

Tutorial letter 203/1/2015

International Trade ECS3702

Semester 1

Department of Economics

IMPORTANT INFORMATION:

This tutorial letter contains solutions to Assignment 03

BAR CODE

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Dear Student

1. INTRODUCTION

To date, you should have received the following study material for ECS3702:

- Study guide
- Tutorial Letter 101/2013 (introductory tutorial letter and assignments)
- Tutorial Letter 301/2013 (general information to all Economics students)

This tutorial letter contains the following information:

- Answers to Assignments 01, 02 and 03

Read this tutorial letter carefully, together with Tutorial Letter 101 and the other study material that you have received. In this way, you will find answers to many of your questions.

2. FEEDBACK ON ASSIGNMENT 03

Please note: The following are **NOT** model answers. They are only a guide on how you could answer the questions. Also note that your study guide is aimed at guiding you through the prescribed book and that you are expected to study the relevant sections in the prescribed book as well as the study units in the study guide. In other words, you must buy the prescribed book. The relevant sections in the prescribed book are clearly indicated in each study unit of the study guide.

Read the questions carefully and make sure that you do what is asked. When you answer the questions, keep the topic of the questions clearly in mind. Do not go off on a tangent, filling many pages, as it will not earn you marks. Therefore, make sure that your answer does in fact reflect what you are asked to do.

QUESTION 1

a) **Briefly explain why increasing opportunity costs in production arise.**

Resources or factors of production are not homogenous. This means all units of the same factor are not identical or of the same quality. All resources or factors of production are not used in the same fixed proportion or intensity in the production of all commodities. As a country produces more of one commodity, it must give up more and more of the second commodity to release just enough resources in order to produce the extra units of the first commodity.

- b) **Briefly explain why the production possibility frontiers of different countries have different shapes.**

The difference between production frontiers of nation 1 and nation 2 is due to the fact that two nations have different factor endowments or resources. In addition, the supply of technology or of available factors changes over time. Therefore, the nation's production possibility frontier shifts.

- c) **Explain, with the aid of a well-drawn diagram, the gains from trade (exchange and specialisation) when there is increasing costs in production.**

You are required to draw and discuss the diagram on page 66 (figure 3.5) of the TB. Essentially, you have to assume a labour-abundant nation that produces commodity X. Assuming that, once the country opens up to trade, it is unable to specialise in good X, the nation will then export from its current production of good X in exchange for some of good Y from its trading partner. This increase in consumption is regarded as gains from exchange. If the nation is able to specialise in the production of good X (the product of its comparative advantage), the quantity of good X produced will increase. The nation will therefore be able to trade some of its good X for good Y and end up consuming on a higher indifference curve. This increase in consumption is the gains from specialisation.

NB: Your diagram should be well drawn, clear and correctly labelled.

QUESTION 2

- a) **Economic integration refers to the commercial policy of discriminatively reducing or eliminating trade barriers among nations. Discuss the forms of regional integration. Give an example of each.**

The answer to this question can be found on pages 289 and 290 of the TB.

Preferential trade agreements (PTAs) reduce tariffs or other trade barriers between the member countries concerned. Each country retains its own trade barriers with non-member countries. An example of this is the British Commonwealth Preference Scheme.

Free trade areas (FTAs) are similar to PTAs, but trade barriers between the member countries are removed completely. As with a PTA, each member country retains its own tariffs and other trade barriers with non-member countries. A recent example is the **North American Free Trade Agreement (NAFTA)** between the United States, Canada, and Mexico, which took effect in 1994. A local example is the Southern African Development Community (**SADC**) which intends to reduce tariffs and to become a free trade area eventually.

