6.2 Labour markets and government intervention

Name: _____ Class: _____ Date: _____ **Total: 36 marks**

KEY WORDS derived demand • net migration • trade union • minimum wage • maximum wage

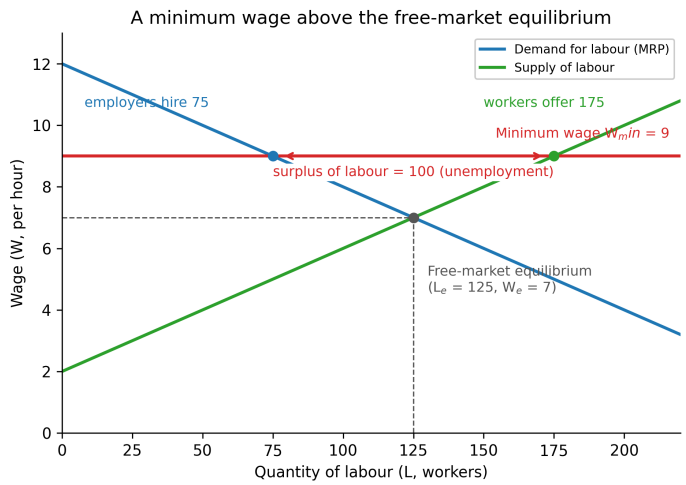
Objective

Analyse labour markets and government intervention with wage-determination diagrams, and evaluate policies for named groups at full IA2 essay standard.

1 Key knowledge and worked examples

Labour demand is a **derived demand**: it follows demand for the product. The elasticity of demand for labour is low when capital cannot easily replace workers, when labour is a small share of costs, and when product demand is price-inelastic. Labour supply to an occupation depends on population, **net migration**, income tax, welfare benefits, regulation and **trade unions**; its elasticity is low when training is long and specific.

A **minimum wage** above equilibrium contracts labour demand and extends labour supply, creating a surplus; a **maximum wage** below equilibrium creates a shortage.



Worked example (model numbers from the diagram). Demand $W = 12 - 0.04L$, supply $W = 2 + 0.04L$.

Equilibrium: $12 - 0.04L = 2 + 0.04L$, so $0.08L = 10$ and $L_e = 125$ workers; $W_e = 12 - 0.04 \times 125 = 7$ per hour. With a floor of $W_min = 9$: quantity demanded solves $9 = 12 - 0.04L$, so $L = 75$; quantity supplied solves $9 = 2 + 0.04L$, so $L = 175$. Surplus of labour $= 175 - 75 = 100$ workers. Check: the floor sits above $W_e = 7$, so it binds, and demand falls while supply rises – both move away from 125, as the figure shows.

2 Practice

2.1 Explain two factors that would make the demand for hotel cleaners more wage-elastic. [4]

2.2 A labour market has demand $W = 20 - 0.05L$ and supply $W = 2 + 0.03L$. Calculate the equilibrium wage and employment. The government then introduces a minimum wage of 11. Calculate the resulting surplus of labour. [6]

2.3 Explain two causes of occupational immobility of labour and one consequence for the economy. [6]

3 Exam-style questions

3.1 In 2024 the fictional island state of Aldara capped pay for all senior public-sector managers at 9 000 Aldaran dollars per month, below the previous market rate. Within a year, 12% of hospital and utility executives had resigned for private or overseas posts. Evaluate the impact of imposing a maximum wage. Illustrate your answer with an appropriate diagram(s). [20]

Solutions

2.1 Demand is more elastic when machines or self-service can replace cleaners easily, because a wage rise then triggers substitution; and when labour is a large share of the hotel's total costs, because a wage rise then raises total cost sharply and forces stronger cuts. Also credit: price-elastic demand for hotel rooms, longer time to adjust. Authored marking guidance (original, not an official scheme): B1 per factor identified, B1 per linked development.

2.2 Equilibrium: $20 - 0.05L = 2 + 0.03L$, so $0.08L = 18$ and $L_e = 225$ workers; $W_e = 20 - 0.05 \times 225 = 8.75$ per hour. The floor at 11 binds because $11 > 8.75$. Quantity demanded: $11 = 20 - 0.05L$ gives $L = 180$; quantity supplied: $11 = 2 + 0.03L$ gives $L = 300$. Surplus $= 300 - 180 = 120$ workers. Authored marking guidance (original): M1 method, A1 answers, B1 binding check.

2.3 Causes: skills gained in a declining industry do not match growing industries; long or costly retraining and required qualifications block movement. Consequence (any one, B1 + B1 development): structural unemployment while vacancies stay unfilled; persistent wage differences between occupations; lost output and higher welfare spending. Authored marking guidance (original): B1 identification, B1 development per point.

3.1 Model response (original; official WEC13 essays are marked 12 for knowledge, application and analysis plus 8 for evaluation, with a Level-3 cap when no appropriate diagram is offered).

Definition and diagram: a maximum wage is a legal ceiling on pay, binding when set below the free-market equilibrium. Draw labour demand falling and supply rising, mark the equilibrium, then a horizontal ceiling below it: quantity demanded exceeds quantity supplied, giving a labour shortage. Aldara's cap binds because executives previously earned more than 9 000 dollars.

Analysis: the intended gain is fairness and lower pay inequality between executives and ordinary public workers, plus budget savings for the state. But the diagram's shortage is real: hospitals and utilities cannot fill senior posts at the capped wage, shown by the 12% resignation rate. Effort and morale of remaining managers may fall; some pay may move into untaxed benefits, creating evasion; and the best candidates may emigrate, lowering the quality of public services that poorer households rely on most.

Evaluation: the damage depends on how far below equilibrium the cap sits, how mobile these executives are (their resignations suggest high mobility), and whether non-pay motives (public service, job security, pensions) retain staff. The policy may work better where private alternatives are few; caps could also be paired with performance pay within the rules. Government failure is possible: ministers lacked information about the true reservation wages of specialist managers.

Judgement: in Aldara's case the cap probably costs more than it gains – the measured 12% resignation shows the shortage is not theoretical – so a narrower, sector-tested cap or a pay ratio rule would achieve fairness with less loss of skill. (≈340 words; allow supported alternative judgements with conditions.)