



MARKER CODE			



Student Personal Identification Number (SPIN)					

TONGA GOVERNMENT
MINISTRY OF EDUCATION AND TRAINING

Tonga National Form Seven Certificate

ECONOMICS

2015

QUESTION and ANSWER BOOKLET

Time allowed: Three Hours

INSTRUCTIONS

1. Write your **Student Personal Identification Number (SPIN)** on the top right hand corner of this booklet.
2. Answer ALL QUESTIONS. Write your answers in the spaces provided in this booklet.
3. If you need more space for answers, ask the Supervisor for extra paper. Write your SPIN on all extra sheets used and clearly number the questions. Attach the extra sheets at the appropriate places in this booklet.

TOPICS	Pages	Time (mins)	Total
SECTION A Resource allocation via the market system	2 - 10	81	45
SECTION B Resource allocation via the public sector	11 - 13	36	20
SECTION C Aggregate economic activity and policy.	14 - 19	63	35
TOTAL	19 pages	180 mins	100 marks

Check that this booklet contain pages 2-19 in the correct order.

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

SECTION A: RESOURCE ALLOCATION VIA THE MARKET SYSTEM (TOTAL: 45 Marks)

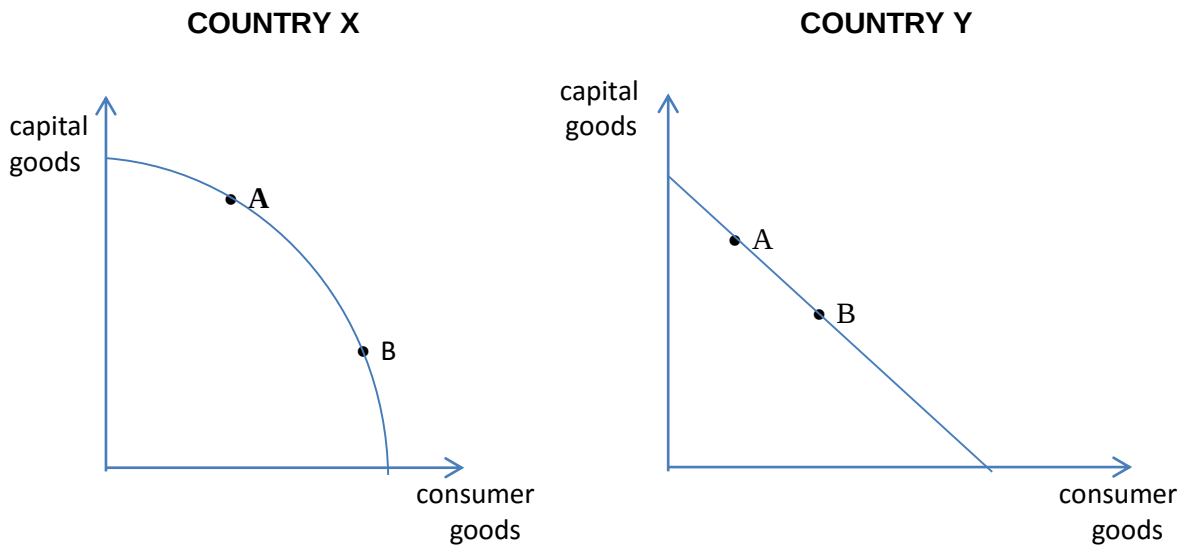
Question 1: ECONOMIC MODEL (5 marks)

Circular Flow Diagram and Production Possibility Curve are two Economic Models.

- a. State the purpose of an economic model.

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- b. The diagrams below show the Production Possibilities Curves (PPC) for Country X and Country Y.



- i. Distinguish between the '**bowed-out**' production possibility curve of Country X and the '**straight-line**' Production Possibility Curve of Country Y.

