

Economics, markets and organizations

Tutorial 8



Continuous exam 1

- 1) What is GDP? What are the components of GDP? Is it better to use GDP for comparisons across countries and why?





Continuous exam 2

- 2) What is the difference between the CPI and the PPI? Why both measures of price level are necessary?





Key objectives

- **Understand the sources of growth**
- **Understanding unemployment and policy interventions on the labor market**
- Understanding savings and investments
- Understand how the market of loanable funds work





Chapter 22

PRODUCTION AND GROWTH





Problems and applications 22.3

- UK income per person today is roughly four times what it was a century ago. Many other countries have also experienced significant growth over that period. What are some specific ways in which your standard of living is likely to differ from that of your great-grandparents?



Answer

- Today's standard of living differs from those of our great-grandparents because of improved transportation, communications, entertainment, machinery for household work, computers, better healthcare.
- It is also possible to add other things like more individual freedom and higher social mobility.



Problems and applications 22.4

The chapter discusses how employment in developed economies has declined relative to output in the agricultural sector. Can you think of another sector where the same phenomenon occurred more recently? Is this change a success or failure from the standpoint of the society as a whole?





Answer

Manufacturing underwent a similar change as agriculture a century ago: industrial employment decreased while the output did not. This is due to modern technologies, that increase labor productivity.

The result is better quality and cheaper industrial goods.





Problems and applications 22.5

Suppose that society decided to reduce consumption and increase investment.

- a. How would this change affect economic growth?
- b. What groups in society would benefit from this change? What groups might be hurt?





Answer

- a) The capital stock would increase in the economy, which would result in a temporary increase in economic growth and a long-run increase in the level of per capita GDP.
- b) It would benefit everyone earning an income in the long-run. In the short run the reduction in consumption would affect the industries producing consumer goods negatively, though.



Questions for review on page 495

- **Q1. What does the level of a nation's GDP measure? What does its growth rate measure? Would you rather live in a nation with high level GDP with low growth rate or in a nation with low level of GDP with high growth rate?**
- **Q3. List and describe four determinants of productivity.**
- **Q5. Explain how higher saving leads to a higher standard of living. What might deter a policymaker to raise the rate of saving?**
- **Q6. Does higher rate of saving lead to higher growth rate temporarily or permanently?**



