

ECON 211 - Principles of Macroeconomics
Notes for Exam 4

1. The simple tax multiplier and the impacts of changes in autonomous net taxes on real GDP (Ch. 34, Class Notes)
 - Simple tax multiplier (TM) is the amount by which a change in net taxes (NT) would multiply in terms of a change in real GDP, other things constant.
 - $TM = -MPC / (1 - MPC)$
 - A change in net taxes would change disposable income, a change in disposable income would change consumption (C), and a change in consumption would change real GDP. Thus, changes in net taxes impact GDP indirectly through consumption.
 - Changes in NT and C are inversely related. Thus, an increase in NT decreases C and vice versa.
 - Change in real GDP = TM x Change in NT
 - Change in NT necessary to cause a desired change in real GDP = Desired change in real GDP / TM
 - Suppose, MPC = 0.90 and NT decreases by \$200.
Increase in real GDP = TM x Δ in NT = $-MPC / (1 - MPC) \times (-200) = -0.90 / (1 - 0.90) \times (-200) = (-9) \times (-200) = \$1,800$. This means that a \$200 decrease in NT can increase real GDP by \$1,800, if MPC = 0.90. On the other hand a \$200 increase in NT can decrease real GDP by \$1,800, if MPC = 0.90.
 - Suppose, MPC = 0.90 and desired increase in real GDP = \$5,000.
Change in NT necessary = Desired Δ in real GDP / TM = Desired Δ in real GDP / $[-MPC / (1 - MPC)] = 5,000 / [-0.90 / (1 - 0.90)] = 5,000 / (-9) = -\556 . This means that a \$556 decrease in NT would be needed to increase real GDP by \$5,000, if MPC = 0.90. On the other hand, a \$556 increase in NT would be needed to decrease real GDP by \$5,000, if MPC = 0.90.

2. Fiscal policy tools to close contractionary or expansionary gaps (Ch. 34, Class Notes)
 - Fiscal policy tools to close contractionary gaps involve boosting AE by increasing government spending (G), decreasing net taxes (NT), or a combination of the two. Such fiscal policy is called expansionary fiscal policy.
 - Fiscal policy tools to close expansionary gaps involve reducing AE by decreasing government spending (G), increasing net taxes (NT), or a combination of the two. Such fiscal policy is called contractionary fiscal policy.
 - Because of the effect of spending multiplier (SM) or simple tax multiplier (TM), the amount of change in AE or its component required is less than the corresponding contractionary or expansionary gap.

3. Fiscal policy and government budgets (Ch. 34, Class Notes)

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- Budget deficit means revenue is less than expenditures.
 - Budget surplus means revenue is greater than expenditures.
 - Balanced budget means revenue is equal to expenditures.
 - Expansionary fiscal policy may cause budget deficit or reduce existing budget surplus.
 - Contractionary fiscal policy may cause budget surplus or reduce existing budget deficit.
4. Classical vs. Keynesian approach to closing a contractionary or an expansionary gap (Ch. 33, Class Notes)
- Classical approach: Leave the economy alone (Laissez faire) because it will self-correct to take care of economic fluctuations through adjustments in wages, prices, and interest rates, which are assumed to be flexible.
 - Keynesian approach: Use external shocks to the economy as needed because it may not self correct given that (a) wages and prices are relatively inflexible and interest rates would not fall fast enough to restore full employment, and (b) business expectations may at times become so grim that even very low interest rates would not induce firms to invest enough to move the economy to full employment.
5. Classical vs. Keynesian view of fiscal policy (Ch. 33, Class Notes)
- Classical view: There is no need for government intervention in terms of fiscal policy.
 - Keynesian view: Government intervention may be needed by applying appropriate fiscal policy.
6. Factors that can adversely impact the implementation of fiscal policy or its desired outcome: Time lag, temporary nature of effects, budget deficits (Ch. 33, Class Notes)
- Time lags in approval and implementation weaken fiscal policy as a tool of economic stabilization.
 - Temporary fiscal policy, e.g., a temporary tax cut, would not be effective in stimulating aggregate demand if people based their decisions on policies that would generate permanent benefits, e.g., permanent income.
 - Large federal budget deficits make it difficult to use discretionary fiscal policy.
7. What is money? (Ch. 29)
- Any commodity that facilitates trade and is widely accepted throughout the economy as a medium of exchange, unit of account, and store of value.
8. What determines the value of money? (Ch. 29)

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- The value of the commodities for which it can be traded, which is called purchasing power.
9. Financial institutions as financial intermediaries vs. depository institutions (Ch. 29, Class Notes)
- Financial intermediaries link savers and borrowers. They accept funds from savers and lend them to borrowers.
 - Depository institutions receive funds through customer deposits, e.g., commercial banks and credit unions.
10. Fractional reserve banking system (Ch. 29, Class Notes)
- A banking system in which banks are legally allowed to hold only a fraction of the deposits as reserves at any point in time and use the rest for profit making activities.
 - Under a fractional reserve banking system, bank reserves represent only a fraction of bank deposits.
11. Reserve requirement and reserve ratio (Ch. 29)
- Reserve requirement is the requirement for banks to hold a specific fraction of total deposits as reserves.
 - Reserve ratio or required reserve ratio (r) is the ratio of a bank's required reserves to its total deposits.
12. Dual banking system (Ch. 29, Class Notes)
- A system of state banks chartered by the states and national banks chartered by the federal government.
 - The dual banking system developed in the United States because the National Banking Act created a system of national banks to provide a more satisfactory currency.
13. The Federal Reserve System, and the functions and goals of the Fed (Ch. 29)
- Federal Reserve System (the Fed) is the central bank and monetary authority of the United States consisting of 12 Federal Reserve banks.
 - The functions of the Fed are to hold deposits of member banks, buy and sell government securities, make loans to member banks, regulate bank reserve requirements, issue bank notes, clear checks, and serve as a bank to the federal government.
 - The goals of the Fed are to help achieve high level of employment in the U.S. and maintain stability in the price level, interest rate, financial markets, and foreign-exchange markets.
14. Alternative definitions or measures of money supply (Ch. 29)