Money Market Study Guide

Fill in the Blank

Money Supply and Demand

1. The three functions of money are _____.
2. Motives for money demand are _____ and _____.
3. Money supply is regulated by the _____.
4. _____ and _____ affect money demand.
5. As income increases the transactions demand for money _____.
6. As interest rates increase the _____ demand for money _____.
7. The major components of M-1 are _____.
8. M-2 is M-1 plus _____.
9. M-2 is also known as the _____ measure of money.
10. Under the _____, the slope the yield curve reflects expectations of future interest rates.
11. Under the _____, the slope of the yield curve reflects the increasing risk as time to maturity increases.
12. Under the _____, the slope of the yield curve reflects the interaction of distinctly separate groups of suppliers and demanders of funds.
13. Interest rates, according to the Fisher Condition have nominal rates adjusted by _____.
14. Higher rates of default risk cause _____ interest rates.
15. Yield curves normally have a(n) _____ curve.
16. The money market demand curve has a downward slope as an increase in interest rates causes _____.
17. The money supply curve has a vertical slope so it is _____ to interest rate changes.
18. Increasing the money supply will cause the money supply curve to shift to the _____.
19. Money demand is _____ when the money demand line shifts upward.
20. Interest rates _____ when money demand increases.
21. Increasing the money supply holding money demand constant _____ interest rates.
22. Under the Quantity Theory of Money, increasing the money supply at full employment will cause _____.
23. The _____ is the number of times per year the money stock turns over.
24. Money supply increases due to _____.
25. The velocity of money is thought to be relatively _____.
26. _____ is the rate commercial banks charge one another when borrowing or lending reserves.
27. _____ is the rate commercial banks charge their best corporate borrowers.
28. _____ is the rate the Federal Reserve charges on bank borrowing.
29. The asset demand for money is a function of _____.
30. _____ is the sum of currency, demand deposits, and traveler's checks.
31. Money supply _____ vary directly with interest rates.
32. _____ is the sum of currency, deposits, traveler's checks, money market accounts, and bonds.

33. Deposits finance _____.
34. Savings finance _____.
35. Banks _____ short term to _____ long term.
36. Interest margin is the difference between _____ and _____.
37. Out of interest margin _____ is(are) paid.
38. Cash and securities are used to meet _____ as well as reserve requirements.
39. Banks must compete against _____ for deposits.
40. Disintermediation results when depositors remove funds from banks to put into _____.
41. When banks need operating funds to meet reserve requirements, they generally borrow them from _____.
42. Cash covers less than 100% of demand _____.
43. The majority of a bank's liabilities are _____.
44. The majority of a bank's assets are _____.
45. _____ is the average maturity of assets or liabilities, and is a measure of interest rate sensitivity.
46. Asset turnover is _____ than that of liabilities.
47. _____ is the process of expanding money supply through loan creation.
48. Additional checking account deposits means that banks must hold additional _____.
49. The reserve requirement is calculated as a percentage of _____.
50. Legal reserves include _____.
51. Free reserves can be _____.
52. Excess reserves are _____ minus _____.
53. The money expansion multiplier is one divided by the _____.
54. Banks use _____ to make _____.
55. The advantages of banks over markets are _____.
56. Deposits tend to have a _____ duration than loans.

Federal Reserve and Monetary Policy

57._____ is divided into 12 districts.
58.The Federal Reserve Bank System was created by _____ as a _____ corporation.
59.Stock in the Federal Reserve is owned by _____.
60._____ are the functions of the Federal Reserve.
61.Monetary policy in the Federal Reserve is carried out by the _____ and _____.
62.The _____ is charged with insuring bank deposits.
63.The FDIC is financed by _____.
64._____ are assessed as a precent of deposits.
65.To overcome the problem of moral hazard, deposit insurance premiums are _____ adjusted.
66.Banks may have examiners from _____ checking adherence to regulations.
67._____ are the instruments of control for the Federal Reserve.
68.Lowering interest rates is a signal of a(n) _____ monetary policy.
69.Buying treasury securities by the Fed is an example of _____ monetary policy.
70.Selling treasury securities by the Fed is an example of _____ money supply.
71._____ the reserve requirement is an example of expansionary monetary policy.
72._____ the reserve requirement is an example of contractionary monetary policy.
73.The FDIC charges banks a premium based on _____.
74.The FDIC Trust Fund collects _____ and pays _____.

