

NAME: _____ STUDENT NO.: _____

THE UNIVERSITY OF WESTERN ONTARIO
LONDON CANADA

J. C. Leith ECONOMICS 125B-001 April 22, 2002

FINAL EXAMINATION

Time: Two Hours **Total Marks: 92**

INSTRUCTIONS:

- Calculators are permitted, but programmable ones are NOT.
- Answer ALL parts, but note choice in Part III.
- Marks for each part are indicated.

PART I: Basic Concepts (28 marks). Complete the following statements on the question paper.

1. The principle of comparative advantage establishes the potential _____ from trade for a country if in autarky its relative prices of commodities _____ from relative prices of commodities in _____ .
2. When a country maintains a fixed nominal exchange rate, the real exchange rate (price of foreign exchange) will fall whenever the domestic inflation rate _____
_____ .
3. In many developing countries, factor price distortions have biased technology choice towards more _____ production techniques.
4. An infant industry is one that _____

_____ .
5. The fraction by which an industry's value added at domestic prices exceeds its value added at _____ prices is called _____ .

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NOTE: QUESTIONS CONTINUE AT THE BACK OF EACH PAGE

6. Under a fixed exchange rate, a rise in _____ (i.e., an increase in absorption) will result in higher prices for _____ goods. This will eventually lead to a balance of payments _____ and _____ in the domestic economy.
7. A negative real interest occurs when _____
8. In the world's fastest-growing economies, the ratio of investment to GDP is typically at least _____% and often greater than _____%.
9. The incidence of a tax refers to the portion of the tax that is _____
10. The grant equivalent of foreign aid is _____
11. The sources of growth equation illustrates the point that the rate of growth of income is greater when _____ and when _____
12. When the inflation rate exceeds the _____ interest rate on a financial asset _____ (borrowers/lenders) benefit because _____

PART II: PROBLEMS (36 marks)

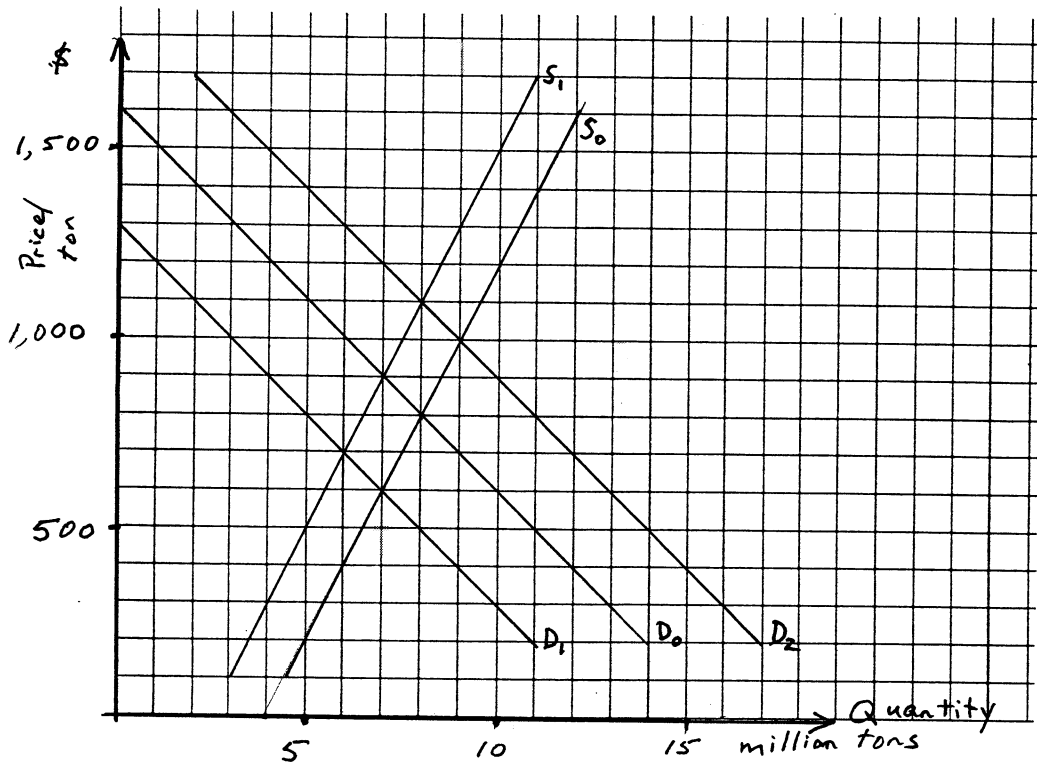


Figure 1

(13 marks)

1. In Figure 1 the normal world market for a commodity is illustrated by the supply curve (S_0) and demand curve (D_0), with price equal to \$800/ton.

