SINGAPORE MANAGEMENT UNIVERSITY

## Homework 10 - KEY

Average: $84.65+0 \mathrm{pt} \mathrm{Gl}$ bonus

## Due on 2/4/2024, by 23:00


#### Abstract

This assignment is optional but STRONGLY RECOMMENDED. If you do not submit the answers till the deadline, the score of your final exam will substitute for the score for this assignment. Submit only the correct letter for each task on eLearn under 'Quizzes' within 'COR2100-Economics and Society G7-8-9-10'. Note that the actual text of questions and answers is not supposed to appear on the eLearn quiz. You have unlimited attempts. The system is programmed to credit your last attempt. Be informed that if you submit an attempt and afterwards you re-open the quiz, you must submit your answers AGAIN. Otherwise, the system will grade the unfinished attempt with 0 (because it is the last one) and there is NOTHING I can do to fix this after the fact. Late homework or homework submitted outside eLearn cannot be accepted as this would violate SMU official policy for fairness and transparency in grading. This assignment is protected by Grade Insurance ${ }^{\text {TM }}$ : If the assignment's average turns out to be below 75 , an equal amount of bonus points will be given to every work, for the average to become 75. Direct any homework questions to your TA.


Scenario 10.1: Consider an economy, where $X=M$. Household's consumption is $C=200+0.5(Y-T)$, private investment I is 110, government spending is 240 and tax coefficient is $10 \%$.

1. According to scenario 10.1, how much is the equilibrium output $(Y)$ ?
A. Around 200 units.
B. Around 400 units.
C. Around 600 units.
D. Around 800 units.
$100 \%$ E. Around 1,000 units.
F. Around 1,200 units.
[It should be $Y=C+I+G$ or $Y=200+0.5(Y-0.1 Y)+110+240$ or $Y=550+0.45 Y$ or $Y=$ $550 / 0.55$ or $Y=1,000$ ]
2. According to scenario 10.1, how much is the equilibrium consumption ( $C$ )?
A. Around 150 units.
B. Around 250 units.
C. Around 350 units.
D. Around 450 units.
E. Around 550 units.
$95 \%$ F. Around 650 units.

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[C=200+0.5(Y-0.1 Y)=200+0.45 Y=200+0.45 \cdot 1,000=650]
$$

3. According to scenario 10.1, how much is the government budget deficit $(G-T)$ at equilibrium?
A. Around - 150 units.
B. Around -100 units
C. Around -50 units.
D. Around zero.
E. Around 50 units.
F. Around 100 units.
$91 \%$. Around 150 units.

$$
[G-T=240-0.10 \cdot 1,000=140]
$$

4. According to scenario 10.1, if the government decreases $G$ to 150 , how much will the equilibrium level of output $(Y)$ be?
A. Around 200 units.
B. Around 400 units.
C. Around 600 units.
$95 \%$ D. Around 800 units.
E. Around 1,000 units.
F. Around 1,200 units.
$[Y=C+I+G$ or $Y=200+0.5(Y-0.1 Y)+110+150$ or $Y=460+0.45 Y$ or $Y=460 / 0.55$ or $Y \approx 836]$
5. According to scenario 10.1, if the government decreases $G$ to 150 , how much will the equilibrium level of consumption $(C)$ be?
A. Around 150 units.
B. Around 250 units.
C. Around 350 units.
D. Around 450 units.
$89 \%$ E. Around 550 units.
F. Around 650 units.

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[C=200+0.5(Y-0.1 Y)=200+0.45 Y \approx 200+0.45 \cdot 836 \approx 576]
$$

6. According to scenario 10.1, if the government decreases $G$ to 150 , how much will government budget deficit ( $G-T$ ) be at equilibrium?
A. Around -150 units.
B. Around -100 units.
C. Around -50 units.
D. Around zero.
$88 \%$ E. Around 50 units.
F. Around 100 units.
G. Around 150 units.

$$
[G-T \approx 150-0.1 \cdot 836 \approx 66]
$$

7! According to scenario 10.1, if the government increases the taxation coefficient to $20 \%$, how much will the equilibrium level of output $(Y)$ be?
A. Around 100 units.
B. Around 300 units.
C. Around 500 units.
D. Around 700 units.

94\%E. Around 900 units.
F. Around 1,100 units.
$[Y=C+I+G$ or $Y=200+0.5(Y-0.2 Y)+110+240$ or $Y=550+0.4 Y$ or $Y=550 / 0.6$ or $Y \approx 917]$
8. According to scenario 10.1 , if the government increases the taxation coefficient to $20 \%$, how much will the equilibrium level of consumption $(C)$ be?
A. Around 150 units.
B. Around 250 units.
C. Around 350 units.
D. Around 450 units.
$92 \%$ E. Around 550 units.
F. Around 650 units.

$$
[C=200+0.5(Y-0.2 Y)=200+0.4 Y \approx 200+0.4 \cdot 917 \approx 567]
$$

9. If the government in scenario 10.1 increases the taxation coefficient to $20 \%$, how much will the government budget deficit $(G-T)$ be at equilibrium?
A. Around -75 units.
B. Around -50 units.
C. Around -25 units.
D. Around zero.
E. Around 25 units.