Customs unions are FTAs which, in addition, harmonise their trade policies with the rest of the world, for example by having a common tariff on trade with non-member countries. The South African Customs Union (**SACU**) is a local example which presently includes South Africa, Swaziland, Lesotho, Botswana and Namibia. South Africa sets the common external tariff and administers the customs revenue pool. A feature of the SACU is that such revenues are shared unequally between the member countries. The smaller economies get a disproportionately larger share of the pooled revenues. This is to compensate them for the external tariff being decided by South Africa and for the polarisation of industrialisation towards South Africa.

A **common market** is a customs union which also allows factors of production (labour and capital) to move freely between the member countries. As noted above, Europe achieved this status in 1993 (then called the Economic Community or EC). The EU is an example of a common market.

An **economic union** is the tightest (or most advanced) form of economic integration. Besides free trade and mobility of the factors of production, the member countries harmonise or even unify monetary and fiscal policies. The EU achieved this status in 2002 with the adoption of a common currency, the euro, managed by a single central bank.

b) Under what conditions will a customs union result in trade creation and higher welfare?

The higher pre-union trade barriers of member nations, the lower customs union barriers on trade with the rest of the world, the greater the number of countries forming a customs union and the larger their size, the more competitive and less complementary the economics of member nations are, the closer members of the union are geographically and the greater the pre-union trade and economic relationship among potential members of the customs union. All these factors contribute to trade creation and higher welfare. Detailed explanations can be found on page 295 of the TB.

c) Discuss the dynamic benefits from joining a customs union.

The dynamic benefits to be gained from customs unions include increased competition, economies of scale, stimulus to investments and better utilisation of factors of production or economic resources. Explain these benefits in more detail. Simply listing the benefits will not earn you maximum points. Further explanation of the dynamic benefits of customs unions can be found on page 296 of the TB.

3. THE EXAMINATION

The examination paper consists of two sections. Section A has two questions and both questions are **compulsory**. ALL students MUST answer both questions in section A. Each question carries 25 marks. Section B has three questions of 25 marks each and you will have to answer any two. The format of the paper will be similar to that of the May 2014 examination paper in terms of it being an essay paper (see section 6 for a copy of this paper).

Writing in point form is unacceptable, except when listing assumptions. Students will be penalised for failing to adhere to this instruction.

Ensure that you prepare well for the final examination by concentrating on the prescribed material as outlined in your study guide and Tutorial Letter 101.

4. PRESCRIBED MATERIAL FOR THE EXAMINATION

You will be examined on any of the prescribed chapters outlined in Tutorial Letter 101 and the study guide. Therefore, ensure that you are familiar with the module content, including the relevant diagrams.

5. ASSESSMENT

As indicated in Tutorial Letter 101, your semester (year) mark will be based on your assignment marks. The first assignment will contribute 25%, the second assignment will contribute 25% and the third assignment will contribute 50% to your semester mark. Your final mark will be calculated using the following weights:

