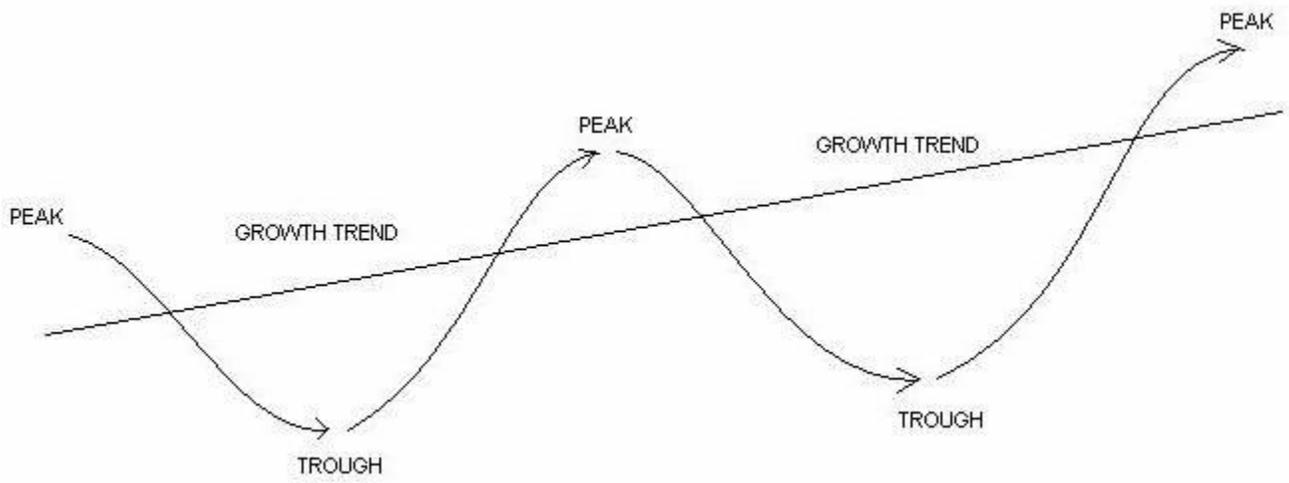
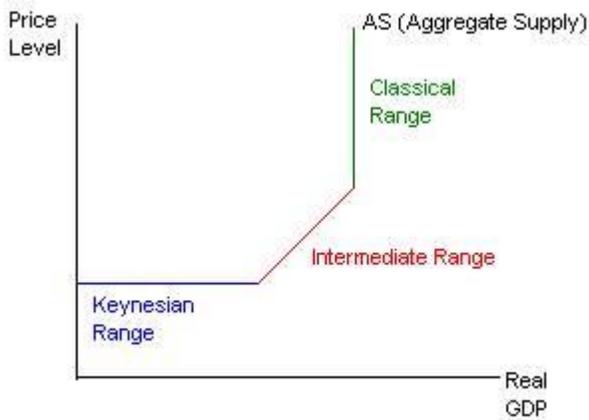


AP Macroeconomics Review – With Answers

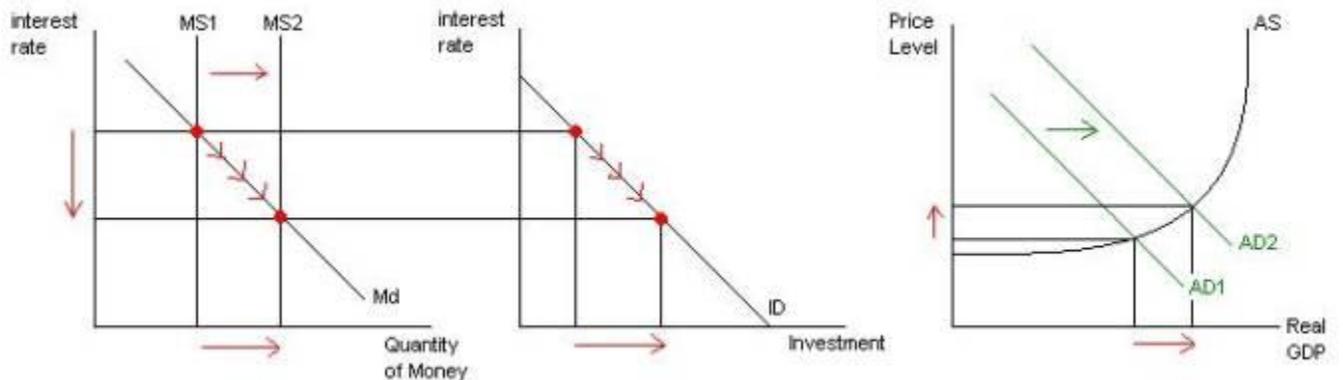
1. The business cycle.



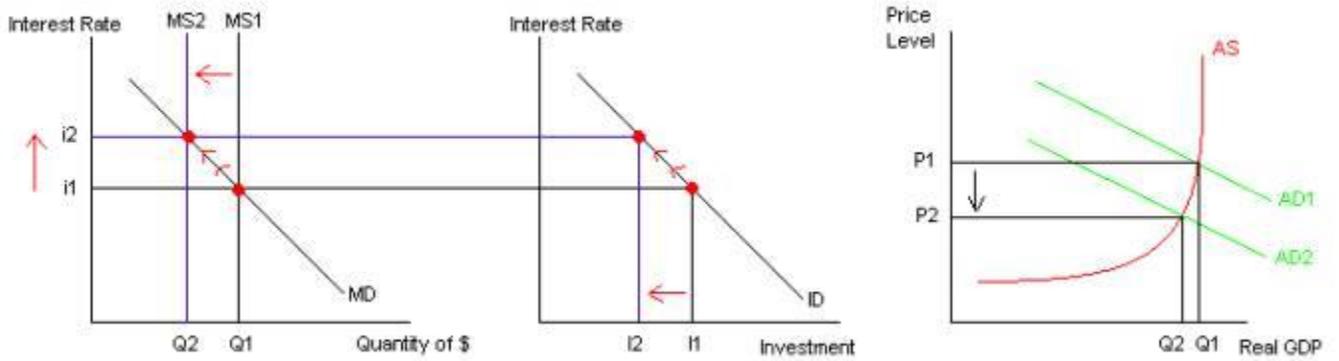
2. Aggregate supply curve (with breakdown of sections).