Credit Market and Asset Pricing

75._____ is the process of issuing securities backed by a debt security pool.
76.The difference between the ask price and bid price is called the _____.
77._____ are financial instruments that pay interest semi-annually and mature at a set time into the future.
78._____ are certificates of ownership in a corporation.
79.Dividends are a distribution of corporate _____.
80._____ markets trade stock already issued.
81._____ markets buy stock that is an initial public offering (IPO).
82.Brokers _____ trades.
83.Dealers can _____ for their own account.
84.An auction market has buyers and sellers constantly _____ prices.
85.Bond prices _____ when interest rates increase.
86.As time to maturity increases, bond prices become more _____ for a given change in interest rates.
87.Present value _____ when interest rates increase.
88.Future value _____ when interest rates decrease.
89.As time increases, future value _____ when holding present value constant.
90.As time increases, present value _____ when holding future value constant.
91.Stock prices increase when _____ decreases.
92.Stock prices increase when _____ increases.
93.Holding income constant, increasing risk on real estate causes values to _____.
94.Risk is defined as _____.
95._____ stock typically do not have voting privileges.
96._____ are financial instruments that pay a portion of earnings called dividends to shareholders and have voting rights.
97.In the major financial markets, pricing is determined by a(n) _____ process.
98.Brokers _____.
99.Financial assets are valued as the _____ of cash flow.
100.A(n) _____ is a periodic equal cash flow stream made at the end of a period.
101.As risk decreases, investors accept a lower _____.
102.Separation of ownership from management in a corporation is made possible by _____.
103.When ask prices rise faster than bid prices, then the spread is _____.
104._____ is the process of issuing securities backed by a debt security pool.
105.Profits not paid out as dividends are _____.
106.Financial markets trade _____.
107.Real estate is valued at the _____ of future cash flows.
108.A(n) _____ is a single payment made at either the beginning or end of a period.
109.Risk is reflected in _____ discount rates which _____ present value.
110.Stock prices typically _____ when corporate earnings decrease.

Fill-in-the-Blank Solutions

Money Supply and Demand

1. store of value, unit of account, medium of exchange
2. transactions, asset
3. central bank
4. interest rates, income
5. increases
6. asset, decreases
7. cash, checkable deposits, and travelers checks
8. savings accounts, overnight repurchases, and banker's acceptances
9. broad
10. expectations hypothesis
11. liquidity preference hypothesis
12. market segmentation hypothesis
13. inflation
14. higher
15. upward sloping
16. asset demand to increase
17. insensitive
18. right
19. increasing
20. increase
21. decreases
22. inflation
23. velocity of money
24. printing of money
25. constant
26. Federal Funds rate
27. The prime rate
28. The discount rate
29. interest rates, income
30. M-1
31. does not
32. L

33.loans
34.investment
35.borrow, lend
36.interest income, interest expense
37.operating expenses
38.operating
39.capital markets
40.capital markets
41.federal funds market
42.deposits
43.deposits
44.loans
45.Duration
46.less
47.Fractional reserve banking
48.reserves
49.deposits
50.cash and securities
51.lent out
52.total reserves, required reserves
53.reserve ratio
54.deposits, loans
55.customize transactions
56.shorter

Federal Reserve and Monetary Policy

57. Federal Reserve
58. Congress, nonprofit
59. member banks
60. Be government's fiscal agent, support banking system, regulate consumer credit, and maintain stability of financial system
61. Board of Governors, Open Market Committee
62. FDIC
63. premiums
64. premiums
65. risk
66. Federal Reserve, FDIC, and the Office of the Comptroller
67. Reserve requirements, open market operations, discount rate
68. expansionary
69. expansionary
70. contractionary
71. Decreasing
72. Increasing
73. risk
74. premiums, claims