89\%F. Around 50 units.
G. Around 75 units.

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[G-T \approx 240-0.2 \cdot 917 \approx 57]
$$

10 . According to scenario 10.1 , which policy decreases the budget deficit by sacrificing less output per unit of deficit decreased?
A. A decrease in $G$ to 150. [This would reduce budget deficit by around $140-66=74$ units, while decreasing GDP by around 1,000-836 $=164$ units. Each unit of decrease in deficit sacrifices $164 / 74 \approx 2.22$ units of GDP]
$77 \%$ B. An increase in $t$ to 20\%. [This would reduce budget deficit by around $140-57=83$ units, while decreasing GDP by around 1,000-917 $=83$ units. Each unit of decrease in deficit sacrifices 83/83 = 1 unit of GDP]
$14 \%$. Both $A$ and $B$ sacrifice an equal amount of GDP per unit of budget deficit decreased.
11. Which of the following could be a goal of Expansionary Monetary Policy?
$20 \%$ A. To decrease the interest rate. [Decrease in r is the means of EMP, not a goal]
67\%B. To increase private investment. [Through the reduction in interest rate, CB stimulates investment]
C. To decrease inflation. [EMP may increase inflation, not decrease it]
$13 \%$. All of the above.
12. Which of the following could be a goal of Contractionary Monetary Policy?
A. To decrease the interest rate. [r must be increased for CMP]
B. To increase private investment. [Increase in r will discourage investment]
$97 \%$ C. To decrease inflation. [The decrease in money supply required to increase r , can prevent prices from rising further]
D. None of the above.
13. Which of the following would be more suitable for a country with high government debt and high inflation?
A. Expansionary monetary policy. [Printing money could pay for debt but will create more inflation]

18\%B. Contractionary monetary policy. [It will decrease inflation but will not help with the debt]
C. Expansionary fiscal policy. [It would worsen both inflation and the debt]
$81 \% \mathrm{D}$. Contractionary fiscal policy. [Government deficit could improve, reducing the debt, plus the economy will cool down lowering inflation]
(14.) Which of the following is known as "stabilization" policy?
$61 \%$ A. The CB changing the money supply to prevent the interest rate from changing.
B. The government increasing $I$ to counterbalance a decrease in $C$. [Completely non-sense]
C. The CB selling government securities in order to increase M1. [Completely wrong]
$33 \%$ D. All of the above.
(15.) Which of the following is most likely to trigger link 2 ?
A. A decrease in GDP.
$16 \% \mathrm{~B}$. An increase in investment.
$72 \%$ C. A decrease in money supply.
D. An increase in consumption.
[Link 2 is when a change in r causes a change in I towards the opposite direction. A change in r is most likely to be a result of a change in money supply]
(16.) Which of the following did NOT take place during the 2007-09 Financial Crisis?
A. Many people lost their jobs even outside the banking/finance sector. [Indeed]
$40 \%$ B. Everyone tried to withdraw their deposits from banks. [The ample-reserves regime reinstated confidence in the banking system]
C. Several major financial institutions collapsed. [Indeed]
$54 \%$. A rapid increase in house prices due to speculation. [This was the main reason why the crisis emerged]
17. Which of the following is accurate regarding the Greek Debt crisis?
$13 \%$ A. Greece was unable to pay its debt and defaulted on the entire amount. [Never happened]
83\%B. Greece went into the longest and deepest recession ever experienced by a developed nation.
C. Greece completely recovered after a bailout by the IMF, the ECB and the EU. [A few bailouts occurred but they did not really help the country to recover]
D. Greece recovered because the ECB conducted expansionary monetary policy. [The ECB did conduct expansionary monetary policy that period (known as quantitative easing, EQ) but not significant revenue from the EQ was used to ease Greece's debt]
18. Which of the following is true for the Great Depression?
A. The second world war helped the US to exit the Great Depression.
B. Commercial banks speculated in the stock market.
C. Companies overestimated the demand for their products.
$86 \%$. All of the above. [All of the above are mentioned in the external video]
19. Country A has $80 \%$ Debt/GDP ratio and country B has 135\% Debt/GDP ratio. Yet, investors prefer country's B government bonds over those of country's $A$. Which of the following may be the reason?
$91 \%$ A. Country B takes on debt for investment, while country A mainly for consumption. [Taking debt for investment increases the chances that a country will be able to fulfill its debt obligations]
B. Country B is smaller. [Has nothing to do. Debt is divided by the GDP anyways]
C. Country B has higher inflation. [High inflation would have a negative impact on the attractiveness of a country's bonds]
D. All of the above.
20. Which of the following is most likely to happen if the CB allows the interest rate to fluctuate freely with the daily changes in money demand?
96\%A. S-R fluctuations in the economy will be more intense.
B. Unemployment will be higher.
C. GDP will be lower.
D. Consumption will be lower.
[If the CB does not stabilize r, shocks from the commodity market will be transferred to the money market, triggering link 2 and creating a loop of shocks between the markets]