Semester (year) mark:	20%
Final examination mark:	80%
Total:	100%

6. COPY OF THE MAY 2014 EXAMINATION PAPER

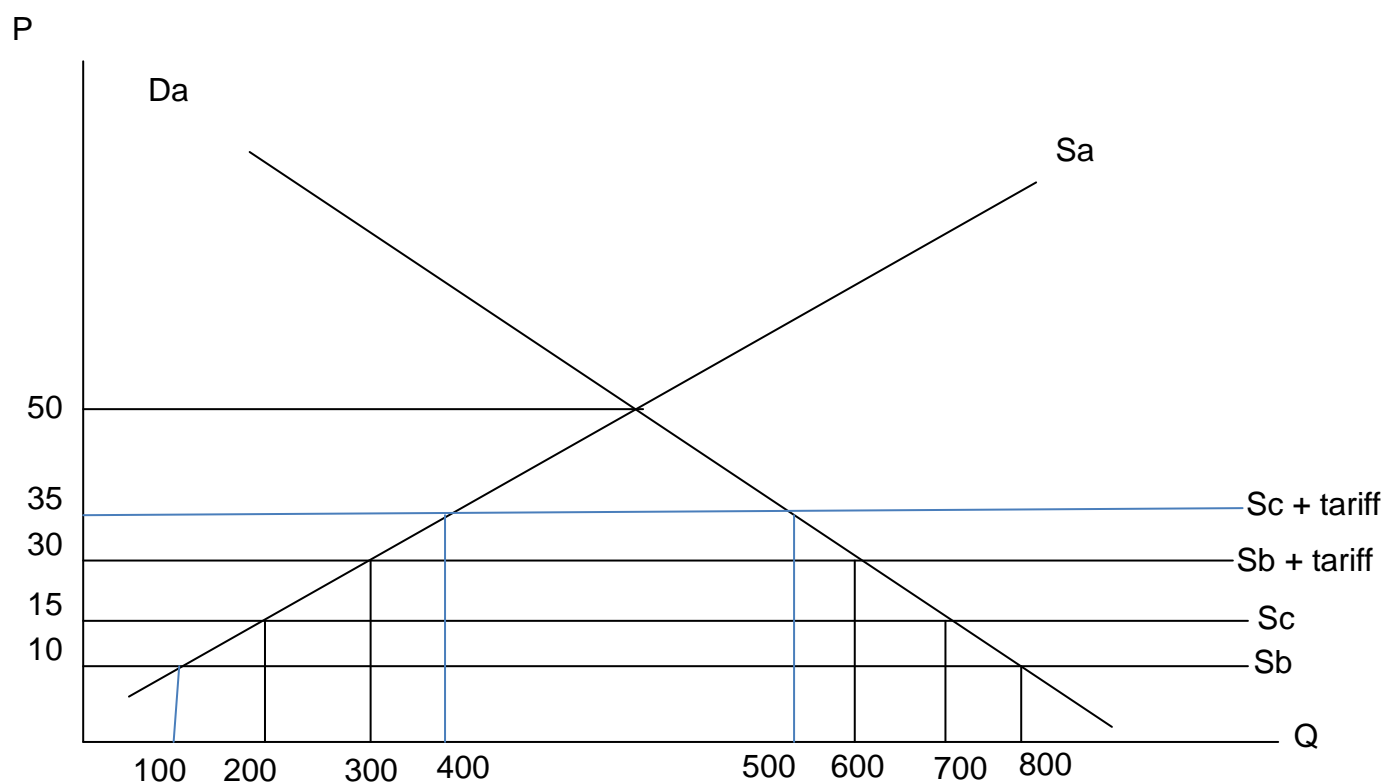
QUESTION 1

SECTION A

This question is compulsory.

Use figure 1 below to answer question 1 that follows.

FIGURE 1



QUESTION 1

(a) If South Africa (country A) imposes a R20 per unit tariff on imports of commodity T from both Botswana (country B) and China (country C):

(i) Country A will import from which country? Explain. (5)

Country A will import from country B. The reason is because good T is cheaper to import from country B than from country A. With the R20 tariff, each unit of good T costs R20 in country B and R30 in country C.

- (ii) How much will be imported? (5)

Since the country is importing from country B, it is importing 300 units (600 – 300).

- (b) Assume country A forms a customs union with country B, how much is the volume of trade created? Explain. (5)

Forming a customs union with country B implies the removal of all tariff barriers. Therefore, country A will buy from country B at the world/free trade price of R10. At that price, country A produces 100 units domestically and domestic consumption is 800 units. Therefore, imports from country A will be 700 units.

- (c) Would domestic producers in country A prefer the agreement of their country joining a customs union to not joining a customs union? Explain your answer. (5)

Domestic producers will prefer not to join the customs union as this will provide competition for them.

- (d) Would domestic consumers in country A prefer forming a customs union with country B and C or with none of them? Explain your answers. (5)

Domestic consumers will prefer joining a customs union with country B because the free trade price in country B is R10, which is cheaper than the free trade price in country C (R15).