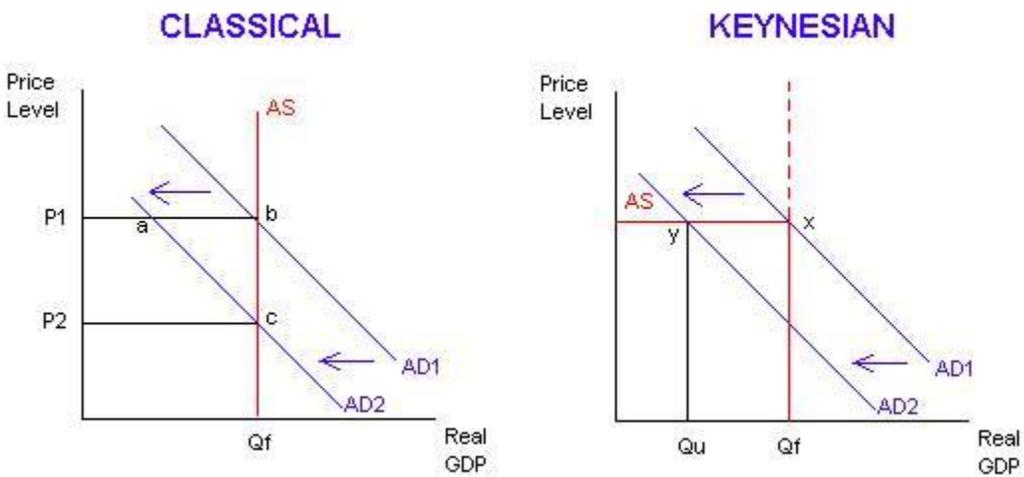
3. Expansionary (“easy”) monetary policy (Buy bonds, ↓ discount rate, ↓ reserve requirement).



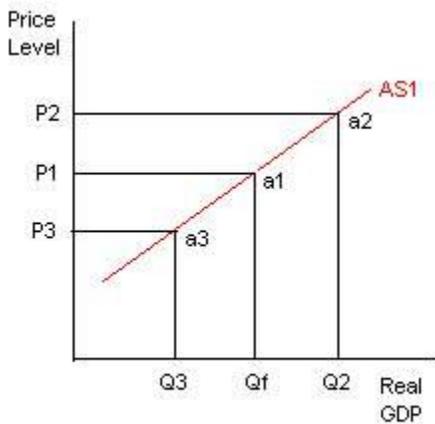
4. Contractionary (“tight”) monetary policy (Sell bonds, ↑ discount rate, ↑ reserve requirement).



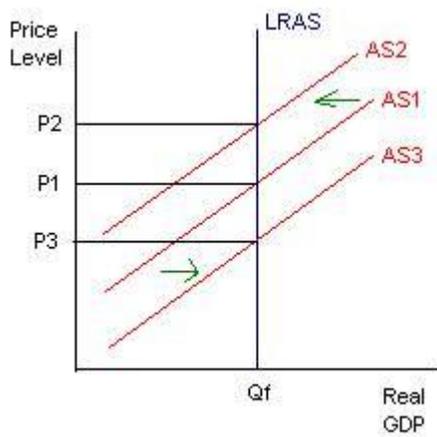
5. Classical vs. Keynesian aggregate supply curves.



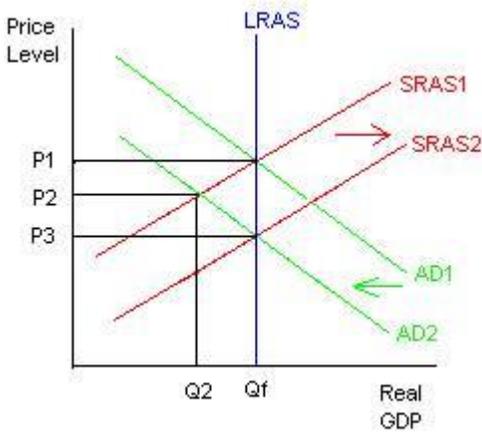
6. Short-run aggregate supply curve (SRAS).