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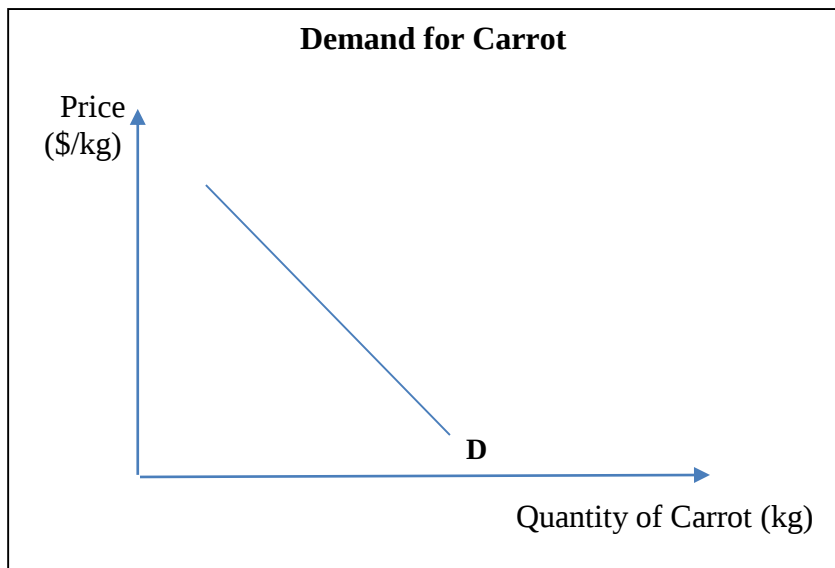
- ii. ***Ceteris paribus***, state an economic cost that each country will experience as a result of a movement along the PPC from point A to point B.

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Question 2: DEMAND AND ELASTICITIES (5 marks)

- a. On **Graph 1**, show the effect of a long drought experienced by carrots growers on the demand for carrots. Label it as D2.

Graph 1



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- b. Give TWO examples of goods that have positive cross-elasticity of demand.

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- c. Interpret correctly the statement given in the box below:

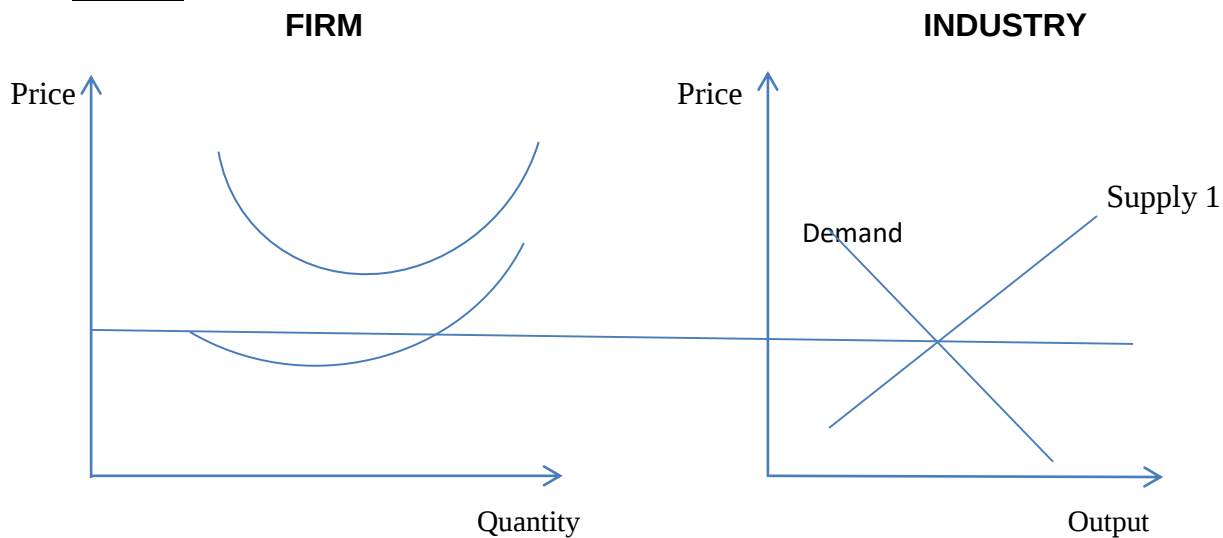
“The price elasticity of demand for Toshiba computer is estimated at 1.2”.

Skill level 2	
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Question 3: SUPPLY AND COSTS (9 marks)

- a. The following questions refer to **graph 3** drawn below.