[25]

SECTION B

Students must answer any **THREE** of the following four questions in this section.

QUESTION 2

You are informed by your international trade instructor that tariffs have more of a negative impact on the overall welfare in a small country than in a large country. Use your understanding of trade policy to evaluate the validity of the statement. **[25]**

Students are required to compare and contrast the partial equilibrium effects of a tariff in both a small and a large country. You should understand and explain the effects of a tariff in the case of both a small country case and a large country clearly. At the end of the explanation, conclude by stating which country is better off. You may do this in one of two ways, namely (i) using words or (ii) using diagrams.

If you use diagrams, are used then the diagram for a small country case is that in figure 8.1, page 214 of the TB, and for a large country case is that in figure 8.8 on page 235 of the TB.

The explanations must however centre on the following facts:

A large country is one that can affect the world price of the commodity and therefore influence its terms of trade. A small country is one that cannot influence the world price of the commodity and as such cannot impact upon its terms of trade.

***For a small country**, the domestic price of the imported commodity increases by the full amount of the tariff. Consumers pay more because of the higher price. Consumers will consume less of the imported Commodity, as they will switch to consuming less desirable domestic substitutes. This constitutes a loss in consumer welfare. Producers experience an increase in production of the import-competing commodity. There is loss in production efficiency as resources are reallocated from more efficient production to less. Government receives revenue from the tariff. Real income is redistributed from consumers to government and producers.*

***For a large country**, the domestic price of the imported commodity increases but not by the full amount of the tariff. Consumption of the imported commodity declines as consumers switch to less desirable domestic substitutes. Because the large country has a big share in global demand for the commodity, the fall in their consumption forces the exporting nation to reduce its export price. Therefore, the tariff burden is shared by consumers in the large country and the exporting nation. Since the import price is now lower, the terms of trade of the large nation improve.*

Conclusion

Only a large country** can improve its TOT by imposing a tariff. For a large country imposing a tariff, the trade volume declines but the TOT improves. Whether the overall welfare of the nation increases or decreases depends on the net effect of the two forces. **For a small country** imposing a tariff, trade volume falls, representing a decline in welfare. The TOT remains unchanged. **Therefore, the nation experiences an overall decline in welfare.

QUESTION 3

- (a) Export subsidies are classified under non-tariff barriers. Using a well-drawn diagram, explain the partial equilibrium effect of an export subsidy. (10)

The correct diagram is found on page 259 of the TB. The subsequent explanation in figure 9.2 should centre on the fact that essentially, the imposition of an export subsidy encourages domestic production and increases exports. Producers in the nations benefit from the subsidy, consumers are harmed.

- (b) Review any three of the arguments for trade protection. (15)

Infant industry argument

An industry should be protected during its infancy against competition from more established and more efficient foreign firms. This protection should continue until the industry acquires enough economies of scale to compete effectively with foreign industries. However, protection should be temporary. It should not be indefinite; it should be removed once the industry has grown. For the argument to be valid, the return from the grown-up industry must be sufficiently high to offset the higher prices paid by domestic consumers of the community during the infancy period. This argument can be abused, however. Some industries may remain in the infancy stage for ever. Also, it may be difficult to identify which industry or potential industry qualifies for this treatment.

Optimum tariff

The optimum tariff is the tariff rate that maximises the difference between the gain from improved terms of trade and the loss from reduced volume of trade. This argument applies only to large countries. Only a large country can improve its terms of trade by imposing a tariff. The optimum tariff for a small country is always zero. When a large country imposes an import tariff, it forces the exporting country to lower its exporting price in order to continue exporting the product. This therefore raises the terms of trade of the large (importing) country and lowers that of the exporting country.

