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Notes – Topic 12

Topic 12: Central Banking and the Federal Reserve

I. Central Banking
   a. Central Bank = Nation's monetary authority.
   b. Most important function: Monetary Policy.
      i. Aim to influence the nation's money supply and/or interest rates.
      ii. Interest rate is just the price of money.
      iii. By altering the supply of money, the central bank essentially changes the interest rates.
   c. US Central Bank called "The Federal Reserve"
      i. "The Fed"
      ii. Not really a government agency.
      iii. Technically owned by member banks (all legitimate commercial banks).
      iv. Does *act* as a government agency.
      v. Not subject to the authority of any of the government's three branches.
      vi. Not funded by the government or congress like other agencies.
      vii. Informal pressure only from the president and congress to take certain action.
      viii. Explicitly designed to be insulated from political pressure so the economics will be most important.
      ix. Analogous to the Supreme Court.
      x. Consists of 12 regional banks – Boston, New York, Philadelphia, Atlanta, Dallas, San Francisco, Cleveland, St. Louis, Kansas City, Minneapolis, Richmond, Atlanta
      xi. Banks in each region subject to the authority of the regional bank.
      xii. Board of Governors
         1. 14-year non-renewable terms.
         2. Members appointed by the president.
         3. President also selects the chairman of the Fed.
            a. 4-year renewable term (indefinitely)
            b. Most economically influential person on the planet.
            c. Currently Alan Greenspan. Regarded as the greatest central banker in history. (been in office since the late 1980s).
   d. Four Major Functions
      i. Monetary Policy
         1. More details later.
         2. Primary responsibility is managing the money supply.
      ii. Issues Money.
         1. Fed actually issues/prints dollars.
         2. Dollars are nothing more than IOUs from the Fed.
         3. *Not* printed by the Department of the Treasury.
      iii. Regulating and overseeing banks.
         1. Other agencies also contribute to this.
         2. Setting required reserves, auditing banks, etc.
      iv. Provides services to Member Banks.
         1. Loans to banks with cash flow problems,
         2. Holding balances.

II. Monetary Policy Tools
   a. Fed cannot directly and precisely control the money supply since gbanks can create money.
   b. It *can* directly control the Monetary Base.
      i. "Money Base"
      ii. Sum of actual printed currency in circulation.

c. Increase/Decrease in monetary base will change the money supply in the same way. Not necessarily by the same amount though.
d. Three instruments for controlling the monetary base.
    i. Reserve requirements
        1. Percentage of total deposits banks are required to hold as reserves.
        2. During normal economic times banks usually try to hold 0 excess reserves.
        3. By changing the level of required reserves, the amount of money circulating changes.
        4. Example: If too little money is circulating (making it to difficult for firms and households to make purchases), decreasing required reserves lets banks loan out more funds; they probably will.
        5. Not used very frequently.
            a. Spitballs vs. Nukes.
            b. Small changes have almost no effect since banks can use accounting tricks to get around it – spitballs.
            c. Big changes have *huge* effects – nukes.
    ii. Interest Rate Policy.
        1. Targeting interest rate called Federal Funds rate.
        2. Rate one US bank charges to another on a short-term loan.
            a. Overnight loans.
            b. If bank holds zero excess reserves they may fall short at the end of the day.
            c. Illegal to close without having required reserves.
            d. Borrows money from another bank to cover the difference.
        3. Fed cannot directly set a specific rate, but can target a rate fairly accurately.
        4. Every 6 weeks Fed meets to discuss interest rates. Very common to change.
        5. If the rate increases, banks tend to lend less since it gets harder to cover any shortcomings. A decrease encourages more lending.
        6. Doesn't really affect the public in any direct way – only banks pay the Federal Funds Rate.
        7. Still a very powerful tool.
        8. Serves a s a benchmark on other interest rates; changing it usually drives other rates.
        9. Partly a signal from the Fed to financial markets about what the Fed wants.
        10. Even though it's largely a psychological tool it's still very powerful.
        11. Fed directly sets the Discount Rate.
            a. Rate banks are charged on loans from the Fed itself.
            b. Banks usually try to cover the problems via other banks rather than the Fed.
            c. Using the Discount Window is a sign of carelessness and can trigger a Fed audit.
    iii. Open Market Operations
        1. Main tool to influence money supply
        2. Used every business day.
        3. Gets money directly into circulation.
        4. Fed holds large quantities of US Government Bonds. (Treasury Debt)
            a. Huge quantity of government bonds circulating.
            b. Very liquid. Constantly being bought and sold.
            c. Government is the safest, most credit-worthy borrower in the known universe.
            d. Thus, bonds are the benchmark – a very important asset.

