

Unit 6

THE FIRM:
OWNERS, MANAGERS, AND EMPLOYEES

OUTLINE

A. Introduction

B. Firms

C. Owners and Managers

D. Employees

E. Labour Discipline Model

F. Principal-agent models

A. Introduction

The Context for This Unit

Work is an important part of economics. (Unit 1)

In models of economic interactions, bargaining determines the division of social surplus. (Unit 5)

All parties gain from these interactions, but have conflicting interests over how these gains (profits) are shared.

- How are wages determined within firms?
- What are the economy-wide effects of firm interactions?

This Unit

- Analyse how firms differ from markets
- Use a model of interactions within the firm to explain how wages are determined, and how this influences unemployment
- Explore the problem of incomplete contracts and hidden actions

B. Firms

What is a firm?

Firm = a business organization which

- Employs people
- Purchases inputs to produce market goods and services
- Sets prices greater than the cost of production

“The firm in a capitalist economy is a miniature, privately owned, centrally planned economy.”

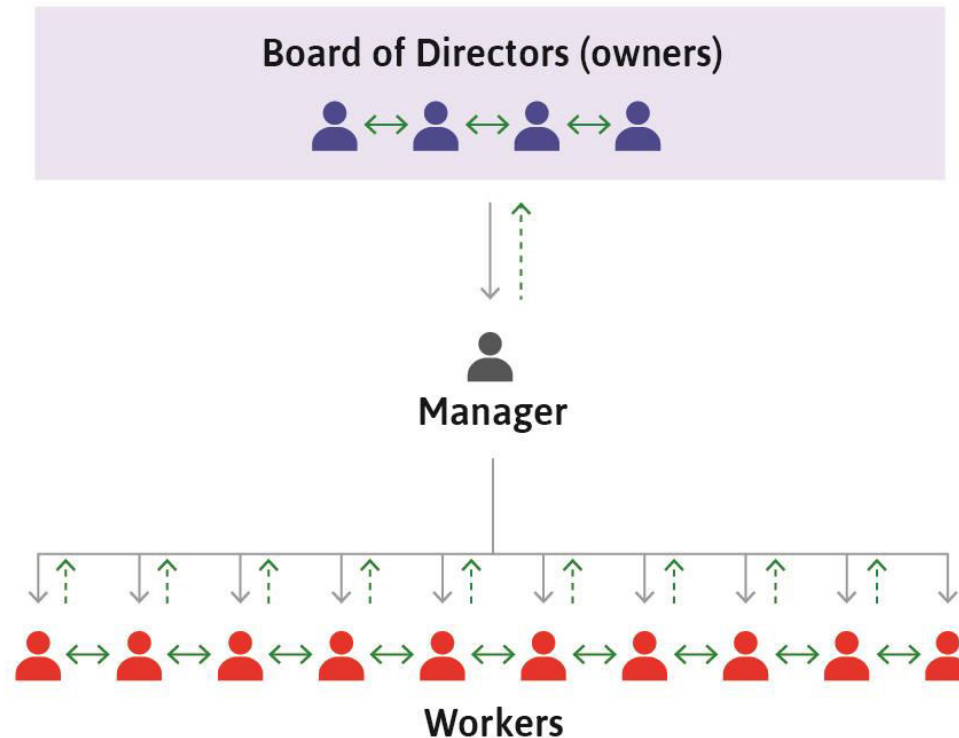
Firms vs. markets

In a capitalist economy, the **division of labour** is coordinated in two ways: firms and markets.

Coordination within firm differs from coordination via markets:

- concentration of economic power in the hands of the owners/managers allows them to issue commands to workers
- Power is decentralized in markets, so decisions are autonomous and voluntary

Structure of a firm



- Owners decide on long-term strategy
- Managers implement their decisions by assigning tasks to workers and monitoring them

Contracts

Firms and markets differ in the contracts that form the basis of exchange.

Contract = a legal document or understanding that specifies a set of actions that parties to the contract must undertake.

- Contracts for products sold in markets permanently transfer ownership of the good from the seller to the buyer.
- Contracts for labour temporarily transfer authority over a person's activities from the employee to the manager or owner.

Relationships within a firm

Unlike in markets, relationships within a firm may extend over a long period of time.