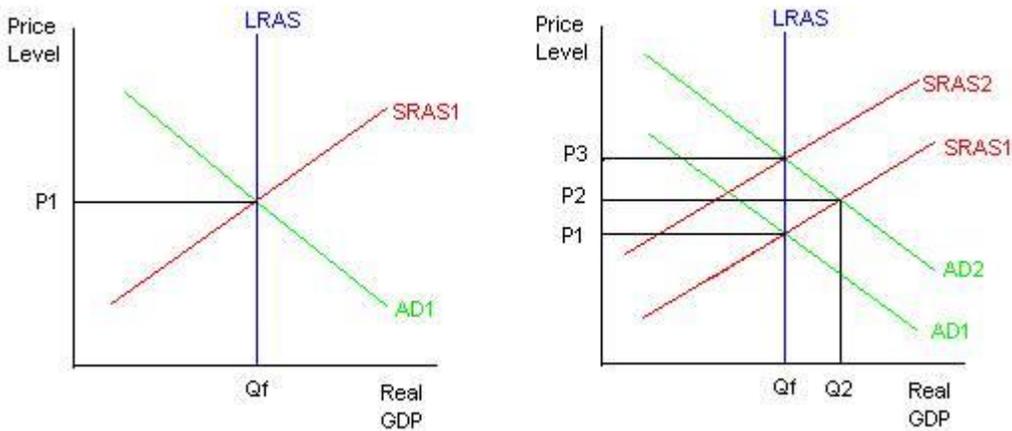
7. Derivation of long-run aggregate supply (LRAS) from short-run aggregate supply (SRAS) curves.



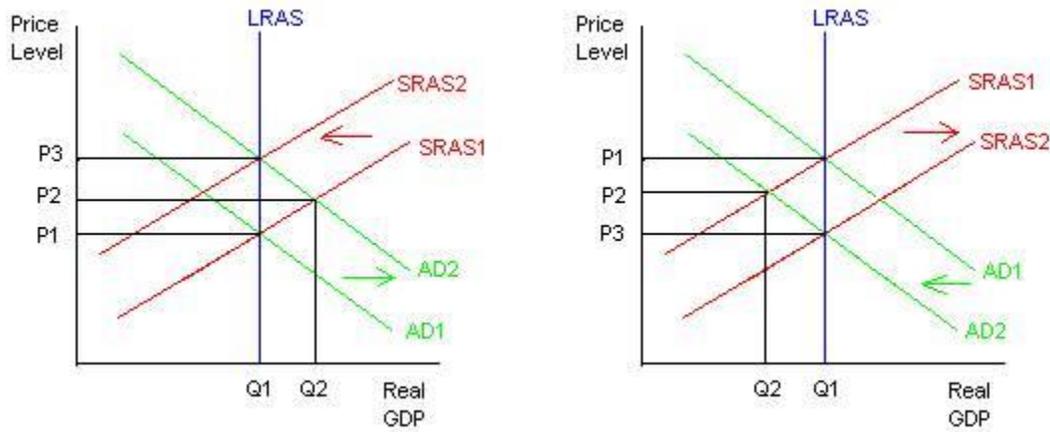
8. Extended AS-AD model with a recession.



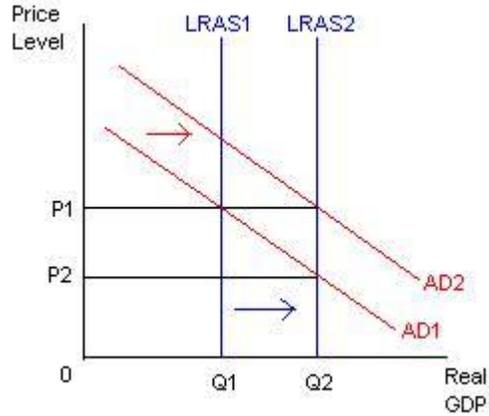
9. Extended AS-AD model with a short-run inflationary gap.



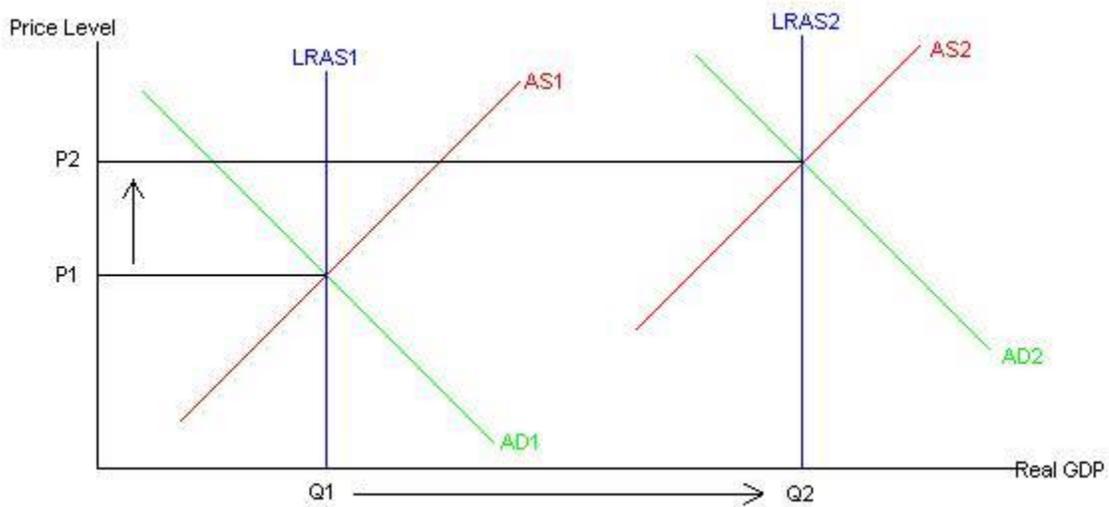
10. Extended AS-AD models with inflationary and recessionary gaps.



