**Chapter 8- ASAD Component**

Content

1. Consider the importance of respective aggregate components in affecting the rate of economic growth. (10)

2. Explain how demand-pull inflation occurs. (8)

3. Explain how cost-push inflation occurs. (8)

4. Explain how the stagflation occurs due to stagnation of the growth of the AD components and rise in cost of production. (12)

5. Explain how the organization of the international event leads to the growth of the economy. (actual and potential growth) (12)

6. Explain how the potential growth can be achieved with the supply side management policies. (15)

7. Consider how an increase in government expenditure affects the economy. (12)

8. Is consumption the key component that contributes to inflation in SIngapore. (15)

9. Consider the impact of the global downturn due to the impact of COVID-19. (15)

10. Consider the importance of the size of the multiplier on the impact of economic growth. (12)

11.CSQ Practice 1

12. CSQ Practice 2

13. CSQ Practice 3

14. Essay Practice 1

15. Essay Practice 2

**1. Consider the importance of respective aggregate components in affecting the rate of economic growth. (10)**

Aggregate Demand

- The total quantity demanded of all goods and services at different price level made in an economy, ceteris paribus.

- It also represents the total expenditure of the economy

- AD = C + I + G + (X - M)

- AD-AS diagram (stock concept - qty based)

Aggregate Supply

- The quantity supplied of all goods and services at different price levels, ceteris paribus. (Upward-sloping from left to right)

- It is also the total output of goods and services that the entire economy is producing and would sell at each price level,

- Keynesian range (constant cost), increasing cost, full employment level

Comment on the relative importance of the various components of AD in enhancing economic growth. (15)

Introduction

Aggregate demand components are crucial expenditures that will influence the economic activities in the economy and contribute to the rise in the national income via the multiplier process.

Main body

1) Explain the roles of the AD components by showing how they affect the national income via the multiplier

2) Explain the characteristics of the respective components and list their contributions to the economy

Consumption

Contribution

i) It is the fuel for the growth of production that will induce investment

ii) It reflects the level of domestic expenditure - essential for economic growth when external demand is low

Investment

Contribution

- determines the production capacity

- enables the economy to raise its technology through high value investment

- provide massive employment - if it is from manufacturing

Government expenditure

Contribution

- takes care of the social needs

- an instrument to adjust the economic activities so to smoothen and correct the

fluctuations in the economy

- provide the resource for the building of the infrastructure and facilities that support business operation - aiding the growth of investment

Export

Contribution

- provides the expenditure necessary for the growth of the economy especially for an economy that is small

- enables the firms to increase greater production to reap economies of scale

Imports

Contribution

- increases the availability of resources and capital equipment, raising potential economic growth

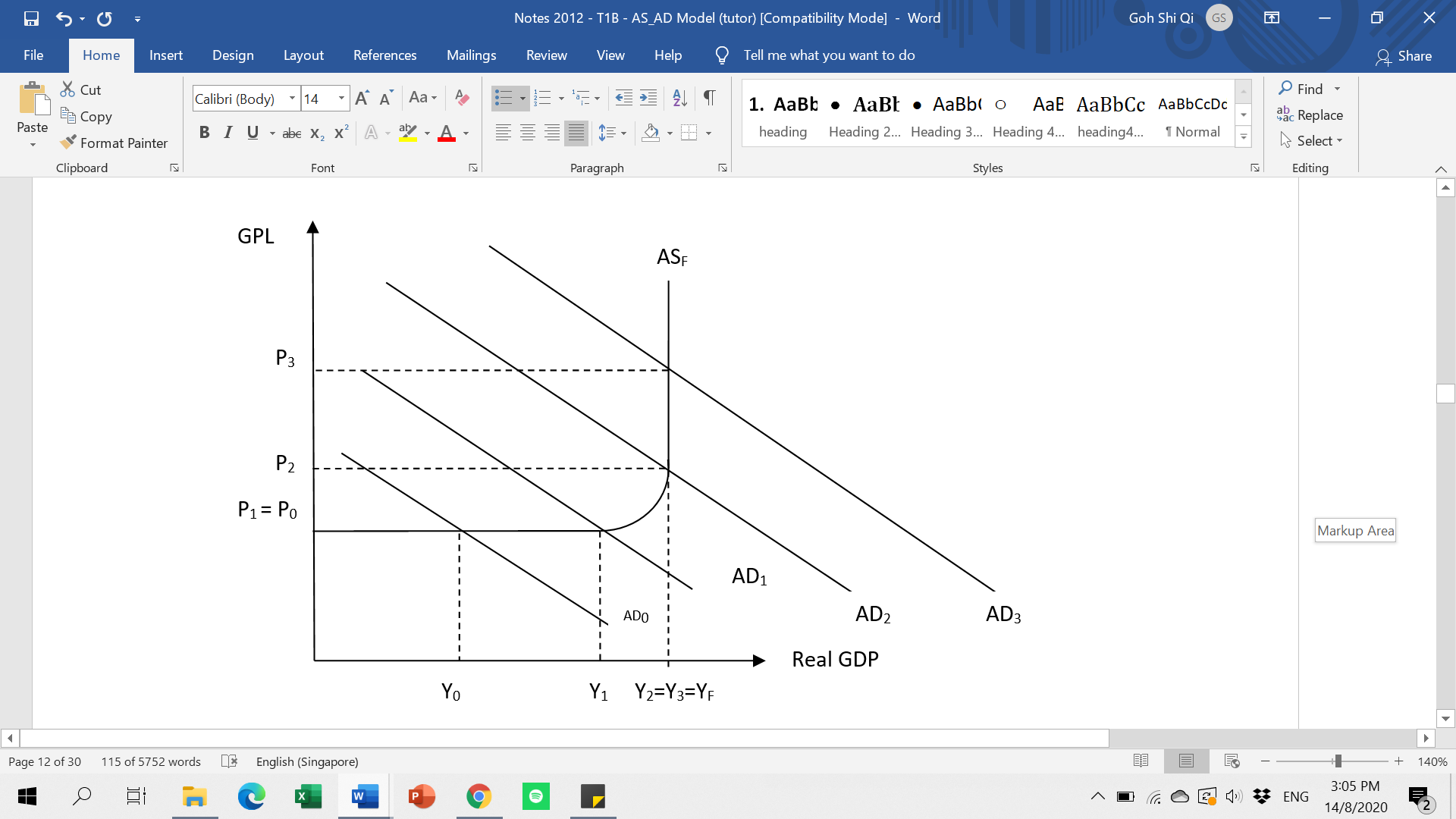
- imports of new products and services raising the standard of living and enhancing the economic development

Conclusion

It is important to take note of the various contributions of AD components as they not only contribute to the rise of national income but have other importance.