Graph 3



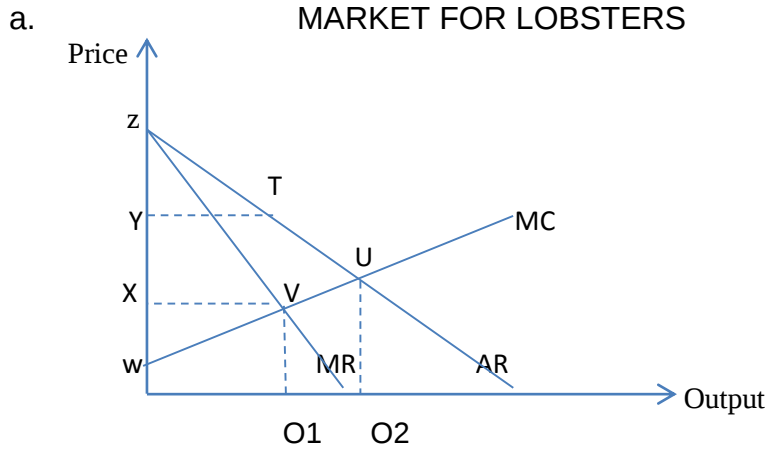
- i. Complete Graph 3 and, shade the area of sub-normal profit.

Skill level 2	
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Skill level 4	
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Skill level 3	
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Question 4: MARKET SITUATION**(11 marks)****Graph 4**

- i. Using the letters in **Graph 4**, identify the profit maximizing price.

- ii. For a Monopoly market structure, in one sentence, give a reason why allocative efficiency is not achieved at the profit maximizing level.

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- iii. Identify a price that results in allocative inefficiency.

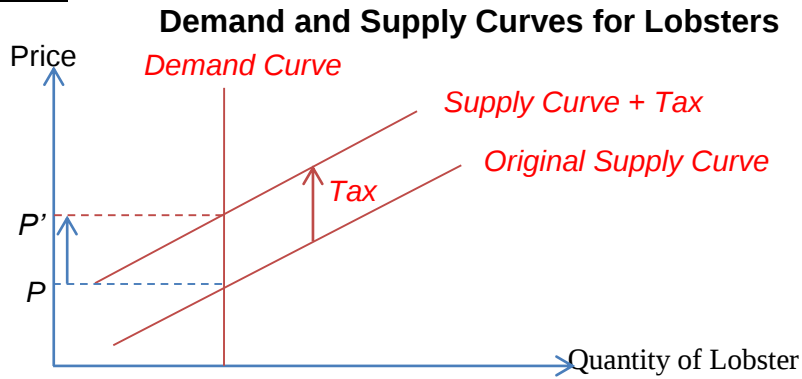
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- iv. Shade the area of allocative inefficiency caused by the price level identified in (iii) above.

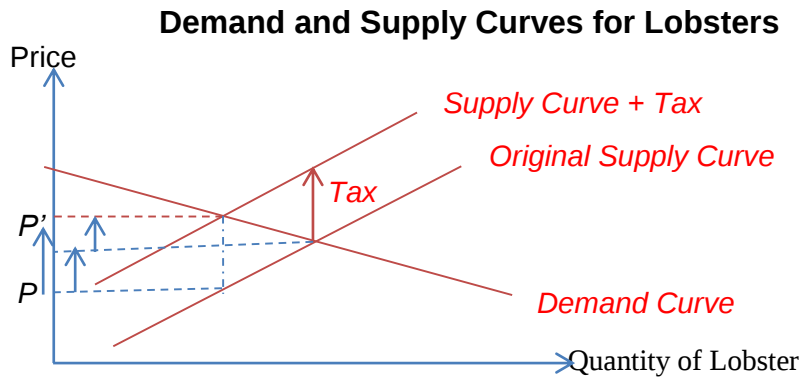
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- b. Both **Graph 5** and **Graph 6** show Demand and Supply Curves for Lobsters.

Graph 5



Graph 6



- i. Compare the impact of the tax imposed on the sellers and buyers as shown by the two graphs.

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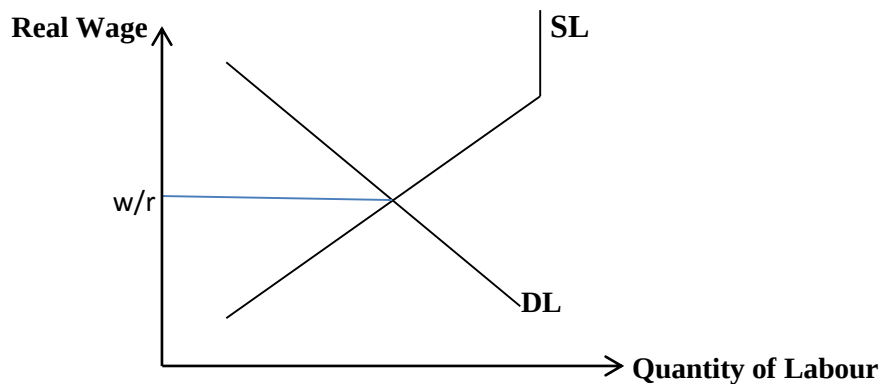
- c. Explain how the Tourism Sector in Tonga can improve on an oligopolistic product in order to boost economic development of the country.