- creation of network of colleagues
- acquisition of skills necessary for the job

These skills, networks, and friendships are **firm-specific assets**. They are valuable only while the worker remains employed in a particular firm.

When the relationship ends, value is lost to both sides.

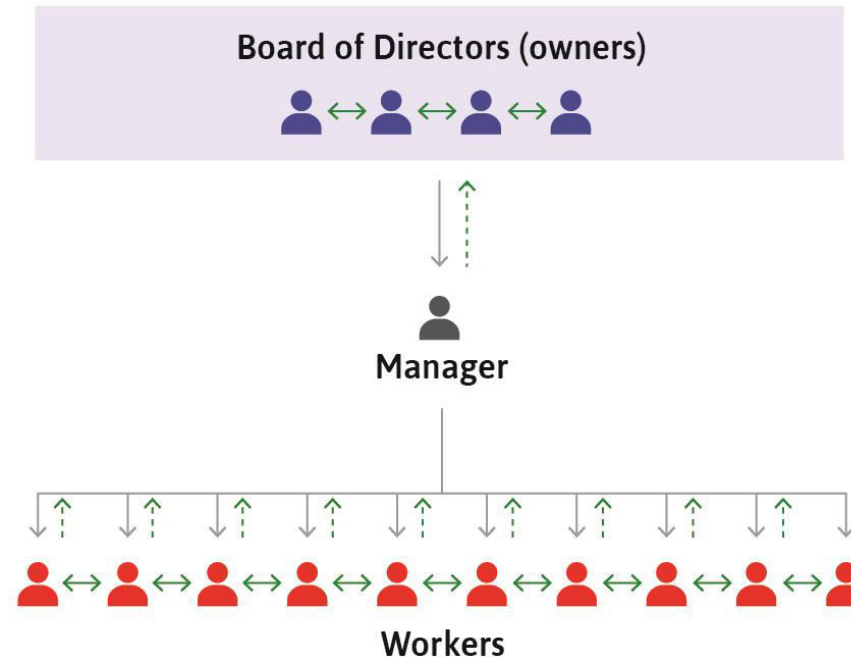
C. Owners and Managers

Separation of ownership and control

Managers \neq owners

Separation of ownership and control = when managers decide on the use of other people's funds.

Asymmetric information



The dashed upward green arrows represent a problem of **asymmetric information** between levels in the firm's hierarchy.

Owners or managers do not always know what their subordinates know or do,
not all of their directions or commands are necessarily carried out.

Owners and managers: conflict of interest

The firm's **profits** legally belong to the people who own the firm's assets.

- Managers' actions have impact on profits
- but if profits increase thanks to managers' work, they will not automatically benefit.

This creates a conflict of interest between managers and owners.

Aligning interests

To solve the conflict of interest between managers and owners:

- link the managers' pay to the performance of the company's share price
- monitor the managers' performance

D. Employees

Incomplete Contracts

Hiring employees is different from buying other goods and services.

The contract between a firm and its employees is **incomplete**:

- some tasks depend on future (unknown) events
- some aspects of the job are difficult to measure and base wages on e.g. effort

Incomplete contract does not specify, in an enforceable way, every aspect of the exchange that affects the interests of parties.

Piece rate pay

Incomplete contracts are not a problem everywhere.

Piece rate work = a type of employment in which the worker is paid a fixed amount for each product made.

Piece rate pay gives workers an incentive to exert effort.

Nevertheless, they are rarely used in most of today's firms:

- it is difficult to measure output in modern jobs
- employees often work as a part of a team

Workers' effort

If firms can't directly measure effort, why do workers work hard?

- work ethic
 - feelings of responsibility
 - to reciprocate a feeling of gratitude for good working conditions
-
- benefits for measurable output
 - promotions
 - fear of being fired

Employment Rents

Employees fear getting fired when they are paid more than their reservation option = they receive employment rent.