**2. Explain how demand-pull inflation occurs. (8)**

Explain how a change in aggregate demand will affect the general price level (GPL) and the real GDP

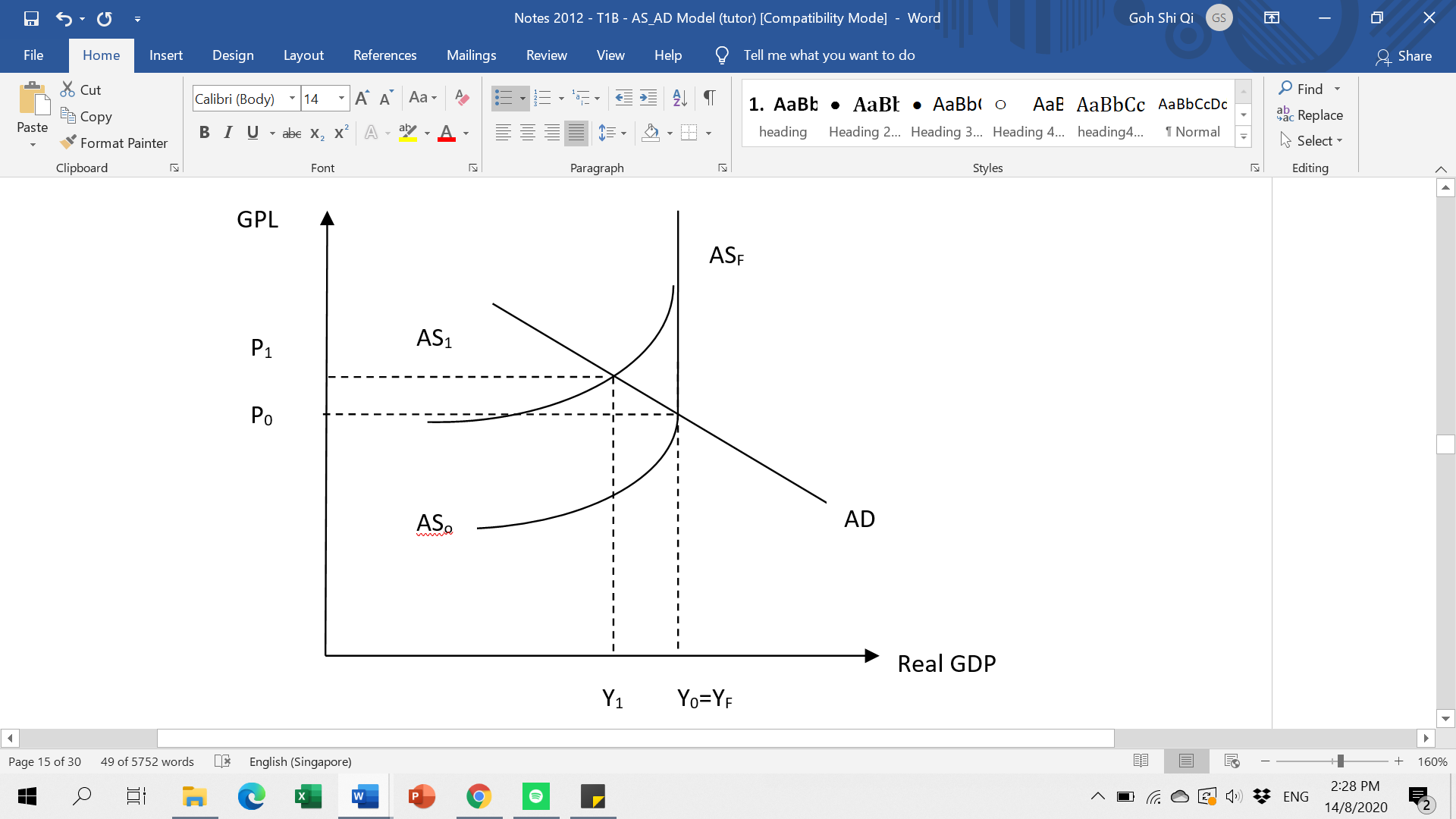


As seen from the diagram, the rise in aggregate demand from AD0 to AD1 will only cause an increase in real GDP from Y0 to Y1 without any change in price level as price is at P1 which is equal to P0. As the aggregate demand rises further from AD1 to AD3 where the supply condition is at rising cost condition or full employment level, there will be excess demand condition which will contribute to rise in price level from P1 or P3 as the real GDP will rise from Y1 to Y2 but remains at Y3 when there is full employment level.

**3. Explain how cost-push inflation occurs. (8)**

How an increase in cost of production will contribute to decrease in AS

- As seen from the diagram the rise in cost of production (Increase in price of oil) will cause the AS curve to shift from AS0 to AS1 which will cause a rise in price level from P0to P1 and a fall in the real GDP from P0 to P1.



Note: The vertical point of ASF remains unchanged as the full employment capacity of production is still at the YF.

(increase in wage – increase in COP -more expensive to reduce – reduce production – decrease in AS)

Increase in wage – increase in cost of production – decrease in AS (decrease in quantity) shift of the SRAS to the left

As seen from the diagram, the rise in cost of production will contribute to a fall in aggregate supply from ASo to AS1 and this will create an excess demand condition. Consequently, there will be a rise in GPL from Po to P1.

**4. Explain how the stagflation occurs due to stagnation of the growth of the AD components and rise in cost of production. (12)**

In the late 1980’s, Japan experienced high wage rate increment and was able to generate sufficient growth in the early years to substantiate the wage increment till the burst of the asset bubble. The wage increment went on a wage price spiral that induces cost-push inflation while the economy’s consumer and investor confidence is tarnished, stagnated and lowered. Consequently, the economy experienced stagflation, a condition of cost push inflation and stagnated or reduction in aggregate demand.

Draw diagram

**5. Explain how the organization of the investment leads to the growth of the economy. (actual and potential growth) (12)**

"With the opening of Resorts World Sentosa and Marina Bay Sands in early 2010, the Ministry of Trade and Industry projects that each of the Integrated Resorts (IRs) would add $2.7 billion to Singapore's Gross Domestic Product (GDP)."

