = \rho_M V - \hat{\hat{w}} = \rho_M \left(V - \frac{C}{\pi_L} \right) - w_F$

Investment bank profits

▶ We have $\Pi_C = \rho_M V - \hat{\hat{w}} = \rho_M \left(V - \frac{C}{\pi_L} \right) - w_F$

▶ To choose delegated decision-making we need $\Pi_D \geq \Pi_C$

Problem and model assumptions
○○○○

Delegated decision-making
○○○

Centralised decision-making
○○○●○

Summary
○○○○

Investment bank profits

- We have $\Pi_C = \rho_M V - \hat{\hat{w}} = \rho_M \left(V - \frac{C}{\pi_L} \right) - w_F$
- To choose delegated decision-making we need $\Pi_D \geq \Pi_C$
- This requires $\rho_M \leq \rho_M^* = \frac{\rho_E(1-\rho_E)V-(1-2\rho_E)C+(1-\rho_E)w_F}{(1-\rho_E)V-(1-2\rho_E)C}$

Problem and model assumptions
oooo

Delegated decision-making
ooo

Centralised decision-making
ooo●o

Summary
oooo

Investment bank profits

▶ We have $\Pi_C = \rho_M V - \hat{\hat{w}} = \rho_M \left(V - \frac{C}{\pi_L} \right) - w_F$

▶ To choose delegated decision-making we need $\Pi_D \geq \Pi_C$

▶ This requires $\rho_M \leq \rho_M^* = \frac{\rho_E(1-\rho_E)V-(1-2\rho_E)C+(1-\rho_E)w_F}{(1-\rho_E)V-(1-2\rho_E)C}$

▶ If the manager's signal is not too precise, then delegated decision-making is optimal

Problem and model assumptions
○○○○

Delegated decision-making
○○○

Centralised decision-making
○○○●○

Summary
○○○○

Investment bank profits

- We have $\Pi_C = \rho_M V - \hat{\hat{w}} = \rho_M \left(V - \frac{C}{\pi_L} \right) - w_F$
- To choose delegated decision-making we need $\Pi_D \geq \Pi_C$
- This requires $\rho_M \leq \rho_M^* = \frac{\rho_E(1-\rho_E)V - (1-2\rho_E)C + (1-\rho_E)w_F}{(1-\rho_E)V - (1-2\rho_E)C}$
- If the manager's signal is not too precise, then delegated decision-making is optimal
- This is always fulfilled if employees have more precise signals $\rho_E > \rho_M$

Problem and model assumptions
oooo

Delegated decision-making
ooo

Centralised decision-making
oooeo

Summary
oooo

Investment bank profits

- We have $\Pi_C = \rho_M V - \hat{\hat{w}} = \rho_M \left(V - \frac{C}{\pi_L} \right) - w_F$
- To choose delegated decision-making we need $\Pi_D \geq \Pi_C$
- This requires $\rho_M \leq \rho_M^* = \frac{\rho_E(1-\rho_E)V - (1-2\rho_E)C + (1-\rho_E)w_F}{(1-\rho_E)V - (1-2\rho_E)C}$
- If the manager's signal is not too precise, then delegated decision-making is optimal
- This is always fulfilled if employees have more precise signals $\rho_E > \rho_M$

Problem and model assumptions
○○○○

Delegated decision-making
○○○

Centralised decision-making
○○○○●

Summary
○○○○

Delegation even if managers have more precise signals

▶ We have $\rho_M^* > \rho_E$ if $w_F > (1 - 2\rho_E) C$

Problem and model assumptions
○○○○

Delegated decision-making
○○○

Centralised decision-making
○○○○●

Summary
○○○○

Delegation even if managers have more precise signals

▶ We have $\rho_M^* > \rho_E$ if $w_F > (1 - 2\rho_E) C$

▶ Delegated decision-making is preferred if $\rho_E < \rho_M \leq \rho_M^*$

Problem and model assumptions
○○○○

Delegated decision-making
○○○

Centralised decision-making
○○○○●

Summary
○○○○

Delegation even if managers have more precise signals

▶ We have $\rho_M^* > \rho_E$ if $w_F > (1 - 2\rho_E)\, C$

▶ Delegated decision-making is preferred if $\rho_E < \rho_M \leq \rho_M^*$

▶ Even if manager's signals are more precise, delegation might be preferred

Problem and model assumptions
oooo

Delegated decision-making
ooo

Centralised decision-making
ooooo●

Summary
oooo

Delegation even if managers have more precise signals

▶ We have $\rho_M^* > \rho_E$ if $w_F > (1 - 2\rho_E) C$

▶ Delegated decision-making is preferred if $\rho_E < \rho_M \leq \rho_M^*$

▶ Even if manager's signals are more precise, delegation might be preferred

▶ This is because employees having negative signals, see low prospects of the client producing surplus

Delegation even if managers have more precise signals

- We have $\rho_M^* > \rho_E$ if $w_F > (1 - 2\rho_E) C$
- Delegated decision-making is preferred if $\rho_E < \rho_M \leq \rho_M^*$
- Even if manager's signals are more precise, delegation might be preferred
- This is because employees having negative signals, see low prospects of the client producing surplus
- $\Rightarrow$ This requires larger incentives to exert effort

Delegation even if managers have more precise signals

▶ We have $\rho_M^* > \rho_E$ if $w_F > (1 - 2\rho_E) C$

▶ Delegated decision-making is preferred if $\rho_E < \rho_M \leq \rho_M^*$

▶ Even if manager's signals are more precise, delegation might be preferred

▶ This is because employees having negative signals, see low prospects of the client producing surplus

