Multiple Choice Questions

Most multiple choice questions (109 in total) were kindly provided by **Rob Bolder**, Assistant Professor of Economics, Utrecht University. We are grateful for his valuable contribution to this project.

Part I - Introduction

1. The Global Economy

1. The difference between Gross National Product (GNP) and Gross Domestic Product (GDP) is:

    A. GNP excludes income received from abroad and includes income paid abroad.

    B. GNP includes exports and excludes imports.

    C. GNP includes capital inflows and excludes capital outflows.

    D. GNP includes net factor income received from abroad.

2. Consider the following two statements:

    I. A Dutch worker living at the border and working in Germany contributes to the Dutch GDP.

    II. An Indonesian seaman works at a Dutch merchant ship. His wages are part of the Dutch GDP.

    A. Both I and II are correct.

    B. I is correct; II is not correct.

    C. I is not correct; II is correct.

    D. Both I and II are not correct.

3. Every year, many Eastern European workers are temporarily employed in the Dutch agricultural sector. The migrants from Poland and Bulgaria send a large share of their income to their families in their home country.

    A. The migrants' earnings are part of Dutch GNP. The money transactions enter the Dutch current as a debit (-).

    B. The migrants' earnings are part of Dutch GDP. The money transactions enter the Dutch current account as a credit (+).

C. The migrants' earnings are part of Dutch GNP. The money transactions enter the Dutch current account as a credit (+).

D. The migrants' earnings are part of Dutch GDP. The money transactions enter the Dutch current account as a debit (-).

4. Consider the following two statements:

   I. It is often argued that multilateral institutions like the International Monetary Fund (IMF), the World Bank or the World Trade Organization (WTO) not only promote neo-liberal economic policies but actually force these policies upon the developing world. This is an example of institutional globalization.

   II. The fact that PPP exchange rates increase the GDPs of poor countries and decrease the GDPs of rich countries is caused by a relative undervaluation of non-tradables in poor countries in current exchange rates.

      A. Both I and II are correct.

      B. I is correct; II is not correct.

      C. I is not correct; II is correct.

      D. Both I and II are not correct

5. Consider the following two statements:

   I. "The fact that multinational companies are adopting the same policies for their branches all over the world is a clear example of political globalization".

   II. "Globalization has led to reduced transport costs, rapid exchange of information, and 'footloose' global capital crossing borders. Location and distance no longer matter; this means the end of geography".

      A. Both I and II are correct.

      B. I is correct; II is not correct.

      C. I is not correct; II is correct.

      D. Both I and II are not correct

6. When GDP per capita for each nation in local currency is simply converted to US dollars on the basis of the average exchange rate in the current period, GDP per capita in high-income countries relative to low-income countries would be over-estimated. The reason for this is:

      A. Productivity differences between high-income countries and low-income countries in the non-tradable sectors tend to be smaller than in the tradable sectors.

B. Productivity differences between high-income countries and low-income countries in the tradable sectors tend to be smaller than in the non-tradable sectors.

C. Converting the value of output in the non-tradable sectors on the basis of the observed exchange rates tends to over-estimate the value of production in these sectors for low-income countries.

D. Wage rates in the tradables sector are higher than wage rates in the non-tradables sector in low-income countries.

7. In GDP statistics, the GDP of the USA is more than nine times the Chinese GDP in current dollars. However, if PPP exchange rates are used, this difference is reduced to less than two times. The fact that PPP exchange rates increase the GDPs of poor countries and decrease the GDPs of rich countries is caused by:

A. Differences of consumption patterns between rich and poor countries.

B. A relative overvaluation of non-tradables in rich countries in current exchange rates.

C. Labour is relatively unproductive in the non-tradables sector in poor countries.

D. A relative undervaluation of tradables in poor countries in current exchange rates.

2. Getting the numbers right

1. Credit (+) items in the balance of payments correspond to transactions that:

A. Involve receipts from foreigners.

B. Involves payments to foreigners.

C. Decrease the domestic money supply.

D. Increase the demand for foreign exchange.

2. If an American receives dividends from the shares of stock she or he owns in Toyota Inc., a Japanese firm, the transaction would be recorded on the US balance of payments as a:

A. Financial account debit.

B. Financial account credit.

C. Current account debit.

D. Current account credit.

3. Table 1: Information Balance of Payments country X

Exports of goods and services	1000
Imports of goods and services	800
Net change in assets owned abroad	500
Net change in foreign owned assets at home	400
Unilateral transfers received	100
Unilateral transfers paid	200
Investment income paid to foreigners	300
Investment income received from foreigners	400

Use the information in table 1 to answer the following question.

Based on table 1, the balance on the current account is:

A. +100

B. +200

C. 0

D. -100

4. Use the information in table 1 (see previous question) to answer the following question.

Based on table 1, the balance on the financial account is:

A. +100

B. +200

C. 0

D. -100

5. We can use the national income identity for an open economy to describe the relations between savings (private and public), investment, and the current account balance.

If national savings is less than domestic investment, then:

A. A current account deficit occurs.

B. The government runs a budget deficit.

C. A current account surplus occurs.

D. A financial account deficit occurs.

6. We can use the national income identity for an open economy to describe the relations between savings (private and public), investment, and the current account balance.

   If national savings exceed the level of investment, then:

   A. A current account deficit occurs.

   B. The government runs a budget surplus.

   C. A current account surplus occurs.

   D. A financial account surplus occurs.

7. We can use the national income identity for an open economy to describe the relations between savings (private and public), investment, and the current account balance.

   If a country runs a current account deficit and private savings equal domestic investment, then the government budget:

   A. Must be balanced.

   B. Must be positive.

   C. Must be negative.

   D. Could either be positive or negative, depending on the financial account.

8. We can use the national income identity for an open economy to describe the relations between savings (private and public), investment, and the current account balance.

   If a country runs a current account surplus and private savings equal domestic investment, then the government budget:

   A. Must be balanced.

   B. Must be positive.

   C. Must be negative.

   D. Could either be positive or negative, depending on the financial account.

9. Consider the following two statements:

   I. When a domestic firm acquires another domestic firm, e.g. via “mergers and acquisitions”, this is recorded in both the firm’s Annual Report and the country’s National Accounts as “investment”.

   II. The fact that PPP exchange rates increase the GDPs of poor countries and decrease the GDPs of rich countries is caused by a relative undervaluation of tradables in poor countries in current exchange rates.

A. Both I and II are correct.

B. I is correct; II is not correct.

C. I is not correct; II is correct.

D. Both I and II are not correct

Part II: Firms, Trade, and Location

3. Trade, comparative advantage, and competition

1. In a Ricardian world, two countries (USA and Mexico) can produce two goods (shoes and computers) with one factor of production (labour). Given the following information:

	Output per hour worked	
	Computers	Shoes
USA	3	6 pairs
Mexico	1	3 pairs

The pre-trade relative price of a computer in Mexico is:

A. One-third pair of shoes.

B. One-half pair of shoes.

C. One pair of shoes.

D. Three pairs of shoes.

2. In a Ricardian world, two countries (USA and Mexico) can produce two goods (shoes and computers) with one factor of production (labour). Given the following information:

	Output per hour worked	
	Computers	Shoes
USA	3	6 pairs
Mexico	1	3 pairs

Trade between the USA and Mexico will occur as long as the international relative price of shoes is between:

A. Three computers and one computer.

B. Three computers and two computers.

C. One-half computer and one-third computer.

D. Six computers and three computers.

3. In a Ricardian world, two countries (Home and Foreign) can produce two goods (cloth and widgets) with one factor of production (labour). Given the following information:

	Unit Labor Requirements	
	Cloth	Widgets
Home	10	20
Foreign	60	30

A. Neither country has a comparative advantage.

B. Home has a comparative advantage in cloth.

C. Foreign has a comparative advantage in cloth.

D. Home has a comparative advantage in both products.

4. In a Ricardian world, two countries (Home and Foreign) can produce two goods (cloth and steel) with one factor of production (labour). Given the following information:

	Unit Labor Requirements	
	Cloth	Steel
Home	1	2
Foreign	30	30

A. Neither country has a comparative advantage.

B. Home has a comparative advantage in cloth.

C. Foreign has a comparative advantage in cloth.

D. Home has a comparative advantage in both products.

5. In a Ricardian world, two countries (Home and Foreign) can produce two goods (cheese and wine) with one factor of production (labour). In Home, the production of one pound of cheese requires 10 units of labour and the production of one gallon of wine requires 30 unit of labour. In Foreign, the unit labour requirements are 2 for one pound of cheese and 5 for one gallon of wine.

   Assume that the world relative price of cheese is 1/3, when we introduce free international trade. In that case,

A. Home will specialize completely in the production of cheese, and Foreign in wine.

B. Home will specialize completely in the production of wine, and Foreign in cheese.

C. Home will produce both goods and Foreign will produce only wine.

D. Home will produce both goods and Foreign will produce only cheese.

6. In a Ricardian world, two countries (Home and Foreign) can produce two goods (cheese and wine) with one factor of production (labour). In Home, the production of one pound of cheese requires 10 units of labour and the production of one gallon of wine requires 30 unit of labour. In Foreign, the unit labour requirements are 1 for one pound of cheese and 5 for one gallon of wine.

   Assume that the world relative price of cheese is 1/4, when we introduce free international trade. In that case,

   A. Home will specialize completely in the production of cheese, and Foreign in wine.

   B. Home will specialize completely in the production of wine, and Foreign in cheese.

   C. Home will produce both goods and Foreign will produce only wine.

   D. Home will produce both goods and Foreign will produce only cheese.

7. In a Ricardian world, two countries (Home and Foreign) can produce two goods (cheese and wine) with one factor of production (labour). In Home, the production of one pound of cheese requires 1 hour of labour and the production of one gallon of wine requires 2 hours of labour. In Foreign, 6 hours of labour are needed for one pound of cheese and 3 for one gallon of wine.