Source: Economic Survey of Singapore 2010

Definition of short-term economic growth and link the project stated

How this project leads to EG ) project – increase in the respective components of AD - increase in AD via the k - rise in real GDP

**Introduction**

• Definition of short-term economic growth – Actual growth

• The factors that will generate short-term economic growth can be seen from the effect of the resorts in generating higher economic activities to raise real GDP

**Main Body**

1. Explain how the opening of RWS and MBS will lead to the growth of real GDP through its impact on appropriate via the multiplier

Consumption will occur as there will be more visitors to the two integrated resorts as there are new leisure activities which include dining, shopping and gaming that will induce more consumption in an affluent society, like Singapore. In addition, there will be inflow of tourists who will raise demand for export services as they raise expenditures at these new resorts. Consequently, this will stimulate the economy as more hotels and other forms of investment are made in the service industry to support the demand for such services brought about by the opening of the Integrated Resorts (IRs). Besides, government expenditure will increase as there is a high degree of building of public infrastructure to support the development of IRs. Therefore, the increase in aggregate demand will induce an increase in the real Gross Domestic Product (GDP) via the multiplier effect, implying that there will be a short-term economic growth.

In the multiplier process, the initial increase in aggregate expenditure expands the circular flow of income and then increases the income of factor earners, which will further expand the circular flow of income with new consumption activities. As long as more consumption activities are made, circular flow of income will continue to expand at the respective level of economic activities until the withdrawal effect is equal to the initial injection, which will cease the expansion of circular flow of income. Consequently, the national income will increase by several folds, depending on the value of the multiplier which is determined by the sum of the MPW (Marginal Propensity to withdraw - MPS + MPT +MPM).

As seen from the diagram, the rise in aggregate demand will lead to a rise in real GDP from Y0 to Y1, indicating that there is short-term economic growth.

However, there are certain factors that will impede this growth. First, the extent of growth brought about by the IRs depends on their ability to increase aggregate demand compared to other industries. As Singapore’s main contribution comes from manufacturing, finance and pharmaceutical, the negative from these industries may undermine the contribution of the two industries to the short-term of economic growth.

Besides this, the value of the multiplier will limit the short-term economic growth as there is a lower degree of expansion of the circular flow of income by the injection brought about due to a higher level of withdrawal, seen in terms of high marginal propensity to save (MPS) and marginal propensity to import (MPM). The value of MPS is high as there is compulsory CPF saving scheme while the value MPM is high as there is a high degree of reliance on import due to our lack of resources.

Third, the condition of high commodity prices and rising wage control will also impede the growth of real GDP as the rising cost condition will reduce the production, undermining the degree of production of services from these industries. (the amount of increase in real GDP is limited by the availability of resources when the economy is near full employment)

Furthermore, production is at full employment level, which will induce an increase in nominal gross domestic product but no real increase in actual production level. The increase in aggregate demand from the two integrated resorts will only raise the price level without any increase in production due to a limited capacity of production. Under such circumstances, the growth of the real GDP will be limited in the short term.

Lastly, the exchange rate will also be a key factor that undermines the contribution of the two IRs towards attaining short-term economic growth as an appreciation of the exchange rate will raise the price of tours to Singapore. A fall in the number of tourists visiting Singapore due to a higher price of tour will reduce the demand for types of services from the service-related industry and thus, lowering the value of aggregate demand.

Conclusion

n of diagram

**6. Explain how the potential growth can be achieved with the supply side management policies. (15)**

Qn: Explain how supply-side management policies like manpower development affect actual and potential growth as seen in the AD-AS analysis

Introduction

Define supply side management policies

Explain that ss policies can be used to attain actual and potential growth

Define actual and potential growth

Main body

1. Explain how manpower policies affect the aggregate demand and supply aspect of the economy

Manpower development

increase in funding for training and development – increase in government expenditure – increase in AD – via k – increase in real GDP – raise actual growth

Increase in government spending – more skilful workers – raise their occupational mobility – expand the labour supply – raise production capacity – attain potential growth

Improvement in infrastructural development - increase the efficiency in the industry - facilitate the mobility of resource - raise the production capacity of production

Liberalisation of the market - reduce the bureaucratic red-tape of the production and business operation - facilitate the mobility of resources - expand production capacity

2. Draw graph and description of the graph

3. Analyse the key determinants of this effect

Conclusion

**7. Consider how an increase in government expenditure affects the economy. (12)**

Introduction

- Define government expenditure

- State that an increase in government expenditure will affect the economy via the AD-AS analysis

Main Body

1. Explain how an increase in government expenditure will increase AD and achieve actual growth

- Increase G → raise efficiency of industries → indirectly boost consumption → increase disposable income → higher level of purchasing power

- Increase G → increase AD → increase NY via k → raise actual growth

2. Explain how an increase in government expenditure will increase AS and achieve potential growth

- Increase G → infrastructural development and R&D → expansion of resources due to high degree of mobility of resources

- Firms can attain higher efficiency of production → raise output → achieve potential growth → seen by the rightward shift of the PPC

3. Show how increase in AD and AS will achieve sustainable EG

- Draw diagram

- Describe diagram

4. Explain the benefits of increasing government expenditure on the economy

(a) Improve standard of living

- Increase G → spillover effects → improve standard of living → higher degree of convenience and comfort due to improved infrastructure and public facilities

(b) Higher efficiency of production

- Raise productivity

→ infrastructural development → raise productivity of industries

→ manpower development → raise skill competency of workers

5. Explain the detriments of increasing government expenditure on economy

(a) Inflationary condition

- Excess increase in AD due to increase in G → under rising cost condition or full employment condition → inflationary condition → increase in general price level → undermine the aim of fiscal stimulus

**8. Is consumption the key component that contributes to inflation in SIngapore. (15)**

Qn: Is consumer spending the main cause of inflation?

* Credit consumption is a huge part of AD

- Wealth

* Increase in household wealth shift consumption upwards

- Expectation of future price

* Households expect inflation in future à consume more now à C shifts up

- Redistribution of income

* Unequal distribution of income will affect the consumer’s base purchasing power. When the income distribution is uneven, the consumption will be low as the rich as MPC is small for the rich.
* With income redistribution, the poor will spend more as MPC for poor is large.
* Consumption will increase, C shifts up.

- Interest rate and availability of credit

* Easy credit facilities will increase credit consumption.
* Lower interest will reduce cost of borrowing, lowering the cost of goods such as fixed assets.
* The above causes increase in consumption, C shifts up.

