

Homework 10 – KEY

Average: 82.99 + Opt GI bonus

Due on 7/11/2023, by 23:00

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 G7-8-26-49'. 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™: 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 net exports are zero. Household's consumption is given by $C = 250 + 0.6(Y - T)$, private investment (I) is 120, government spending, (G) is 230 and the tax coefficient (t) is 15%.

1✓ According to scenario 10.1, how much is the equilibrium output (Y)?

- A. Around 300 units.
- B. Around 600 units.
- C. Around 900 units.
- 98%D. Around 1,200 units.**
- E. Around 1,500 units.
- F. Around 1,800 units.

[Since net exports are zero, it is $X = M$. In addition, it should be $Y = C + I + G$ or $Y = 250 + 0.6(Y - 0.15Y) + 120 + 230$ or $Y = 600 + 0.51Y$ or $Y = 600/0.49$ or $Y \approx 1,224$]

2✓ According to scenario 10.1, how much is the equilibrium consumption (C)?

- A. Around 150 units.
- B. Around 300 units.
- C. Around 450 units.
- D. Around 600 units.
- E. Around 750 units.

97%F. Around 900 units.

[$C = 250 + 0.6(Y - 0.15Y) = 250 + 0.51Y \approx 250 + 0.51 \cdot 1,224 \approx 874$]

3✓ According to scenario 10.1, how much is the government budget deficit ($G - T$) at equilibrium?

- A. Around -75 units.
- B. Around -50 units.
- C. Around -25 units.
- D. Around zero.
- E. Around 25 units.

96%F. Around 50 units.

- G. Around 75 units.

[$G - T \approx 230 - 0.15 \cdot 1,224 \approx 46$]

4[✓] According to scenario 10.1, if the government increases G by 100, by how much will the equilibrium level of output (Y) increase?

- A. Around 50 units.
- B. Around 100 units.
- C. Around 150 units.
- 94%D. Around 200 units.**
- E. Around 250 units.
- F. Around 300 units.

$[Y = C + I + G$ or $Y = 250 + 0.6(Y - 0.15Y) + 120 + 330$ or $Y = 700 + 0.51Y$ or $Y = 700/0.49$ or $Y \approx 1,429$. Thus, the equilibrium level of output will increase by around $1,429 - 1,224 \approx 205$ units]

5[✓] According to scenario 10.1, if the government increases G by 100, by how much will the equilibrium level of consumption (C) increase?

- A. By around 25 units.
- B. By around 50 units.
- C. By around 75 units.
- 86%D. By around 100 units.**
- E. By around 125 units.
- F. By around 150 units.

$[C = 250 + 0.6(Y - 0.15Y) = 250 + 0.51Y \approx 250 + 0.51 \cdot 1,429 \approx 979$. Thus, level of consumption will increase by around $979 - 874 = 105$ units]

6[✓] According to scenario 10.1, if the government increases G by 100, by how much will government budget deficit ($G - T$) increase at equilibrium?

- A. By around 25 units.
- B. By around 50 units.
- 87%C. By around 75 units.**
- D. By around 100 units.
- E. By around 125 units.
- F. By around 150 units.

$[G - T \approx 330 - 0.15 \cdot 1,429 \approx 116$. Thus, the equilibrium level of the government budget deficit will increase by around $116 - 46 = 70$]

7[✓] According to scenario 10.1, if G is not increased but the government decreases the taxation coefficient to 5%, by how much will the equilibrium level of output (Y) be increased?

- A. By around 60 units.
- B. By around 90 units.
- C. By around 120 units.
- D. By around 150 units.
- 91%E. By around 170 units.**
- F. By around 200 units.

$[Y = C + I + G$ or $Y = 250 + 0.6(Y - 0.05Y) + 120 + 230$ or $Y = 600 + 0.57Y$ or $Y = 600/0.43$ or $Y \approx 1,395$. Thus, the equilibrium level of output will increase by around $1,395 - 1,224 = 171$ units]

8✓ According to scenario 10.1, if G is not increased but the government decreases the taxation coefficient to 5%, by how much will the equilibrium level of consumption (C) be increased?

- A. By around 30 units.
- B. By around 60 units.
- C. By around 90 units.
- D. By around 120 units.
- E. By around 150 units.

84%F. **By around 180 units.**

$[C = 250 + 0.6(Y - 0.05Y) = 250 + 0.57Y \approx 250 + 0.57 \cdot 1,395 \approx 1,045]$. Thus, the equilibrium level of consumption will increase by around $1,045 - 874 = 171$ units]

9✓ According to scenario 10.1, if G is not increased but the government decreases the taxation coefficient to 5%, by how much will the government budget deficit ($G - T$) increase at equilibrium?

- A. By around zero.
- B. By around 40 units.
- C. By around 80 units.

87%D. **By around 120 units.**

- E. By around 160 units.
- F. By around 200 units.