Credit Market and Asset Pricing

75.Asset securitization
76.spread
77.Bonds
78.Stocks
79.earnings
80.Secondary
81.Primary
82.arrange
83.buy and sell
84.negotiating
85.decrease
86.volatile
87.decreases
88.decreases
89.increases
90.decreases
91.interest rates
92.income
93.decrease
94.volatility
95.Preferred
96.Common stock
97.auction
98.act as go between for buyers and sellers
99.present value
100.ordinary annuity
101.return
102.common stock
103.widening
104.asset securitization
105.retained earnings
106.financial assets and liabilities
107.present value
108.single lump sum
109.increased, decrease
110.decrease

True/False

Money Supply and Demand

1. Higher interest rates decrease transactions demand for money.
2. Money supply is not affected by interest rates.
3. As income increases, transactions demand for money decreases.
4. As income increases, asset demand for money decreases.
5. In the Quantity Theory of Money, given full employment, an increase in the money supply will produce inflation.
6. Nominal interest rates include the inflation rate.
7. Nominal interest rates increase when risk decreases.
8. When nominal interest rates rise faster than the inflation rate, real interest rates fall.
9. For small inflationary increase in the money supply, interest rates fall.
10. When money demand rises relative to money supply, interest rates increase.
11. M-1 includes cash, checks, and demand deposits.
12. The prime rate is the highest rate that banks charge their customers.
13. Liquidity risk premium implies different suppliers and demanders of money market instruments.
14. Interest rate expectations imply that long term rates are an average of expected rates.
15. A normal yield curve has lower short term rates than long term.
16. Nominal interest rates rise when the real rate increases.
17. Under the market segmentation hypothesis, an increase in the risk premium will cause the yield curve to shift upwards.
18. Under the market expectations hypothesis, a projected increase in interest rates will cause the slope of the yield curve to increase.
19. Money supply has a vertical slope as the Federal Reserve's willingness to supply money is not directly conditioned on interest rates.
20. Small denomination savings deposits are not included in M-2.
21. The Federal funds rate is the rate charged firms borrowing from the Federal Reserve.
22. The discount rate is the lowest rate at which firms can borrow.
23. The prime rate is the rate the Federal Reserve charges local banks for loans.
24. US Treasury Securities have the lowest interest rates due to an absence of default risk.
25. Corporate bond rates are higher due to an increased default risk.

26. Banks are the economic link between savings and investment.
27. Financial markets cannot supply every credit need due to asymmetric information.
28. Financial institutions typically have three types of risk: credit, interest rate, and liquidity.
29. Credit risk is the risk of default on principal, interest, or both.
30. Interest rate risk is the risk that rates will not change.
31. Liquidity risk is risk that loans cannot be sold.
32. Duration is a measure of average maturity of a portfolio of assets or liabilities.
33. Deposit insurance insures depositors in case the bank fails.
34. Interest costs tend to rise faster than interest income.
35. Banks make more money when interest rates are high.
36. Spread refers to the difference between interest rate paid and received.
37. Loan supply is independent of deposits.
38. Loan demand decreases when interest rates increase.
39. Banks borrow short term and lend long term.
40. In fractional reserve banking, a portion of the assets are kept as reserves while the remainder is lent out.
41. Legal reserves are cash, securities, and loans.
42. Free reserves are cash.
43. Excess reserves equal free reserves plus required reserves.
44. Required reserves are calculated as deposits times the reserve ratio.
45. Nominal money supply / price index = real money supply.
46. The money multiplier is 1 / reserve ratio.

Federal Reserve and Monetary Policy

47. The Federal Reserve is a private stock profit corporation.
48. Member banks of the Federal Reserve System determine monetary policy.
49. Members of the Board of Governors are appointed by the President subject to Congressional approval.
50. Monetary policy is carried out by the Board of Governors.
51. Banks must maintain capital reserve requirements set by the FDIC and the Bank for International Settlements.
52. Legal reserves include short term loans.
53. Monetarization of the debt is the process of purchasing federal debt by the Fed.
54. Selling treasury securities by the Fed, increases the money supply.
55. Increasing the discount rate by the Fed is an expansionary monetary policy action.
56. Lowering the reserve requirement by the Fed is a contractionary monetary policy action.
57. The Federal Reserve is primarily responsible for the nation's monetary policy.
58. Financial markets are well suited to providing customized financial services.
59. Disintermediation occurs when funds are transfered out of the banking system directly into the financial markets.
60. The time needed to recognize that a problem exists is called recognition lag.