- Fiscal policy

* Increase taxation reduce disposable income fall in consumption
* Increase in subsidies increase disposable income v increase in consumption

- Tastes and Attitude

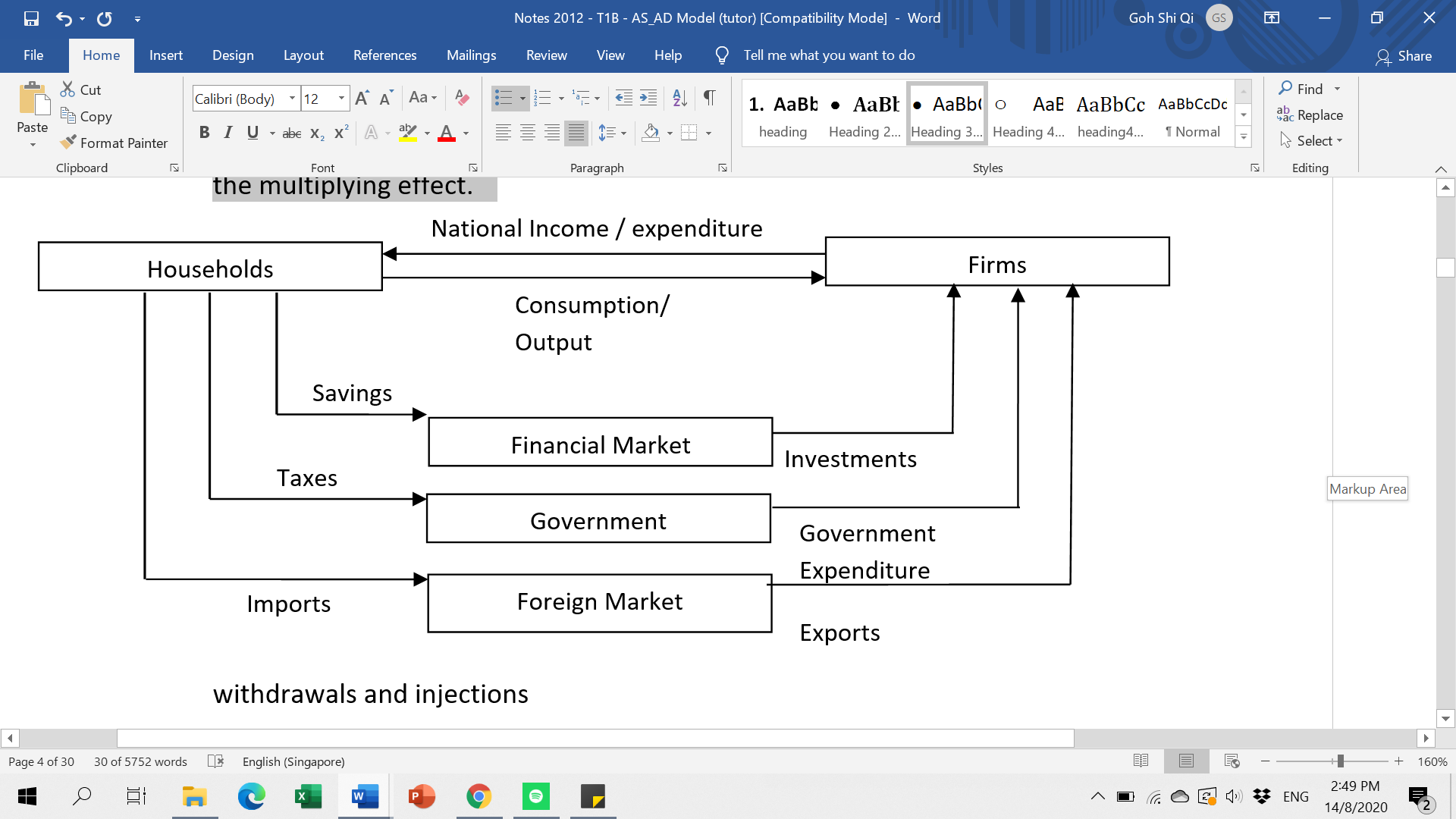
* Change in attitude to be more thrifty Decrease consumption
* Introduction of new consumer goods Increase consumption