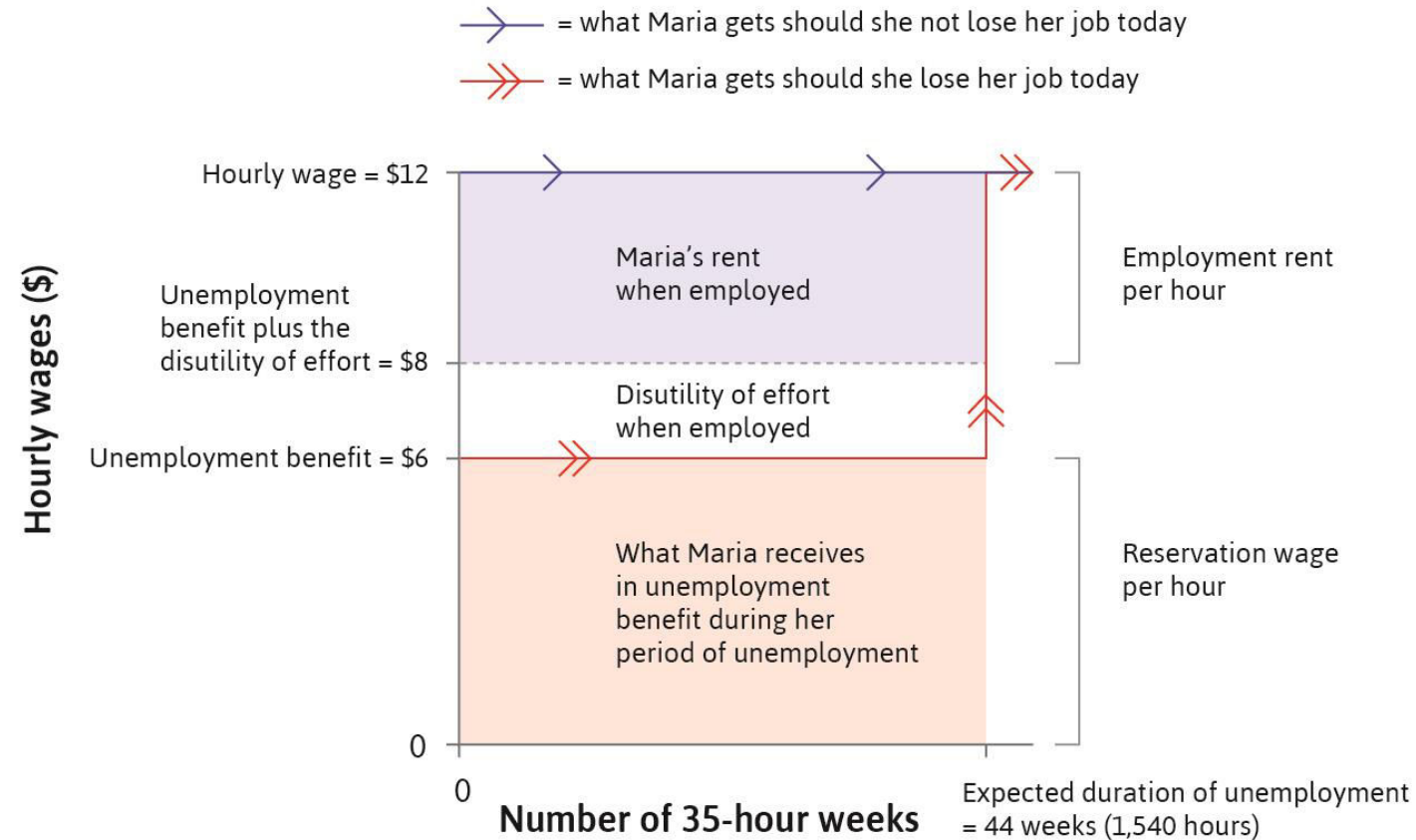
Employment rent = cost of job loss, which includes

- Lost income while searching for a job
- Costs required to start a new job e.g. relocation
- Loss of non-wage benefits e.g. medical insurance
- Social costs (stigma of being unemployed)

Calculating Employment Rents

Reservation wage = value of next best option (other employment or unemployment benefits)

Employment rent =
wage – reservation wage
– disutility of effort



E. Labour Discipline Model

Wages and Effort

The employer cannot directly measure the worker's effort

Large employment rent → large cost of job loss →
worker puts in more effort to reduce chance of getting fired

One way to increase the cost of job loss is for the firm to raise wages.

The Employment Game

1. The employer chooses a wage. As long as the worker works hard enough, she will keep her job at the offered wage.
2. The worker chooses a level of work effort, taking into account the costs of losing her job if she does not provide enough effort.

