Exam 2 Sample Questions

Identify and **explain the significance of**:

Inventory adjustment mechanism

a. GDP gap : difference b/w actual (equilibrium) Y_e and non-inflationary full employment Y^*, where $Y^* > Y_e \Rightarrow$ indicate unemployment is the problem. measure the economic costs of unemployment.

b. Excess Reserves
= Total Reserve − legal required reserve.
The only funds commercial banks can loan are ER. If commercial banks hold rather than lend ER, then actual $\Delta M^S <$ max potential ΔM^S

c. Three types of unemployment
structure, frictional, cyclical.

d. inventory adjustment mechanism

e. Quantity theory of money

f. Frictional unemployment

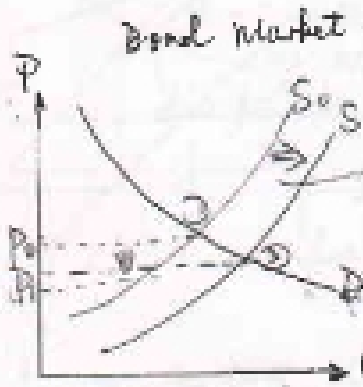
g. effects of unanticipated inflation on creditors

h. Three functions of money
① as a medium of exchange ② as a unit of accounting ③ as a store of value.

i. Default risk

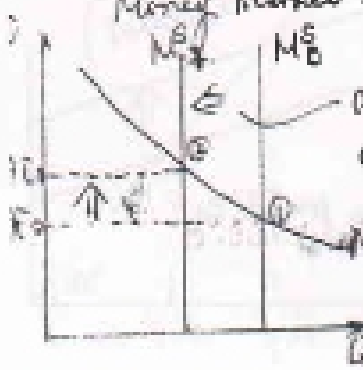
j. Consumer Wealth

k. how inflation affects creditors

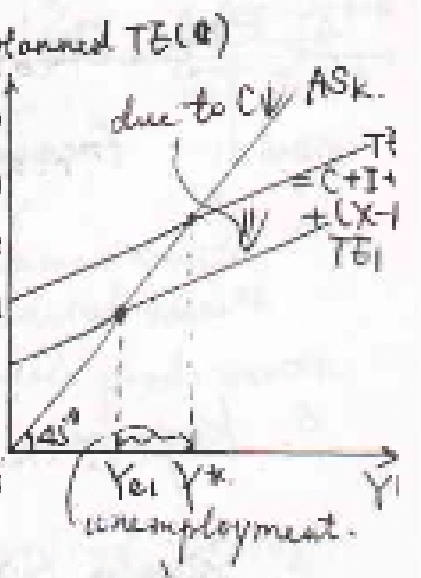


1. Use the Quantity Theory of Money to explain inflation. $\%\Delta M^S + \%\Delta V = \%\Delta P + \%\Delta Q$.
If $\%\Delta V \approx 0$, $\%\Delta M^S > \%\Delta Q \Rightarrow \%\Delta P > 0$ inflation.
due to Fed sell bond

2. If you were a member of the Federal Reserve Board of Governors, what *three* policies would you suggest to combat inflation? Why? Explain *carefully*.
① Legal Reserve Requirement − raise required reserve rate (RRR)
② Discount Rate − raise
③ Open market operation − sell bonds



3. Using money *and* bond market diagrams, illustrate and briefly explain effects the effects of your suggested open market operation. Same as 2) & 3).
due to Fed sell bond



4. **Assume**: (a) the economy is initially in equilibrium at noninflationary full-employment GDP ($^*Y$) (b) due to terrorist attacks, the consumption function shifts downward by $100 billion and (c) the marginal propensity to consume is 0.8. Using a Keynesian total expenditure (TE)/aggregate supply (AS_K) diagram, illustrate and explain the probable macroeconomic effects of the decline in consumer spending. $\Delta C = -100$ $\Delta Y = -500$ $\Delta Y = 500$

$\frac{500}{4} = 125$.

