

STRICTLY CONFIDENTIAL

**THE PUBLIC ACCOUNTS EXAMINATION COUNCIL
OF MALAWI**

2011 EXAMINATIONS

ACCOUNTING TECHNICIAN PROGRAMME

PAPER TC 5: ECONOMICS

(DECEMBER 2011)

TIME ALLOWED: 3 HOURS

SUGGESTED SOLUTIONS

1. (a) Dandaula's statement: "You see, with this fuel shortage all prices ought to go up!"
- (i) The branch of economics into which Dandaula's statement falls is normative economics.
- (ii) The main weakness of normative economics is that it deals more with value judgment. In other words, the statements cannot be empirically tested. This may lead to fallacious conclusions.
- (b) (i) Price elasticity of demand is the responsiveness in quantity demanded for a product due to a unit change in its price.

Note: Mathematically, Price elasticity of demand = $\frac{\% \Delta Q_x^d}{\% \Delta P_x} = \frac{\Delta Q}{\Delta P} * \frac{P}{Q}$

Where P_x = price of product x and Q_x = quantity demanded for product x .

- (ii) **Three** key determinants of price elasticity of demand include:
- (1) **Availability of close substitutes.** The more substitute goods there are, especially close substitutes, the more elastic will be the price elasticity of demand for a good.
- (2) **The time period.** The time horizon influences elasticity largely because the longer the time period which we consider, the greater the knowledge of substitution possibilities by consumers and the provision of substitutes by producers hence the more elastic the price elasticity of demand for a product.
- (3) **Habit forming.** Products that are of habit forming nature, such as smoking tend to have price elasticity of demand being inelastic.

Note: other factors include, *necessity of the product* and *competitors' policies*.

(c)

	Price elasticity	Income elasticity
Maize flour	(-) 0.09	(-) 0.29
Bread	(-) 1.25	(+) 0.25

For the producers of maize, the data above indicate that price elasticity of demand for maize flour is inelastic, implying that a unit change in price will have a less than a unit change in quantity demanded for maize flour. This is likely to motivate producers to increase price of maize flour in

order to increase total revenue. On the other hand, the income elasticity of demand for maize flour is negative implying that maize flour is regarded as an inferior product, i.e., as people's income increases, they tend to consume less of maize flour. This again justifies producers' increase in price of maize flour, since an increase in price indirectly reduces people's income level.

In case of bread, the data show that price elasticity of demand for bread is elastic such that a unit change in price will lead to a proportionately more than unit change in quantity demanded. As such producers have no motivation to increase its price, as doing so will eventually reduce their level of total revenue. However, income elasticity of demand for bread indicates that bread is a normal product, i.e., as people's income increases, they tend to consume more of bread. Again this justifies the reduction in price of bread as this indirectly leads to increase in income let alone the demand for bread.

2. (a) The law of diminishing returns states that, given the present state of technology, as more units of a variable input factor are added to input factors that are fixed in supply in the short run, the resulting increments to total production will eventually and progressively decline.
- (b) With regards to time periods, diminishing returns differ from economies of scale in that diminishing returns take place in the short run while economies of scale occur in the long run – when all factors of production are considered variable.
- (c) The following are **five** major sources of internal economies of scale.

Technical economies arise from increased use of specialization and from mechanization, automation and computerization. Of particular interest is the more economic combination of factors that large-scale operation makes possible.

Administrative economies are said to occur when, as firms grow larger, the specialist skills of particular managers are used to a greater effect, and more sophisticated decision-making techniques are introduced.

Financial economies refer to situations in which large-scale firms find it easy to borrow money at favourable rates of interest as financial institutions are willing to loan on preferential terms to large, well-known companies.

Marketing economies can be due to various reasons. Firstly, when a firm buys its raw materials in bulk, it may obtain preferential terms in the form of a discount, thus reducing the cost of each unit. Secondly, a large firm may employ specialist buyers whose sole responsibility is to buy raw materials at the cheapest price.