Payoffs:

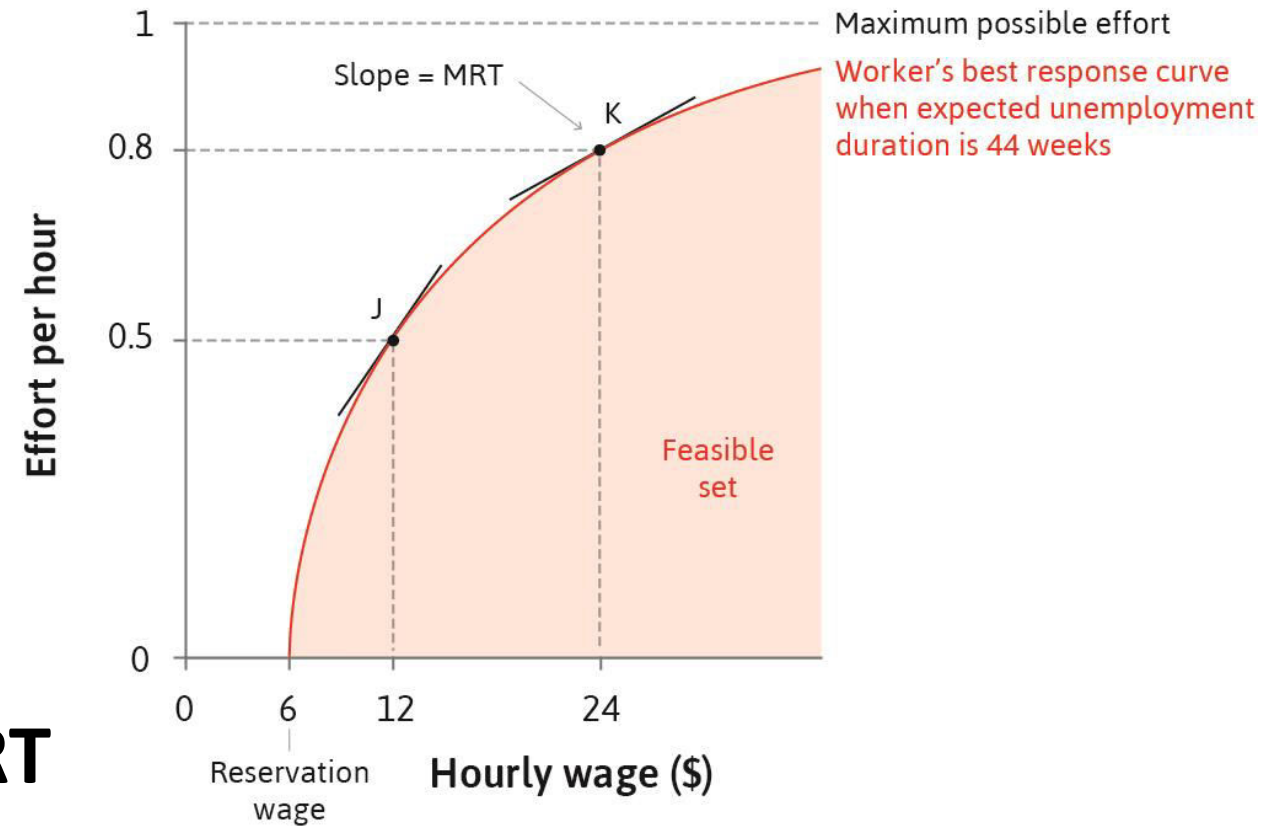
- Firm: profit = worker's output – wage
- Worker: employment rent

Worker's Best Response Curve

Best response curve shows the optimal amount of effort workers will exert for each wage offered

