# The firm:
# Owners, Managers and Employees
ECONOMICS

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UCL

Lecture 6

# CONTEXT

Context for this lecture

*Work* is important for the economy to work. (Unit 1)

- *Work* takes place within institutional boundaries of a firm
- Firms create *social surplus* by matching capital with labour

*Bargaining* determines the division of social surplus. (Unit 5)

All parties *gain* from creating a large surplus,

but have *conflicting interests* over how these gains in surplus are shared.

## THIS LECTURE

Explain how *wages are determined within firms*

Firms demand *effort* (and *not hours worked*) from workers

We will explore *wages* firms offer workers' to extract *effort* is subject to *hidden actions*

*Hidden Action*  occurs when action taken by one party cannot be observed by the other party

i.e., employer cannot know (verify) how hard the workers are working

...  also knows as a *Moral Hazard* problem

## HIDDEN ACTION

*Hidden action* or *hidden effort* is a problem

- firms require *knowledge* (skills) as an input in the production process

    difficult to discern to know extent the worker is applying their knowledge to work

- if workers work in *teams*

    difficult to identify each individual's contribution to team's output

    > If *action* is *hidden*, workers exert effort only if offered a *wage premium* – an *efficiency wage*

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# FIRMS & MARKETS

What are *firms*?                        What are *markets*?

How do *firms* differ from *markets*?

What constitutes *work* within firms?
    *Architect*                                          *Chefs*
    *Software engineer*                          *Receptionist*
    *Plumbers*                                    *Hairdressers*

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# FIRMS VERSUS MARKETS

*Firms* versus *markets*

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

*within* firms

*and*

*via* markets

*Coordination within firm* differs from *coordination via markets*

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## MARKETS

What is a *market*?

Entities (institutions) like firms and households
are *sellers* and *buyers* in the market

*Sellers* and *buyers* make *autonomous voluntary* decisions
to supply and demand

What is a *successful market transaction*?

A successful transaction takes place when demand and supply
*coincide*.

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## WELL-FUNCTIONING MARKET

When does markets *function properly*?

If successful transactions take place *frequently* and *attracts* sufficient buyers and sellers

Condition under which markets work:

if sufficiently large number of *sellers* and *buyers compete* with each other

Implies: no entity posses *power* in a market

> *Well functioning markets are characterised by decentralisation of power*

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# FIRMS

*Firms represent a concentration of economic power*

Owners/managers direct or *order* the employees' actions.

Employees have little *autonomous choice* within the firm

Firm is an institutions where the rule of the game is everyone
follows the owner manager's *order*
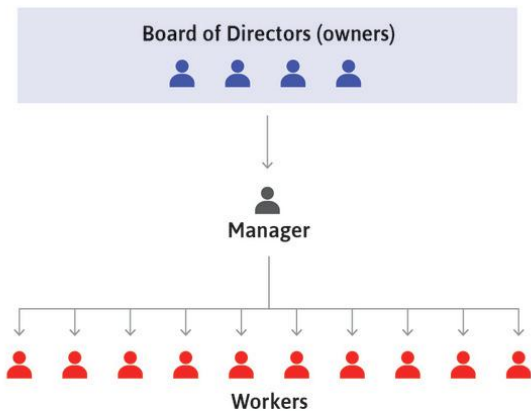
*Power is concentrated in the hand of owners/managers*

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# FIRMS

- *Owners* decide the long-term strategy
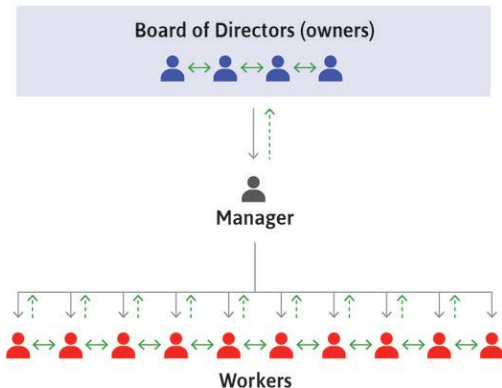- Owners then direct the *manager(s)* to implement their decision
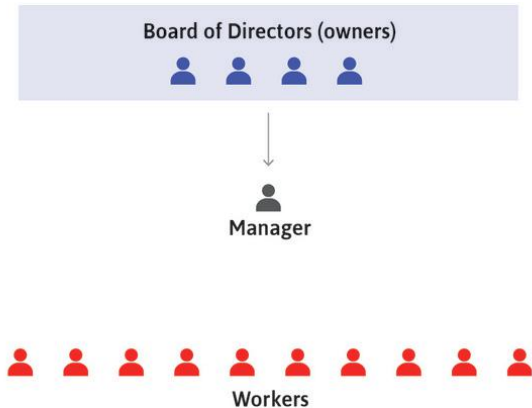
# FIRMS