(a) If, due to a crop failure in a major producer, the supply curve shifts to S_1 . This would cause the price to _____ (rise/fall) to \$ _____ /ton, while the revenue to the producers would _____, because _____.

(b) If in the next year, supply returns to S_0 , but due to a recession in the world economy, the demand decreases to D_1 . The revenue to producers would _____ (rise/fall) to \$ _____. In the subsequent year the rapid growth of world income shifted the demand curve to D_2 .

- (c) In response to these shifts, it is proposed to establish a buffer stock to stabilize the price at \$800/ton. In case (a) this would help to _____ prices and _____ incomes received by the producers. In case (b) producer _____ would be stabilized. For example, given S_0 and if demand = D_2 , the buffer stock would have to _____ (buy/sell) the commodity to keep the price from _____.
- (d) With the buffer stock functioning at a target price of \$800/ton, and if over time the costs of producing this commodity increase, while world incomes grow, the buffer stock would _____ because _____.

(12 marks)

2. Figure 2 depicts the market for bicycles in a developing country. Imports of bicycles are available at a price of \$20 per bicycle, and the exchange rate is currently 3 peswas per dollar (P3.00/\$1.00).

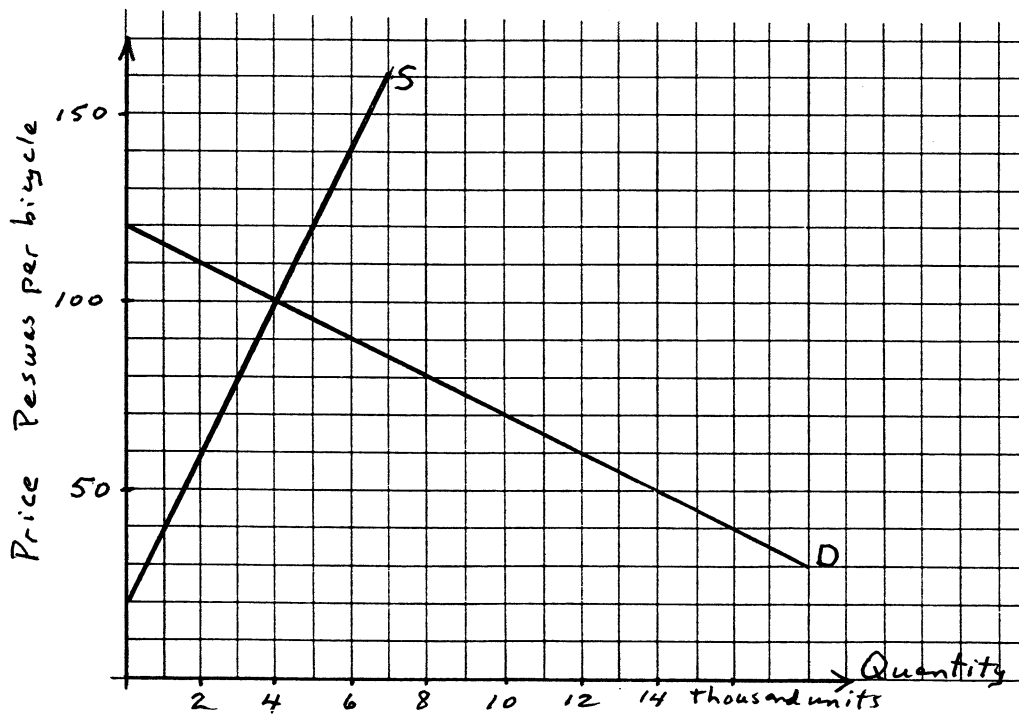


Figure 2

- (a) In the absence of any tariff on bicycle imports, the price in the domestic economy is P _____ per bicycle, and production is _____ thousand units per year.
- (b) To encourage domestic production, government imposes an import tariff of 33 1/3%. The outcome is that consumers pay a price of P _____ per bicycle; domestic production is _____ thousand units per year; and government tariff revenue is P _____ per year.
- (c) In the absence of the tariff on bicycle imports, the value added in domestic production of imports is P20 per unit while the materials cost P40 per unit. When the authorities impose the import tariff of 33 1/3% on bicycles, they also impose a tariff of 33 1/3% on imports of materials, the effective rate of protection for bicycle production is _____%. If, however, the authorities instead permitted imports of materials duty free, the effective rate of protection of bicycle production is _____%.
- (d) The authorities have found that foreign exchange reserves are running out. Consequently, they have imposed a quota on imports of bicycles amounting to 2500 units per year, and keep the tariff at 33 1/3%. In these circumstances, the domestic price will be P _____/unit.
- (e) To deal with the decline of foreign exchange reserves, the authorities abandon the quota and devalue currency to a P4.50/\$1.00 exchange rate, and keep the tariff at 33 1/3%. As a result, the domestic price becomes P _____ per bicycle, domestic producers supply _____ thousand units per year, and government collects P _____ in tariff revenue each year.