9. Consider the impact of the global downturn due to the impact of COVID-19. (15)

**10. Consider the importance of the size of the multiplier on the impact of economic growth. (12)**

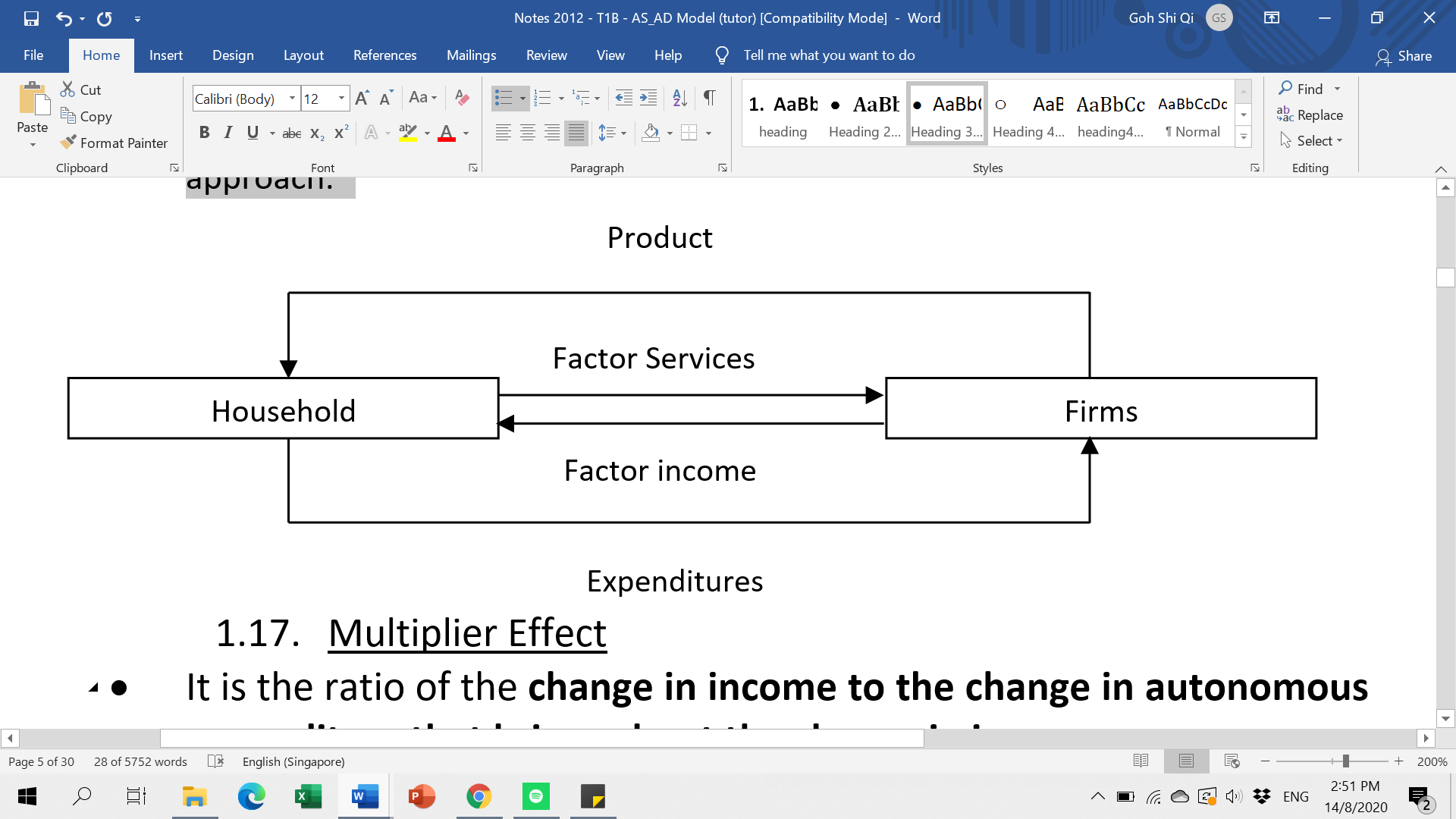
10.1 Circular Flow of Income

- It refers to the flow of injections and withdrawals that will affect the level of transactions and output which will affect the level of national income through the multiplying effect.



10.2 Flow of National Income

- It refers to the different ways on how the level of national income is attained which can be based on the output approach, income approach and expenditure approach.



10.3 Multiplier Effect

- It is the ratio of the change in income to the change in autonomous expenditure that brings about the change in income.

- It determines the amount of change in national income as a result of a change in aggregate expenditure.

- K=NY/AD - > change in AD X K = change in national income

G(100m)x2 (k) = 200m (NY)

K = 2 as 1 / MPW = 2 when MPW = 0.5

- The extent of the multiplier effect depends on the withdrawal effects at various levels of transaction in the circular of income

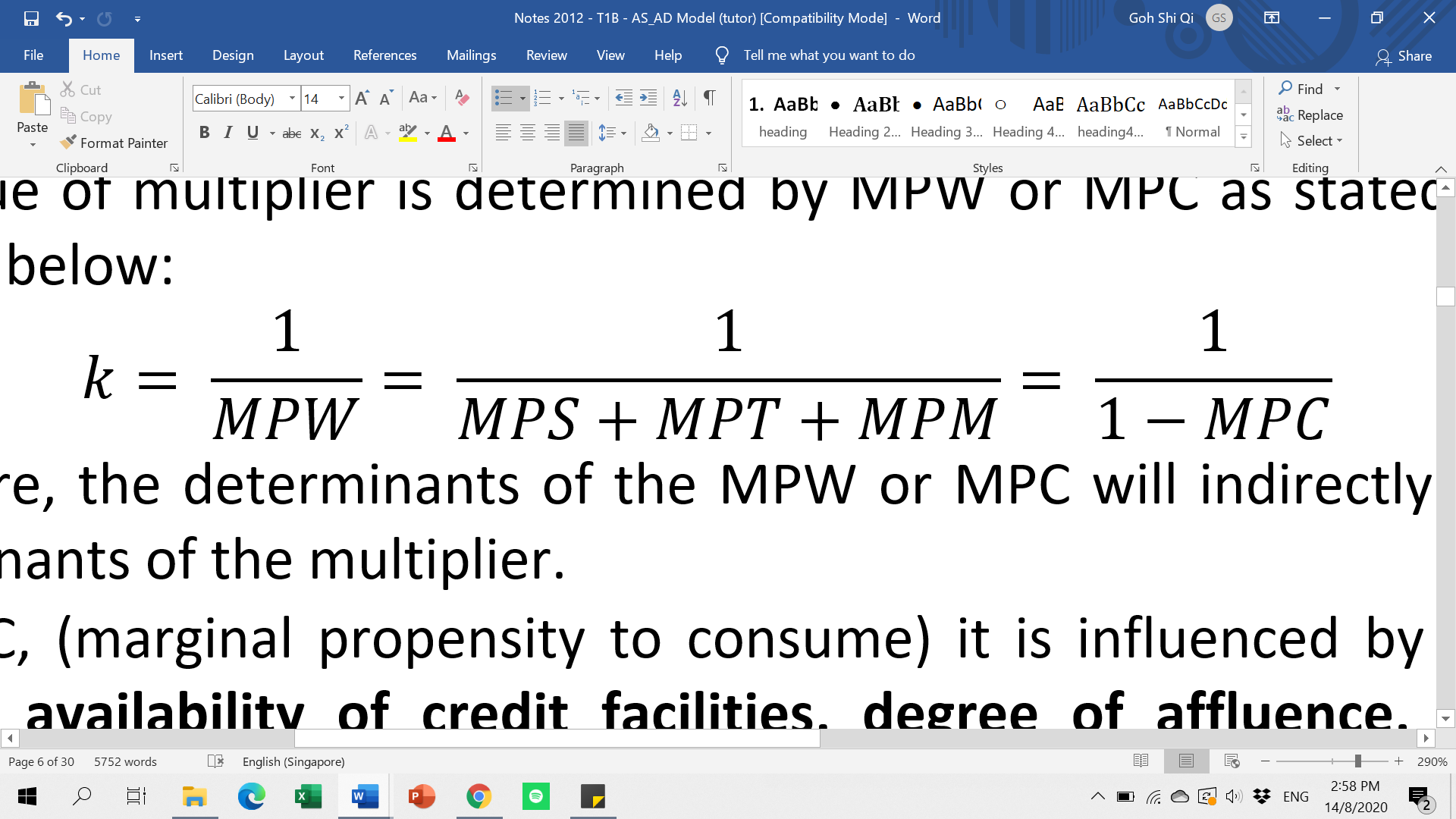
- In the multiplier process, the initial increase in the aggregate expenditure expands the circular flow of income and then increases the income of the factor earners which will further expand the circular flow of income with new consumption activities. As long as more consumption activities take place, the circular flow of income will continue to expand at the respective level of economic activities until the withdrawal effect is equal to the initial injections which will cease the expansion of the circular flow of income. Consequently, the national income will increase by several folds, depending on the value of the multiplier which is determined by the sum of the MPW (Marginal Propensity to withdraw - MPS + MPT +MPM)

10.4 Reverse Multiplier Process

- In the reverse multiplying process, the initial reduction in the aggregate expenditure contracts the circular flow of income and then, reducing the income of the factor earners which will further contract the circular flow of income as consumption activities reduces. As lesser consumption activities are made, the circular flow of income will contribute to contract at the respective level of economic activities until the withdrawal effects is equal to the initial reduction in injection. Consequently, the national income will decrease by several folds, depending on the value of the multiplier which is determined by the sum of MPW (Marginal Propensity to Withdraw = MPS + MPT + MPM)

10.5 Explain how the size of the multiplier is determined

- The value of multiplier is determined by MPW or MPC as stated in the formula below:



- Therefore, the determinants of the MPW or MPC will indirectly be the determinants of the multiplier.