   When we introduce free international trade, countries will specialize completely. We assume that the world relative price of cheese is 1. In that case,

   A. The wage per hour in Home is six times the wage in Foreign.

   B. The wage per hour in Foreign is 3/2 times the wage in Home.

   C. The wage per hour in Foreign is three times the wage in Home.

   D. The wage per hour in Home is three times the wage in Foreign.

8. Assume that the world economy consist of two countries, Switzerland and Turkey. The countries produce cotton and wine. Labour is the only factor of production. The wage per hour in Switzerland is € 9, and the hourly wage in Turkey is € 5. Per hour of labour, the countries produce the following quantities:

	Switzerland	Turkey
Cotton (bales)	3	2
Wine (litres)	9	4

In case free trade is introduced,

A. Turkish relative wage advantage does not compensate for the productivity disadvantage, so there is no trade.

B. Swiss' relative productivity advantage compensates more than enough for its relative wage disadvantage, so Switzerland will export both goods.

C. Turkey will export cotton, and Switzerland will export wine.

D. Switzerland will export cotton, and Turkey will export wine.

9. People sometimes worry that American trade with other countries will lead to large US trade deficits and the movement of massive amounts of American capital out of the country. This worry is unfounded because countries cannot:

A. Increase savings at the same time that a trade deficit grows.

B. Spend more than they earn.

C. Invest more than they save.

D. Have both current account and financial account deficits at the same time.

10. In a world of two countries (country A and country B), two goods can be produced (good S and good T) with two production factors (capital and labour).

Consider the following data:

	Countries	
Factor Endowments	A	B
Labor Force	45	20
Capital Stock	15	10

If good S is capital intensive, then following the Heckscher-Ohlin Theory,

A. Country A will export good S.

B. Country B will export good S.

C. Both countries will export good S.

D. Trade will not occur between these two countries.

11. In a world of two countries (country A and country B), two goods can be produced (food and steel) with two production factors (capital and labour).

Consider the following data:

	Countries	
Factor Endowments	A	B
Labor Force	6000	200
Capital Stock	400	10

If food is relatively labour intensive, then following the Heckscher-Ohlin Theory,

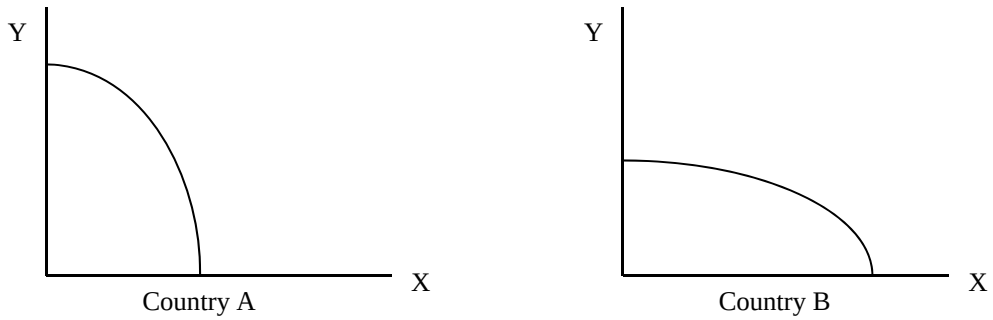
A. Country A will export food.

B. Country B will export food.

C. Both countries will export food.

D. Trade will not occur between these two countries.

12.



There are two countries, A and B, that both produce two goods, namely X and Y. For the production of both goods, both labour and capital are used. The production of Y is relatively capital-intensive, while that of X is relatively labour-intensive. The production possibility curves for both countries are presented in the figure above. Relative demand for both goods is the same in the two countries.

According to the Heckscher-Ohlin model, the production possibility curves show that:

A. Labour is relatively abundant in country A, in autarky (no trade) the relative price of good X is higher in country A than in country B, and the w/r ratio will fall in case of free trade.

B. Capital is relatively abundant in country A, in autarky the relative price of good X is lower in country A than in country B, and the w/r ratio will rise in case of free trade.

C. Labour is the relatively abundant factor in country A, in autarky the relative price of good X is higher in country A than in country B, and the w/r ratio will rise in case of free trade.

D. Capital is the relatively abundant factor in country A, in autarky the relative price of good X is lower in country A than in country B, and the w/r ratio will fall in case of free trade.

13. In a world of two countries (Brazil and Chile), two goods can be produced (timber and computers) with two production factors (capital and natural resources). Suppose that Brazil is relatively capital abundant and Chile is relatively natural resource abundant. If timber is natural resource intensive and computers are capital intensive, then following the Heckscher-Ohlin Theory:

    A. Chile will produce more computers after trade begins with Brazil.

    B. Brazil will produce more timber after trade begins with Chile.

    C. Chile will produce more timber after trade begins with Brazil.

    D. Brazil will completely specialize in computers and Chile in timber after trade.

14. Assume a world of two countries (A and B), two goods (wheat and steel), and two factors of production (capital and labour). We know that the production of wheat is relatively labour-intensive, and labour is the relatively abundant factor in country A.

    According to Heckscher and Ohlin, a change from autarky (no trade) to free international trade will:

    A. Raise the income of workers in country A if they are employed in the steel industry, but will lower the income of workers in the wheat industry.

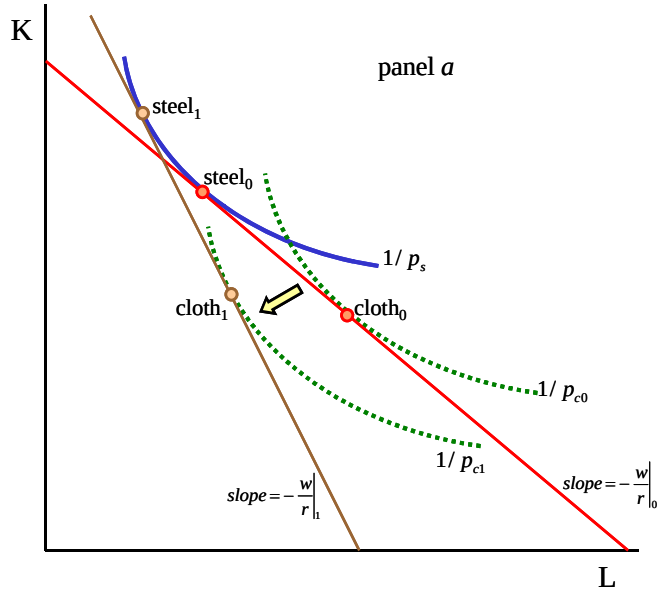
    B. Raise the income of workers in country A if they are employed in the wheat industry, but will lower the income of workers in the steel industry.

    C. Raise the income of all workers in country A.

    D. Lower the income of all workers in country A.

15. In a Heckscher – Ohlin world of two countries (A and B), two goods can be produced (cloth and steel) with two factors of production (labour and capital). We assume that country A is relatively capital abundant. In the figure below, unit value isoquants are presented for both goods, produced in both countries in autarky.

Lerner diagram



A. Country B has a comparative advantage in the production of cloth; the wage-rental ratio in country B is $(w/r)_1$. In case we introduce free international trade, the wage-rental ratio will fall.

B. Country B has a comparative advantage in the production of cloth; the wage-rental ratio in country B is $(w/r)_0$. In case we introduce free international trade, the wage-rental ratio will fall.

C. Country B has a comparative advantage in the production of cloth; the wage-rental ratio in country B is $(w/r)_0$. In case we introduce free international trade, the wage-rental ratio will rise.

D. Country B has a comparative advantage in the production of cloth; the wage-rental ratio in country B is $(w/r)_1$. In case we introduce free international trade, the wage-rental ratio will rise.

16. Although the Heckscher – Ohlin model does not provide an explanation for a large share of international trade, the model is often used for analyzing North (advanced countries) – South (developing countries) trade.

    Assume a world of two countries (North and South), two goods (computers and clothing), and two factors of production (high-skilled labour and low-skilled labour). We know that the production of computers is relatively high-skilled labour intensive, and high-skilled labour is the relatively abundant factor in North.

According to Heckscher and Ohlin, a change from autarky (no trade) to free international trade will:

A. Raise the income of workers in North if they are employed in the computer industry, but will lower the income of workers in North in the clothing industry.

B. Raise the income of high-skilled workers in North, but will lower the income of low-skilled workers in North.

C. Lower the income of low-skilled workers in the clothing industry and raise the income of low-skilled workers in the computer industry.

D. Lower the income of all workers in North.

17. Certain kinds of tropical fruits are impossible to grow outdoors in the United States. Suppose, however, that in order to create jobs in Wyoming, the US government offered extensive subsidies to firms to produce bananas. With the subsidies, firms could build greenhouses and offer the fruit at world prices.

A. The United States now has a comparative advantage in bananas.

B. The United States now has a comparative advantage in bananas, but is not competitive.

C. The United States is competitive, but does not have a comparative advantage in bananas.

D. The United States has a comparative advantage and is competitive.

4. Modern trade theory: the role of the firm

1. In international trade we distinguish between inter-industry trade and intra-industry trade.

   Intra-industry trade will tend to dominate trade flows in case of:

   A. Large differences between relative country factor availabilities.

   B. Small differences between relative country factor availabilities.

   C. Homogeneous products that cannot be differentiated.

   D. Constant cost industries.

2. Economies of scale can be either *internal* or *external*.

   Consider the following two statements:

   I. Internal economies of scale always result in monopolies in the long run.

   II. External economies of scale are compatible with perfect competition.

A. Both I and II are correct.

B. I is correct; II is not correct.

C. I is not correct; II is correct.

D. Both I and II are not correct.

3. Economies of scale can be either internal or external. Both types of scale economies are important causes of international trade.