Strategic trade policy

This refers to governments protecting some large oligopolistic industries in order to increase their global market share at the expense of foreign competitors. The aim of such a policy is to increase the global share of the domestic firms at the expense of the foreign firms. By encouraging high-technological industries, a nation can reap the external economies of scale resulting from such high-tech industries. Strategic trade policy needs a large capital outlay at the beginning. As output expands, the marginal costs decrease. An example is the aircraft industry. However, the policy lacks adequate information. It brings about productivity loss as resources move from efficient industries to protected industries that may be less efficient.

Scientific tariff

It is the rate that equalises wage rates across nations. It is implemented to offset the competitive advantage of low wages in foreign nations. The policy makes no allowance for productivity differences between nations. It is therefore not as scientific as it can be. The tariff assumes that labour is the only factor in production costs.

The arguments for reducing balance of payments deficits and reducing employment can also be made.

[25]

QUESTION 4

- (a) State the Heckscher-Ohlin (H-O) theorem. What is the Leontief paradox in the context of the Heckscher-Ohlin theorem? (7)

The H-O theorem states that a nation will export the commodity whose production requires intensive use of its relatively abundant and cheap factor and will import the commodity whose production requires intensive use of its relatively scarce and expensive factor.

The Leontief paradox is one the limitations of the H-O theorem. It was the first empirical test of the H-O theorem and it was developed by Leontief. According to the H-O theorem, capital-abundant countries would export capital-intensive goods and import labour-intensive goods. However, Leontief found that the United States of America, a capital-abundant country, exported labour-intensive goods and imported capital-intensive goods.

- (b) State the Stolper-Samuelson theorem. (5)

The Stolper-Samuelson theorem postulates that an increase in the relative price of a commodity raises the return or earnings of the factor used intensively in the production of the commodity.

- (c) Assume a tariff is imposed. Use the Stolper-Samuelson theorem to explain the effect on a nation's scarce factor of production. Is the Stolper-Samuelson theorem always true for both a large and a small country? (13)

*Assume nation 2 is a capital-abundant country. If it imposes an import tariff on good X (its labour-intensive commodity), the P_X/P_Y rises for domestic producers and consumers and so will the real wage of labour (the nation's scarce factor). As P_X/P_Y rises due to the tariff on good X, the nation will produce more of good X and less of Y. The expansion in production of X requires L/K in a higher proportion than is released by producing less Y (capital-intensive good). Therefore, w/r will rise and K is substituted for L so that K/L rises in the production of both commodities. As each unit of L is now combined with more K, the productivity of L rises and therefore, w rises. The small country as a whole loses from imposing a tariff, and the scarce factor benefits at the expense of the abundant factor. The Stolper-Samuelson theorem is **always true for a small nation and usually true for a large nation.***

[25]

QUESTION 5

Assume country 1 is a capital-abundant country and country 2 is a labour-abundant country. Illustrate and explain the pattern of trade and gains from trade within the Heckscher-Ohlin theorem framework.

[25]

The correct diagrams are the two in figure 5.4. Explain the diagrams in their entirety. Your explanation must touch on factor intensity, factor abundance, and comparative advantage. The pattern of trade must be clear. Your explanation must also include the assumptions and criticisms of the theory.

TOTAL: 100

7. COMMUNICATION WITH LECTURERS

The lecturers for this module are:

- Ms K Amusa – 012 433 4642
- Mr J Mkhize – 012 433 4623

Appointments with the above lecturers should be made in advance. If you arrive without an appointment, the lecturers might not be able to see you immediately.

While we are happy to help you if you do not understand some of the economic principles, we do expect final-year students to try and solve problems by themselves.

Please do not contact your lecturers with administrative queries. Contact the relevant department (as listed in the brochure *My studies @ Unisa*).

Please note: Unisa's telephone lines are very busy during examination time (May and October). There is no guarantee that you will be able to get through to your lecturers in the last days before the examination. You should therefore go through your work **in good time** and **if** you have problems, contact us well before the examination.

8. CONCLUDING REMARKS

We hope that you enjoyed this module. Best wishes as you prepare for the examination.

Kind regards

Ms K Amusa