- For MPC, (marginal propensity to consume) it is influenced by factors like the availability of credit facilities, degree of affluence, size of population and consumer behaviour.

- For MPS (marginal propensity to save), it is affected by the attitude towards savings, legislation (compulsory CPF Scheme), level of welfare (better welfare system, less need and willingness to save).

- For MPM (marginal propensity to imports), it is influenced by factors like the degree of reliance on imported resources and the availability of domestic natural endowments.

- For MPT (marginal propensity to tax), it is influenced by the tax rate set by the government

Qn: Significance of multiplier in determining the economic growth of the country.

Introduction

Definition of economic growth and multiplier

Economic principle is based on change in AD x k = change in NY

Main Body

1. Explain how the multiplier works to raise EG (multiplier process)

2. Why it is significant that it will be a strong influence

3. Why other factors are significant in affecting economic growth

- size of economy - depends on export demand

4. Analysis of the impact

Conclusion

11. HCI Prelim H1 Economics 2019 Question 2

**Economic growth and digital transformation**

**Extract 6: China’s economic slowdown and rebalancing**

China has so far managed a gradual economic slowdown. Looking at the demand-side of growth, investment has long been a major driver in China. A gradual rebalancing from investment-driven to consumption-driven growth is needed to avoid any further over-allocation of capital and its negative consequences, such as excess capacity in the economy.

While this rebalancing started a couple of years ago, the most recent Government Work Report reiterate the importance of boosting consumption. Consumption tends to be a more stable driver of growth than investment, being less prone to boom-and-bust of business cycles. In recent years, consumption has become the major driver of growth in China, overtaking investment. Nevertheless, the overall contribution of consumption to growth has been relatively stable in the past few decades. Thus, although rebalancing is under way, its pace is relatively slow. This may relate to still very strong motives to save money related to social security coverage that is only partial and the varying quality of public healthcare and education services provided across China. These factors force people to save for their old age, in case of illness or for their children’s education, and so there is lower consumption.

The key question therefore is how to realise the consumption potential in China. Important prerequisites are high employment rates and rapidly growing incomes. While the unemployment rate has long been low in China, there is less information about underemployment, particularly in rural areas, where, by definition, all people are employed. Income growth has been strong in past years, though in 2016 it was relatively weaker, especially in urban areas. The good news, however, is that rural incomes have been continuously growing faster than urban ones, thereby reducing the urban-rural income divide.

Source: *The Telegraph,* 15 March 2017

(b) Using AD/AS analysis, explain two intended consequences of rebalancing in the Chinese economy and use an AD/AS diagram to explain why rebalancing might not remove the ‘excess capacity’ in the Chinese economy. (Extract 6) [7]

***Answers***

***Requirement for first part: Explain two intended consequences, supported by evidence. [Up to 4 m]***

(i) **To reduce excess capacity**

- Investment used to be the traditional ‘engine of growth’ in China, boosting actual growth.

- However, concurrently, it has led to over-allocation of capital goods in the economy resulting in excessive spare capacity.

- *As mentioned in Extract 6: Rebalancing is needed to avoid any ‘further over-allocation of capital… (reducing) excess capacity in the economy’.*

- Hence, a gradual reduction in investment expenditure to reduce the excess productive capacity is necessary.

- At the same time, a corresponding rise in consumption is required to better utilize the existing spare capacity.

(ii) **To achieve more stable economic growth**

- On the other hand, consumption-led growth tends to be more stable as compared to investment driven growth.

- *As mentioned in Extract 6: ‘Consumption is less prone to ‘boom-and-bust of the business cycle’*

- With consumption replacing investment as the ‘growth driver’, it would lead to less drastic economic upswings and downswings. Thus minimizing any adverse consequences such as heightened cyclical unemployment during downturns.

***Second part : Explain how rebalancing might not remove excess capacity [Up to 3m]***

- Investment has previously created excess capacity in China, and while consumption has increased, it has not reached its ‘full potential’ due to high savings rate in China.

- As a result, the overall rise in AD is probably still insufficient to utilize the spare resources and achieve the full employment output.

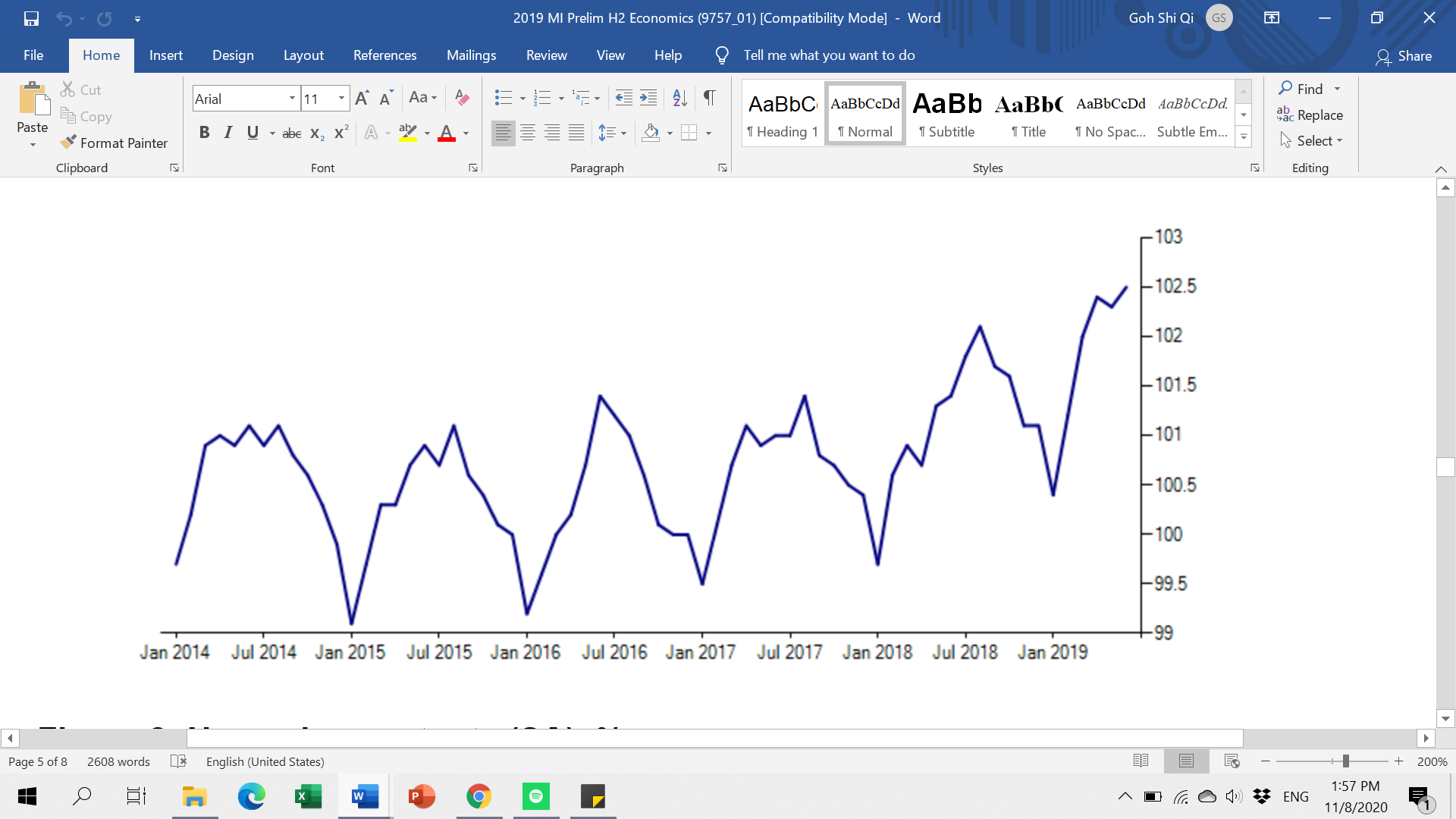
- Thus, the excess capacity has not been removed in China. (Refer to diagram.)