Represents the firm's **feasible frontier** for wages and effort

Slope of best response curve = **MRT**



Firm's best response

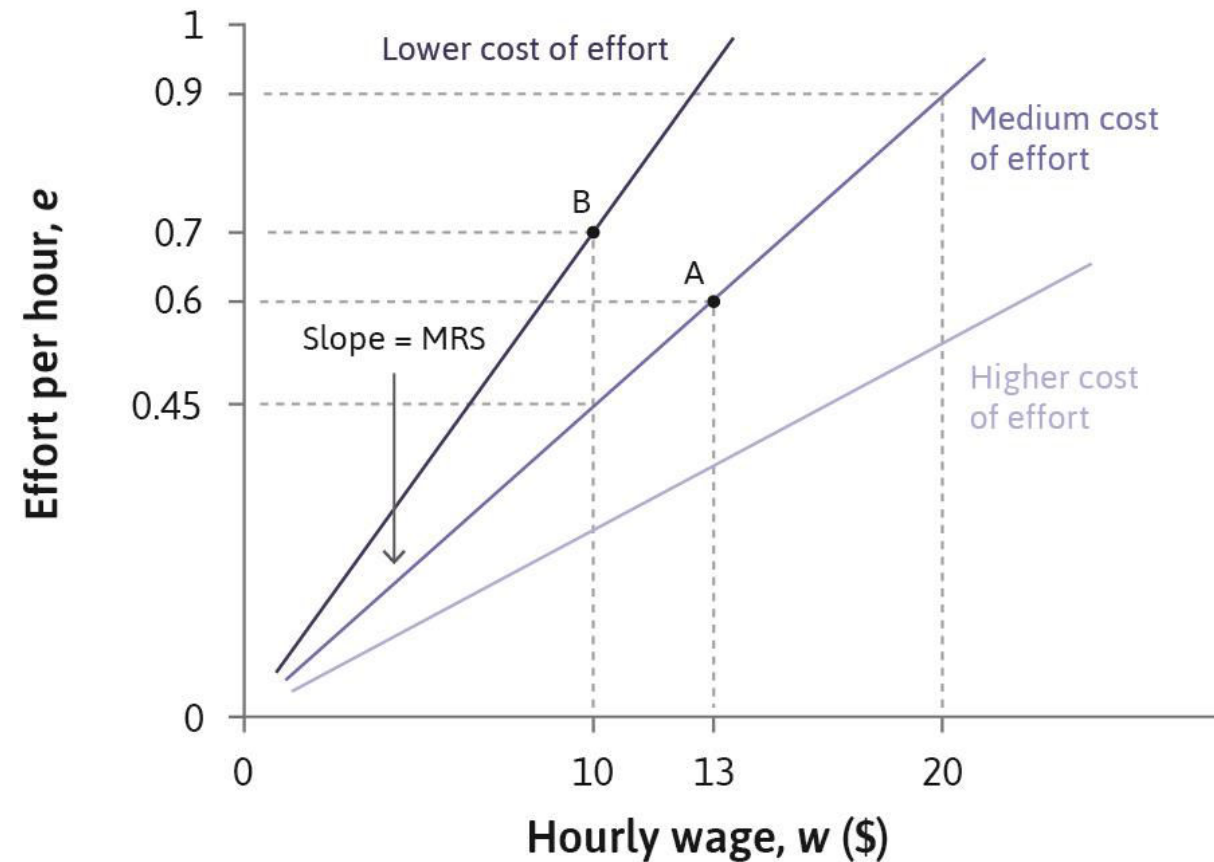
To maximise profits, firms want to minimise the costs of production.

Because there is a trade-off between wages and effort, the employer should find a feasible combination of effort and wage that minimises the cost per unit of effort.

Isocost lines for effort

The cost of effort is the same at all points on an **isocost line**.

Slope of isocost curve = **MRS** = the rate at which the employer is willing to increase wages to get higher effort.

