## Summary for Midterm II

## 1 Aggregate Expenditure and Output in the Short Run

1. The aggregate expenditure model (four components)

- Consumption function, marginal propensity to consume, and marginal propensity to save.
- Investment and factors affecting it.
- Government spending and net exports.

2. Graphing macroeconomic equilibrium

- Determine the off-equilibrium points and how it adjusts back to equilibrium.
- The role of inventories

3. The multiplier effect (calculation)

## 2 Aggregate Demand and Aggregate Supply Analysis

1. Aggregate demand (price change and component change)

- Consumption
- Investment
- Net exports
- Shifts of demand curves

2. Aggregate supply

- Short-run aggregate supply curve (sticky wages)
- Long-run aggregate supply curve
- Shifts of the SRAS (expectation of future price level, supply shock)

3. Macroeconomic equilibrium in the long run and short run

- Graphing the equilibrium of demand and supply shocks.
- Summary page on slide 37 .

4. Dynamic aggregate demand and supply model

- How inflation is generated

5. Schools of macroeconomic thoughts.

## 3 Fiscal Policy

1. What is fiscal policy (government purchases and taxes).
2. Expansionary and contractionary fiscal policies.

- When you use expansionary or contractionary fiscal policy?
- How you use them?
- What is the consequence?
- Summary slide 16.

3. Fiscal policy in a dynamic model.
4. The government purchases and tax multipliers

- How to calculate the effect?
- Graphing the multiplier effect.

5. Limits of fiscal policy.

- Timing
- Crowding out (High interest rate and long-run effect is zero)

6. Long-run supply side economics.

## 4 Money, Banks, and the Federal Reserve System

1. What is money? (Functions and criteria of money)
2. How is money measured? (Money supply)
3. Money creation (T-account and multiplier)
4. The Fed system

- More details in the monetary policy chapter.
- Shadow banking system (concepts)

5. The quantity theory of money

## 5 Monetary Policy

1. Monetary policy definition (goals and tools (from previous chapter))
2. Implementation (Tools and targets)

- Money demand and supply curve
- Shifts of supply curve and its consequences.
- Which target? (Money supply, interest rate (Taylor rule), inflation (trade-off with unemployment)?)

3. How monetary policy affect price level and aggregate output (static and dynamic).

## 6 Sample Questions

1. Suppose that autonomous consumption is 1,200 , government purchases are 1,250 , planned investment spending is 1,500 , net exports are 1,000 , and the MPC is 0.6 . Equilibrium GDP is equal to $\$$ (?). (Enter your response as an integer.)
A: 12,375 .

$$
(1200+1250+1500+1000) /(1-M P C)=12375
$$

2. In the aggregate expenditure model, when is planned investment greater than actual investment?
(a) Planned investment always equals actual investment in the aggregate expenditure model.
(b) When there is an unplanned increase in inventories.
(c) When there is no unplanned change in inventories.
(d) When there is an unplanned decrease in inventories.

A: d.
3. Complete the following table to indicate what effect a decrease in each of the consumption components will have on consumption.

| A decrease in | will | consumption. |
| :--- | :--- | ---: |
| the price level | increase | consumption. |
| household wealth | decrease | consumption. |
| expected future income | decrease | consumption. |
| current disposable income | decrease | consumption. |
| the interest rate | increase | consumption. |

4. On a 450-line diagram (or Keynesian Cross), the horizontal axis measures (real GDP), while the vertical axis measures (real aggregate expenditure) .
1) Using the line drawing tool, draw the aggregate expenditure function on a 450 -line diagram. Label it $A E$.
2) Using the point drawing tool, illustrate macroeconomic equilibrium. Label it $E$.

5. Suppose booming economies in the BRIC nations (Brazil, Russia, India, and China) causes net exports (NX) to rise by $\$ 100$ billion in the United States. If the MPC is 0.8 , the change in equilibrium GDP will be $\$(500)$ billion.
6. Find equilibrium GDP using the following macroeconomic model (the numbers, with the exception of the MPC, represent billions of dollars):
$C=250+0.5 Y$ consumption function, $I=1000$ planned investment function, $G=1500$ government spending function, $N X=-500$ Net export function, $Y=C+I+G+N X$ equilibrium condition.
The equilibrium level of GDP is $\$(4,500)$ billion. (Round your answer to the nearest billion dollars.)
A: Plug first four functions into the final equilibrium condition and solve for $Y$.
7. What is the effect on real GDP of a $\$ 175$ billion change in planned investment if the MPC is 0.5 ? \$ ( 350 ) billion. (Enter your response rounded to the nearest whole number.) A: $175 / 0.5=350$.
8. Indicate which of the following would cause a shift in the aggregate demand curve from point A to point C. (Mark all that apply.)
(a) Increased consumer optimism
(b) Lower interest rates
(c) Inflation
(d) Decrease in the price level
(e) Decrease in the U.S. exchange rate relative to other currencies
(f) Lower taxes


A: a, b, e, f.
9. The graph to the right shows the aggregate demand curve, short-run aggregate supply curve, and the long-run potential output for an economy

1) Use the line drawing tool to show the short-run effect of monetary policy that causes an increase in interest rates. Properly label this line.
2) Use the point drawing tool to show the new equilibrium price level and real GDP in the short-run. Label this point B .

10. Suppose the reserve requirement is (15)\%. What is the effect on total checkable deposits in the economy if bank reserves increase by $\$ 60$ billion?
(a) $\$ 4$ billion increase
(b) $\$ 400$ billion increase
(c) $\$ 60$ billion increase
(d) $\$ 900$ billion increase

A: b.
11. Suppose that Deja owns a McDonald's franchise. She decides to move her restaurant's checking account to Wells Fargo, which causes the changes shown on the following T-account.

| Wells Fargo |  |  |
| :---: | :---: | :---: |
| Assets | Liabilities |  |
| Reserves $\$ 100,000$ | Deposits $\quad \$ 100,000$ |  |

If the required reserve ratio is 0.20 , or 20 percent, and Wells Fargo currently has no excess reserves, the maximum loan Wells Fargo can make as result of this transaction is \$ (80,000). A: $100000 \times(1-0.2)=80000$.
12. Suppose you deposit $\$ 1,500$ cash into your checking account. By how much will checking deposits in the banking system increase as a result when the required reserve ratio is 0.20 ? The change in checking deposits is equal to: $\$(7,500)$.
A: $1500 / 0.2=7500$.