- *Manager(s)* manager assign tasks to workers

# FIRMS

- *Workers* often know things that *managers* do not, and *managers* know things that *owners* do not *(hidden actions)*

(*green arrows represent flows of information*)

## DIFFERENT PERSPECTIVES ON FIRMS

*D.H. Robertson:*
  *A firm is an "island of conscious power in this ocean of unconscious coopertation"*

*Coase:*
  *hierarchy of the firm was is a cost-reducing way to conduct business*

*Marx:*
  *coercive authority of boss over the worker limited the employee's freedom*

# FIRMS VERSUS MARKETS

*Markets*

Well functioning markets are characterised by
*decentralisation of power*

*Firms*

Within firms, *power is concentrated*
in the hand of owners/managers

# ECONOMIC RENT

*Economic rent* excess payoff received that over and above
opportunity cost

- *The name comes from landowner's economic rents in the past.*

*Example:* you own flat in London that you have let.

|  |  |  |  |
|---|---|---|---|
| *Rent* tenants pay: | £2000 *p.a.* |  |  |
| *Cost* of maintaining the flat: |  |  | £ 500 *p.a.* |
| Your *economic rent*: | £2000 *p.a.* | − | £500 *p.a.* |
|  | = £1500 *p.a.* |  |  |

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# EMPLOYMENT RENT

A workers employment rents is:

| *Net utility from the job* | *less* | *opportunity cost of doing the job* |
|:---:|:---:|:---:|
| *Wage earned* *less* *disutility from work* | *less* | *reservation wage* |

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# MARIA'S EMPLOYMENT RENT

*Example 1:*

Maria has 35 hours per week job

- Maria gets $12 per hour
- Maria responds by working with *effort intensity* 0.5
- Maria's disutility from working with *effort intensity* 0.5 is $2 per hour

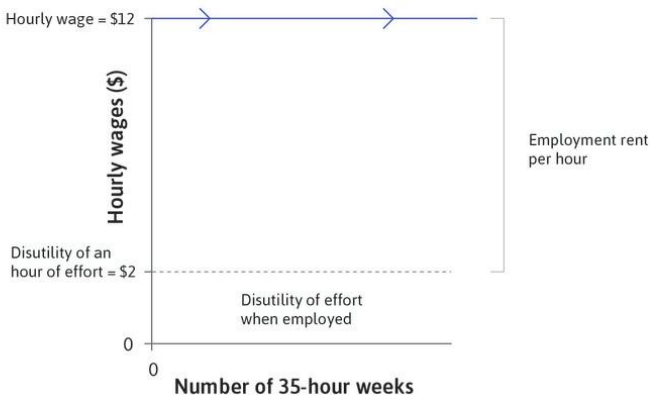    *she works only half the time & checks social media rest of the time*

If she loses this job,

   she expect it will take her 44 weeks to find another job.

What is Maria's *employment rent*?

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# MARIA'S EMPLOYMENT RENT



→ = what Maria gets should she not lose her job today

Hourly wage = $12

**Hourly wages ($)**

Employment rent per hour

Disutility of an hour of effort = $2

Disutility of effort when employed

0

0

**Number of 35-hour weeks**

## MARIA'S EMPLOYMENT RENT

What is Maria's *employment rent*?

Maria's net utility from the job:

$$= \$12 - \$2$$
$$= \$10 \text{ per hour}$$

Maria's **total** *employment rent*

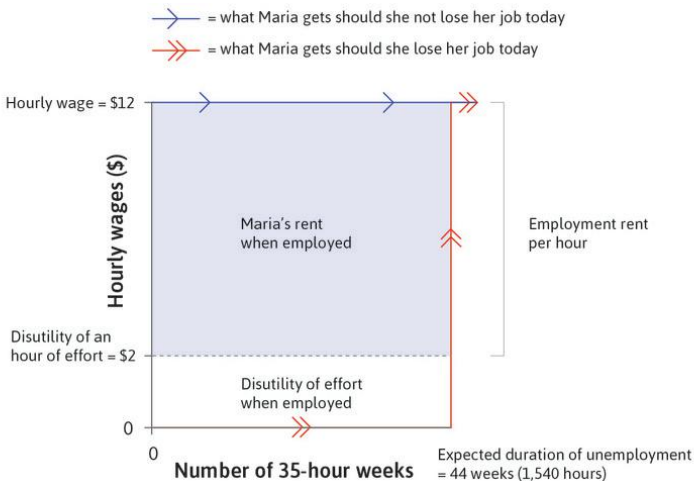= employment rent per hour $\times$ expected lost hours of work