5. How big a tax cut would be needed to restore full-employment under the circumstances outline above? Show your calculations. MPC = 0.8

Given C↓ by $100 billion, in order to restore Y^*, we need to increase C by $100 billion. $\Delta C = \$100$ billion

$M_{Tax} = -\frac{MPC}{1-MPC} = -\frac{0.8}{1-0.8} = -4$ $\Delta Y = M_{Tax} \cdot \Delta T$

$MPC = \frac{\Delta C}{\Delta Y_d} = 0.8$ $\Delta Y_d = \Delta C / 0.8 = 100/0.8 = 125$ billion.

$\Rightarrow$ increase ΔY_d by 125 billion

$\Rightarrow$ cut tax by $125 billion.

Exam 2.

△ GDP. Inflation. Unemployment. (Definition & Significances).
- GDP Gap., Non-inflationary full employment GDP.
- Three major economic effects of inflation. (Q12)
- Three types of unemployment.
- Economic Costs & Non-Economic Costs of Unemployment. (Q16).

△ Consumption Function. (Q10).
- Four Determinants of Consumption Function.

△ Keynesian model.
- Keynesian Cross Model. (Q5. Q8. Q27) Q4, Q15
- Withdrawal & Injection Model. (Q22, Q13) } Fiscal Policies { Government Spending (Q9.
- Government Spending Multiplier
  Tax Multiplier

⇒ Inflation / Unemployment.

△ Monetary Sector:
- Quantity Theory of Money (Q2. Q3. Q6. Q14, Q20). Q28
- Fed Controls M^S (Q7. Q14; Q18: Q26) + (Q20. Q21).

  Three Instraments: Legal Reserve Requirment
  Discount Rate
  Open market Operation

- Bond Market & Money Market:

  Bond price and interest rate are inversely related.

Final:

ps) nvestment.

△ Monetary Policies to combat Inflation & Unemployment.

△ The Economic Effects of the Federal Budget Deficit.

Treasury. { long-run reduce K., move more resources to the public sector ⇒ reduce efficiency.
short-run crowding out. G ↑ I ↓.

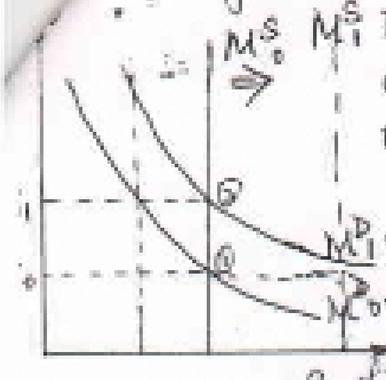
△ Keynesian VS. Monetarists.

△ Supply Side Economics. real output.

$\%\Delta M^S + \%\Delta V = \%\Delta P + \%\Delta Q$. suppose $\%\Delta V = 0$ and the Confederate states printed money to finance the American Civil War. $\%\Delta M^S > \%\Delta Q \Rightarrow \%\Delta P > 0 \Rightarrow$ inflation

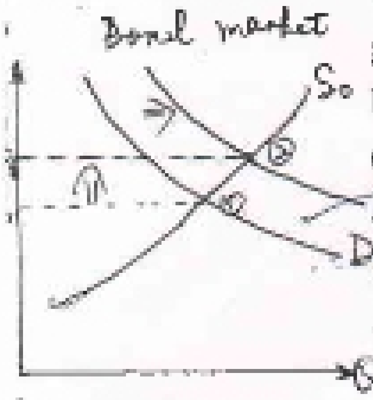
6. First, use the Quantity Theory of Money and the standard assumption of constant velocity to explain the hyper inflation experienced by the Confederate states during the American Civil War. Now, suppose that velocity is *not necessarily constant*. How do you think velocity may have changed due to the extremely high wartime inflation? Why? Would the change in velocity tend to reduce or intensify the inflationary pressure in the economy? Why?