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Question 5: SUPPLY AND DEMAND ANALYSIS (6 marks)

- a. Illustrated in the graph below is the real wage rate (w/r) for the Labour market.

Graph 7 Labour Market



On graph 7, you are to do the followings:

- Draw a dotted line to illustrate a new real wage rate (floor price), set by the government. Label the new wage level as **mw/r** .
- Identify whether the new wage rate (**mw/r**) creates unemployment and if YES, indicate the amount of unemployment on the graph and label it UE.

Skill level 1	
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Skill level 1	
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2. Discuss why Labour Market Equilibrium is not achieved as a result of the new real wage, mw/r .

Skill level 4	
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Question 6: INTERNATIONAL MARKET

(9 marks)

- Both Tonga and Fiji produce tomatoes and cabbage.
- Resources are fixed in the two countries.
- Tonga has comparative advantage in producing tomatoes because one tonne of tomatoes has the opportunity cost of only $1/3$ tonne of cabbage compared to 1 tonne of cabbage in Fiji.
- Fiji has comparative advantage in producing cabbage because one tonne of cabbage has the opportunity cost of only 1 tonne of tomatoes compared to 3 tonnes of tomatoes in Tonga.

- a. Explain why each country tend toward specialization in the production of each good.

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SECTION B: RESOURCE ALLOCATION VIA THE PUBLIC SECTOR (TOTAL: 20 Marks)
Question 1: PRIVATE AND PUBLIC GOODS (9 marks)

‘Education in Tonga would be considered as both a private good and a public good’.

- a. Explain how ‘Education in Tonga’ can be regarded as a free-rider problem.

Skill level 3	
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- b. ‘Education is regarded as providing positive externality’. Describe a positive spillover that results from the consumption or production of this service.

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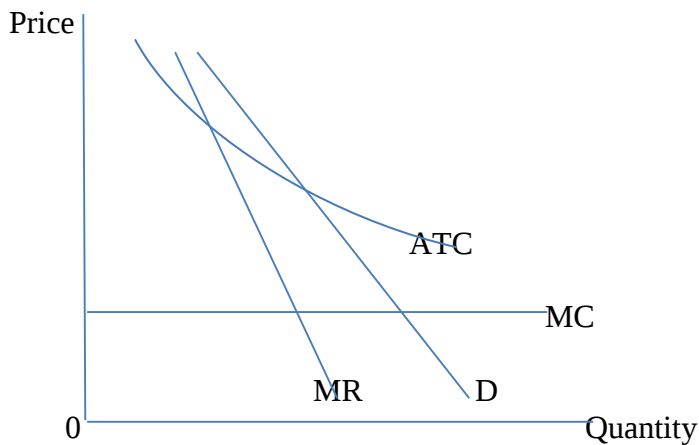
- c. Discuss with clear references to how ‘Education in Tonga’ is considered as both a private good and a public good.

Skill level 4	
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a. Define the term **socially optimal**.

- b. Describe a feature in Graph 8 below that indicates it is for a natural monopoly.

Graph 8



Skill level 2	
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Question 4: MERIT AND DEMERIT GOODS (4 marks)

In Tonga, the legal age for buying tobacco and cigarettes is 18 years and older. It is also illegal for retail stores to sell separate tobacco and cigarette stick separately.

- a. Identify a negative externality of consumption that is produced as a result of consuming tobacco.

Skill level 1	
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- b. Explain the impact of the legal actions stated in the box on the tobacco and cigarette market.

Skill level 3	
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SECTION C: AGGREGATE ECONOMIC ACTIVITY AND POLICY (TOTAL: 35 Marks)

Question 1: NATIONAL INCOME (19 marks)

- a. Define any ONE of the three approaches used to measure an economy's National Activities.

Skill level 1	
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- b. Give ONE reason why **GDP in Constant Prices** is a preferred indicator over **GDP in Current Prices**.

Skill level 1	
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- c. Using the given GDP Deflator and Nominal GDP;

- i. Calculate the Real GDP for the year 2014.

