Labour markets and government intervention

Edexcel IAL Economics WEC13 sections 3.3.4-3.3.5 full package

Labour markets and government intervention

- explain the demand for labour as a **derived demand** and the factors behind labour supply;
- find the competitive wage and analyse shifts in demand and supply;
- explain geographical and **occupational immobility**;

Labour markets and government intervention (2)

- evaluate how governments control monopolies, promote competition and protect suppliers and workers;
- analyse minimum and **maximum wages** and other labour-market policies.

The demand for and supply of labour

- the demand for the final product;
- labour **productivity** 生产率: how much each worker adds;
- the price of the product;

The demand for and supply of labour (2)

- the wage compared with the cost of capital that could replace workers.
- the size and age structure of the population: China's working-age population (15–59) has been shrinking since about 2012;
- **net migration**;

The demand for and supply of labour (3)

- income tax rates and the level of welfare benefits;
- government rules, such as licences and working-time limits;
- **trade unions** 工会, which can limit entry or bargain for higher pay.

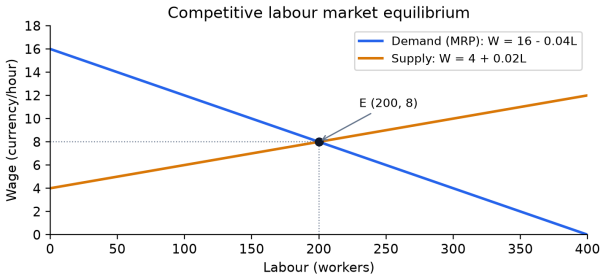
Wage determination and labour market failure

- Supply of labour: $W = 4 + 0.02L$. Demand for labour: $W = 16 - 0.04L$ (wage in yuan per hour, L in workers).
- Set them equal: $4 + 0.02L = 16 - 0.04L$, so $0.06L = 12$ and $L = 200$ workers.
- The wage is $W = 4 + 0.02(200) = 8$ yuan per hour.

Wage determination and labour market failure (2)

- **Geographical immobility 地域流动性不足**: workers cannot move to another area. High housing costs, family ties and lack of information all play a part. In China the *hukou* (household registration) system has long made it harder for migrant workers to get schooling and healthcare for their children in the cities where they work.
- **Occupational immobility 职业流动性不足**: workers cannot move to another job because they lack the skills, cannot afford retraining, or face discrimination. A laid-off coal miner in Shanxi cannot become a software engineer next month.

Figure: Wage determination and labour market failure



- Labour supply $W = 4 + 0.02L$ meets labour demand $W = 16 - 0.04L$ at 200 workers and 8 yuan per hour
- Match each part of the diagram to the text.

Government intervention in product markets

- **price regulation**: under an **RPI — X** price cap, a firm may raise prices by inflation (RPI) minus X percent each year. When British Telecom was privatised in 1984, its prices were capped at RPI − 3%. To keep its profits, the firm must cut costs by at least X percent a year;
- profit regulation;
- quality standards and performance targets;

Government intervention in product markets (2)

- referral to a competition authority and laws to control mergers. In April 2021 China's market regulator, SAMR, fined Alibaba ¥18.2 billion for forcing merchants to sell only on its platform.
- tax incentives and grants for small firms and for foreign direct investment;
- **deregulation**;

Government intervention in product markets (3)

- **privatisation** 私有化;
- **competitive tendering** 竞争性招标: private firms bid to run public services such as bus routes or hospital cleaning;
- **trade liberalisation** 贸易自由化: lower tariffs bring foreign competition.

Government intervention in product markets (4)

- rules on local sourcing;
- employment laws against exploitation;
- limits on foreign firms entering a market;

Government intervention in product markets (5)

- limits on the power of large buyers (monopsony);
- **nationalisation 国有化**: in February 2008 the UK government took over the failing bank Northern Rock.
- **regulatory capture 监管俘获**: the regulator comes to serve the firms it regulates. After the 2010 Deepwater Horizon oil spill, investigators found that the US offshore drilling regulator had grown too close to the oil companies;

Government intervention in product markets (6)

- **asymmetric information**: the firm knows its true costs better than the regulator does;
- too few staff or too little money for the regulator;
- too little legal power to act.