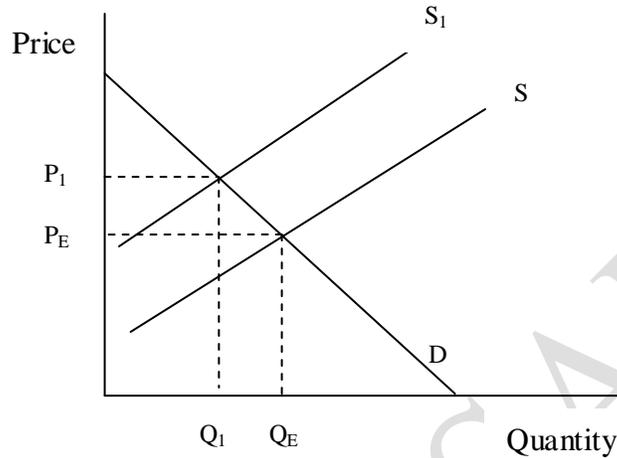
Research economies tend to occur as large firms establish research departments that help them discover new products, new methods of work and new markets. Such revelations put large firms on a competitive position as they become more efficient in allocation of resources.

Note: other points may be considered.

- (d) Small firms have certain advantages over large firms that may outweigh economies of scale. For example:
- (i) Since they are small, they are more likely to operate in competitive markets, in which prices will tend to be lower, and the most efficient firms will survive at the expense of the inefficient.
 - (ii) Management-employee relations are more likely to be co-operative, with direct personal contacts between managers at the top and all their employees.
Note: other points may also be considered.
- (e) *Diseconomies of scale* are said to occur when a firm's increases in production are matched or followed by increases in costs of production.
3. (a) **Four** factors that determine demand for maize in Malawi include:
- (i) **Price of the product.** An increase in maize price, *ceteris paribus*, will lead to reduction in the number of people buying the product while a reduction in the price will lead to increase in number of people purchasing the product.
 - (ii) **Price of maize's substitute products.** An increase in prices of maize's substitutes such as rice will lead to increase in demand for maize and vice versa.
 - (iii) **Size of household income.** An increase in household income will lead to increase in demand for maize if maize is a normal product.
 - (iv) **Tastes and preferences.** If the taste or preferences for maize increases, then there will be increase in demand for the product.

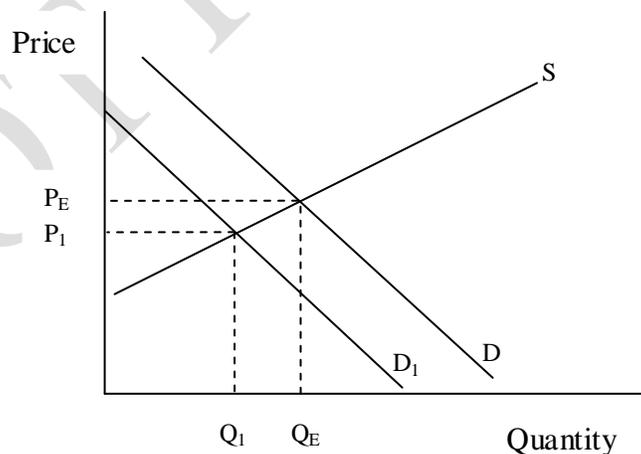
- (c) Using demand and supply analysis to examine the effect on the equilibrium price and quantity traded of maize in Malawi of each of the following events.

- (i) Drought.