The velocity will increase, because with hyper inflation, people wanted to spend their money a.s.a.p. The increase in velocity should intensify inflation because with $\%\Delta V > 0$ and ↑, $\%\Delta P$ should ↑



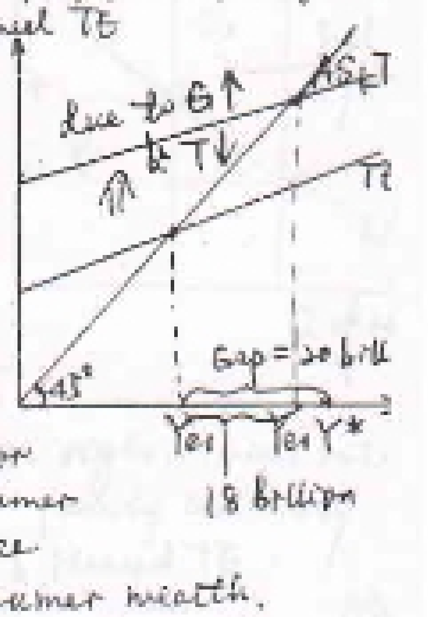
7. Suppose that the Fed's policy objective is to keep the nominal interest rate (i) constant. How would a Fed with this policy objective respond to an increase in money demand? Why? Illustrate your answer with diagrams of the money and bond markets.

In order to maintain i constant, Fed should increase its money supply. ① lower legal reserve requirement ② lower discount rate ③ Buy bonds.



8. Suppose that there is an initial GDP gap of $20 billion. Now suppose that MPC = .8 and government spending (G) is increased by $2 billion *and at the same time* taxes (T) are decreased by $2 billion. Will this combination of policies restore noninflationary full-employment GDP (Y*)? Why or why not? Show your calculations and illustrate your answer graphically.

8). GDP gap = 20 billion
$\Delta G = \$2$ billion
$\Delta T = -2\$$ billion.
MPC = 0.8.
$M_G = \frac{1}{1-MPC} = \frac{1}{1-0.8}$.
$\Delta Y_G = M_G \cdot \Delta G = 2 \times 5 = 10$ billion.
$M_{Tax} = -\frac{MPC}{1-MPC} = -\frac{0.8}{0.2} = -4$
$\Delta Y_{Tax} = M_{Tax} \cdot \Delta T = -4 \times (-2) = 8$ billion
$\Delta Y = \Delta Y_G + \Delta Y_{Tax} = 10 + 8 = 18$
$\Delta Y <$ GDP gap.
No, cannot restore

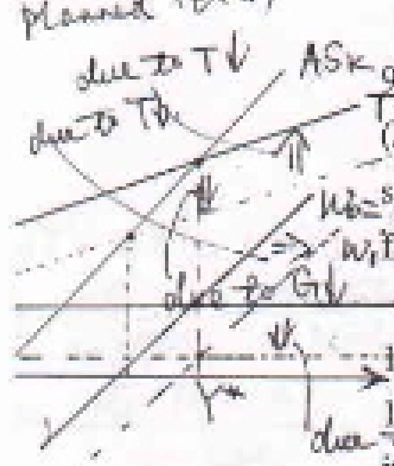


9. Assume: (a) the economy is initially in equilibrium at noninflationary full-employment GDP (Y*) (b) government spending (G) is cut by $8 billion (c) taxes (T) are cut by $10 billion and (d) the marginal propensity to consume (MPC) = 0.8

2. $\Delta G = -8$ billion.
$\Delta T = -10$ billion
MPC = 0.8.

9a Using your knowledge of the government spending and tax multipliers, calculate the change in Y caused by the decrease in government spending then calculate the change in Y caused by the decrease in taxes.

ⓐ. $M_G = \frac{1}{1-MPC} = \frac{1}{1-0.8} = 5$ $\quad M_{Tax} = -\frac{MPC}{1-MPC} = -4$
$\Delta Y_G = M_G \times \Delta G = -8 \times 5 = -40$ billion $\quad \Delta Y_{Tax} = M_{Tax} \cdot \Delta T = -4 \times (-10) = 40$ billion.