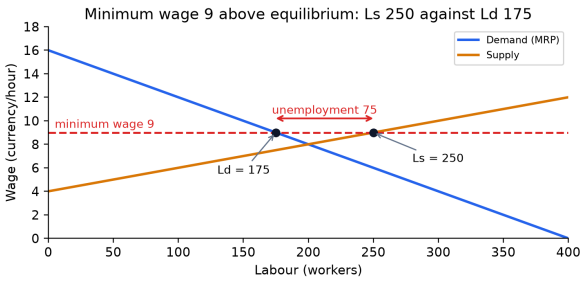
Government intervention in labour markets

- **maximum wages 最高工资**: rare, but public-sector pay caps are one example (the UK capped most public-sector pay rises at 1% a year from 2013 to 2017), and since 2014 EU rules have limited bankers' bonuses to the size of their salary, or twice it with shareholders' approval;
- **minimum wages 最低工资**: China's provinces set their own **minimum wages**; Shanghai's, the highest, was ¥2,690 a month from July 2023;
- taxes on employment, such as employers' social insurance contributions and corporation tax, which raise the cost of hiring;

Government intervention in labour markets (2)

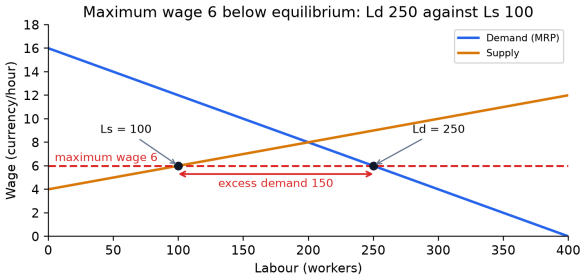
- policies to reduce immobility: training, relocation grants and more housing;
- laws against discrimination and exploitation.
- **Minimum wage of 9 yuan** (above the equilibrium of 8): labour supplied $= (9-4)/0.02 = 250$; labour demanded $= (16-9)/0.04 = 175$. 75 workers who want jobs cannot find them, but the 175 who are employed earn more.
- **Maximum wage of 6 yuan** (below the equilibrium): labour demanded $= (16-6)/0.04 = 250$; labour supplied $= (6-4)/0.02 = 100$. There is a shortage of 150 workers, and jobs stay empty.

Figure: Government intervention in labour markets



- A **minimum wage** of 9 above the equilibrium: 250 want to work but only 175 are hired, so 75 are unemployed
- Match each part of the diagram to the text.

Figure: Government intervention in labour markets ·



- A **maximum wage** of 6 below the equilibrium: employers want 250 workers but only 100 offer themselves, a shortage of 150
- Match each part of the diagram to the text.

Data-response practice (Section B style)

- (a) Using the extract, explain **two** factors that reduced the supply of HGV drivers in the UK. [4]
- (b) The average HGV driver's annual pay rose from £32,000 to £36,000, while the number of drivers employed rose from 300,000 to 306,000. Calculate the **elasticity of labour supply** and comment on your answer. [4]
- (c) With the help of a labour market diagram, explain the effect of the shortage on drivers' wages and employment. [6]

Data-response practice (Section B style) (2)

- (d) Examine **two** causes of labour immobility in the market for HGV drivers. [8]
- (e) Evaluate whether temporary visas for foreign workers are a better solution to labour shortages than training more domestic workers. [12]

Sources for this lesson

- D. Card and A. Krueger, "**Minimum Wages** and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania", *American Economic Review* 84 (1994).
- State Administration for Market Regulation, decision on Alibaba (10 April 2021).
- S. Littlechild, *Regulation of British Telecommunications' Profitability* (1983), the origin of RPI − X.

Sources for this lesson (2)

- Shanghai Municipal Human Resources and Social Security Bureau, **minimum wage** notice (2023).
- Road Haulage Association statements on the HGV driver shortage (2021).
- Pearson Edexcel International A Level Economics specification (WEC13), Issue 2, sections 3.3.4–3.3.5.

Common errors

- Writing that firms demand labour "because they need workers". Say it is derived from demand for the product.
- Putting "price" and "quantity" on a labour market diagram. Label the axes wage rate and number of workers.
- Stating that a **minimum wage** always causes unemployment. In a monopsony it may raise employment.

Common errors (2)

- Mixing up **geographical immobility** (cannot move place) with **occupational immobility** (cannot change job).
- Describing an RPI − X cap as a fixed price. It allows prices to rise, but by less than inflation.
- Listing government measures without judging their effect on price, profit, efficiency, quality and choice.

Key terms

- **Derived demand**: demand for labour that comes from demand for the product it makes.
- **Elasticity of labour supply**: % change in labour supplied ÷ % change in the wage.
- **Geographical / occupational immobility**: barriers to moving place / changing job.

Key terms (2)

- **RPI — X**: a price cap that allows rises of inflation minus X percent.
- **Regulatory capture**: a regulator acting in the interests of the firms it regulates.
- **Minimum / maximum wage**: a legal floor / ceiling on pay.
- **Monopsony**: a single buyer, here a dominant employer.

Check yourself

- 1.
- Explain why the demand for delivery drivers rose in 2020. 2.
- On the model, labour demand rises to $W = 19 - 0.04L$.
- Find the new wage and employment. 3.