= \$10 per hour $\times$ (44 weeks $\times$ 35 hours per week)

= \$15,400

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# MARIA'S EMPLOYMENT RENT



→ = what Maria gets should she not lose her job today

⇉ = what Maria gets should she lose her job today

Hourly wage = $12

Hourly wages ($)

Employment rent per hour

Disutility of an hour of effort = $2

Disutility of effort when employed

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**Number of 35-hour weeks**

Expected duration of unemployment = 44 weeks (1,540 hours)

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# MARIA'S EMPLOYMENT RENT

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# EMPLOYMENT RENT WITH UNEMPLOYMENT BENEFIT

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# EMPLOYMENT RENT WITH UNEMPLOYMENT BENEFIT

*Example 2:* What is Maria's *employment rent* if Maria gets unemployment benefit of $6 per hour?

Maria's net utility from the job:

$$= \quad \$12 - \$6 - \$2$$

$$= \quad \$4 \text{ per hour}$$

Maria's ***total*** *employment rent*

= employment rent per hour × expected lost hours of work

= $4 per hour × (44 weeks × 35 hours per week)

= $6,160

## EFFORT INTENSITY

Employer can *set the wage* and can *threaten to fire*

Maria's effort intensity is *hidden* from the employer

Maria's *chooses her effort intensity:*

| Wage per hour | Work intensity chosen | Reservation wage |
|---------------|----------------------|------------------|
| $ 6 *per hour* | 0 | $ 6 *per hour* |
| $ 12 *per hour* | 0.5 | $ 6 *per hour* |
| $ 24 *per hour* | 0.8 | $ 6 *per hour* |

Rate at which *wage* transforms into *effort intensity*

. . . *Marginal rate of transformation*

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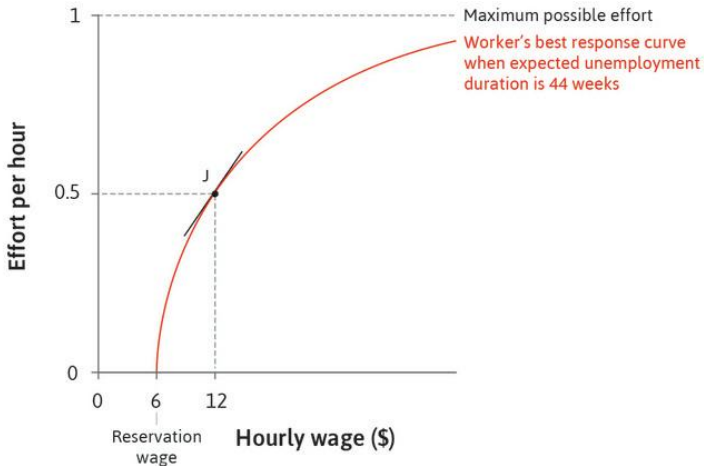
## MARIA'S EFFORT CHOICE

