

Summer 2020 – Individual Assignment 4 – (15%)

ECON252 – Macroeconomics-

Name	ID
Fahad Madouh	38993



AUM

American University Of The Middle East

Problem 1: (40 points)

GDP/ Income	Consumption	Investment	Government expenditure	Exports	Imports	Aggregate Expenditure	Inventories	GDP will
8400	6800	1200	1000	400	600	8800	400	Decrease
9200	7400	1200	1000	400	600	9400	200	Decrease
10000	8000	1200	1000	400	600	10000	0	Be constant
10800	8600	1200	1000	400	600	10600	200	Increase
11600	9200	1200	1000	400	600	11200	400	Increase

- a) Fill in the blanks. Find the equilibrium GDP.

The equilibrium GDP is 10,000

- b) Calculate the MPC and the multiplier.

MPC = Consumption change / Income change

$$= \{9200 - 6800\} / \{11600 - 8400\}$$

$$= 0.75$$

MPS = 1 - MPC

$$= 1 - 0.75$$

$$= 0.25$$

Multiplier = (1 / 0.25) = 4

- c) If the government wants to set a new equilibrium at 12000 by how much it needs to increase the government expenditure?

$$12,000 - 10000 = 2000$$

The government expenditure will need to be increased by 2000.



AUM

American University Of The Middle East

Problem 2: (30 points)

Explain whether each of the following events will increase, decrease, or have no effect on long-run aggregate supply.

- a) Country invites more expats. **No effect. More expats will lead to increased supply in the short run if they possess relevant skills. In the long-run, the economy will adjust to its original equilibrium since they will create increased demand that will require more employees to increase production thus supply will meet demand resulting into no effect.**
- b) Government raises the minimum wage. **Increase. Increased minimum wage will result in increased purchasing power of workers and enticement to look for employment by the unemployed thus increased supply.**
- c) Intel invents a new and more powerful computer chip. **Increase. The new computer chip will lead to increased demand. The increased demand will pull increased supply.**
- d) A new virus results in closedown of many companies. **Decrease. Closedown will lead to reduced production and thus reduced supply.**



AUM

American University Of The Middle East

Problem 3: (30 points)

Consider the data of the following table for the years 2015 and 2016

Year	Real GDP	Potential GDP	Unemployment rate
2015	4.26 trillion \$	4.19 trillion \$	3.5 %
2016	4.27 trillion \$	4.34 trillion \$	4.9%

- a) In 2015, Real GDP is higher than potential GDP. Explain how is this possible
The unemployment level was higher in overall, there was an increase in trade activities and increased government expenditure.
- b) Real GDP in 2016 is higher than 2015, the unemployment rate increased substantially from 2015 to 2016. Why did this increase in unemployment occur?
The adoption of new technology that replaced human power must have resulted in production that was cost efficient hence increased real GDP and high unemployment due to use of technology in production instead of human labor.
- c) Was the inflation rate in 2016 to have been higher or lower than the inflation rate in 2015? Does your answer depend on whether the recession that started in December 2015 was caused by a supply shock or by a change in a component of aggregate demand?
The 2016 inflation rate should have been higher than inflation rate in 2015. The cause of the recession that started in 2015 December was a result of negative supply shock that reduced production and increased costs leading the economy into recession.