Credit Market and Asset Pricing

61. Asset securitization is the process of converting assets into liabilities.
62. Derivatives are a liability derived from an asset.
63. Financial markets are usually run as an auction.
64. Specialists help maintain an orderly market.
65. Preferred stock does not have voting privileges.
66. As interest rates increase, future values increase given present value.
67. As interest rates increase, present value decreases given future value.
68. As interest rates increase bond prices decrease.
69. Increasing bond prices mean interest rates are decreasing.
70. Cuts in interest rates help stock prices.
71. Lowering interest rates lowers monthly payments on a mortgage loan.
72. Increasing the term of the loan decreases the monthly payment but increases the total interest paid.
73. It is not uncommon for total interest paid on a loan to exceed the principal.
74. As interest rates decrease, future values decrease given present value.
75. Increasing bond prices are due to increasing interest rates.
76. Typically, interest rates increase as loan term decreases.
77. The loan payment increases as interest rates rise.
78. For each loan payment, decreasing the interest rates decreases the amount paid toward the loan principal.
79. Increasing time, holding interest rates and present value constant, increases future value.
80. Decreasing time, holding interest rates and future value constant, increases present value.
81. When bid/ask spreads are increasing, the bid price is increasing more than the ask price.
82. The bid price is the price offered by the buyer.
83. Usually spreads increase as risk increases.
84. As transactions volume declines for a security, typically the spread increases.

T/F Solutions

Money Supply and Demand

1. False, higher interest rates decrease asset demand for money
2. True
3. False, income increases transactions demand
4. False, income increases asset demand
5. True
6. True
7. False, nominal rates increase as risk increases
8. False, real rates increase
9. True
10. True
11. True
12. False, it is the lowest rate
13. False, that is the definition for market segmentation hypothesis.
14. True
15. True
16. True
17. False
18. True
19. True
20. False
21. False
22. False
23. False
24. True
25. True

26. True
27. True
28. True
29. True
30. False, it is the risk that interest rates will change.
31. True
32. True
33. True
34. True
35. False, banks make money on spread between loans and deposits. Higher interest rates choke loan demand.
36. True
37. False, unless the banks sells loans it must rely on deposits to make loans.
38. True
39. True
40. True
41. False, legal reserves are cash and securities
42. False, free reserves are excess reserves, reserves in excess of legal requirements.
43. False, total reserves minus required reserves.
44. True
45. True
46. True

Federal Reserve and Monetary Policy

47. False, it is a public non-profit corporation but stock is owned by member banks not the general public nor individuals.
48. False, the Federal Reserve's Board of Governors and Open Market Committee determine monetary policy.
49. True
50. True
51. True
52. False, legal reserves are cash and Federal securities.
53. True
54. False, selling securities reduce the money supply
55. False, increasing the discount rate is a contractionary policy.
56. False, lowering the reserve requirement is an expansionary policy.
57. True
58. False, financial markets can only accommodate large volume, similar transactions.
59. True
60. True

Credit Market and Asset Pricing

61. False, it is the process of putting debt instruments into pools and issuing new debt instruments against it.
62. False, derivatives are based on the performance of underlying asset such as stock.
63. True
64. True
65. True
66. True
67. True
68. True
69. True
70. True
71. True
72. True
73. True
74. True
75. False, decreasing interest rates can either decrease the loan payment or loan term.
76. True
77. True
78. False, the amount of the loan payment applied toward principal would increase.
79. True
80. True
81. False, the asking price is increasing more than the bid price.
82. True
83. True
84. True