**Insert AD-AS diagram showing excess capacity.**

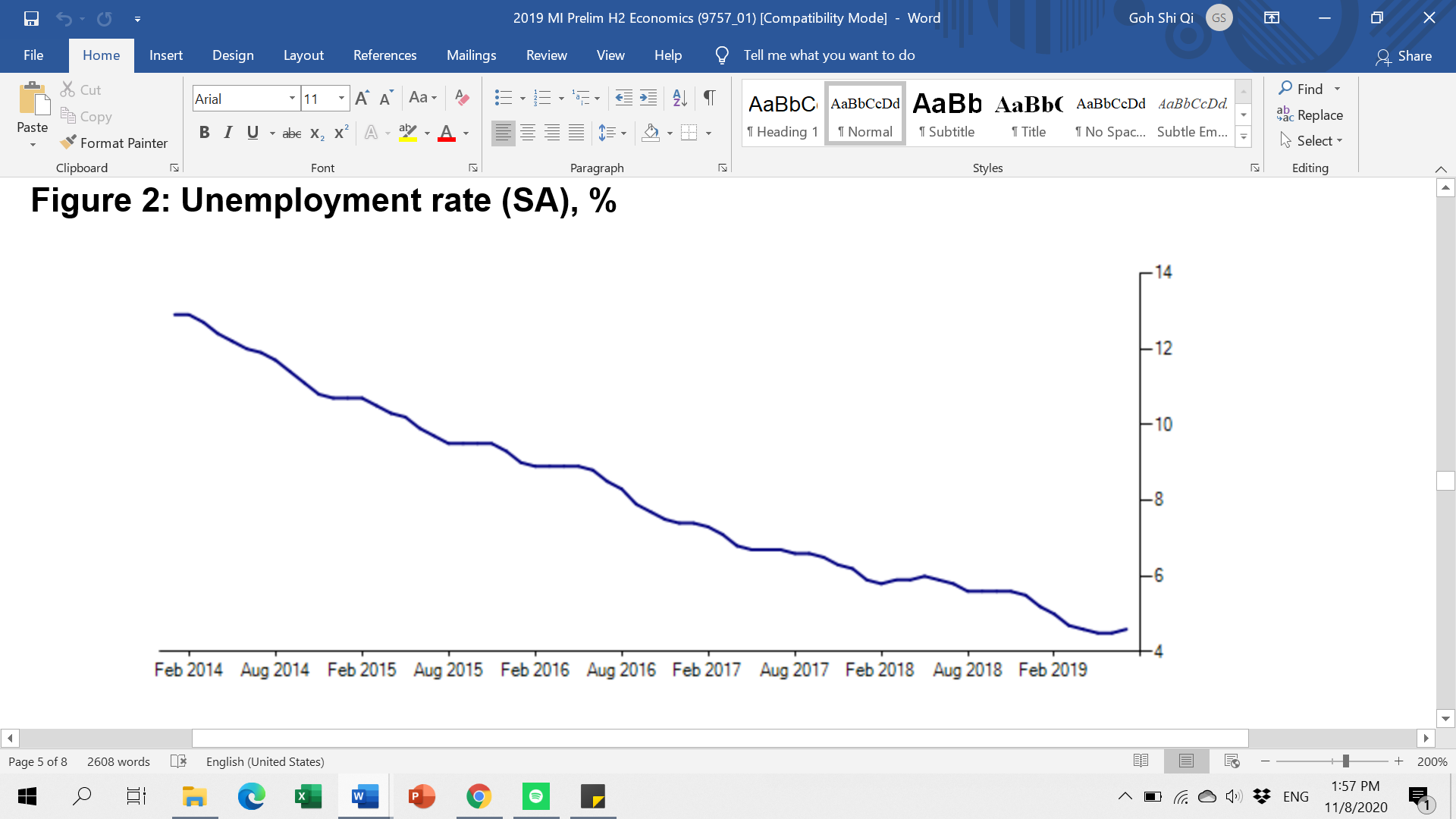
12. MI Prelim H2 2019 Prelims Question 2

**The Irish economy in the midst of Brexit and US trade wars**

**Figure 1: Consumer price index, December 2016=100**

****

**Figure 2: Unemployment rate (SA), %**

****

Source: [*https://www.cso.ie/indicators*](https://www.cso.ie/indicators)*,* assessed 7 Aug 2019