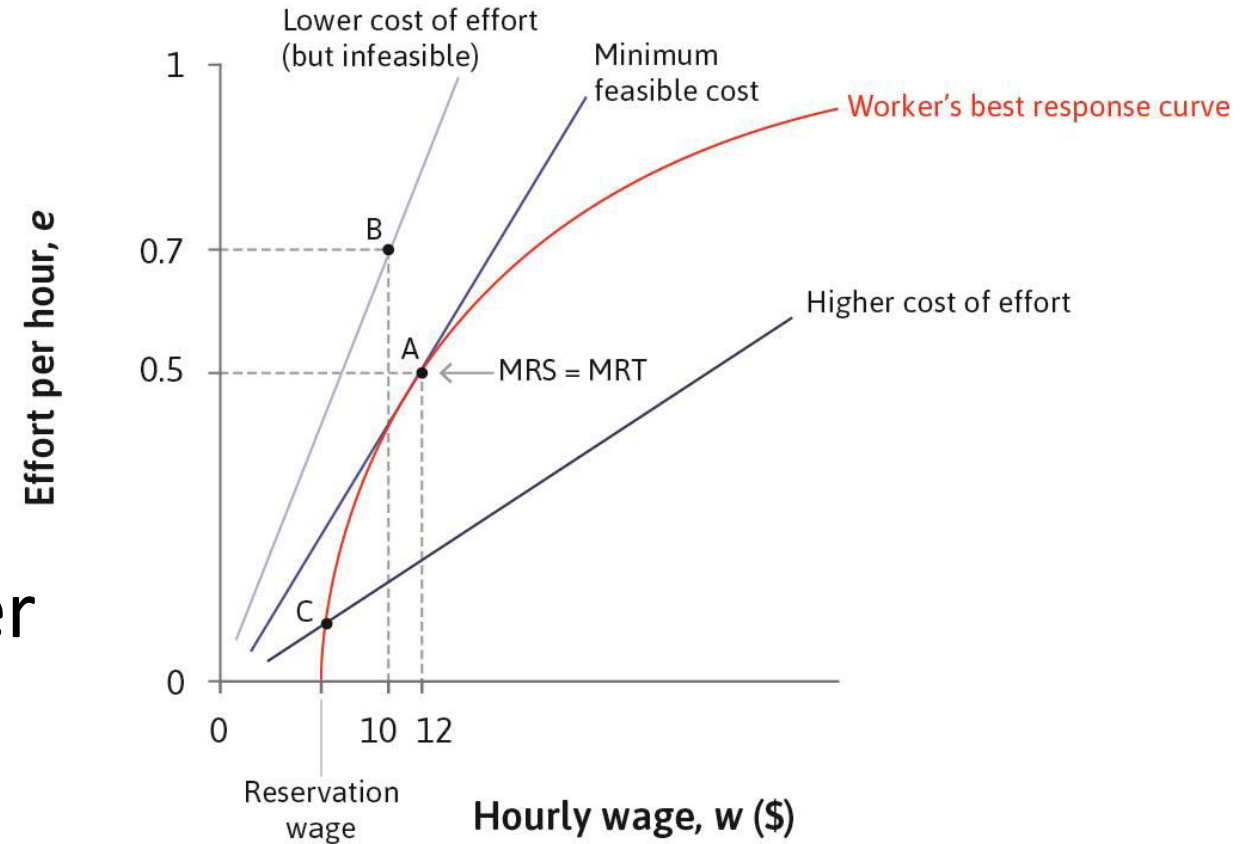


Determining wages

Profits are maximised at the steepest isocost line, subject to the worker's best response curve.

$$\text{MRS} = \text{MRT}$$

Efficiency wage = wages set higher than the reservation wage so workers will care about losing the job and provide more effort.



Involuntary unemployment

Involuntary unemployment = being out of work, but preferring to have a job at the wages and working conditions that otherwise identical employed workers have.