$[G - T \approx 230 - 0.05 \cdot 1,395 \approx 160]$. Thus, the equilibrium level of the government budget deficit will increase by around $160 - 46 = 114$ units]

10✓ According to scenario 10.1, if none of G or t change but the marginal propensity to consume becomes 0.4, how much will the equilibrium level of output (Y) be?

- A. Around 300 units.
- B. Around 600 units.
- 91%C. **Around 900 units.**
- D. Around 1,200 units.
- E. Around 1,500 units.
- F. Around 1,800 units.

$[Y = C + I + G \text{ or } Y = 250 + 0.4(Y - 0.15Y) + 120 + 230 \text{ or } Y = 600 + 0.34Y \text{ or } Y = 600/0.66 \text{ or } Y \approx 909]$

11✓ According to scenario 10.1, if none of G or t change but the marginal propensity to consume becomes 0.4, how much will the equilibrium level of consumption (C) be?

- A. Around 150 units.
- B. Around 300 units.
- C. Around 450 units.

91%D. **Around 600 units.**

- E. Around 750 units.
- F. Around 900 units.

$[C = 250 + 0.4(Y - 0.15Y) = 250 + 0.34Y \approx 250 + 0.34 \cdot 909 \approx 559]$

- 12.✓ According to scenario 10.1, if none of G or t change but the marginal propensity to consume becomes 0.4, how much will the government budget deficit ($G - T$) be at equilibrium?
- A. Around -90 units.
 - B. Around -60 units.
 - C. Around -30 units.
 - D. Around zero.
 - E. Around 30 units.
 - F. Around 60 units.
- 88%G. Around 90 units.**
 $[G - T \approx 230 - 0.15 \cdot 909 \approx 94]$
- 13.✓ Which of the following is most likely to be the target of contractionary monetary policy?
- A. To decrease government deficit. *[This concerns fiscal policy]*
 - 73%B. To lower the price level.** *[Lowering the money supply is the main tool used by CBs to ease inflation]*
 - 16%C.** Both A and B.
 - D. None of the above.
- 14.** Which of the following is LESS likely to be the intention of contractionary fiscal policy?
- A. To curb the national debt. *[Both the decrease in government spending and the increase in taxes lead to the reduction of national debt]*
 - B. To lower the inflation rate. *[CFP will decrease demand for goods, thus reducing price level]*
 - 37%C.** To increase government revenue. *[This can be achieved if government decides to increase its taxes]*
 - 54%D. To decrease money demand.** *[CFP could reduce demand for money, but why would this ever be a government's intention?]*
- 15.** Which of the following is most likely to be the target of expansionary fiscal policy?
- 65%A. To increase employment.** *[EFP will boost GDP, thus increasing production and employment]*
 - B. To increase the supply of money. *[This could happen if the CB decides it but it will never be the target of EFP]*
 - 28%C.** Both A and B.
 - D. None of the above.
- 16.✓ Which of the following was the main cause of both the Great Depression and the 2007-09 World Financial Crisis?
- 95%A. The prices of certain assets increased disproportionately to their real value.**
 - B. The US economy was hit by hyperinflation.
 - C. The US government was unable to borrow money due to its enormous debt to GDP ratio.
 - D. The US dollar devaluated.
- [The Great Depression and the 2007-09 Financial Crisis were caused by a bubble in the stock market and the housing market, respectively]*
- 17.✓ Which of the following may happen when the real interest rate in an economy becomes negative?
- A. Consumption will decrease. *[If money becomes cheaper, consumption will tend to increase]*
 - B. Prices will tend to fall. *[The cheap money will stimulate demand for consumption and prices will tend to increase]*
 - C. The quantity of loans will tend to decrease. *[When money is cheaper, people will want to use more of it]*
 - 89%D. Investment will tend to increase.** *[Investment is negatively related to the real interest rate]*

18. Which of the following is accurate regarding the Greek Debt crisis?

55%A. Austerity imposed by foreign Institutions diminished Greece's production capacity.

B. Hyperinflation crippled the Greek economy irreversibly.

34%C. Extremely high interest rates discouraged private investment.

D. Greek real GDP increased, but nominal GDP decreased.

[Because of Greece's high levels of debt, IMF, ECB and the European Commission forced the Greek government to intense austerity, which resulted in a large reduction in its real GDP]

19. Suppose that in a scarce-reserves situation, the government decreases income tax in order to stimulate economic activity. How should the Central Bank act in order to facilitate the fiscal policy?

74%A. It should offer to buy government securities.

18%B. It should offer to sell government securities.

C. It should increase government spending. *[CB cannot conduct fiscal policy]*

D. It should not interfere with the government policy.

[The increase in Y caused by EFP will put pressure for the interest rate to increase (through link 1). The CB can prevent this by conducting OMPs to increase money supply]

20. How can the government stabilize a shock that started from the CB decreasing the interest rate?

A. It could decrease income taxes.

B. It could increase its spending.

42%C. Both A and B.

50%D. None of the above.

[The government does not have stabilization role or stabilization tools to neutralize monetary shocks]