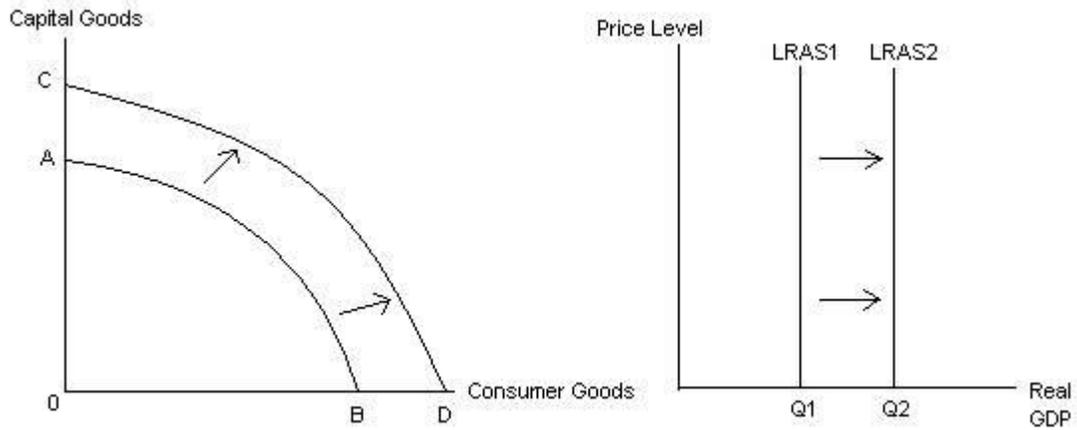
11. Monetary rule.



12. Economic growth & the extended AS-AD model.

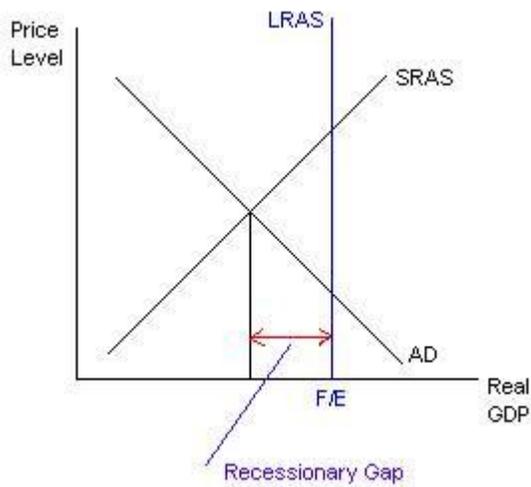


13. Economic growth illustrated via a PPC diagram and

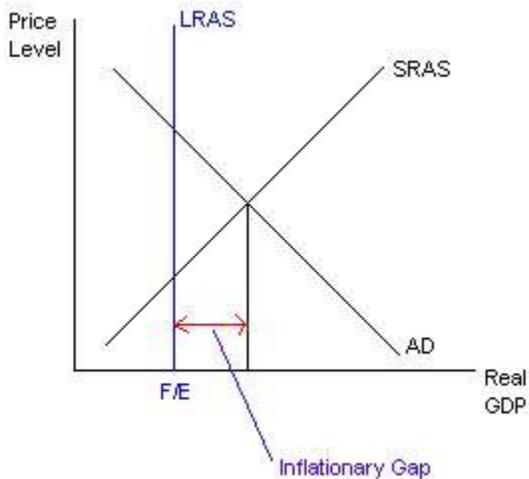


LRAS.

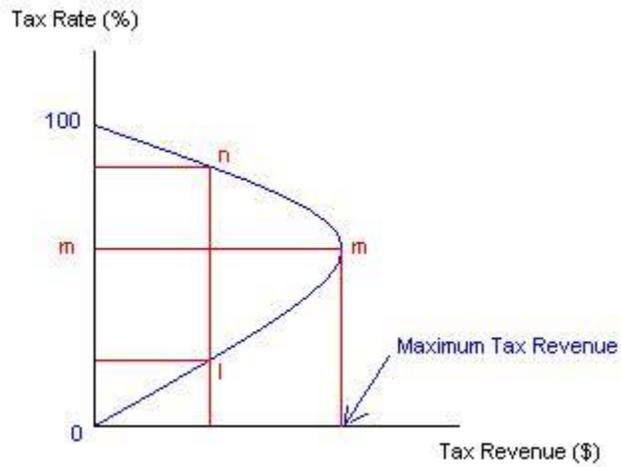
14. Recessionary gap.



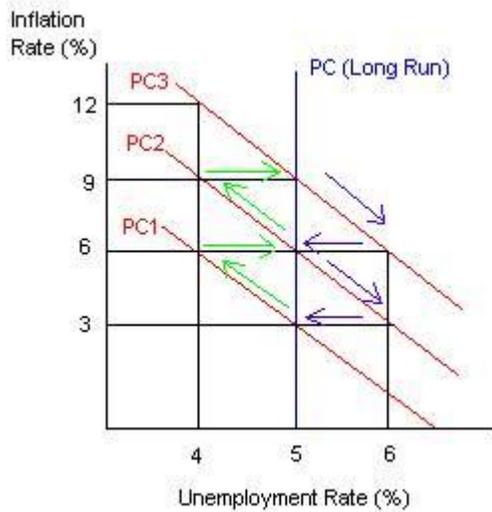
15. Inflationary gap.



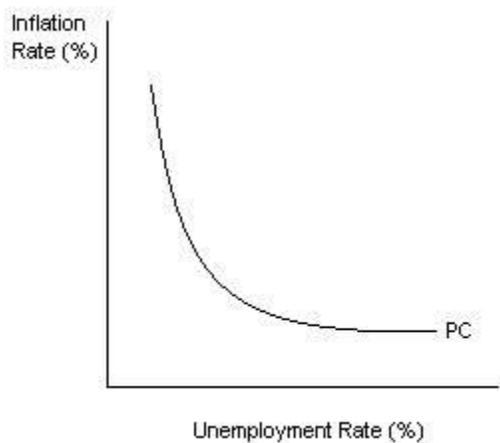
16. Laffer Curve.