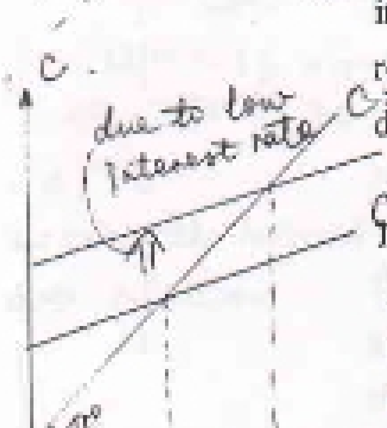


9b Using a Keynesian Total Expenditure (TE)/aggregate supply (AS_K) and aggregate injections (J)/aggregate withdrawals diagram (W), illustrate and briefly explain the combined effects of the spending and tax cuts. What, if any, problem would the economy be experiencing after these fiscal policy changes?

The combined effect $\Delta Y = \Delta Y_G + \Delta Y_{Tax} = 0$.
The economy will stay at the initial level Y*.

10. Use a consumption function diagram and brief verbal descriptions to explain: "From 1927 to 1929, the Federal Reserve fueled the prosperity of the "Roaring Twenties" by repeatedly lowering interest rates. When the market crash wiped out consumer wealth in 1929, however, the Fed reacted by raising interest rates. Many economists believe this credit "tightening" made the decline in overall economic activity even worse."

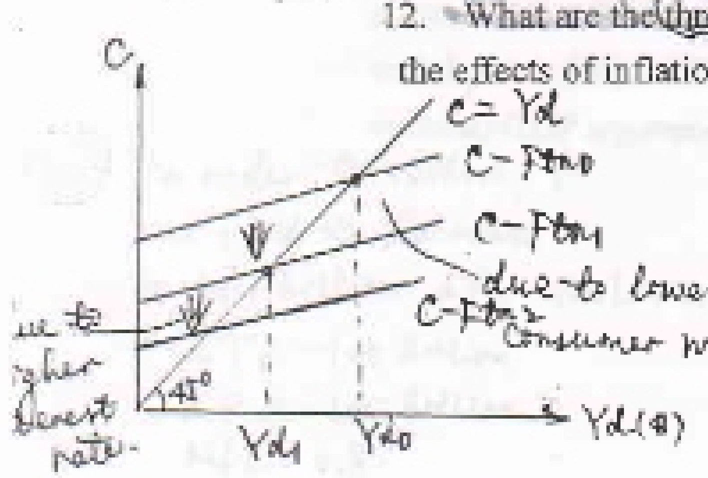
① disposable or after-tax income.
② Credit Conditions. "big ticket"
③ Consumer expectations about future disposable income and/or future consumer goods price
④ consumer wealth. { financial wealth / durable goods wealth.



11. Suppose initially that: velocity (V) is constant and there is no inflation. Now suppose that velocity (V) increases. If the policy objective is to prevent inflation, how would the Fed respond to this exogenous change in velocity? Use the Quantity theory of Money to explain your answer.

$\%\Delta M^S + \%\Delta V = \%\Delta P + \%\Delta Q$
If $\%\Delta V > 0$, in order to get $\%\Delta P = 0$, we need to $\%\Delta M^S < 0$ ⇒ decrease M^S.
① raise require reserve rate ② raise discount rate ③ sell bonds in the open market.

12. What are the three major economic effects of inflation? Be sure to carefully explain the effects of inflation on debtors and creditors.



12 ① Inflation reduces the real value of any assets with fixed nominal value.
② Unanticipated inflations reduce the purchasing power (real values) of creditors (lenders) and increase the real values of debtors (borrowers)
③ Inflations, especially when high and variable increase uncertainty about future and tend to reduce lending, borrowing and investment activities and hence reduce the rate of economic growth