   A. External economies of scale are linked to the size of the industry, the market structure will be imperfectly competitive, and trade is intra-industry trade.

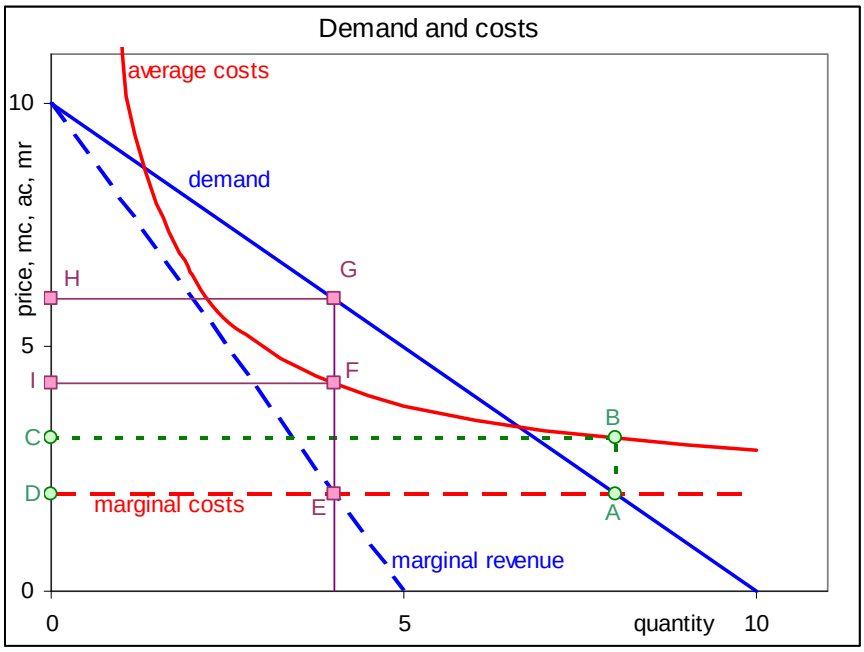
   B. Internal economies of scale are linked to the size of the firm, the market structure will be imperfectly competitive, and trade is intra-firm trade.

   C. External economies of scale are linked to the size of the industry, the market structure can be perfectly competitive, and trade can be inter-industry trade.

   D. Internal economies of scale are linked to the size of the firm, the market structure can be perfectly competitive, and trade can be both intra-industry trade and inter-industry trade.

4. Assume a world of two countries (Home and Foreign). The production of good X is characterized by internal economies of scale. Assume that the Home market is characterized by a monopoly. The demand and cost conditions are presented in the figure below. The Foreign market is also served by only one producer of good X with the same cost structure and the same demand function as the monopolist in Home.

   Figure 4.2 Increasing returns to scale, and perfect and imperfect competition.



We now introduce free international trade with one simplifying assumption: the Foreign firm assumes that the Home firm will continue to produce the same quantity as before on the Home market. Likewise, the Home firm will start exporting to Foreign, assuming that the Foreign firm will continue to produce the same quantity as before on the Foreign market.

We know that international trade will benefit consumers in both countries, but what about the producers' profits?

A. The decrease in the initial monopoly profits is only partly compensated by the increase in profits resulting from a larger sales volume reducing average costs, and the increase in profits resulting from sales to the export market. The net effect is a reduction in total profits.

B. The decrease in the initial monopoly profits is fully compensated by the increase in profits resulting from a larger sales volume reducing average costs, and the increase in profits resulting from sales to the export market. The net effect is no change in total profits.

C. The decrease in the initial monopoly profits is more than compensated by the increase in profits resulting from a larger sales volume reducing average costs and the increase in profits resulting from sales to the export market. The net effect is an increase in total profits.

D. Either B or C: the decrease in the initial monopoly profits must at least be fully compensated by the increase in profits resulting from a larger sales volume reducing average costs and the increase in profits resulting from sales to the export market. The monopolist will not accept a reduction in total profits.

5. The Grubel-Lloyd index can be used to measure the extent of intra-industry trade.

   Assume that the Dutch tomato export equals an amount of € 6 billion, while the import of tomatoes into the Netherlands has a value of € 2 billion. The Grubel-Lloyd index is:

   A. 0.50

   B. 0.75

   C. 0.10

   D. 0.66

6. A product is produced in a monopolistically competitive industry with scale economies. If this industry exists in two countries, and these two countries engage in trade with each other, then we would expect:

   A. The country in which the price of the product is lower will export the product.

B. The country with a relative abundance of the factor of production in which production of the product is intensive will export this product.

C. Each of the countries will export different varieties of the product to the other country.

D. Neither country will export this product since there is no comparative advantage.

7. Monopolistic competition is associated with:

A. Cut-throat price competition.

B. Product differentiation.

C. Strategic interaction of firms.

D. High profit margins.

5. Trade restrictions and trade policy

1. The main redistribution effect of a tariff is the transfer of income from:

A. Domestic producers to domestic consumers.

B. Domestic consumers to domestic producers.

C. Domestic producers to the government.

D. The government to domestic producers.

2. The effects of trade policy instruments like an import tariff or an export subsidy for a large country differ from the effects of these instruments for a small country.

A. A large country can improve the terms of trade with a tariff and with an export subsidy; a small country cannot influence world market prices.

B. A large country can realize a net welfare gain with an export subsidy, a small country cannot.

C. An export subsidy deteriorates the terms of trade of a large country, and improves the terms of trade of a small country.

D. An import tariff will improve the terms of trade of a large country, and an export subsidy will deteriorate the terms of trade of a large country.

3. Consider the following two statements:

I. When, starting from a situation of free trade, a large country imposes an import tariff, the government's tariff revenues are earned at the expense of domestic consumers and foreign producers.

II. When, starting from a situation of free trade, a large country introduces an export subsidy, this export subsidy will improve the country's terms of trade.

A. Both I and II are correct.

B. I is correct; II is not correct.

C. I is not correct; II is correct.

D. Both I and II are not correct

4. Consider a world of two countries: Home and Foreign.

The Home demand and supply functions for product X are:

$D = 100 – 20P$

$S= 20 + 20P$

The Foreign demand and supply functions for product X are:

$D^* = 80 – 20P$

$S^* = 40 + 20P$

In case of free trade,

A. Home will import 20 units of good X; the equilibrium price for good X is 1.5.

B. Home will export 20 units of good X; the equilibrium price for good X is 1.5.

C. Home will import 15 units of good X; the equilibrium price for good X is 2.

D. Home will export 15 units of good X; the equilibrium price for good X is 2.

5. Given the information of the previous question, now suppose the importing country imposes a specific tariff of 0.5. The effect of this tariff is:

A. The volume of trade falls to 13.

B. The volume of trade falls to 12.

C. The volume of trade falls to 11.

D. The volume of trade falls to 10.

6. An import tariff and an export subsidy change the domestic price of a good as well as the world market price, in case a large country uses these trade policy instruments. In general:

A. An import tariff raises both the world market price and the domestic price of a good; an export subsidy lowers the world market price as well as the domestic price of a good.

B. An import tariff lowers the world market price and raises the domestic price of a good; an export subsidy lowers the world market price and raises the domestic price of a good.

C. An import tariff lowers both the world market price and the domestic price of a good; an export subsidy raises the world market price as well as the domestic price of a good.

D. An import tariff raises the world market price and lowers the domestic price of a good; an export subsidy lowers de world market price and raises the domestic price of a good.

7. At the end of May 2005, the US and the EU complained that the growth of Chinese exports of clothing and textile products to their markets was such, that their domestic industries were severely hurt. The two countries decided to bring their complaints before the WTO Dispute Settlement Body. Decide whether the following propositions are right or wrong, and select the correct one.

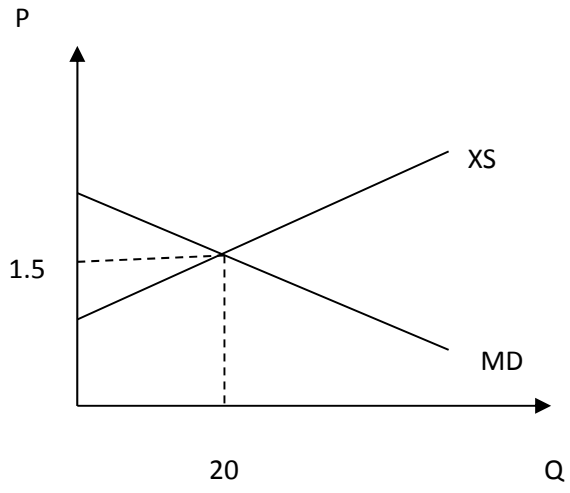
A. The two governments are wise to do this, as it is unfair that this industry in the two countries would shrink as a result of lowering of trade barriers.

B. By giving this industry protection, the US and the EU end up with a higher level of welfare.

C. If the complaints result in reduced exports by China, the level of welfare in the two countries and in China will fall.

D. This is the best way to protect the employment in this sector in the EU and the US.

8. Consider a world of two countries: Home and Foreign. Both countries can produce and consume wheat. The figure below illustrates free trade equilibrium: Home imports = Foreign exports = 20, and the world market price is 1.5.



Home imposes a specific tariff of 0.5. This tariff creates a wedge between Home's domestic price of wheat (Pt = 1.75) and the price in Foreign (P*t = 1.25). The trade volume falls from 20 to 10.

The net welfare effect of this tariff for Home is a welfare gain of 1.25.