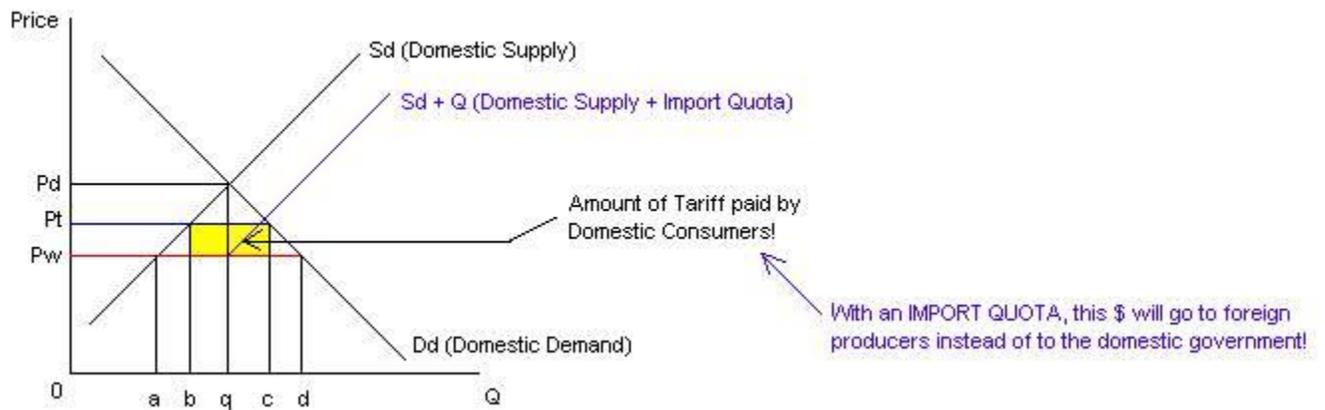
17. Derivation of LRPC (long-run Phillips' curve) from short-run Phillips' curves.



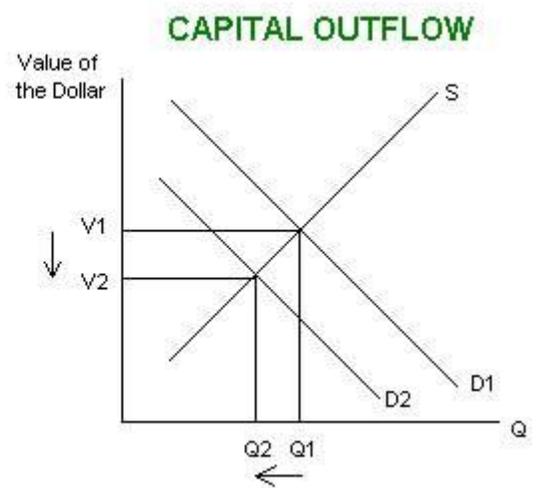
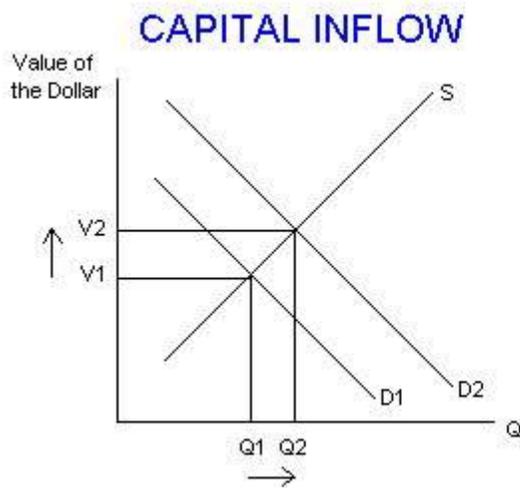
18. Short-run Phillips Curve.



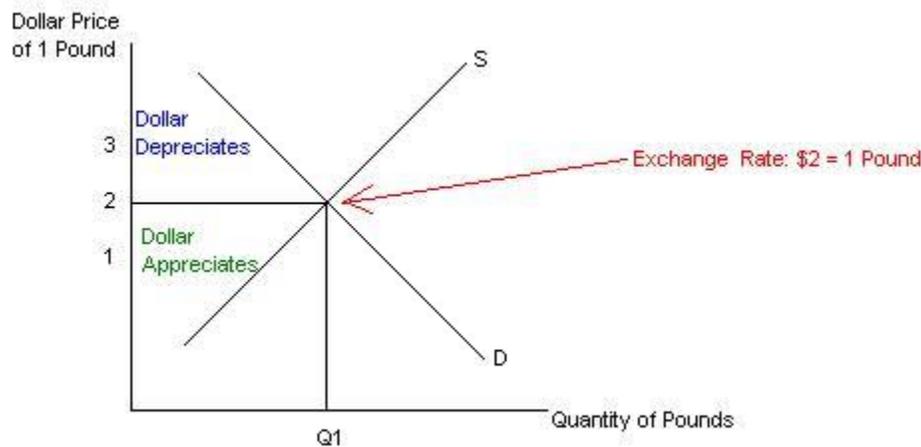
19. Impact of tariffs & quotas.