## MARIA'S EFFORT CHOICE



Maximum possible effort
Worker's best response curve when expected unemployment duration is 44 weeks
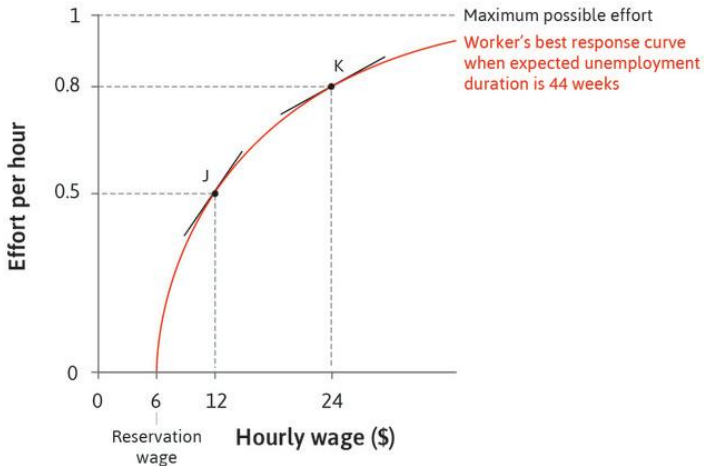
## MARIA'S EFFORT CHOICE
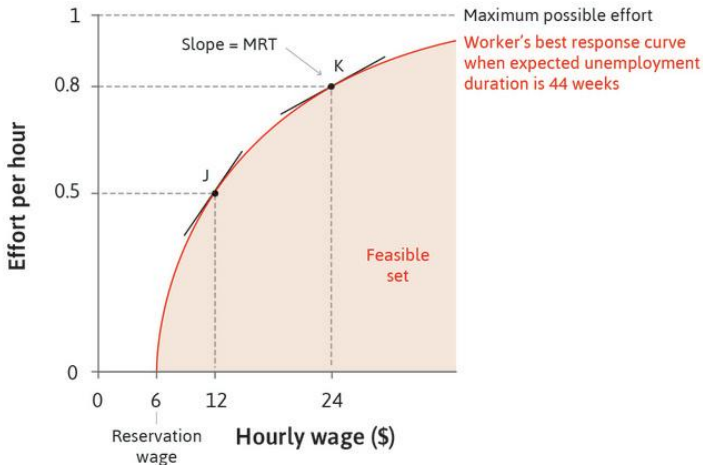
## EMPLOYER'S INDIFFERENCE CURVE

Some jobs are mechanical where as other jobs, the quality of effort matters.

*Chef at a high end restaurant*                          *Accountant*

*Software engineer*                                 *Shop manager*

The employer (owner)

    just doesn't rent labour but

    buys *effort intensity* with the wage ...

                  ... pays a *wage premium* for buying higher effort

## EMPLOYER'S INDIFFERENCE CURVE

Employer's *indifference curve* connect are all the points where
she is indifferent between *wage premium* she offers and
*effort intensity* she gets from Maria

Slope of the *indifference curve*:
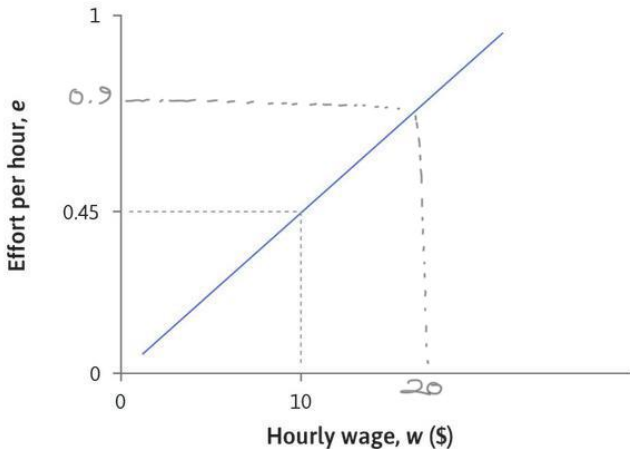rate at which the employer trades off
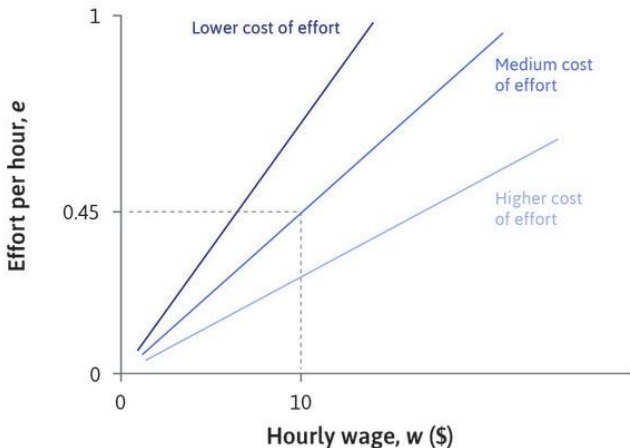*wage premium* paid to Maria
and
*effort intensity* obtained in return