⇒ This requires larger incentives to exert effort

⇒ Higher wages are paid

Problem and model assumptions
OOOO

Delegated decision-making
OOO

Centralised decision-making
OOOO●

Summary
OOOO

Delegation even if managers have more precise signals

- ▶ We have $\rho_M^* > \rho_E$ if $w_F > (1 - 2\rho_E) C$
- ▶ Delegated decision-making is preferred if $\rho_E < \rho_M \leq \rho_M^*$
- ▶ Even if manager's signals are more precise, delegation might be preferred
- ▶ This is because employees having negative signals, see low prospects of the client producing surplus
- ⇒ This requires larger incentives to exert effort
- ⇒ Higher wages are paid, reducing profits of investment banks

Problem and model assumptions
○○○○

Delegated decision-making
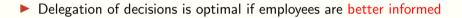○○○

Centralised decision-making
○○○○○●

Summary
○○○○

Delegation even if managers have more precise signals

- ▶ We have $\rho_M^* > \rho_E$ if $w_F > (1 - 2\rho_E) C$
- ▶ Delegated decision-making is preferred if $\rho_E < \rho_M \leq \rho_M^*$
- ▶ Even if manager's signals are more precise, delegation might be preferred
- ▶ This is because employees having negative signals, see low prospects of the client producing surplus
- ⇒ This requires larger incentives to exert effort
- ⇒ Higher wages are paid, reducing profits of investment banks

Problem and model assumptions
◦◦◦◦

Delegated decision-making
◦◦◦

Centralised decision-making
◦◦◦◦◦

Summary
●◦◦◦

■ Problem and model assumptions

■ Delegated decision-making

■ Centralised decision-making

■ Summary

Optimal delegation of decisions

Optimal delegation of decisions

▶ Delegation of decisions is optimal if employees are better informed

Optimal delegation of decisions

▶ Delegation of decisions is optimal if employees are better informed

▶ Even if they are not better informed, delegation might be optimal

Optimal delegation of decisions

▶ Delegation of decisions is optimal if employees are better informed

▶ Even if they are not better informed, delegation might be optimal

▶ If employees receive negative signals on the prospects of the client, they are more difficult to incentivise to exert effort

Problem and model assumptions
○○○○

Delegated decision-making
○○○

Centralised decision-making
○○○○○

Summary
○●○○

Optimal delegation of decisions

▶ Delegation of decisions is optimal if employees are better informed

▶ Even if they are not better informed, delegation might be optimal

▶ If employees receive negative signals on the prospects of the client, they are more difficult to incentivise to exert effort

▶ If these required additional incentives are large enough, then profits of investment banks are higher with delegation

Optimal delegation of decisions

- ▶ Delegation of decisions is optimal if employees are better informed
- ▶ Even if they are not better informed, delegation might be optimal
- ▶ If employees receive negative signals on the prospects of the client, they are more difficult to incentivise to exert effort
- ▶ If these required additional incentives are large enough, then profits of investment banks are higher with delegation

Delegated decisions in investment banks

Problem and model assumptions
○○○○

Delegated decision-making
○○○

Centralised decision-making
○○○○○

Summary
○○●○

Delegated decisions in investment banks

▶ Investment banks rely on the knowledge of their staff

Delegated decisions in investment banks

▶ Investment banks rely on the knowledge of their staff and need to motivate them to use this knowledge

Problem and model assumptions
○○○○

Delegated decision-making
○○○

Centralised decision-making
○○○○○

Summary
○○●○

Delegated decisions in investment banks

▶ Investment banks rely on the knowledge of their staff and need to motivate them to use this knowledge

▶ Imposing decisions that employees disagree with, is costly and can reduce profits

Problem and model assumptions
oooo

Delegated decision-making
ooo

Centralised decision-making
ooooo

Summary
oooo

Delegated decisions in investment banks

▶ Investment banks rely on the knowledge of their staff and need to motivate them to use this knowledge

▶ Imposing decisions that employees disagree with, is costly and can reduce profits

▶ Often it is preferable to delegate decisions to maintain incentives to exert effort

Problem and model assumptions
○○○○

Delegated decision-making
○○○

Centralised decision-making
○○○○○

Summary
○○●○

Delegated decisions in investment banks

▶ Investment banks rely on the knowledge of their staff and need to motivate them to use this knowledge

▶ Imposing decisions that employees disagree with, is costly and can reduce profits

▶ Often it is preferable to delegate decisions to maintain incentives to exert effort even if managers are better informed

Problem and model assumptions
○○○○

Delegated decision-making
○○○

Centralised decision-making
○○○○○

Summary
○○●○

Delegated decisions in investment banks

▶ Investment banks rely on the knowledge of their staff and need to motivate them to use this knowledge

▶ Imposing decisions that employees disagree with, is costly and can reduce profits

▶ Often it is preferable to delegate decisions to maintain incentives to exert effort even if managers are better informed

▶ Investment banks typically delegate decisions more than many other organisations

Delegated decisions in investment banks

- ▶ Investment banks rely on the knowledge of their staff and need to motivate them to use this knowledge
- ▶ Imposing decisions that employees disagree with, is costly and can reduce profits
- ▶ Often it is preferable to delegate decisions to maintain incentives to exert effort even if managers are better informed
- ▶ Investment banks typically delegate decisions more than many other organisations

Andreas Krause
Department of Economics
University of Bath
Claverton Down
Bath BA2 7AY
United Kingdom

E-mail: mnsak@bath.ac.uk