20. Capital Inflow vs. Capital Outflow.



21. International Exchange Rates.



22. What is the difference between real and nominal?

- Real = Nominal – Inflation.
- Real GDP adjusts Nominal GDP for changes in the price level (inflation and deflation). $\text{Real GDP} = \text{Nominal GDP} / \text{Price Index}$

23. What's not included in GDP?

- GDP represents the total market value of all final goods and services produced in a country in one year.
- Items excluded from GDP include: non-production transactions, existing goods or property sold/transferred, used items, secondhand sales, illegal activities, purely financial transactions, public transfers (social security, cash welfare benefits, etc.), private transfers (allowances, alimony payments, etc.), or the sale of stocks and bonds.

24. What are the determinants (shift factors) of aggregate demand?

- Changes in consumer spending, investment, government spending, and net exports will cause AD to shift. If consumer wealth increases, expectations become positive, household indebtedness decreases, or taxes decrease, AD will shift to the right (increase). If interest rates decrease or profit expectations increase, AD will shift to the right (increase). Profit expectations depend upon things such as expectations on future business expectations, technology, excess capacity, or business taxes. Net exports may change based on the amount of national income abroad or the value of the dollar.

25. What are the determinants (shift factors) of aggregate supply?

- Changes in input prices, productivity, or the legal (institutional) environment will result in a shift of the AS curve. Increases in domestic resource availability, decreases in the price of imports, or decreases in market power, will cause AS to shift to right (increase). Increases in subsidies, decreases in taxes, or reductions in government regulation will shift AS to the right. And, increases in productivity will lower per-unit production costs and increase AS.

26. What is cost-push inflation?

- Cost-push inflation exists when prices rise because of a rise in the per-unit production costs.

27. What is demand-pull inflation?

- Demand-pull inflation exists when total spending exceeds the economy's ability to produce output at the current price level.

28. What is considered investment (I)?

- Purchases of machinery, equipment, and tools by businesses.
- Construction (including residential).
- Changes in business inventory.

29. What does full employment mean?

- Full employment means all available resources are being employed.
- 4-6% unemployment.

30. Who is excluded from the labor force?

- If you are not actively seeking work.
- Discouraged workers (those who want a job, but are NOT actively seeking one).
- Homemakers for non-market wages.
- Retired workers.
- Disabled workers.

31. What are the four types of unemployment?

1. FRICTIONAL:

- Between jobs (personal choice).
- They may have quit one job to find another, or they may be trying to find the best opportunity after graduating.

2. STRUCTURAL:

- Job mismatch ... Skills don't match the skills businesses want ... Basis for government job training programs.
- This happens as the demand for certain types of labor changes because skills are now obsolete.

3. CYCLICAL:

- Insufficient aggregate demand for people actively seeking jobs.

4. SEASONAL: ➤ Unemployment caused by changes in the weather.

32. How does one calculate the unemployment rate?

- The unemployment rate represents the % of the labor force not employed!
- Labor force = employed + unemployed.
- Unemployment rate = # unemployed / # labor force.

33. What is MPS?

- Marginal propensity to save is the % of any change in income that is saved.
- $MPS = \Delta \text{Savings} / \Delta \text{Income}$.

34. What is MPC?

- Marginal propensity to consume is the % of any change in income that is consumed.
- $MPC = \Delta \text{Consumption} / \Delta \text{Income}$.

35. What does MPS + MPC equal?

- $MPS + MPC = 1$.

36. What is APS?

- Average propensity to save is the % of income that is saved.
- $APS = \text{Savings} / \text{Income}$.

37. What is APC?

- Average propensity to consume is the % of income that is consumed.
- $APC = \text{Consumption} / \text{Income}$.

38. What does APS + APC equal?

- $APS + APC = 1$.

39. What is the formula for the spending multiplier?

- $m = 1 / (1 - MPC)$
- $m = 1 / MPS$

40. Do changes in government spending and taxation have equal results?

- NO ... if changes are equal, government spending will have a larger impact since it has a direct effect.
- Taxes change income and, thus, consumption by an amount equal to the tax times the marginal propensity to consume. So, the change in consumption will be less than the tax change causing its overall impact to be less.

41. What is fiscal policy?

- Changes in government spending and taxation to manipulate spending!

42. What is expansionary fiscal policy?

- **EXPANSIONARY FISCAL POLICY:** To combat a recession!

1. ↑ Government Spending (Shifts AD to the right by more than a ΔG due to the multiplier)

2. ↓ Taxes (↑ incomes and consumption ↑ by $MPC \times \Delta \text{income}$, thereby shifting AD to the right by more than the ΔC because of the multiplier)

3. Combination of ↑ Government Spending and ↓ Taxes.

* If the budget was initially balanced, expansionary fiscal policy creates a **BUDGET DEFICIT** ($G > T$)!

43. What is contractionary fiscal policy?

- **CONTRACTIONARY FISCAL POLICY:** To combat inflation!

1. ↓ Government Spending (Shifts AD to the left by more than a ΔG due to the multiplier)

2. ↑ Taxes (↓ incomes and consumption ↓ by $MPC \times \Delta \text{income}$, thereby shifting AD to the left by more than the ΔC because of the multiplier)

3. Combination of ↓ Government Spending and ↑ Taxes.

* If the budget was initially balanced, contractionary fiscal policy creates a **BUDGET SURPLUS** ($T > G$)!

44. What type of fiscal policy results in crowding-out?

- Expansionary fiscal policy.

45. What type of fiscal policy results in crowding-in?

- Contractionary fiscal policy.

46. What is crowding-out?

- Crowding-out occurs when we are running on a budget deficit and, therefore, we must borrow money to finance that deficit. This increases the demand for loanable funds, causes interest rates to rise, and crowds out some private investment.