From a global point of view, we can argue that:

A. Foreign's net welfare loss equals Home's net welfare gain; the world's net welfare effect is zero.

B. Foreign's net welfare loss is less than Home's net welfare gain; the world's net welfare gain is 2.5.

C. Foreign's net welfare loss is bigger than Home's net welfare gain; the world's net welfare loss is 2.5.

D. Foreign's net welfare loss is bigger than Home's net welfare gain; the world's net welfare loss is 1.25.

9. Compared to an import quota, an (equivalent) tariff may provide a *less* certain protection for domestic producers since:

A. A tariff has efficiency losses in terms of production and consumption.

B. Foreign firms may absorb the tariff by offering exports at lower prices.

C. Tariffs are effective only if demand is rather elastic.

D. Quotas result in quota rents.

10. The infant industry argument for protection calls for active government involvement:

A. Only if the government forecasts are accurate.

B. Only if some market failure can be identified.

C. Only if the industry is not one already dominated by industrial countries.

D. Only if the industry has a high value added.

11. Consider a world of six countries: 2 high-income countries, 2 middle-income countries, and 2 low-income countries. All countries participate in trade liberalization negotiations. Several global, regional, and bilateral liberalization options are discussed.

From a global welfare point of view, the best outcome of these trade liberalization negotiations would be:

A. The creation of one free trade area (FTA) for all six countries.

B. The creation of two customs unions (CU); each CU consisting of one high-income country, one middle-income country and one low-income country.

C. The creation of three free trade areas (FTAs); one FTA for the high-income countries, one FTA for the middle-income countries, and one FTA for the low-income countries.

D. Bilateral free trade agreements between countries that trade a lot with each other.

12. The North American Free Trade Area (NAFTA) is a regional free trade arrangement between USA, Canada, and Mexico. Long before NAFTA was created, trade between the US and Canada was already liberalized in the US-CAN FTA agreement. The USA and Canada have similar economic structures and export compositions (competitive economic structures). Mexico's economic structure and export composition, however, differs a lot from its partner countries in NAFTA (complementary economic structures). Based on the definitions of trade creation and trade diversion, we expect (in relative terms):

    A. More trade diversion from the US-CAN FTA, and more trade creation from Mexico joining NAFTA.

    B. More trade creation from the US-CAN FTA, and more trade diversion from Mexico joining NAFTA.

    C. No trade creation from Mexico joining NAFTA.

    D. The same balance of trade creation and trade diversion for both regional trade arrangements.

13. A firm is producing bicycles for the local market. The government is considering a preferential trading agreement (PTA) with a neighbouring country. Policy reports predict that a PTA with neighbouring country L will give rise to trade diversion on the market for bicycles, while integration with country M will lead to trade creation on the market for bicycles. It is inevitable that a PTA will be concluded. The firm must decide whether or not the firm will lobby for one of the two options.

    A. The firm has no clear preference for a PTA with L or a PTA with M, so the firm will not lobby at all.

    B. The firm will lobby for a PTA with M.

    C. The firm will lobby for a PTA with L.

    D. Lobbying is not necessary: a PTA with M is the best from a national welfare point of view as well as from the firm's point of view.

14. Imagine a world of three countries: Home, Partner, and the Rest of the World (RoW). Home and Partner decide to form a customs union (CU). The welfare effects of a CU are ambiguous. The net welfare effect depends on the balance of *trade creation* and *trade diversion*.

    Trade creation is likely to dominate trade diversion if:

A. Home producers compete primarily with producers in Partner, and the level of external protection in the CU is lower than the previous level of protection in Home and Partner.

B. Home producers compete primarily with producers in Partner, and the level of external protection in the CU is higher than the previous level of protection in Home and Partner.

C. Home producers compete primarily with producers in RoW, and the level of external protection in the CU is lower than the previous level of protection in Home and Partner.

D. Home producers compete primarily with producers in RoW, and the level of external protection in the CU is higher than the previous level of protection in Home and Partner.

15. Suppose that Canada has domestic firms that could supply its entire market for radios at a price of $60, while US firms could supply radios at $50 and Mexican firms at $40. Suppose that Canada initially has a 50 percent tariff on imports of radios and then forms a free trade area with Mexico. As a result, Canada realizes:

    A. Trade creation, no trade diversion, and overall welfare gains.

    B. Trade creation, no trade diversion, and overall welfare losses.

    C. Trade diversion, no trade creation, and overall potential welfare losses.

    D. Trade diversion, trade creation, and potential overall welfare gains.

16. A country is facing high unemployment. Labour market reforms have failed to improve the situation significantly, and the government now considers the use of trade policy instruments to stimulate domestic production and employment. From a national welfare point of view, the best option for the government is:

    A. An import tariff.

    B. An import quota.

    C. An export subsidy.

    D. A labour cost subsidy.

17. A country is facing high unemployment. The government considers several policy measures to increase employment and lower unemployment: Labour market reforms, the imposition of import tariffs to save jobs in import-competing industries, labour cost subsidies, and export subsidies to increase employment in exporting industries. Rank these policy measures from first-best to fourth-best (1 to 4):

    A. 1. Import tariffs; 2. Labour cost subsidies; 3. Export subsidies; 4. Labour market reforms.

B. 1. Export subsidies; 2. Labour cost subsidies; 3. Labour market reforms; 4. Import tariffs.

C. 1. Labour market reforms; 2. Export subsidies; 3. Import tariffs; 4. Labour cost subsidies.

D. 1. Labour market reforms; 2. Labour cost subsidies; 3. Import tariffs; 4. Export subsidies.

6. Firms, location, and distance

1. Empirical evidence shows that most greenfield investment by multinational firms is skill- and R&D- intensive. One of the reasons for this is:

   A. R&D activities involve large share of intangible assets which are difficult to quantify.

   B. High start-up costs associated with licensing or franchising.

   C. Unwillingness by multinationals to share revenue from R&D operations.

   D. Lower costs of conducting transactions within a firm rather than between firms.

2. For the analysis of multinational behavior some simplifying assumptions are made: Firms can choose to locate production in two countries. Production uses only one input factor, labour. Setting up a plant gives plant-specific fixed costs *P*, and exporting a unit of good X involves trade costs *t*.

   If we distinguish between a horizontal multinational and single plant options (a national exporting firm or a vertical multinational), it is more likely that the firm will decide to become a horizontal multinational if:

   A. Countries are similar in size, trade costs are relatively low, and marginal costs differ between countries.

   B. Markets in the two countries differ in size, trade costs are relatively high, and marginal costs differ between countries.

   C. Markets in the two countries differ in size, trade costs are relatively low, and marginal costs differ between countries.

   D. Countries are similar in size, trade costs are relatively high, and marginal costs are similar in the two countries.

3. Motives for foreign direct investment (FDI) by multinational enterprises (MNEs) can be classified into at least three general categories: risk-spreading, market-seeking, and factor-seeking.

    A. A good example of factor-seeking FDI is the increase in FDI in Europe (Single European Market) in the 1980s and 1990s by American and Japanese MNEs.

    B. Market-seeking FDI are linked to vertical MNEs; factor-seeking FDI are linked to horizontal MNEs.

    C. Market-seeking FDI is linked to horizontal MNEs; factor-seeking FDI is linked to vertical MNEs.

    D. Fragmentation and slicing-up-the-value-chain are a good example of risk-spreading FDI.

4. Why have most of the MNEs that possess large research facilities never opted for licensing/outsourcing?

    A. Internalization limits the risk of dissipation of knowledge.

    B. The hold-up problem is likely to lead to sub-optimal investments.

    C. Agency costs do rise since producers can manipulate information.

    D. Greenfield investments allow the MNEs to apply the management structures that are needed in skill intensive sectors.

5. Consider the following two statements:

    I. Vernon's Product Life Cycle model shows how a country's comparative advantage can change over time.

    II. In the current era of globalization, the behavior of all multinationals is dominated by a global diffusion of US institutions and culture.

        A. Both I and II are correct.

        B. I is correct; II is not correct.

        C. I is not correct; II is correct.

        D. Both I and II are not correct.

6. In general, a firm can serve foreign markets in three ways:

    - The firm can export its goods (international trade).

    - The firm can select a foreign firm to produce its goods (licensing).

    - The firm can create a subsidiary, and become a multinational (FDI/MNE).

Based on Dunning's Ownership, Location and Internalization (OLI) approach, we can list the conditions O, L and/or I that need to be satisfied for each entry mode. Which table is correct?

A.

Modes	O-advantage	L-advantage	I-advantage
Export	no	no	no
licensing	no	yes	no
FDI/MNE	no	yes	yes

B.

Modes	*O-advantage*	*L-advantage*	*I-advantage*
Export	*yes*	*no*	*no*
licensing	*yes*	*yes*	*no*
FDI/MNE	*yes*	*yes*	*yes*

C.

Modes	O-advantage	L-advantage	I-advantage
Export	yes	no	no
licensing	no	yes	no
FDI/MNE	yes	yes	yes

D.

Modes	O-advantage	L-advantage	I-advantage
Export	no	no	no
licensing	no	no	no
FDI/MNE	yes	yes	yes

Part III: Capital, currency, and crisis

8. Exchange rates

1. We use the uncovered interest parity condition to describe equilibrium in the financial markets. Suppose we have perfect capital mobility and transaction costs are zero, then the uncovered interest parity condition is: $rh = rf + dE$ $TC = 0, risk = dE$

   Suppose the interest rate in Home is 4% and the interest rate in Foreign is 6%, then:

   A. The Home currency is expected to appreciate with 2%.

   B. The Home currency is expected to depreciate with 2%.

   C. The Foreign currency is strong, and the Home currency is weak.

   D. The Foreign currency is weak, and the Home currency is strong.

9. Currency crisis and exchange rate policy

1. The sequence of events in a currency crisis can best be described by:

   A.
   1. Mounting pressure on the existing exchange rate.
   2. Speculative attack.
   3. Depreciation/devaluation of the currency.
   4. Central Bank raises interest rates.
   5. Loss of international reserves.