Problems & Exercises

1. Money Supply and Demand
    a. If the money supply grows at 7% and the price index at 4%, what is the real rate of money growth?
    b. If the velocity of money is constant at 3 and GDP equals $600, then what is the money supply?
    c. What is the velocity of money given a money supply of 6,000 and a GDP of 18,000?
    d. With a money supply of $4 Billion and velocity of money of 2.5, what is the nominal GDP?
    e. If nominal money growth is 12%, with an inflation of 4%, then what is the growth of the real money supply?
    f. If the price level is 1.2 and GDP of $12 Billion, what is the real GDP?
    g. Given money supply of $5,000, velocity of money 4.0, and a real GDP of $16,000, what is the price level?
    h. Given an increase in output of 2%, if money supply increases 5%, what would be the expected increase in inflation?

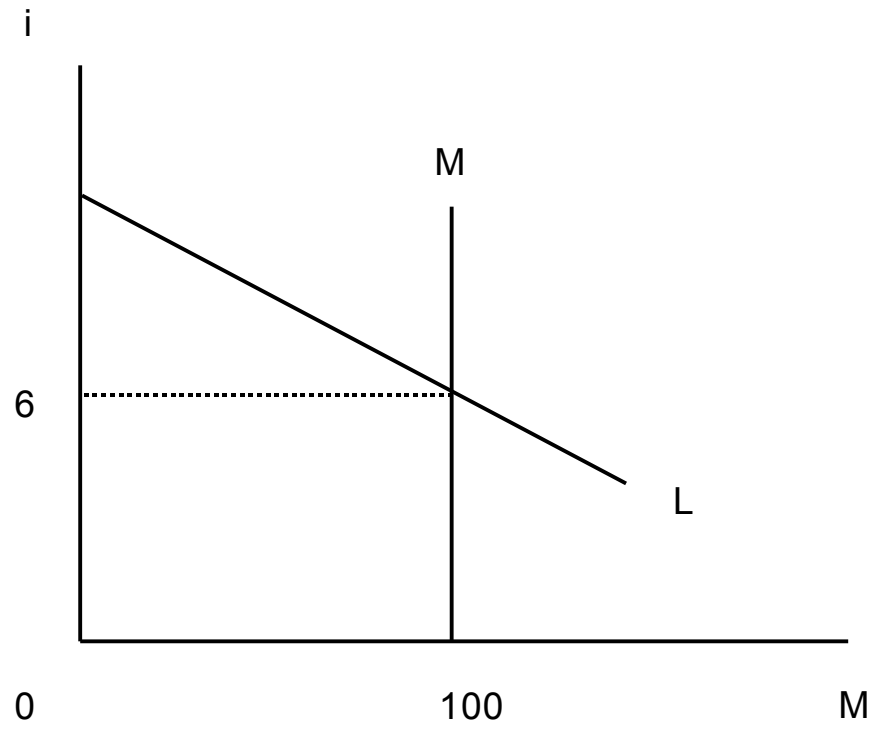
2. Monetary Aggregates (in millions)

Outstanding credit card balances	$1,000
Cash	200
Demand deposits	2,500
Savings deposits	10,000
Large time deposits	200,000
Small time deposits	70,000
Traveler's checks	600
Commercial paper	120,000
Stock funds	800,000
Money market funds	70,000
Bond funds	100,000
Treasury Bills	300,000

For the above, answer the following questions.

a. what is M-1?
b. what is M-2?
c. What could cause M-2 to increase and M-1 to decrease?

3. Interest Rates
    a. Under the Fisher Condition if the inflation rate moves to 6% and the real rate of interest is 3.5% then what is the nominal rate of interest?
    b. If a bond priced at 8% has an expected default premium of 2% and that risk premium increases to 5%, what would be the new yield on the bond?
    c. If the nominal rate is 9% given a real rate of 3%, what is the expected rate of inflation?
    d. If the nominal interest rate equals 7% and the expected rate of inflation equals 3%, what is the real rate of interest?
    e. Given a real interest rate of 3% and an inflation rate of 6%, in the absence of any risk premium, what will be the nominal rate?
    f. If nominal rates increase from 5% to 8%, what was the expected increase in inflation?
    g. Default rates increase 2%, what will be the effect on nominal rates?
    h. Given a nominal rate of 6% and an expected inflation rate of 4%, what is the real rate of interest?