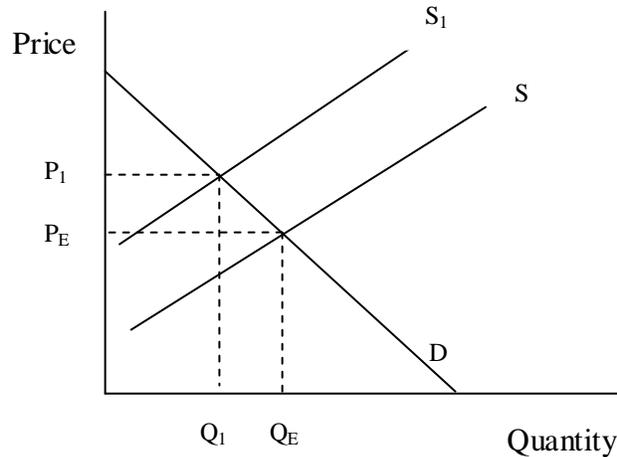
Let us assume that initially the market is in equilibrium state where Q_E of maize is produced at price, P_E . Drought will lead to crop failure which will result in reduction in supply of maize as evidenced by a leftward shift in the supply curve to S_1 . As such, equilibrium quantity decreases to Q_1 and equilibrium price increases to P_1 .

- (ii) A rise in demand for rice.



Maize and rice are substitutes; hence there exists a negative relationship between the two products. A rise in demand for rice will therefore lead to decline in demand for maize evidenced by a shift in demand curves from D to D_1 . As such, equilibrium quantity decreases to Q_1 and equilibrium price decreases to P_1 .

- (iii) A fall in maize fertilizer subsidy.



Let us assume that initially the market is in equilibrium state where Q_E of maize is produced at price, P_E . A fall in the subsidy paid to maize producers is tantamount to increase in cost of production which will result in a decrease in supply as evidenced by a leftward shift in the supply curve to S_1 . As such, equilibrium quantity decreases to Q_1 and equilibrium price increases to P_1 .

4. (a) The following are the differences between the terminologies:
- (i) Private cost measures the cost to a firm of the resources it uses to produce a product while social cost measures the cost to society as a whole of the resources that a firm uses.
 - (ii) Private benefit measures the benefit obtained directly by a supplier or by a consumer while social benefit measures the total benefit obtained, both directly by a supplier or a consumer, and indirectly, at no extra cost, to other suppliers or consumers.
- (b) **Two** positive and **two** negative externalities that are likely to emanate from construction of a state highway in a rural area are as follows: The positive externalities may include *creation of jobs* and *reduction in transport costs*. The negative externalities may include *increased accidents due to speeding vehicles* and *deforestation*.

- (c) **Three** disadvantages of a planned economy include:
- (i) There are no private profits because all resources are public-owned.
 - (ii) The state may misjudge the wants of its people.
 - (iii) Planning usually involves large bureaucracies that can be costly and wasteful.
- Note:** other points may be considered.
- (d) There are **three** basic resource allocation decisions as follows:
- (i) **What goods and services should be produced?** This will depend on what consumers want to buy and what they will pay for each product.
 - (ii) **How will these goods and services be produced?** The producers of products might be small or large, private or public companies. The choice about who will produce the products and how they will be produced will depend on the costs of resources and the efficiencies of resource utilization.
 - (iii) **To whom will the products be distributed?** Some products may be provided free by the state while others have to be paid for. The distribution of products will largely depend on the distribution of income and wealth in society.
5. (a) Money can be defined as any commodity or token that is generally accepted as a means of payment for goods and services.
- (b) The following are the five characteristics of money:
- (i) Money must be widely accepted.
 - (ii) It must be durable (long lasting).
 - (iii) It must be difficult to imitate.
 - (iv) It must be portable.
 - (v) It must be divisible into small units.
- (c) *Narrow money* is money balances that are readily available to finance current spending, that is to say for 'transactions purposes'; while *broad money* refers generally to money held for transactions purposes and money held as a form of saving. It provides an indicator of the private sector's

holdings of relatively liquid assets – assets that could be converted with relative ease and without capital loss into spending on goods and services.