(11 marks)

3. Figure 3 depicts the domestic savings (S) and investment (I) schedules of a developing country, as a function of the real rate of interest (r). The local currency is the Kwacha.

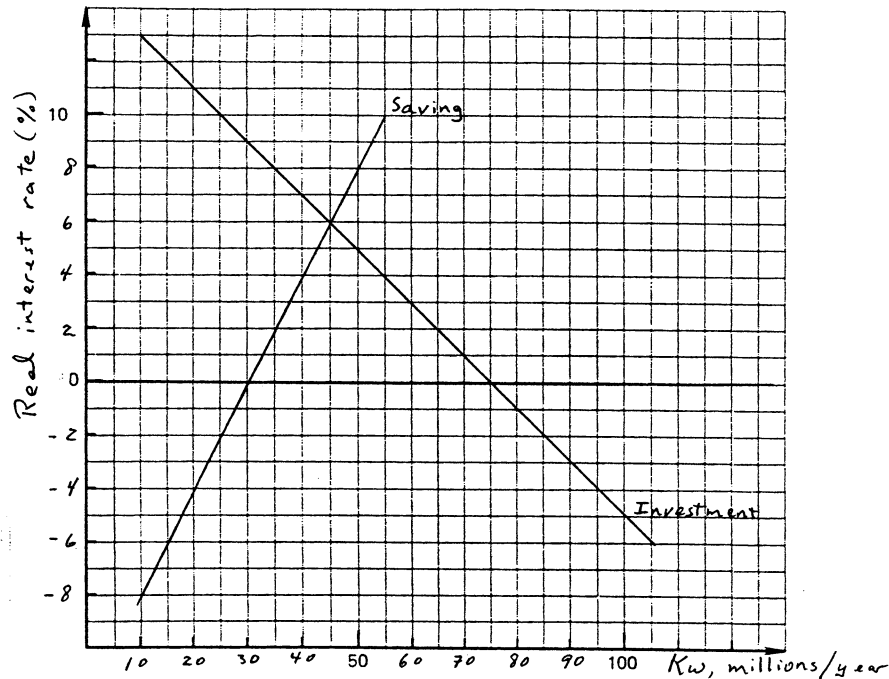


Figure 3

- (a) If the financial market were functioning efficiently, the real rate of interest would be _____ %.
- (b) The authorities have set a target to achieve investment of 25% of GDP. Since GDP is currently K240m, this implies an investment of K_____ million this year. Investors would be willing to invest in projects worth this amount if the real interest rate is _____ %.
- (c) The authorities have tried to encourage investment by keeping the nominal interest rate at a regulated rate of 5%. Inflation is currently running at 5% and is expected to continue at this rate. The volume of savings generated would be K_____ millions. If inflation rises to 7.1% while the regulated nominal interest rate remains at 5%, the real rate of interest would _____ (rise/fall) to _____ %.

(d) The authorities have to decide whether to allocate the domestic savings generated at the regulated nominal interest rate among competing investments by a random process or a competitive bidding process. If they choose the competitive bidding allocation method and the expected rate of inflation remains 7.1% per annum, the volume of investment would be K_____ millions (to nearest 5 million). If they choose the random allocation, the productivity of capital would be _____ because _____

(e) To try to reduce inflation, the authorities require the banks to hold a higher proportion of their deposits in reserves. As a consequence the volume of domestic savings and investment would _____ because _____

PART III: Short Essay (28 marks). Answer ONE of the following in the examination booklet provided. (Your answer must be written essay style. You may use diagrams, but if so you must explain them. Write legibly: an answer that cannot be read cannot be marked.)

1. Governments have four basic policy instruments at their disposal to influence the industrialization process: tariffs on imports, quantitative restrictions on trade, subsidies, and exchange rate policy. Describe briefly how each of these interventions works. Which intervention has proved most successful in practice, and why?
2. Some primary exporting countries have prospered, while others have stagnated. Explain the difference in outcomes.
3. Short-term stabilization is a major problem facing policy-makers in developing countries. Identify two shocks that commonly occur in developing countries, and show how appropriate policy should be instituted in order to achieve internal and external balance. Be explicit about the nature of the adjustment process that would occur in the absence of policy intervention and with the policy intervention.
4. In a modern economy the financial system serves four essential functions. Describe any three of these essential functions, and show how the effectiveness in performing that function affects economic development.