   B.
   1. Mounting pressure on the existing exchange rate.
   2. Loss of international reserves.
   3. Central Bank raises interest rates.
   4. Speculative attack.
   5. Depreciation/devaluation of the currency.

   C.
   1. Mounting pressure on the existing exchange rate.
   2. Central Bank raises interest rates.
   3. Speculative attack.
   4. Loss of international reserves.
   5. Depreciation/devaluation of the currency.

   D.
   1. Mounting pressure on the existing exchange rate.
   2. Central Bank raises interest rates.
   3. Speculative attack.
   4. Depreciation/devaluation of the currency.

5. Loss of international reserves.

2. A first-generation model of currency crises can be characterized by:

    I. Loss of confidence by investors in economy and currency, capital outflows, switch to a current account deficit, exchange rate depreciation.

    II. Higher interest rates, sale of foreign exchange reserves by the central bank without a need for exchange rate devaluation.

        A. Both I and II are correct.

        B. I is correct; II is not correct.

        C. I is not correct; II is correct.

        D. Both I and II are not correct.

3. Many emerging economies in Asia and Latin America experienced a currency crisis in the 1990s. In most cases,

        A. Real GDP growth fell to zero in the crisis year, followed by slow recovery and small positive growth rates in the next decade.

        B. The contraction in real GDP lasted several years, followed by slow recovery.

        C. The contraction in real GDP was substantial in the crisis year, followed by a sharp rebound in GDP growth in the next year.

        D. The decline in real GDP growth was substantial in the crisis year, but growth rates remained positive.

4. Please fill in the gap: “Without ……. a currency crisis cannot occur at all”.

        A. low interest rates

        B. bad macroeconomic fundamentals

        C. capital mobility

        D. increase in moral hazard and adverse selection problems

5. Models of a currency crisis can be classified along two basic dimensions:

    I. (a) An active role of international investors or (b) a passive role of international investors.

    II. The rationale for the currency crisis: (a) the currency crisis is due to ‘bad fundamentals’ or (b) the currency crisis is due to the volatility of capital; the attack on the currency is a purely speculative one.

        A. The first generation model is characterized by I(a) and II(b).

B. The second generation model is characterized by I(b) and II(b).

C. The first generation model is characterized by I(b) and II (a).

D. The second generation model is characterized by I(a) and II(a).

6. Current account balance Taiwanesia (in % of GDP)

Year	Current account deficit (-) or surplus (+)
1	-1
2	-4
3	-3
4	+2
5	+2
6	-2

In the table above, the current account balance of the emerging economy Taiwanesia is presented for a period of six years. Taiwanesia was hit by a currency crisis. Based on the characteristics of a currency crisis and the sequence of events, it is safe to say that:

A. Year 2 is the crisis year, because the current account balance deteriorated the most in this year.

B. Year 3 is the crisis year, because the usual rapid economic recovery after a crisis enabled Taiwanesia to realize a current account surplus in the next year.

C. Year 4 is the crisis year, because of the reversal of capital flows.

D. Year 6 is the crisis year, because of the reversal of capital flows.

7. Assume that the first generation model represents the situation of country A. The country has just discovered rich oil deposits. The exploitation is in the hands of the State Oil Company that sells the oil in international markets and sells the foreign currency receipts to the Central Bank. As a result the currency reserves of the Central Bank increase by an amount equal to 8 per cent of GDP annually. The government is running a budget deficit of 5 per cent of GDP, which the Central Bank compensates by selling off an equal amount of its reserves against the national currency. You are a foreign investor and have to estimate the risk of a currency crisis of this particular country. What would your conclusion be?

A. This is a very low risk. The oil exports guarantee that the fixed exchange rate of the currency can easily be maintained.

B. In the short run the risk is low. As soon as oil prices go down, the risk increases and the investment should be withdrawn.

C. There is an imminent risk of an exchange rate crisis. Advice: do not invest in this country.

D. There is no risk at all. In case of an exchange rate adjustment, the currency will appreciate and not depreciate. This raises the expected return on investments.

8. In the second generation model of a currency crisis,

   A. The crisis is caused by 'bad fundamentals', and investors determine the timing of the crisis.

   B. The crisis is inevitable, because of 'herd behavior' of investors.

   C. The crisis is caused by a monetary financed expansionary fiscal policy.

   D. Policy makers face a trade-off between sticking to a fixed exchange rate and depreciation of the currency; investors' expectations determine the outcome.

9. What can be said about the risk that China faces regarding a banking crisis?

   A. There is no such risk since China runs a massive current account surplus.

   B. There is no such risk since China's currency (RMB) is undervalued.

   C. The banking sector's excessive lending and surging property prices make such a crisis a real possibility.

   D. A banking crisis is inevitable since a centrally planned economy increases the fragility of a country's banking sector.

10. Emerging economy Argenzil in Latin America has pegged its currency to the US dollar (E=1). Argenzil's central bank will use all its reserves (R = 100) to defend this fixed exchange rate. Three investors have investments in local currency: one large investor for the total amount of 60, and two small investors with investments in local currency of 30 each.

    All three investors have to decide whether to hold their investments or sell their funds to the central bank in exchange for reserves. Each investor faces transaction cost of 10 in case they want to sell their investments. In case of a successful speculative attack, the central bank has to devalue the currency by 50%.

    Which of the following statements is correct?

    A. There is no risk of a speculative attack, because transaction costs are too high.

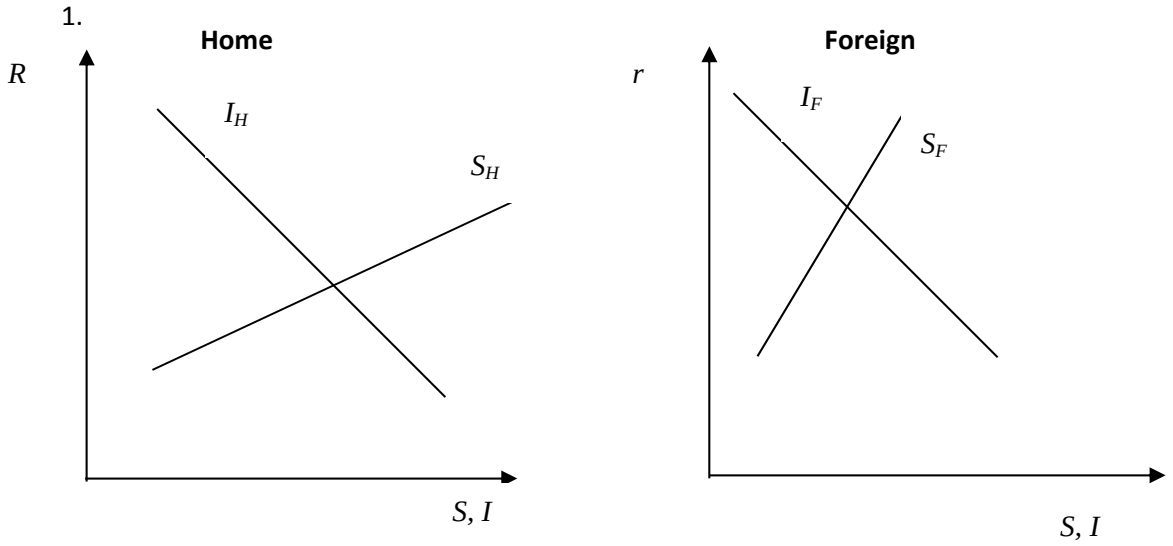
    B. There is only a small risk of a speculative attack, because a successful attack requires a coordinated action of all investors. This is not likely.

    C. There is a high risk of a successful speculative attack.

D. There is a small risk of a speculative attack, because the attack can fail and investors lose money.

10. Gains from international capital mobility

1.

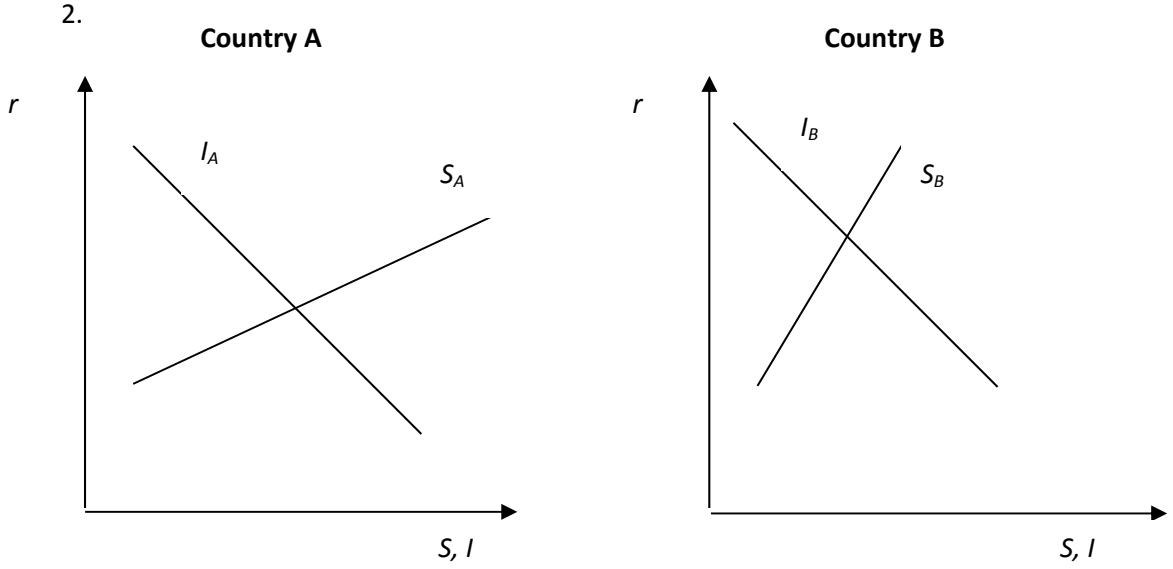


In the figure above, the savings curves and investment curves for Home and Foreign are presented. The figure can be used to illustrate the major potential advantage of international capital mobility.