4. Money Supply and Demand Graph

From the graph above, answer the following questions.

a. Given the shift in money supply from m_0 to m_1:

b. What is the difference in supply vs. demand at i = 6%?

c. How would the market respond to this difference?

5. Money, Credit and Banking
    a. If total reserves are $1,000 million and legal reserves are $250 million, how much are excess reserves?
    b. If total deposits are $800 million and the required reserve ratio is 3%, how much are required reserves?
    c. What is the money multiplier if the reserve requirement is 4% of deposits?
    d. If there is an initial injection of $280 million with a 5% deposit reserve requirement, what will be the total increase in money supply?
    e. How much are required reserves if the required reserve ratio is 20% and deposits are $6 million?

Retained Earnings	270
Cash	190
Demand deposits	750
Fixed Assets	300
Consumer Loans	1,030
Commercial Loans	700
Marketable Securities	280
Bonds Payable	140
Common Stock	50
Savings Deposits	400
Time Deposits	890
Net Income	60
Operating Expenses	80
Interest Expense	175
Interest Income	210
Reserve Ratio	10%

6. Banking

From the above information, construct the balance sheet for First National Bank of Lakeland and answer the following questions:

a. What is the capital ratio?
b. What is the required reserve?
c. What are the total reserves?
d. What is the amount of excess reserves?
e. What are the total deposits?

7. Federal Reserve and Monetary Policy
    a. What is the equilibrium rate of interest?
    b. How much would money supply need to increase to lower interest rates to 5%?
    c. If money demand increases .5 billion at each rate, what will be the new equilibrium interest rate?
    d. If monetary policy emphasizes lower interest rates without an adjustment to money supply, what will be the result?

8. Credit Market and Asset Pricing
    a. If a zero coupon bond matures in 5 years at 8% with a maturity value of $10,000, what is its current value?
    b. If a stock earns $100 per year indefinitely into the future, given an interest rate of 4%, what is it worth today?
    c. If $1,000 is deposited into a savings account at 6%, what will be its value in 10 years?
    d. If $1,000 is deposited into a savings account each year for 40 years at 7%, what will be its future value?
    e. Now assume you live 15 years after retirement, how much can you take out per year as you use all of your funds? Assume you earn an interest rate of 8%.
    f. What is the present value of $20,000 received 10 years from now at an interest rate of 6%?
    g. What is the present value of a stream of $40,000 paid annually for 40 years at 12%?
    h. How much must be saved each year at 10% to accumulate $2 million for 30 years?
    i. You are at retirement. Your annual cash needs are estimated to be $30,000. Given that you expect to live 15 years and earn 10% on your funds, how much money should you have accumulated?

Problems and Exercises: Answers & Solutions

1. Money Supply and Demand

    a. 7% - 4% = 3%
    b. $600 / 3 = $200
    c. 1,800 / 600 = 3
    d. 4 * 2.5 = $10 Billion
    e. 12% - 4% = 8%
    f. 12 / 1.2 = $10 Billion
    g. 5,000 * 4 = 16,000y: y = 1.25
    h. 5% - 2% = 3%

2. Money Aggregates

    a. 200 + 2,500 + 600 = $3,300
    b. 3,300 + 10,000 + 70,000 + 70,000 =
    c. any item in M-2 not in M-1 increasing and any item in M-1 decreasing.

3. Interest Rates
    a. 6% + 3.5% = 9.5%
    b. 8 + (5 -2) = 11%
    c. 9% - 3% = 6%
    d. 7% - 3% = 4%
    e. 3% + 6% = 9%
    f. 8% - 5% = 3%
    g. increase 2%
    h. 6% -4% = 2%

To be finished

4.

a. 100 - 120 = 20, excess supply
b. With an excess supply in cash, bonds will be bought. As more bond demand increases, the interest rate falls. As the interest rate falls, the gap between money supply and money demanded falls. The process stops when money supply equals money demand.