Years	GDP Deflator	Nominal GDP	Real GDP
2013	100	100	100
2014	150	150	

Skill level 1	
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- ii. From your calculation in (i) above, make a conclusion on the economic growth between the two years.

Skill level 3	
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- d. Explain why the **money borrowers** gain when actual inflation is higher than expected.

Skill level 3	
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- e. Explain how Progressive Taxes support a '**fair & equitable**' distribution of income.

Skill level 3	
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Human Capital has a significant impact on an economy's growth.

- f. Define **Human Capital**.

Skill level 1	
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- g. Describe the contribution of Human Capital to a country's economic growth.

Skill level 2	
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- h. Make a valid conclusion to support that a growing population will enhance productivity.

Skill level 4	
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Question 2: MARKET FOR MONEY AND CREDIT

(3 marks)

XYZ BANK			
\$M Assets		\$M Liabilities	
Reserves	4000	Demand Deposits	7000
		Term Deposits	3000
Loan	<u>6000</u>		
	<u>10000</u>		<u>10000</u>

- a. If XYZ Bank is the only bank in the country it can improve its total level of deposits simply by **lending more**.

Name the economic term used to describe this.

Skill level 1	
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- b. Calculate the amount XYZ Bank can create after an infinite rounds of depositing and lending. The Central Bank has asked XYZ Bank to retain $\frac{1}{4}$ of its deposits to cover immediate costs.

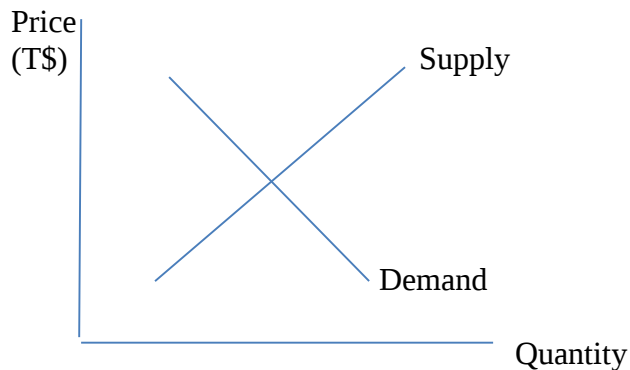
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Question 3: BALANCE OF PAYMENTS

(6 marks)

The graph below relates to Tonga's trade with Japan. Japan is buying more of Tonga's squash and other Tonga-made products.

Graph 9



- a. Draw a curve to illustrate that Japan is demanding more of the Tongan currency in the foreign currency exchange market. Label this curve, **X1**.
- b. State what happens to the value of Tongan Pa'anga in the foreign currency exchange market.

Skill level 1	
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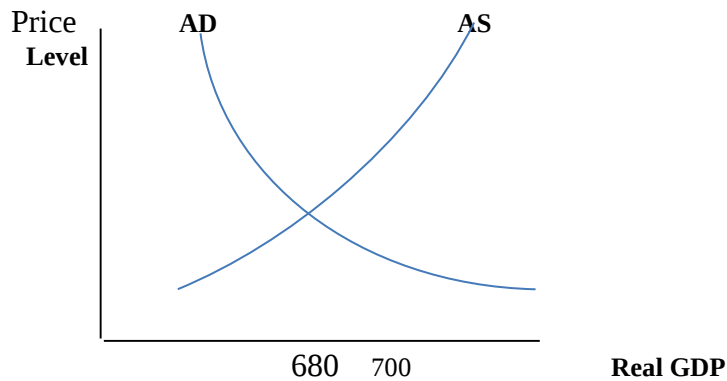
Skill level 1	
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- c. Discuss with a conclusion the impact of (b) on page 17 on Tonga's Balance of Payments.

Skill level 4	
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Question 4: AGGREGATE DEMAND AND AGGREGATE SUPPLY (7 marks)

- a. On the AD/AS graph below, draw the Full Employment line to show that a recessionary gap occurs. Indicate the gap with a double arrow line.



Skill level 1	
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- b. Explain why the recessionary gap in the graph occurs.

Skill level 3	
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- c. One way to close the recessionary gap is to use Expansionary Fiscal Policy. Describe how an increased in government's spending (Expansionary Fiscal Policy) cures the recessionary gap.

Skill level 2	
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- d. Identify a negative economic impact of the expansionary fiscal policy in (c) above on an economy.

Skill level 1	
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