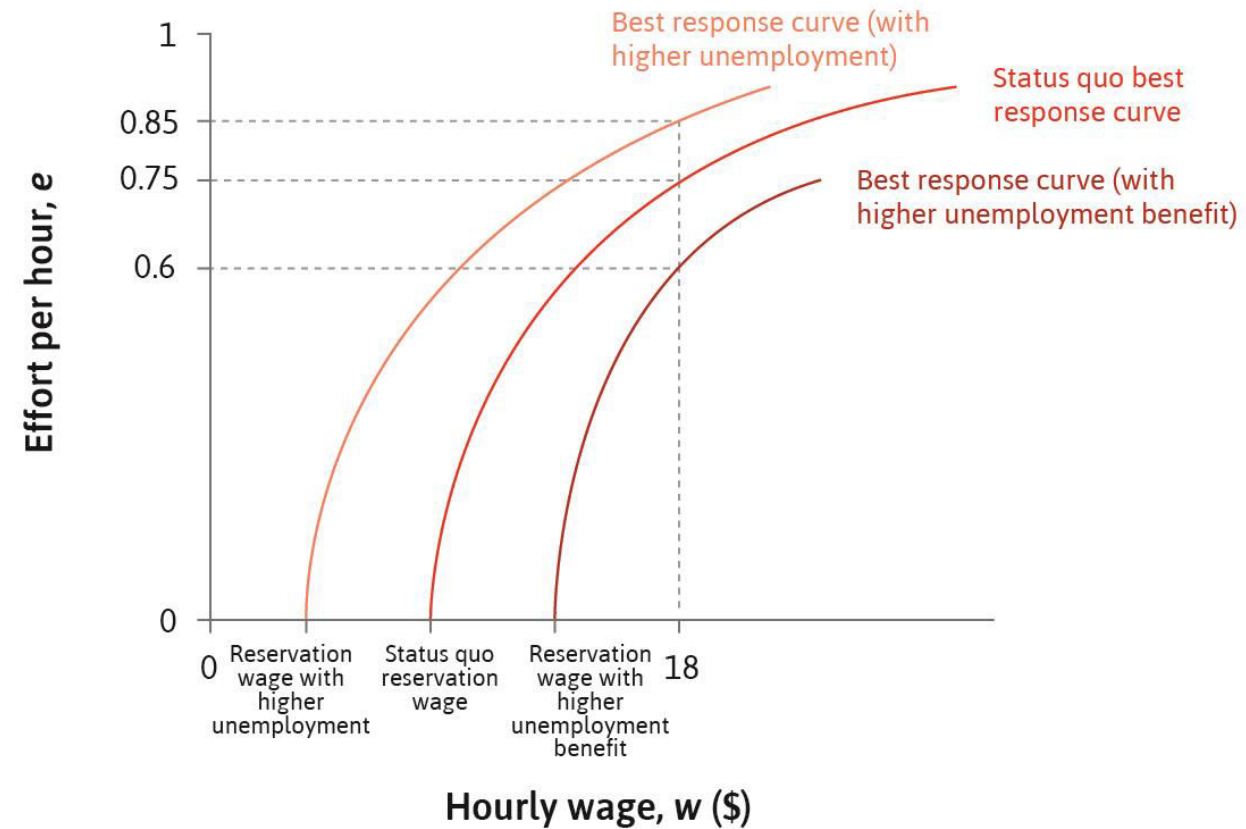
There must always be **involuntary unemployment** in the labour discipline model.

Why? In equilibrium, both wages and involuntary unemployment have to be high enough to ensure employment rent is high enough for workers to put in effort.

Factors shifting the equilibrium

The best response function will shift in reaction to changes in:

- the utility of the things that the wage can buy
- the disutility of effort
- the reservation wage
- the probability of getting fired at each effort level



Cooperatives

Cooperative = a firm that is mostly or entirely owned by its workers, who hire and fire the managers.

Because profits are paid out to workers, there is less need for supervision and monitoring.

F. Principal-agent models

Incomplete contracts in general

Incomplete contracts do not only occur in employment relationships.

Incomplete contracts arise when:

- information is not verifiable
- the relationship covers periods of time
- there is uncertainty
- there are difficulties with measurement
- judiciary is absent
- preferences for omitting some information

Principal-agent models

Principal-agent models capture interactions under incomplete contracts

- e.g. the firm is the principal and the worker is the agent

Agent takes action that is **hidden** from the principal, which is why the principal cannot verify it.

Hidden Action Problems

A **hidden action problem** occurs when

- there is a conflict of interest between the principal and the agent
- over some action that may be taken by the agent
- and this action cannot be subjected to a complete contract.

The information about the action may be either **asymmetric** or **unverifiable**.

Summary

1. Firms: owners and managers have power over workers
 - Contracts are **incomplete** – do not cover worker effort
 - **Employment rents** motivate workers to exert effort
 - An example of a **hidden action problem** between a principal (firm) and an agent (worker)
2. **Labour-discipline model** of wage-setting within firms
 - **Isocost curves** = firm's 'indifference curves'
 - **Best response curve** = maximum feasible effort, given wages
 - Profit-maximising choice where **MRS = MRT**
 - **Involuntary unemployment** as a feature of the equilibrium

In the next unit

- Models of interactions between firms and customers
- How the gains from trade are divided between consumers and owners of the firm
- The effects of taxes and firm competition on prices and purchases