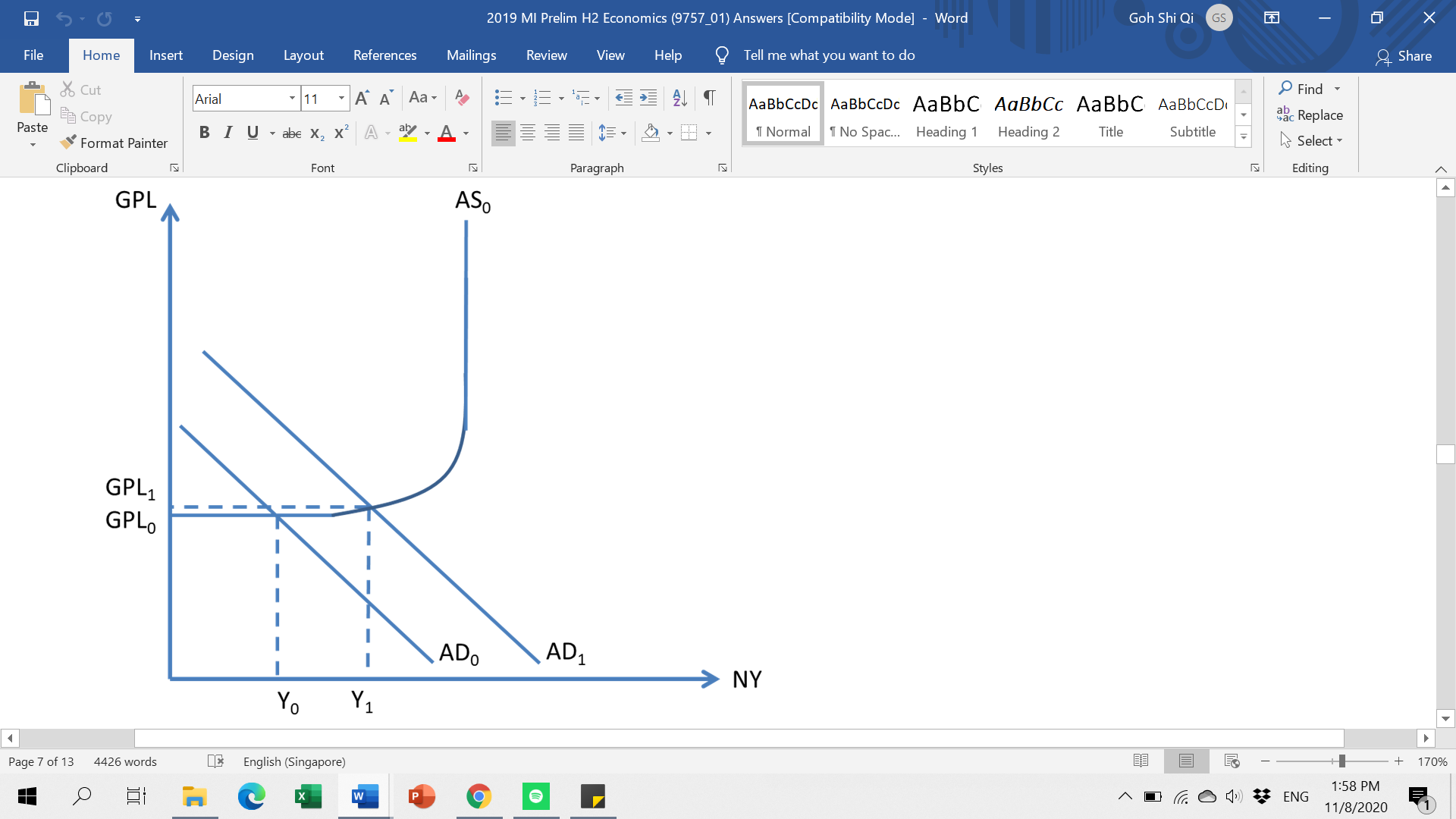
(a) (i) Compare the trend of Irelands’ CPI with its unemployment rate. [2]

Answers

Comparing the general trend, Ireland’s CPI increased while its unemployment rate fell (i.e., **inverse relationship**) [1]. Comparing the extent of the change, the **CPI’s rise is very slight but the fall in unemployment was very steep** [1]

(ii) Referring to Extract 6, using an AD AS diagram, explain the relationship between the 2 variables above.

Economy doing well, **C increased** by 2.9%, causing **AD increase from AD0 to AD1** [1]→ NY increase from Y0 to Y1 and thus employment increases as higher output production needs more resources including labour (thus **unN decreases**[1]) but not yet at Yf, thus **GPL slight increase**[1]



13. SAJC H2 2019 Prelims Question 2

**US- China Trade War: What’s in it for Asian economies?**

**Table 2: Components of GDP in selected economies, 2017**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Consumption Expenditure**  **(% of GDP)** | **Government Consumption Expenditure**  **(% of GDP)** | **Exports of goods and services**  **(% of GDP)** | **Imports of goods and services**  **(% of GDP)** |
| **China** | 52.6 | 14.3 | 19.8 | 18.0 |
| **Singapore** | 46.5 | 10.9 | 173.3 | 149.1 |
| **US** | 82.4 | 14.0 | 12.1 | 15.0 |
| **Vietnam** | 74.5 | 6.5 | 101.6 | 98.8 |

(d) Explain the usefulness of Table 2 in comparing the size of the multiplier between the US and Vietnam. [4]

**Answers**

Table 2 shows us that Vietnam imports make up a much larger % of GDP compared to the US. This means that Vietnam is **likely** to have a higher marginal propensity to import than the US. [1]

Since k = 1/mps+mpt+mpm, [1] Vietnam’s k is likely to be smaller than that of the US. [1]

However, Table 2 does not provide us any information on saving and tax rates and hence, there is no info on mps and mpt.

*OR*

While import expenditure as a % of GDP gives us an idea of how reliant an economy is on imports, it is only an approximation of mpm value.

Hence Table 2 is limited in its usefulness. [1]

**Alternative Answer:**

Table 2 shows that Vietnam has a smaller consumption expenditure as a % of GDP compared to US suggesting that the marginal propensity to consume (mpc) is smaller in Vietnam than in US. [1]

As k = 1/1-mpc [1], Vietnam’s k is likely to be smaller than that of US. [1]

However, consumption as a % of GDP gives us only an approximation of the mpc value hence Table 2 is limited in its usefulness. [1]

14. GCE A Level H2 Economics 2011 Paper 2 Qsn 4

(a) Explain the process whereby an increase in government expenditure can lead to a bigger change in national income. [10]

(b) Discuss the extent to which conflicts in government macroeconomic objects limit the scope for the use of fiscal policy in any economy. [15]

15. MI Prelim 2019 Qsn 4

Foreign direct investment from the USA to Singapore hit over US$77 billion in 2018. Source: EDB, Singapore, March 2019

(a) Explain the factors that determine the level of foreign direct investment in a country. [10]

(b) Assess the role of foreign direct investment in raising the standard of living of a country. [15]