Once international capital mobility is permitted, capital will re-allocate.

A. Home will have a net capital inflow; national savings will decrease and national investments will increase.
B. Home will have a net capital outflow; national savings will decrease and national investment will increase.
C. Home will have a net capital inflow; national savings will increase and national investment will decrease.
D. Home will have a net capital outflow; national savings will increase and national investment will decrease.

2.



In the figure above, the savings curves and investment curves for Country A and Country B are presented. Country A and Country B differ only in terms of their savings schedules; the investment schedules are identical. The figure can be used to illustrate the major potential advantage of international capital mobility.

A. Country A's preferences are biased towards current consumption; capital flows from Country A to Country B; Country A benefits from capital mobility because the increase in savings surplus is larger than the decrease in investor surplus.
B. Country A's preferences are biased towards future consumption; capital flows from Country A to Country B; Country A benefits from capital mobility because the increase in invertor surplus is larger than the decrease in savings surplus.
C. Country A's preferences are biased towards current consumption; capital flows from Country A to Country B; Country A benefits from capital mobility because the increase in investor surplus is larger than the decrease in savings surplus.
D. Country A's preferences are biased towards future consumption; capital flows from Country A to Country B; Country A benefits from capital mobility because the increase in savings surplus is larger than the decrease in investor surplus.

3. Theoretically, one could argue that international capital movements:
   A. Tend to hurt donor countries.
   B. Tend to hurt recipient countries.
   C. Tend to hurt labour in donor countries.
   D. Tend to hurt labour in recipient countries.

4. Two big 'waves' of globalization can be identified: at the end of the nineteenth century and following the end of the Second World War. These have episodes coincided with drastic decreases in international price gaps for goods and services and drastic increases in international trade and capital flows. There are important differences between the first and second wave of international capital mobility:
    A. In the first wave of globalization capital flows from advanced countries to developing countries and is mainly short-term capital.
    B. In the second wave of globalization capital flows from advanced countries to advanced countries and is mainly long-term capital.
    C. In the first wave of globalization capital flows mainly from the UK to the USA, and is mainly short-term capital.
    D. In the second wave of globalization capital flows from advanced countries to advanced countries, and is mainly short-term capital.

5. Consider the following two statements about international capital mobility and international capital market integration:
    I. Perfect capital market integration can result in small net capital flows.
    II. A country that still has restrictions left on its ingoing and outgoing capital flows can nevertheless experience substantial net capital flows.
        A. Both I and II are correct.
        B. I is correct; II is not correct.
        C. I is not correct; II is correct.
        D. Both I and II are not correct.

6. The U-shaped pattern (rise-fall-rise) of international capital mobility in the late nineteenth and twentieth century can be explained by using three factors:
    (1) Technology
    (2) The role of financial institutions (fixed exchange rates in particular)
    (3) Politics

    A. The rise in international capital mobility in the late nineteenth and twentieth century is explained by factor (1); the fall in international capital mobility by factors (2) and (3).
    B. The rise in international capital mobility in the late nineteenth and twentieth century is explained by factors (1) and (2); the fall in international capital mobility by factor (3).
    C. The rise in international capital mobility in the late nineteenth and twentieth century is explained by factors (1), (2) and (3); the fall in international capital mobility by factor (3).

D. The rise in international capital mobility in the late nineteenth and twentieth century is explained by factors (1) and (3); the fall in international capital mobility by factors (2) and (3).

11. Financial crises, firms, and the open economy

1. The government of an emerging economy that has its currency pegged to the $, wants to take measures to prevent the occurrence of twin crises in the future while also stimulating economic development. In the meeting of the Cabinet Members responsible for financial and economic affairs various measures and policies are discussed. Which of the following options are indeed effective to realize the objectives of the government?

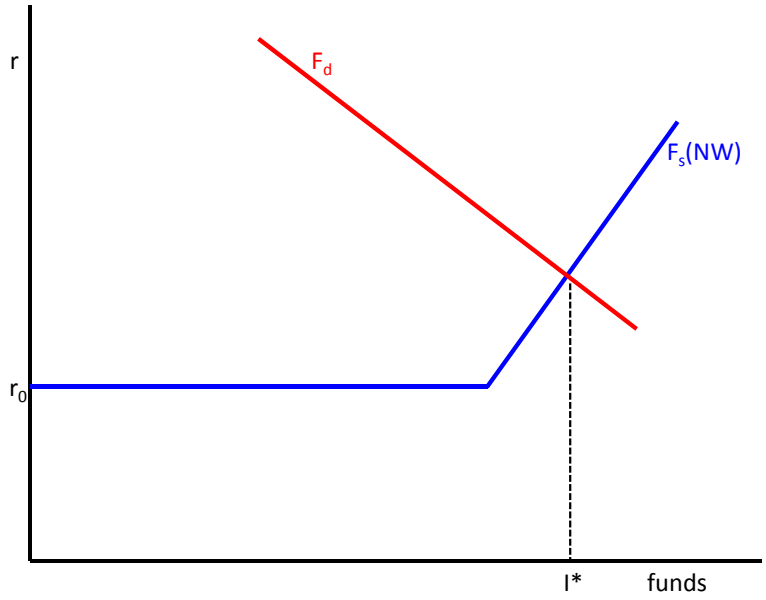
   A. Improve the quality of regulation of the banking sector and the enforcement of regulations.

   B. Introduction of a high tax on all incoming foreign capital.

   C. Increase the guarantees of saving deposits with local banks.

   D. All the above.

2. The graph below shows equilibrium on the funds market for country X, due to the interplay of the demand for funds, the availability of internal financing, and the access to external funds for a representative firm. We assume transaction costs are zero in the initial situation.



According to the asymmetric information framework for a financial crisis, an interest rate increase and a decrease in asset prices increase the moral hazard and adverse selection problems on financial markets. The impact of these two disruptions can be shown in the graph:

   A. Both the fall in asset prices and the interest rate increase will shift the Fs curve to the left; the result is less funds available for investment.

B. The fall in asset prices reduces a firm's net worth, and will shift the Fs curve to the left; the interest rate increase creates a wedge, reducing the available funds even more.
C. The fall in asset prices will reduce the firm's demand for funds, and the Fd curve shifts to the left; the interest rate increase will shift the Fs curve to the left, reducing the supply of funds in accordance with the reduced demand.
D. Both the interest rate increase and the fall in asset prices increase uncertainty in general; this will increase the slope of the Fs curve, reducing the available funds for investment.

3. Both internal and external factors may lead to a disruption of financial markets. The framework presented in the previous question can be used to illustrate the effects of a currency crisis (a reversal of capital flows and a sudden depreciation of country X's currency).

   Which statement is incorrect?

   A. The currency crisis will shift the Fs curve to the left.
   B. The currency crisis will increase the slope of the Fs curve.
   C. The currency crisis will create a wedge between the gross and net return to savings.
   D. The currency crisis will shift the Fd as well as the Fs curve to the left.

4. A financial crisis may be triggered by a currency crisis in different ways. In case of a currency depreciation and an increase of the rate of interest, the domestic economy is hit by:

   A. An increase of the slope of the Fs curve.
   B. A shifting to the left of the Fs curve.
   C. A wedge between the gross and net return on savings.
   D. All of the above.

5. Consider the following two statements:
   I. If international (financial) investors expect a depreciation of the currency of a country, then that country's equilibrium (nominal) interest rate will be below the world (nominal) interest rate.
   II. A market characterized by "overinvestment", e.g. because the government is perceived to be ready to "bail out" commercial banks, will tend to have private risk "under-priced" and assets (i.e. loans by commercial banks to firms) "overpriced".

   A. Both I and II are correct.
   B. I is correct; II is not correct.
   C. I is not correct; II is correct.
   D. Both I and II are not correct

6. Which of the following is an example of a financial crisis?

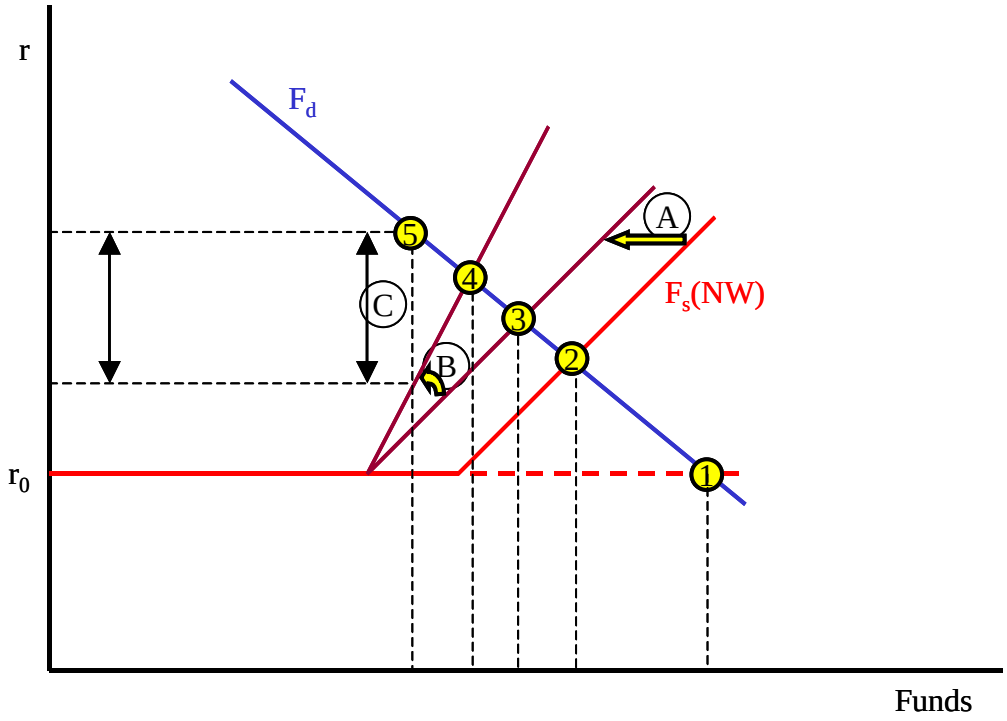
   A. Country Argenzil in Latin America underwent a currency crisis and also experienced a recession in 2002.