Chapter 23

UNEMPLOYMENT





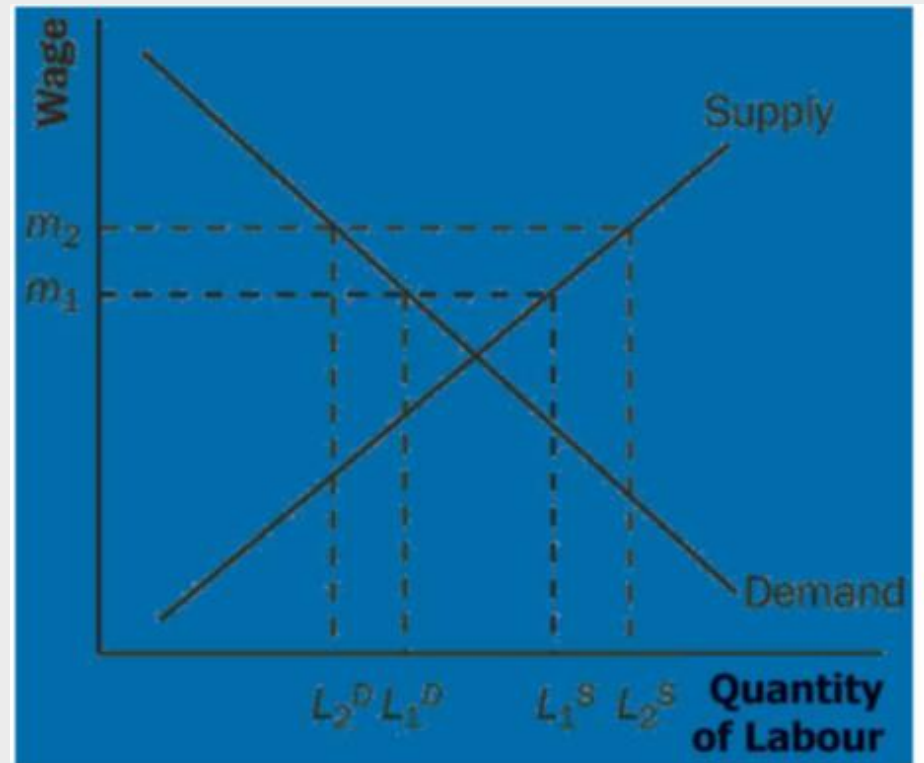
Problems and applications 24.5

Using a diagram of the labour market, show the effect of an increase in the minimum wage on the wage paid to workers, the number of workers supplied, the number of workers demanded and the amount of unemployment.



Answer

- Wage paid increases (m_1 to m_2)
- Number of jobs offered reduces. (L_1^D to L_2^D)
- Number of people willing to work increases (L_1^S to L_2^S)
- (Involuntary) unemployment increases





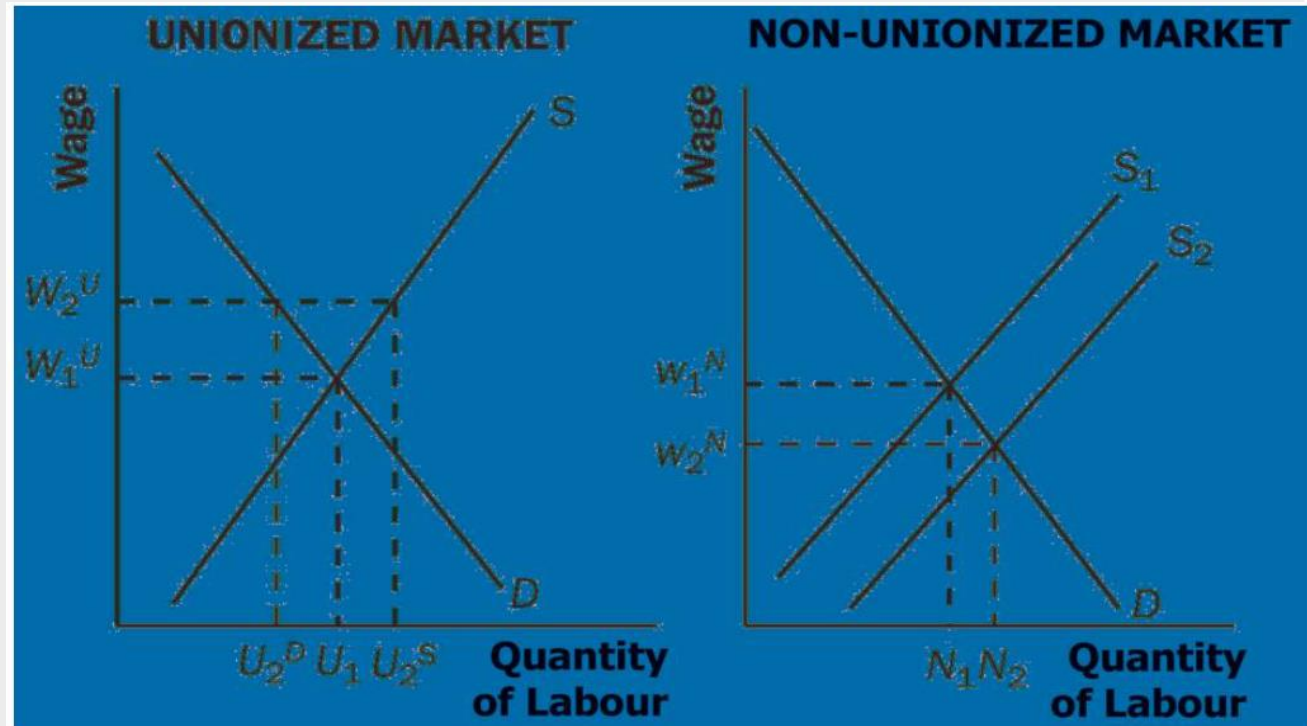
Problems and applications 24.7

Consider an economy with two labour markets, neither of which is unionized. Now suppose a union is established in one market.

a. Show the effect of the union on the market in which it is formed. In what sense is the quantity of labour employed in this market an inefficient quantity?

b. Show the effect of the union on the non-unionized market. What happens to the equilibrium wage in this market?