        5. By buying/selling bonds from the public, Fed can increase/decrease monetary base.
        6. Buy bonds from the public to increase the money supply (giving more cash to the public).
        7. Sell bonds to the public to decrease the money supply (take cash away from the public).
        8. Buying bonds is the same as "Printing Money"
        9. Important that the Fed, a quasi-government agency is the one able to "print money."
            a. If congress or the president wants to spend more they'll have to sell bonds to the public.
            b. In nations where the central bank is a real government agency, politicians can order the central bank to buy bonds – same as just printing up bank notes and delivering them to the government.
        10. Fed does occasionally buy bonds directly from the government but cannot be forced to do so.
        11. Trend toward using the US system in other countries.

III. Real Effects of Monetary Policy.
- a. Very strong effects on real economic activity.
- b. Like fiscal policy, can have expansionary or contractionary policy.
- c. Expansionary Policy.
    - i. Central Bank increases the money supply.
    - ii. Interest rates fall. Price of money falls when there's more of it (like any good/service).
    - iii. Investment rises. With lower rates it's easier to get money to invest.
    - iv. Aggregate demand and GDP rise.
    - v. If Keynes is right that a drop in investment causes a recession, expansionary monetary policy is one obvious solution.
- d. Contractionary Policy
    - i. Exactly the opposite changes.
    - ii. Cools down overheating economy.

IV. Why Monetary Policy, not Fiscal Policy?
- a. Main instrument of macroeconomic management is monetary policy.
- b. Very little fiscal policy used at all.
- c. Very little difference in effects.
- d. Because Fed is really the only organization making macroeconomic changes it has enormous power in the economy.
- e. Three problems with Fiscal Policy:
    - i. Supply-Side Shocks
        1. Applies the same to monetary policy since monetary policy still addresses aggregate demand (except through investment, not government spending).
        2. Cannot simultaneously decrease inflation and increase GDP at the same time.
        3. Fed prefers to fix problems with inflation, so it has an easier choice than the government trying to set fiscal policy.
        4. Not everyone is thrilled about such a bias, but that's still what's done.
    - ii. Political Concerns
        1. Not a problem at all for monetary policy.
        2. No direct effects on the government's budget so no political concerns.
    - iii. Time Lags
        1. Monetary policy can be implemented on very short notice.
        2. No need to design appealing legislation or get it passed.
        3. Open Market Committee sets monetary policy.

            a. Very highly trained economically.
            b. No political pressure.
        4. Can literally alter policy overnight.
        5. Doesn't completely eliminate time lags.
            a. Still have to gather and process data.
            b. Delay between implementation and effects taking place. Estimated at about 6 months for major changes.
        6. Can still continue working after it's no longer wanted. Estimated at about two years after a major change being implemented.
    f. Current Recession
        i. When it was first clear that the economy was entering a slump, Alan Greenspan immediately cut rates and increased the money supply.
        ii. Fed is getting a lot of credit for keeping the recession short and mild.
        iii. Congress, on the other hand, took about a year to create a very watered-down fiscal stimulus bill.

V. The Fed's Anti-Inflationary Bias
    a. The Fed must balance inflation and GDP. Most important relationship for policymakers.
    b. Philip's Curve: Relationship between inflation and unemployment.
    c. Since at least the 80s, the Fed has had a clear bias toward controlling inflation.
    d. Fed has long-term "Big Picture" view of the economy.
    e. Controlled inflation is the foundation for long-run growth.
    f. Some critics hold with the opposite
        i. If unemployment falls ½% to combat a ½% increase in inflation, everyone notices.
        ii. If inflation rises ½% probably nobody would even notice.
        iii. Remember that "a little" inflation just leads to more inflation.
        iv. All post-WWII recessions except the most recent were initiated by the Fed's contractionary policy.
        v. Paul Volcker engineered *deep* recession in the 1908s to combat high inflation.
        vi.