- (d) Keynes identified **three** reasons or motives why people hold wealth as money rather than as interest-bearing securities. These are:
- (i) **Transaction motive.** Households need money to pay for their day-to-day purchases. The level of transactions demand for money depends on household income.
 - (ii) **Precautionary motive.** This is related to holding money to cover unforeseen expenditures; perhaps in relation to domestic emergencies or to take advantage of bargain offers. People choose to hold money over and above expected transaction needs as a precaution for a ‘rainy day’ when it might suddenly be needed.
 - (iii) **Speculative motive.** This formed the only innovative element of Keynes theory relative to the earlier theories of demand for money. The speculative motive refers to holding of money for its own sake over and above transactions and precautionary balances and in preference to an alternative asset that would yield interest. Some people therefore choose to keep ready money to take advantage of a profitable opportunity to invest, say, in bonds, which may arise (or they may sell bonds for money when they fear a fall in bonds’ market prices).
6. (a) Free-floating exchange rate is the form of exchange rate left to the free play of market forces and there is no official financing at all. There is no need for government to hold any official reserves, because it will not want to use them. This is however, theoretical.

Rigidly fixed exchange rate system means that the government of every country in the international monetary system must use its official reserves to create an exact match between supply and demand for its currency in the foreign exchange market, in order to keep the exchange rate unchanged. Using the official reserves will therefore cancel out a surplus or deficit on the current account and non-official capital transitions in their balance of payment.

(b) **Five** factors that may influence Malawi's exchange rate include:

- (i) ***Natural resources of the country.*** Malawi's richness in natural resources would benefit the country not only from a net surplus on its current account but also from long term capital investment from overseas investors. Should that be the case, Malawi's currency would therefore be strong in the foreign exchange market.
- (ii) ***The political stability of a country.*** Malawi's stable political or economic status is likely to have strong investment implications hence strong currency.
- (iii) ***Government policies.*** Some government policies such as exchange controls and import controls may weaken Malawi's currency.
- (iv) ***Speculation by traders.*** When a currency is expected to depreciate, debtors who owe money in that currency will pay their debts more slowly while those who owe in a currency that is expected to appreciate will pay more quickly. These 'leads' and 'lags' add to the speculative pressure on currencies by altering supply and demand.
- (vi) ***Competitiveness of exports.*** Should Malawi's exports be competitive, for instance due to high quality, then Malawi's currency is likely to be strong.
Note: other points may be considered

(c) **Two** advantages and **two** disadvantages that may arise from the depreciation of Malawi Kwacha are as follows: **The advantages would arise in the sense that:**

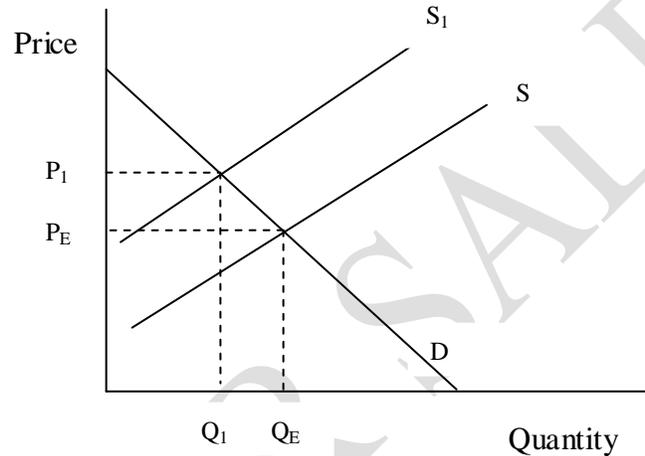
- (i) Exports will be cheaper in overseas markets.
- (ii) Demand for locally produced substitutes may increase to the advantage of local industries.

With regards to disadvantages, depreciation of the Kwacha:

- (i) Will make imports become more expensive (since the price elasticity of demand for imports is inelastic) leading to imported cost-push inflation.
- (ii) Since our price elasticity of demand to import, particularly of raw materials, is inelastic, while our export base is negligible, depreciation would worsen the BOP deficit as we continue to

import more at higher prices and export less at lower prices.

7. (a) Inflation is a general and persistent upward movement in the level of prices. (it is the process in which the price level is rising and money is losing value.)
- (b) An increase in international oil price is likely to cause imported cost-push inflation in Malawi. Imported cost-push inflation occurs where the cost of essential imports rise regardless of whether or not they are in short supply.