Answer



- In the unionized market wages and unemployment increases. Not everyone who wants to work find a job (inefficiency).
- The excess supply of labor will appear in the non-unionized market as a shift in supply, reducing wage and increasing employment.



Questions for review (page 516)

- Q4. Why is frictional unemployment inevitable? How might the government reduce the amount of frictional unemployment?
- Q5. Are minimum wage laws a better explanation for structural unemployment among teenagers or among university graduates? Why

Answers

- Q4 Simply because the economy is always changing, new firms are created old firms may shut down. Also the structure of labor demand changes. The government can reduce frictional unemployment by improving the flow of information on the labor market and by offering training for the unemployed.
- Q5 For teenagers, because their market wage would possibly be below the minimum wage, hence the minimum wage acts as a binding price floor.



Chapter 24

SAVINGS, INVESTMENTS AND THE FINANCIAL SYSTEM



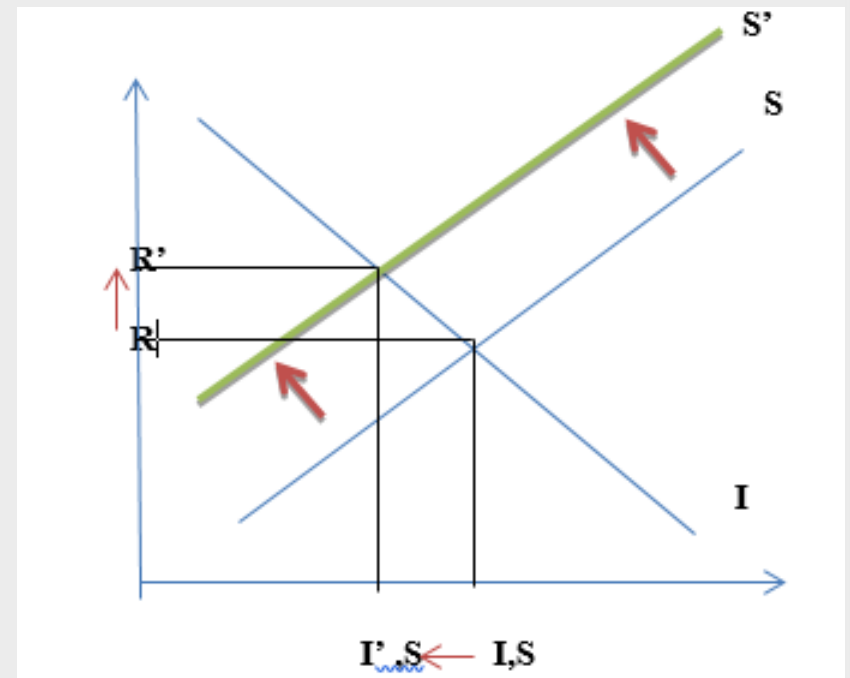


Question 1

- a) Assume that the Dutch government decides to run a higher Budget Deficit through borrowing by increasing government expenditure. In detail and by using a graph describe what will happen to the interest rate, the savings and investment.
- b) Now assume that the Dutch government decides to run a higher budget deficit through lowering taxes. In detail, describe what will happen to national savings and the interest rate.

Answer

a) Since $S = Y - C - T + T - G$, if G increases, national savings would shift to the left (decrease at given r). This, with given demand for loanable funds, results in an increase of the interest rate and less investments.





Answer

b) $S = Y - C - T + T - G$, if T reduces, then private savings will increase by the same amount as public savings reduces. No change in national savings, interest rate and investments, hence.