5. Money, Credit, and Banking
    a. $1,000 - 250 = $750 Million
    b. 3% * 800 = $24 Million
    c. 1 / .05 = $5,600
    d. 20% * $6 Million = $1.2 Million

6. Bank
    a. The actual capital ratio is 12%: (50 + 270) / (190+280+300+1,030+700)
    b. Required reserves are $204 ; $2,040 * 10%.
    c. Total reserves are $470; Cash 190 + Securities 280.
    d. The amount of excess reserves are $266; $470 - 204.
    e. Total deposits are $2,040; demand deposits of 750 plus savings deposits of 400 plus time deposits of 890.

7. Federal Reserve and Monetary Policy
    a. 7%
    b. $1 million
    c. 6%
    d. Money demand > money supply: shortage of money, deflation.

8. Credit Market and Asset Pricing
    a. $10,000 / 1.08^5 = 7438921$
    b. 100 / .04 = $2,500
    c. $1,000 * 1.06^{10} = 4738910$
    d. $199,635.11
    e. $23,323.28
    f. $11,167.90
    g. $329,751.07
    h. $12,158.50
    i. $228,182.39

Activities and Discussion

1. If the Fed were under the control of the President, what changes would you expect in monetary policy and what would be the effects on the economy?
2. Read the current Monetary Report from the Federal Reserve website and give a summary of existing economic conditions? Is current monetary policy restrictive or expansive?
3. Plot the current yield curve from US Treasury security price data. What observations or conclusions would you make?
4. Determine for yourself the link between money supply growth and inflation. Obtain the data and plot it.
5. From the Flow of Funds data, summarize credit market trends.

Selected Definitions

Annuities
Financial instruments with a constant periodic cash flow either as payments or receipts usually for a set time period. Annuities with cash flow at the beginning of each period are called annuities due while annuities with payments at the end of each period are called ordinary annuities.

Asset Securitization
Combining debt instruments such as mortgages into a pool and issuing new securities backed by this pool.

Bankers' Acceptances
They are used in international trade, is a bank draft issued by a firm, payable at some future date that are guaranteed for a fee by the bank which "accepts" it. The firm issuing the instrument is required to deposit the required funds into its account to cover the acceptance.

Bank for International Settlement
An international central bank that seeks to coordinate and support central banks around the world.

Board of Directors
Owner representatives elected by common stock shareholders. Responsible for setting corporate polices, strategic direction, selection and oversight of management, hiring auditors.

Bonds
Debt issued by corporations, or governments with specified payments of interest over the period plus principal at maturity.

Certificates of Deposit
A deposit at a bank for a specified period of time with no withdrawal privileges.

Commercial Paper
It is a short-term unsecured promissory note that is issued in the open market and represents the obligation of the issuing corporation.

Common Stock
Certificates of ownership in a corporation.

Coupon
Interest rate on a debt security, usually a bond, upon which the issue promises to pay until maturity.

Coupon Rate
see Coupon

Credit Risk
Risk of nonpayment or late payment of interest and/or principal.

Deferred Annuities
Payment for an annuity the will start paying at some time in the future.

Derivatives
A contract whose value is based on the performance of an underlying asset.

Discounting
A mathematical process using the interest rate for determining present value from future value.

Discount Rate
The interest rate that the Fed charges banks to borrow from the discount window.

Disintermediation
Funds moved from the banking system into the financial market.

Dividends

Distribution of corporate earnings to stockholders. May be in cash or additional stock.

Duration

A measure of the average life of an asset using a weighted average of each payment time and present value of payment amount. It isused as a measure of interest rate sensitivity.

Excess Reserves

Reserve assets in excess of the reserve requirement.

Eurodollar Deposit

Deposit of a dollar dominated account in an offshore bank. It does not have to be located in Europe.

Federal Funds Rate

The interest rate charged on overnight loans in the federal funds market.

Federal Home Loan Mortgage Corporation (FHLMC)

Called "Freddie Mac" it creates a secondary mortgage market for conventional loans.

Federal National Mortgage Association (FNMA)

Called "Fannie Mae" it is a privately owned, government-sponsored agency that buys and sells FHA-insurance, VA-guaranteed and conventional loans.