47. What is crowding-in?

- Crowding-in occurs when we are running on a budget surplus and, therefore, we don't need to borrow money to finance our budget. This decreases the demand for loanable funds, causes interest rates to fall, and crowds in some private investment.

48. What is an example of automatic stabilizers?

- Automatic stabilizers exist because net taxes change with GDP since taxes reduce disposable incomes and therefore, spending.
- Taxes automatically rise with GDP when incomes rise. This is an example of an automatic contractionary fiscal policy.
- Taxes automatically fall with GDP when incomes fall. This is an example of an automatic expansionary fiscal policy.
- Transfers and subsidies rise when GDP falls; and when these government payments rise, net tax revenues fall along with GDP. This is also an example of an automatic expansionary fiscal policy.
- The size of automatic stability depends on the responsiveness of changes in taxes to changes in GDP.
- The more progressive the tax system, the greater the economy's built-in stability.
- Automatic stability reduces, but does NOT correct economic instability!

49. What is a budget deficit?

- Government expenditures > Government revenues.
- $G > T$.

50. What is a budget surplus?

- Government revenues > Government expenditures. ➤ $T > G$.

51. What is the difference between debt and deficit?

- Debt is the total accumulation of all past deficits and surpluses.

52. What is the Keynesian view on wage/price flexibility?

- Prices and wages are NOT flexible ... they are “sticky.”
- Since our economy is characterized by big businesses and unions, businesses are unlikely to lower wages.

53. What is the Classical view on wage/price flexibility?

- Prices and wages are flexible.
- During recessions, people lose jobs and are forced to take lower wages. This translates into lower business costs which allows for an increase in production.
- While nominal wages fall, real wages would remain the same because prices would also drop since firms would need to move out growing inventories.

54. Who is the founder of Classical economics?

- Adam Smith.

55. Who is the founder of Keynesian economics?

- John Maynard Keynes.

56. What is the shape of the Classical AS curve?

- The Classical AS curve is vertical since we always operate at full employment (due to flexible and responsive wages/prices).

57. What is the shape of the Keynesian AS curve?

- The Keynesian AS curve is horizontal since we usually are operating below full employment (and, since wages/prices are “sticky”).

58. What is money?

1. Store of Value

- If it had no value, people wouldn't want it! This lets us transfer purchasing power from the present to the future. It's a convenient way to store wealth.

2. Unit of Account

- \$ -- Price Tag -- ↑ Transactions.
- Prices are quoted in dollars and cents.

3. Medium of Exchange

- Accept currency in exchange for goods and services.

59. What is the Federal Reserve System?

STRUCTURE OF THE CENTRAL BANK (The Federal Reserve System):

- The "Fed" was established in 1913. It holds power over the money and banking system.
- The central controlling authority is the Board of Governors.
- 1 Member (Presidents) from the 12 Federal Reserve District Banks represent the advisory committee which reports what is going on in each of the reserve bank's districts.
- The central bank is independent from the U.S. government!
- Politicians can't directly tell them what to do!

60. What are the tools of monetary policy?

- Open market operations (buy / sell government securities).
- Discount rate.
- Reserve requirement.

61. What is the formula for the money multiplier?

- $mm = 1 / \text{reserve ratio}$

62. What is the reserve ratio?

- The % of \$ that banks must hold in reserves.
- This amount is set by the Fed and guarantees that banks won't loan out everything in deposit.
- Money Multiplier = $1 / \text{Reserve Requirement} = 1 / \text{RR}$
- Example) If $\text{RR} = 20\%$, the Money Multiplier = $1 / (1/5) = 5$
- Example) If $\text{RR} = 10\%$, the Money Multiplier = $1 / (1/10) = 10$
- Changing the reserve ratio affects the size of excess reserves and, therefore the size of the multiplier as well!
- The reserve ratio is RARELY changed since changing it could destabilize bank's lending and profit positions! A change in the reserve ratio would affect banks' lending ability immediately.

63. What is the discount rate?

- The interest rate the Central Bank charges other banks for loans.
- An increase in the discount rate signals that borrowing excess reserves is more difficult and will tend to shrink excess reserves.
- A decrease in the discount rate signals that borrowing excess reserves will be easier and will tend to expand excess reserves.
- Changing the discount rate has minimal direct effect, since only 2-3% of banks reserves are borrowed from the Fed. It serves more so as a signal indicating the direction of monetary policy!

64. What is the federal funds rate?

- The interest rate banks charge each other on overnight loans. The FFR is determined by the demand and supply of loanable funds (excess reserves).

65. What is stagflation?

- Stagflation occurs when prices and unemployment are both rising!

66. How do monetarists and Keynesians differ on the issue of crowding-out?

- Monetarists feel crowding-out is significant and that it completely negates the intended effects of fiscal policy.
- Keynesians recognize that crowding-out does exist, but they feel it is insignificant (because investments is not really sensitive to interest rates).

67. What is the monetary rule?

- A rule that would make the Fed increase the money supply each year at the same annual rate as the normal GDP growth rate.
- This rule would link increases in the LRAS with increases in the money supply so that AD is shifting rightward at the same time.

68. In macroeconomics, what is the difference between the short run and the long run?

SHORT-RUN vs. LONG-RUN AGGREGATE SUPPLY:

1. SHORT-RUN:

- Nominal wages and other input prices remain constant (fixed) as the price level changes.
- Workers may not realize that their real wages have changed due to inflation (or deflation) and therefore have not adjusted their labor supply and wage decisions.
- Workers hired under fixed wage contracts are “stuck” with their current wages regardless of price level changes.