... *Marginal rate of substitution*

# EMPLOYER'S INDIFFERENCE CURVE

## EMPLOYER'S INDIFFERENCE CURVE



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# OPTIMAL WAGE EFFORT

Employer *chooses* the *wage—effort intensity combination* where

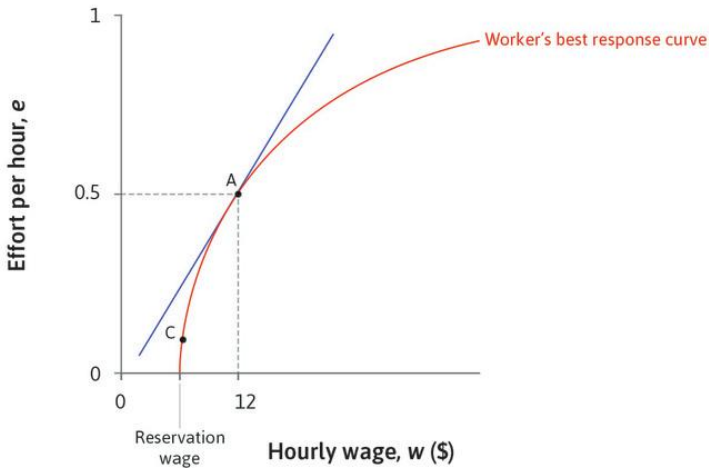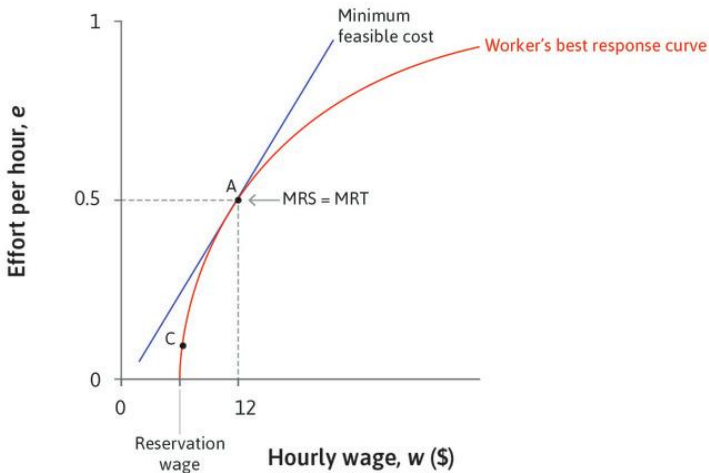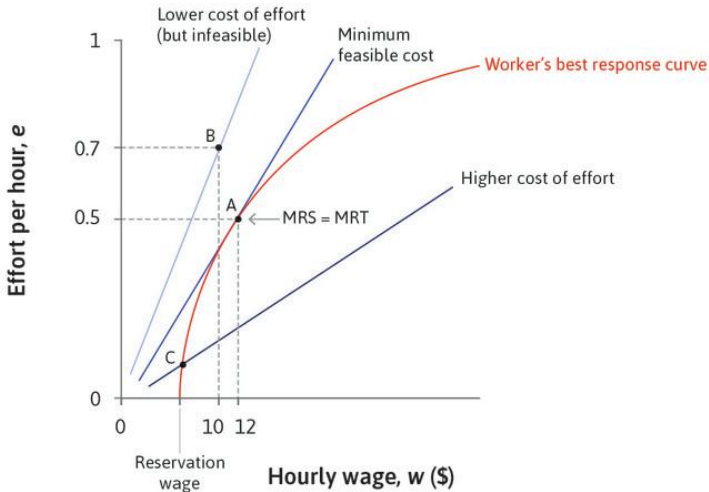| | |
|---|---|
| Marginal rate of substitution (MRS) | ... rate a which employer trades-off *wage* cost with *effort intensity* obtained in return |
| *equals* | |
| Marginal rate of transformation (MRT) | ... rate at which Maria produces *effort intensity* in response to *wage* |

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## EFFICIENCY WAGE

*Efficiency Wage:*

the employer pays the worker a higher *economic rent* in order to obtain the *high effort intensity*

this is because *effort intensity* is *hidden* and cannot be ordered

*Intuition:* think of it as the cost of buying *hidden effort intensity*

Employers have less *power* over them

Skilled workers' work in jobs where *effort intensity* is important and thus obtain efficiency wage

*Architects, designers*

Unskilled workers get the minimum wage

*Construction workers, shelf stockers*

## SUMMARY

Firms: owners and managers have *power* over workers

　　More power over unskilled than skilled workers

　　Skilled workers use knowledge and their work is more subject
　　to hidden action

Economic rents *motivate* workers to exert effort

Explains why *skilled workers earn higher wages* than unskilled
workers