If a firm's costs increase they will react by increasing their prices and reducing production. This is represented by a leftward shift in the supply curve from S to S_1 resulting in increase in the price level from P_E to P_1 .

- (c) **Three** ways in which inflation prevents money from performing its functions effectively are:
- (i) Money should be a store of value or wealth. In a period of inflation, although money retains its nominal value, it loses some of its purchasing power.
 - (ii) Money should be a standard of deferred payment. However, in times of inflation, someone who incurs a debt will profit at the expense of a lender because when the debt has to be repaid, its real value will have declined.
 - (iii) Money should be an acceptable means of payment. However, during hyperinflation, people might prefer not to use money at all.
- (d) **Two** undesirable consequences of inflation are:
- (i) **Redistribution effects.** Different income groups are likely to be affected differently; for instance, those on fixed incomes will have their purchasing power reduced.

- (ii) ***The effect on the balance of payments.*** High inflation may make exports less competitive and depending upon the price elasticity of demand, the effect could be a deficit on the balance of payments.

8. (a) The term unemployment can be defined as people who are out of work, who want a job and are actively looking for a job.

(b) The unemployment being referred to here is likely to be seasonal unemployment.

Seasonal unemployment arises due to changes in times or seasons. This is very common in the agricultural sector of poor countries such as Malawi. In the case of the fishing industry, many people are likely to get employed and earn more during the *chambo* fishing season. However, some of these people are likely to be unemployed after government's restriction and they are likely to remain unemployed until the next fishing season.

(c) The above government restriction is likely to have limited unemployment effects on fishermen in Mangochi because the restriction is only on *chambo* as such majority of the fishermen are likely to continue with their fishing jobs catching other species.

(d) **Three** negative effects of unemployment in general include:

- (i) It leads to loss of output which could have been produced had the unemployed been in employment.

- (ii) Unemployment will in the long-term lead to demoralization. The results can be family unrest, depression and possibly an increase in crime rate.

- (iii) The unemployed labour represents a loss of resources and with it a resulting lower standard of living.

(e) **Two** remedial policies that the Government of Malawi can employ to reduce cyclical unemployment in places like Mangochi are fiscal and monetary policies.

- (i) In case of fiscal policy, government can increase aggregate demand, either through the increase in total government expenditure or by reduction of taxes.

(ii) On its part, the monetary policy can be used to influence the level of aggregate demand by means of interest rate and the level of credit available. For instance, the reduction in interest rate makes it cheaper to borrow for consumption and investment and this will stimulate demand in the economy.

9. (a) Foreign debt is the amount of debt owed by the government of a country to its various foreign creditors, usually foreign countries.

(b) **Five** advantages to Malawi that would arise from foreign debt cancellation are:

(i) The government's budgetary position will improve due to the reduced costs of debt servicing because of the diminished volume of foreign debt.

(ii) Government may reduce or cease to borrow from the local financial market. If the government ceases to borrow in the financial market, demand for loanable funds in the economy will decline and this could lower interest rates and hence encourage private investment.

(iii) The government's improved financial position might allow it to reduce the burden of taxation in the economy, and lower taxes might spur initiative, hard work and enterprise in the economy.

(iv) The financial markets will be able to exert less power over the government's choice of economic objectives and policies if the government does not need to borrow from them.

(vi) A lower level of foreign debt will mean that, if in future Malawi needs to borrow money for any purposes, it is likely to have access to funds on better terms than would be the case if foreign debt had not been reduced (or cancelled).

(c) A proportional tax takes the same proportion of income in tax from all levels of income. **Two** likely disadvantages of using proportional tax to raise revenue for foreign debt service are:

(i) Proportional tax does not contribute towards a redistribution of wealth among the population.

(ii) The tax rules may need to be quite complex in order to be proportional.

- (d) Apart from raising revenue, **three** other functions of taxation in general include:
- (i) To discourage certain activities regarded as undesirable.
 - (ii) To cause certain products to be priced to take into account their social costs.
 - (iii) To redistribute wealth.
- Note:** other points may be considered.

END

NOT FOR SALE