2. LONG-RUN:

- Nominal wages are fully responsive to changes in the price level.
- The LRAS (long-run aggregate supply) curve is a vertical line at the full-employment level of real GDP.

69. What does a Phillips curve illustrate?

- Shows the inverse relationship between unemployment (u/e) and inflation!

70. Why is the LRAS curve vertical?

- The LRAS curve is vertical because it represents full employment (and, because nominal wages are fully responsive to changes in the price level in the long run).

71. How can we achieve economic growth?

6 MAIN FACTORS of GROWTH:

1. Quantity & Quality of Natural Resources.
2. Quantity & Quality of Human Resources.
3. Supply or Stock of Capital Goods.
4. Technology.
5. Aggregate Demand (must for output to)
6. Full Employment & Full Production of Resources. This includes both allocative and productive efficiency.

72. How can we illustrate economic growth?

GROWTH & PRODUCTION POSSIBILITIES ANALYSIS:

- Growth is shown by an outward shift of the PPC.
- AD must to remain at the full employment at each new production level.
- New resources that cause the curve to shift outwards must be used efficiently in order to produce the maximum amount of output.
- In addition, for the economy to obtain the highest possible increase in monetary value, the goods and services most wanted by society must be produced (allocative efficiency).

73. What is the equation of exchange?

- $MV = PQ$.
- M is money supply, V is velocity, P is price, and Q is quantity.
- PQ represents nominal GDP.

74. What is the difference between tariffs and quotas?

TARIFFS:

- Excise tax on imports.
- Often referred to as “protective tariffs” since they are intended to protect domestic producers from foreign competition by import prices.
- Sometimes tariffs are used as a method of bringing in more revenue.

IMPORT QUOTAS:

- These quotas state the maximum amount of imported goods allowed during a specific time period.
- Low import quotas may serve as a better protective device since they restrict the amount of foreign goods coming into a country.

75. What is the difference between a trade deficit and a trade surplus?

- Trade Deficit: Imports > Exports.
- Trade Surplus: Exports > Imports.

76. What is the difference between capital inflows and capital outflows?

- CAPITAL INFLOW: (interest rate_{U.S.} > interest rate_{rest of the world}) --> (8% > 5%)
- * The demand for dollars ↑, value of the dollar ↑, it now takes more foreign currency to buy \$1 worth of goods!
- CAPITAL OUTFLOW: (interest rate_{U.S.} < interest rate_{rest of the world}) --> (5% < 8%)
- * The demand for dollars ↓, value of the dollar ↓, it now takes less foreign currency to buy \$1 worth of goods!

77. What is the difference between a strong dollar and a weak dollar?

APPRECIATION (Strong Dollar):

- The value of a currency has ↑ (purchasing power ↑). It now takes less of that currency to buy another country's currency.

DEPRECIATION (Weak Dollar):

- The value of a currency has ↓ (purchasing power ↓). It now takes more of that currency to buy another country's currency.

78. What is the purpose of trade?

ECONOMIC BASIS FOR TRADE:

1. International trade allows nations to use the productivity of their resources and therefore realize an expanded PPC (shifts out).
2. The distribution of resources among countries are often unequal.
3. Efficient production entails different technologies and combinations of resources.
4. Products vary amongst nations and some people like imports over domestic goods.
5. As economies progress, the level of resources available may change and affect the relative efficiency of the production of goods and services.

79. What is the difference between absolute and comparative advantage?

ABSOLUTE ADVANTAGE:

- One should buy goods from another if they can produce it cheaper than you can.

COMPARATIVE ADVANTAGE:

- It's beneficial for a person (or country) to specialize and trade even if that person is more productive than the possible trading partners in everything.
- If there are relative cost differences in the production process, people should specialize.

80. What does the following equation stand for: $B.O.P. = B.O.T + C.F.$

- Balance of Payments = Balance of Trade + Capital Flows.
- Balance of Trade = Exports – Imports.
- Capital Inflow: Interest rates (u.s.) > Interest rates (r.o.w.)
- Capital Outflow: Interest rates (u.s.) < Interest rates (r.o.w.)

81. What is currency?

- Coins and paper (Federal Reserve Notes) held in the hands of the public.
- It is “token” money since its intrinsic value is less than its actual value.

82. What is M1?

- M1 = Currency + Demand Deposits (Checking Accounts).

83. What is the largest component of M1?

- Demand Deposits (Checking Accounts).

84. Who is helped and hurt by inflation?

REDISTRIBUTIVE EFFECTS of INFLATION:

1. Fixed Income Groups (Hurt).
2. Savers (Hurt).
3. Debtors / Borrowers (Helped).
4. Anticipated Inflation (Effects are less severe due to “inflation premiums” built into wage/pension contracts).

*** Most people are simultaneously helped and hurt by inflation since we are often both borrowers and savers!

*** Mild inflation may be a healthy by-product of a prosperous economy or it may have undesirable effects!

85. What types of policies are used during periods of high unemployment?

- Expansionary (“easy”) fiscal and monetary policies.
- Fiscal Policies: ↓ Taxes, ↑ Government Spending.
- Monetary Policies: ↓ reserve requirement, ↓ discount rate, BUY bonds.

86. What types of policies are used during periods of high inflation?

- Contractionary (“tight”) fiscal and monetary policies.
- Fiscal Policies: ↑ Taxes, ↓ Government Spending.
- Monetary Policies: ↑ reserve requirement, ↑ discount rate, SELL bonds.

87. Circular Flow Revisited ☺