   B. In the same year the Minister of Finance of Thailand decided to nationalize 'Bangkok Traders Bank' in order to save it from bankruptcy after foreign lenders have drawn out of the bank and a run on the bank by deposit holders has developed.

   C. Speculators expect a devaluation of the African CFA franc vis-à-vis the €, and sell their CFA denominated assets.

   D. The Polish Central Bank announces a rise of the interest rate in order to stem the outflow of capital. A significant share of Polish firms have their loans denominated in a foreign currency.

7. Figure 11.2 Financial crisis in an asymmetric information framework



The graph above shows equilibrium on the funds market for country X, due to the interplay of the demand for funds, the availability of internal financing, and the access to external funds for a representative firm. In addition, the (potential) effects of several disruptions on the position and slope of the supply curve are presented.

A shift from point 2 to point 3 takes place when:

   A. Inflation in country X rises.

B. Banks raise the interest rate.

C. There is a bank run.

D. Banks have debt in foreign currencies.

8. Figure 11.2 above shows equilibrium on the funds market for country X, due to the interplay of the demand for funds, the availability of internal financing, and the access to external funds for a representative firm. In addition, the (potential) effects of several disruptions on the position and slope of the supply curve are presented.

   A shift from point 2 towards point 1 illustrates:

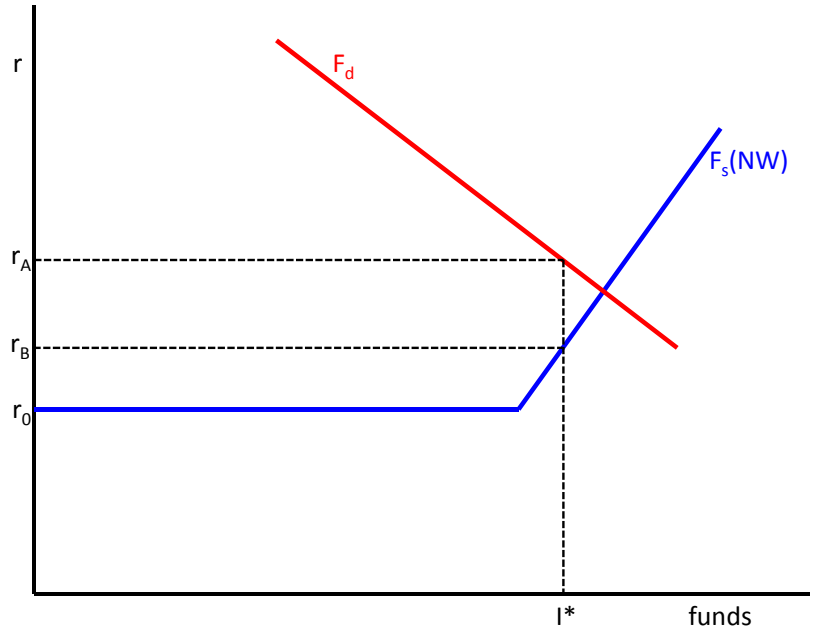
   A. Improved efficiency of the financial sector.

   B. Improved regulation and supervision of the financial sector.

   C. The effect of reducing the level of deposit guarantees by the government.

   D. Overinvestment, because the level of private risk is too low.

9. The graph below shows equilibrium on the funds market for country X, due to the interplay of the demand for funds, the availability of internal financing, and the access to external funds for a representative firm. The banking sector is not efficient; we assume some transaction costs of financial intermediation in the initial situation.



   In order to increase financial stability, the government introduces explicit guarantees that they will bail out banks that get into trouble in case firms are not able to repay their loans.

   A. The supply of funds will increase, because F_S shifts to the right.

   B. The supply of funds will increase, because the slope of F_S decreases.

   C. The supply of funds will increase, because the wedge is reduced.

D. All of the above.

10. What possibilities do monetary authorities have to avert a speculative attack on the country's currency?
    A. Raise interest rates and deplete their foreign exchange reserves.
    B. Reform the fundamentals of the economy.
    C. Introduce a Tobin tax, or a similar kind of capital restriction.
    D. Averting a speculative attack is impossible since currency crises are inevitable due to their self-fulfilling character.

11. Consider the following two statements:
    I. The third-generation model (vicious circle of financial crisis) creates a synthesis between the 'fundamentalists' and the 'self-fulfillers'.
    II. The interaction between the exchange rate and the domestic financial sector is explicitly analyzed in both the second-generation models and third generation models.
        A. Both I and II are correct.
        B. I is correct; II is not correct.
        C. I is not correct; II is correct.
        D. Both I and II are not correct.

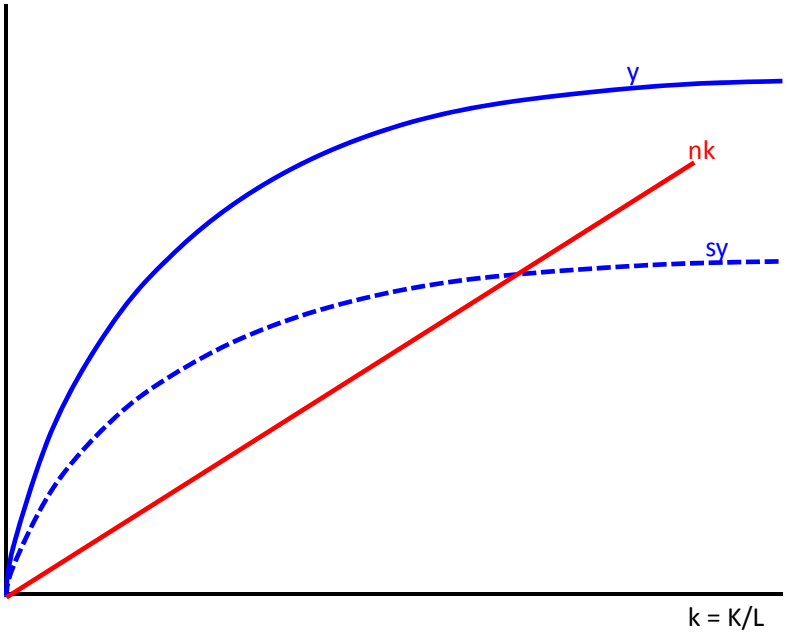
12. The Great Recession

1. Recently, some member states of the European Union proposed the introduction of a *Tobin tax* in order to increase financial stability. The purpose of a Tobin tax is:
    A. To reduce the inflow of short-term capital.
    B. To reduce the outflow of short-term capital.
    C. To reduce both the inflow and outflow of short-term capital.
    D. To reduce international capital mobility in general.

Part IV: Consequences of globalization

13. Globalization and growth

1.



The figure above illustrates neoclassical growth. The ray ***nk*** shows investment per person needed to maintain the same amount of capital per person if labour grows at rate *n*; ***y*** shows how output per person varies with capital per person. Under the assumption that saving is proportional to income, ***sy*** shows saving and investment per person.

In the steady state,

A. Both output per worker and total output will grow at the rate n.
B. Growth of output per worker is zero; output will grow at the rate n.
C. Output per worker will grow at the rate n, growth of output is zero.
D. Growth of output per worker and growth of output are zero.

2. Using the figure in the previous question, the effect of a higher rate of savings is:
   A. A new equilibrium with a higher K/L ratio, more output per worker, and higher output growth as before.
   B. A new equilibrium with a higher K/L ratio, more output per worker, and the same output growth as before.

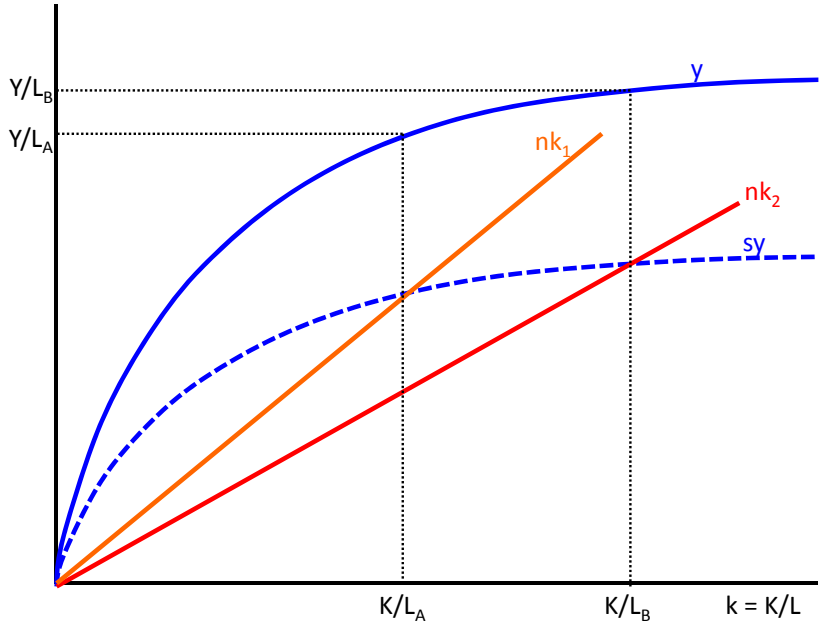
C. A new equilibrium with a higher K/L ratio, more output per worker, but lower output growth than before.
D. The same equilibrium with the same K/L ratio, the same output per worker and the same output growth as before.