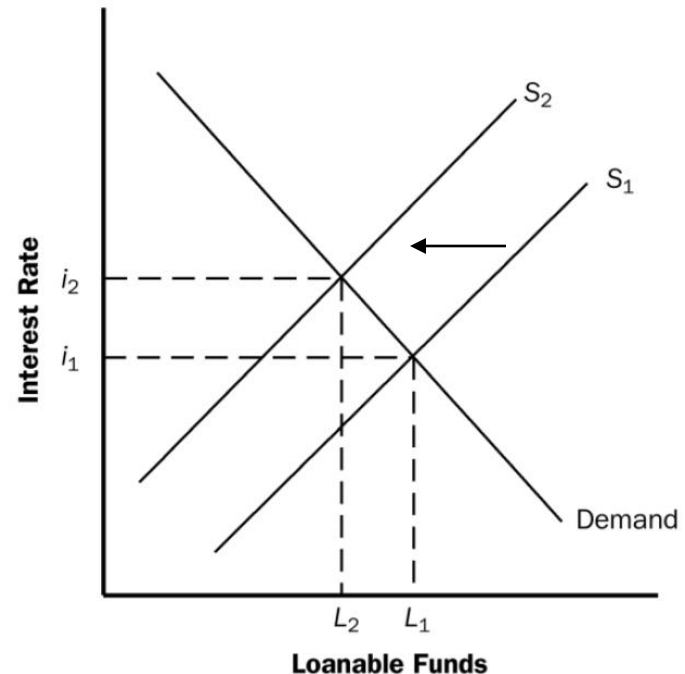


Problems and applications on page 537

- Q4. When the Greek government asked for support from the European Union to repay bonds that were coming up for maturity between 2008 and 2010, interest rates rose on bonds issued by other EU members such as Spain, Portugal and Ireland. Why do you suppose this happened? What can you predict happened to the price of bonds from these countries in this period?

Answer

- Investors became more cautious and reduce their purchases of bonds from countries that they deemed similar to Greece in terms of risk.
- As a result the supply of loanable funds reduce in these countries (supply shifted to the left) and the interest rate increased.





Problems and applications on page 538

- Q7. Suppose that GDP is 5 trillion euro, taxes are 1.5 trillion, private saving is 0.5 trillion and public saving is 0.2 trillion. Assuming that the economy is closed, calculate the consumption, government purchases, national saving and investment.



Answer

- $S^{\text{priv}} = Y - C - T \rightarrow C = Y - S^{\text{priv}} - T = 5 - 0.5 - 1.5 = 3$
- $S^{\text{pub}} = T - G \rightarrow G = T - S^{\text{pub}} = 1.5 - 0.2 = 1.3$
- $S = S^{\text{priv}} + S^{\text{pub}} = 0.5 + 0.2 = 0.7$
- $I = S = 0.7$



Problems and applications on page 538

Q8. Consider that BP is considering exploring new oil fields.

- a) Assuming that BP needs to borrow money in the bond market, to finance the purchase of new oil rigs and drilling machinery, why could an increase in interest rates affect BP's decision whether to carry out the exploration?
- b) If BP has enough of its own funds to finance the development of the new oil field without borrowing, would an increase in interest rates still affect BP's decision about undertake the new project?



Answer

- a) It would increase the cost of new funds and would reduce the returns from the new investments. If the increase in interest rate is high enough, BP would abandon the project.
- b) Yes, since the opportunity costs of using own funds would increase. This is because the own funds could be lent at the higher interest rate in the market for loanable funds (by buying bonds of other companies for example).