Fractional Reserve Banking

Banks hold a fraction of deposits, in the form of reserves, lending out remainder.

Free Reserves

Reserves in excess of the reserve requirement.

Future Value

Value of funds at some point in the future, usually increased by interest.

Government National Mortgage Association (GNMA)

Called "Ginnie Mae" is a government agency which provides a secondary mortgage market for special assistance loans.

Interest Rate Risk

Risk that interest rates change. This causes the price to change.

L

Long-term liquid assets; T-bills, savings bonds, commercial paper, bankers' acceptances, & Eurodollar holdings of US residents.

Legal Reserves

Cash plus securities. Note that banks are only allowed in invest in certain securities such as US Treasuries and munis.

Liquidity Risk

Risk of being unable to sell security at fair market value.

London InterBank Offering Rate (LIBOR)

Best rate that creditworthy internationals bank charge each other for large loans. Most international loans are priced from LIBOR.

M-1

Cash, demand deposits, other checkable deposits and traveler's checks.

M-2

M1 plus savings deposits (including money market deposit accounts), small-denomination time deposits (time deposits $100,000), and retail money market mutual funds.

M-3

M2 plus large-denomination time deposits (in amounts of $100,000 or more), institutional money funds, repurchase liabilities (overnight and term) issued by all depository institutions, and Eurodollars (overnight and term).

Money Market Accounts

Usually managed by investment companies, they invest funds into high quality short-term instruments such as T-bills, commercial paper, money center bank CDs. Yields are higher than small denomination bank CDs. Retail money market accounts are available for individuals, institutional money market for firms.

Municipal Bonds

Bonds issued by state, and local governments. Income is not taxable by the Federal government.

Mutual Fund

A fund that invests in securities.

Par Value

For bonds, it is the value that firms will redeem. A $1,000 par value bond at maturity will be paid $1,000. Common stock may be issued with a par value but usually it has very little meaning. Preferred stock's par value is used to compute the dividend.

Portfolio Management

Managing a collection of assets (or sometimes liabilities) to achieve risk and return goals.

Preferred Stock

Stock issued by corporations that has more seniority than common stock but does not have voting privileges. Usually pays a much higher and consistent dividend than common stock.

Present Value

Current value of money. For example, $100 today is worth $100.

Prime Rate

The base interest rate charge on high quality corporate loans by money center banks. Most domestic loans are priced from the prime rate.

Repurchase Agreement

It is the sale of a security with a commitment by the seller to buy the security back from the purchaser at a specified price at a designated future date.

Reserves

Cash and securities. Note securities must be legally permissionable short-term bonds such as US Treasury securities.

Reserve Requirement

The percentage of deposits that must be maintained in approved reserve assets (legal reserves) which consist of cash, short-term securities, and deposits at the Fed.

Retained Earnings

Profits retained, that is not paid out as dividends, in the firm. Often retained earnings are used to acquire assets that enable the firm to grow.

Treasury Bills

Short term debt instruments of the US Federal government. Sold on a discount basis then redeemed at face value. The difference is interest.

Treasury Bonds and Notes

Federal government security with semi-annual coupon payments.

Selected References

Bank for International Settlements: www.bis.org

Federal Deposit Insurance Corporation: www.fdic.gov

Federal Reserve: www.federalreserve.gov

Home Mortgages: www.freddiemac.com

Investment Company Institute: www.ici.org

Economic data from the Fed: research.stlouisfed.org/fred/

Financial news:

- Wall Street Journal: wsj.com
- Bloomberg: bloomberg.com
- Financial Times: ft.com

International Monetary Fund: www.imf.org

Office of the Comptroller: www.occ.treas.gov

World Bank: www.worldbank.org

Selected Formulas

Reserve Ratio: Reserves/Deposit

Required Reserves = Deposits * Required Reserve Ratio

Free Reserves = Reserves - Required Reserves

M*V = P*Q

Nominal Interest Rates = Real Interest Rates + Inflation + Risk Premium

Real Money Supply = Nominal Money Supply / Price