3. The Solow growth model implies catching up of poor countries and convergence of income levels. The model's crucial assumption for this outcome is:
   A. All countries have adequate institutions.
   B. All countries have access to the same technologies.
   C. All countries use growth oriented policies.
   D. All countries are open.

4. Suppose the growth rate of the labour force is relatively high in country A and relatively low in country B. If both countries are in their steady state, the neoclassical growth model predicts that:
   A. Growth of output is higher in country B, because output per worker is higher in B.
   B. Growth of output is higher in country A, and output per worker is higher in country B.
   C. Growth of output is higher in country B, and output per worker is higher in country A.
   D. Growth of output is zero in both countries, because both countries are in the steady state.

5. China has grown faster than the industrialized countries in recent years. How can this best be explained in terms of the Solow model?
   A. China has caught up with western TFP growth.
   B. China has benefited from capital accumulation.
   C. China's growth path lies higher due to its massive population.
   D. The convergence hypothesis predicts that China matches long run western growth rates.

6.

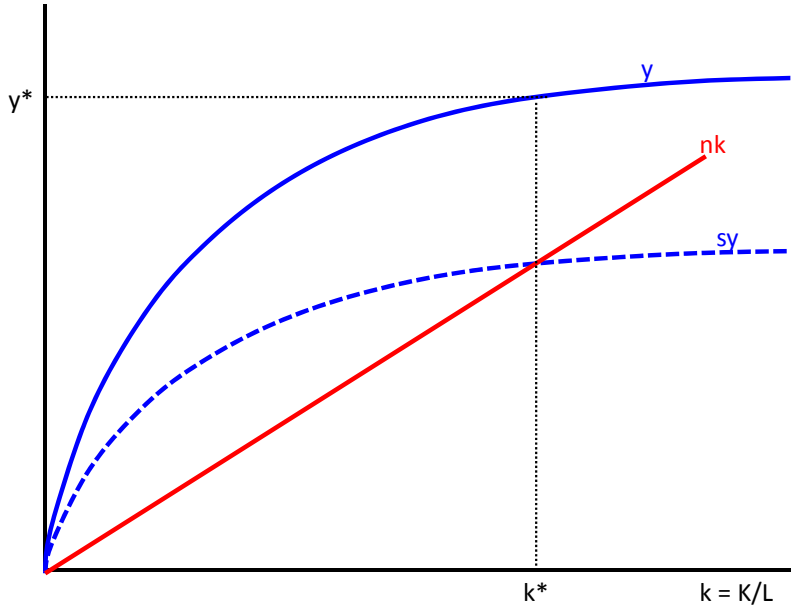


Given is the above model of neoclassical growth. y shows how output per person varies with capital per person, nk_1 and nk_2 show investment per person needed to maintain capital per person if labour grows at rates n_1 and n_2 respectively, and sy (which is proportional to income) shows saving and investment per person. In which steady state grows output most rapidly, and why is that?

A. In the situation in which the growth rate equals n_1, since capital per worker and output per worker are higher.
B. In the situation in which the growth rate equals n_2, since capital per worker and output per worker are higher.
C. In the situation in which the growth rate equals n_1, since n_1 is larger than n_2.
D. In the situation in which the growth rate equals n_2, since n_2 is larger than n_1.

7. What effect would a higher rate of saving have on output growth in the neoclassical model?
A. Higher savings would lead to lower consumption, output growth would thus decrease.
B. Higher savings would lead to a different steady state, but output growth would remain unchanged.
C. Higher savings would lead to more capital and output per worker, output growth would thus increase.
D. In the short run output growth would increase, in the long run it would have no effect.

8.



The Solow diagram above illustrates neoclassical growth in a closed economy. The ray ***nk*** shows investment per person needed to maintain the same amount of capital per person if labour grows at rate *n*; ***y*** shows how output per person varies with capital per person. Under the assumption that saving is proportional to income, ***sy*** shows saving and investment per person.

The diagram can be used to illustrate the benefits of globalization. In case we focus on the effects of free international trade, the improved allocation of resources in an open economy will:

A. Shift the sy curve upwards, raise the K/L ratio and increase output per worker in the steady state.
B. Shift the sy curve upwards, and increase output per worker for the same K/L ratio in the steady state.
C. Shift the y curve upwards, raise the K/L ratio and increase output per worker in the steady state.
D. Shift the y curve upwards, and increase output per worker for the same K/L ratio in the steady state.

9. The Solow diagram, presented in the previous question, can also be used to illustrate the benefits of international capital mobility. A net capital inflow will:

A. Shift the sy curve upwards, raise the K/L ratio and increase output per worker in the steady state.
B. Shift the sy curve upwards, and increase output per worker for the same K/L ratio in the steady state.

C. Shift the y curve upwards, raise the K/L ratio and increase output per worker in the steady state.
D. Shift the y curve upwards, and increase output per worker for the same K/L ratio in the steady state.

10. In the Solow model, the long-run rate of GDP growth in the economy is constrained by one or more of the following factors: 1. TFP; 2. National savings; 3. Population Growth.
    A. 1 and 2
    B. 2 and 3
    C. 1 and 3
    D. 1, 2 and 3

11. What is the role of institutions regarding economic growth?
    A. Good institutions lead to lower transaction costs and therefore lead to economic growth.
    B. Good institutions alone do not lead to economic growth.
    C. Better institutions might not only improve economic growth, economic growth might also improve the quality of the institutions.
    D. All of the above.

12. Suppose a poor developing country has a relatively high population growth and has high barriers to trade and capital movements. The government wants to increase the level of welfare of the average citizen. Which of the following suggested policy measures is the best?
    A. Import lots of capital goods while protecting domestic industries; this brings new technology into the country at a relatively low price and increases TFP.
    B. Open up the capital market to increase the level of funds for investment while maintaining the trade barriers that protect the domestic industries.
    C. Lower trade barriers in order to produce according to the comparative advantages of the country and open up the capital market while improving the supervision by the central bank.
    D. Maintain trade barriers to stimulate the process of industrialization and maintain capital controls to avoid the risk of a financial crisis.

14. Globalization and inequality

1. International labour mobility:
    A. Leads to wage convergence by raising wages in destination country and lowering wages in source country.
    B. Is in accordance with the Ricardo model.
    C. Is in accordance with the Heckscher-Ohlin factor proportions model.
    D. Leads to wage convergence by raising wages in source and lowering them in destination countries.

2. Assume that high-skilled labour is the relatively abundant factor in North (OECD countries), while low-skilled labour is relatively abundant in South (Emerging Economies or NICs). The production of pharmaceuticals is relatively high-skilled intensive, and the production of clothing is relatively low-skilled intensive. According to the Heckscher-Ohlin theory of international trade (especially the Stolper-Samuelson Theorem), the effects of North-South trade are:
    A. International trade will raise the relative price of pharmaceuticals in North, and will raise the real income of high-skilled labour and lower the real income of low-skilled labour in the OECD.
    B. International trade will lower the relative price of pharmaceuticals in North, and will raise the real income of high-skilled labour and lower the real income of low-skilled labour in the OECD.
    C. International trade will raise the relative price of pharmaceuticals in North, and will lower the real income of high-skilled labour and raise the real income of low-skilled labour in the OECD.
    D. International trade will lower the relative price of pharmaceuticals in North, and will lower the real income of high-skilled labour and raise the real income of low-skilled labour in the OECD.

3. During the 1980s, domestic prices of manufactured products that use more high-skilled labour have risen less than prices of products in sectors that use more low-skilled labour in the USA and Germany. Given the comparative advantage of developing countries in low-skilled labour intensively produced products, and increasing exports of these products by developing countries, one would expect the opposite. An explanation for this finding is that:
    A. Multinational companies control international trade in manufactured products. They exploit cheap labour in developing countries and quote high prices in industrialized countries, thus pocketing the gains from international trade.

B. Trade has a minor influence in the development of domestic prices in the USA and Germany. Technological developments are much more important.
C. Imports of low-skilled labour intensive products face very high trade barriers at the borders of developed countries. This drives up the domestic prices of these goods relative to high-skilled labour intensive goods in the USA and Germany.
D. The Leontief Paradox also applies to the Stolper Samuelson Theorem.

4. Which of the following statements is correct?
   A. In terms of income per capita, poor countries have become poorer, rich countries have grown richer over the last two centuries.
   B. Income inequality between countries has increased if we weigh growth rates by population numbers.
   C. Income inequality has increased over the last two centuries if we measure this by the inequality between the poorest and the richest citizen of the world.
   D. Trade has exacerbated the income inequality described in c) of this question.

5. Consider the following two statements:
   I. Income inequality between countries has increased since 1990 if we weigh growth rates by population numbers.
   II. Income inequality has increased over the last two centuries, if we measure this by the inequality between the poorest and the richest citizen of the world.
      A. Both I and II are correct.
      B. I is correct; II is not correct.
      C. I is not correct; II is correct.
      D. Both I and II are not correct.