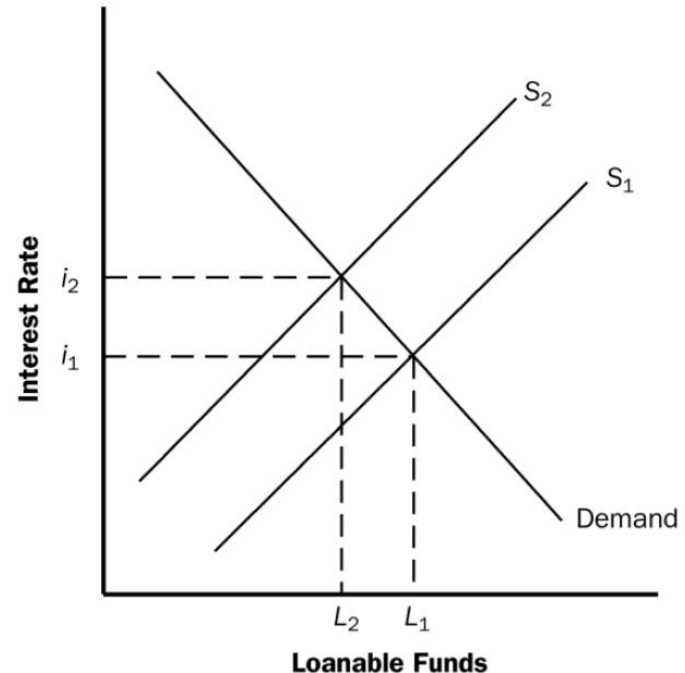
Problems and applications on page 538

Q9. Suppose that the government borrows 5 billion more next year than this year.

- a) Use a supply-and-demand diagram to analyze this policy. Does the interest rate rise or fall?
- b) What happens to investment? To private saving? To public saving? To national saving? Compare the size of changes to the 5 billion government borrowing.
- c) How does the elasticity of supply of loanable funds affect the size of changes?
- d) How does the elasticity of demand for loanable funds affect the size of changes?

Answer

a) The increase in G would reduce public savings and hence national savings. Then the supply of loanable funds would shift to the left, resulting in higher interest rate.



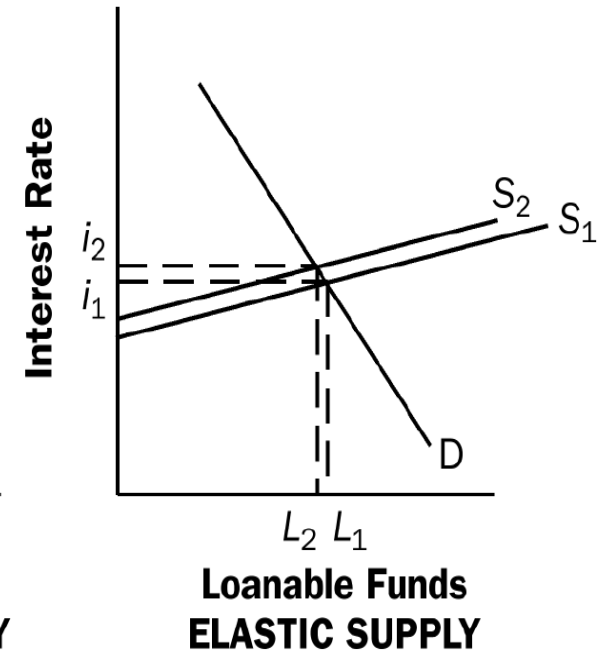
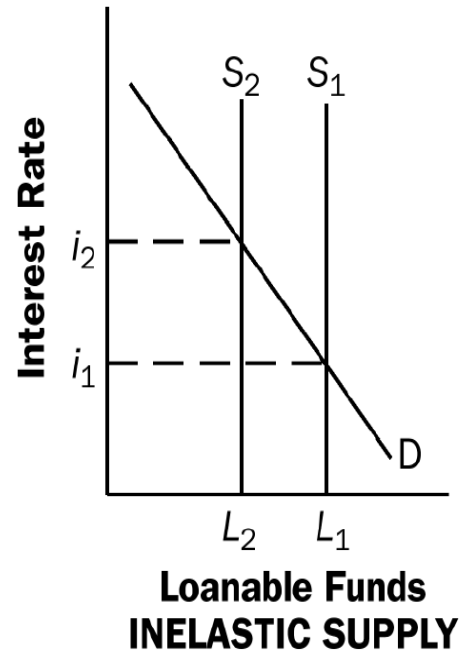


Answer

b) The public savings would reduce while the private savings would remain unchanged (if we believe that individuals would reduce their consumption as a result of an increase in interest rate, then private savings would increase). As a result national savings and investments would reduce.

Answers

c) If the supply of loanable funds were more elastic, then the reduction in public savings would result in a smaller change in interest rate and investments. With inelastic supply the changes were greater.



Answer

d) If demand were inelastic then even a big increase in interest rate would reduce investments only in a small extent. If demand were highly elastic, then even a small change in interest rate would reduce investment strongly.

