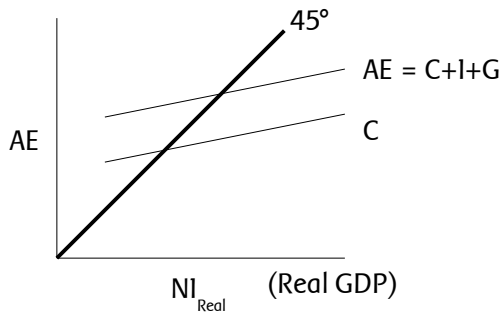


Unit III – Keynesian Economics, Aggregate Economy, Fiscal Policy

KEYNESIAN EQUILIBRIUM – NO SUPPLY

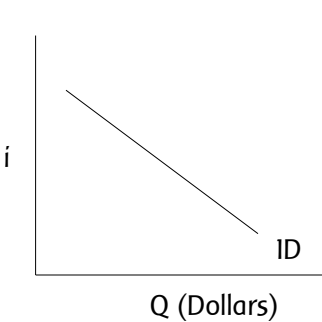
- Aggregate Expenditures (AE) Schedule
- Given Income (=output), Consumption, Investment, Government Spending. Key Equation: $AE = C + I + G$
- Equilibrium where $AE = NI$



INVESTMENT DEMAND

***Comparing Costs and Benefits

- Planned Investment should equal Actual Investment(S)
- Unplanned Investment is Total minus Planned. This is Surplus or Deficit Inventory. To withhold inventory is like investing for the future, but it was unplanned because you intended to sell what is now left-over.



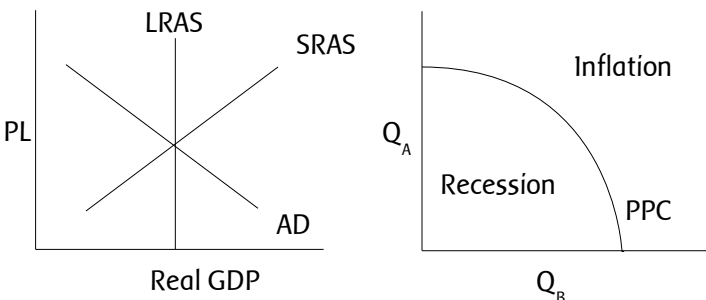
Determinants

- Expectations
- Business Confidence
- Technology
- Competitors
- Not i!!!

The y-axis could be either nominal interest rate (i) or expected rate of return (r)

Long-run Aggregate Supply vs. Production Possibilities Curve

PPC shows output potential with scarce resources, for two goods. Assumes maximum efficiency. Determinants are same as AS. Gaps: Inflationary is outside, Recessionary is Inside.

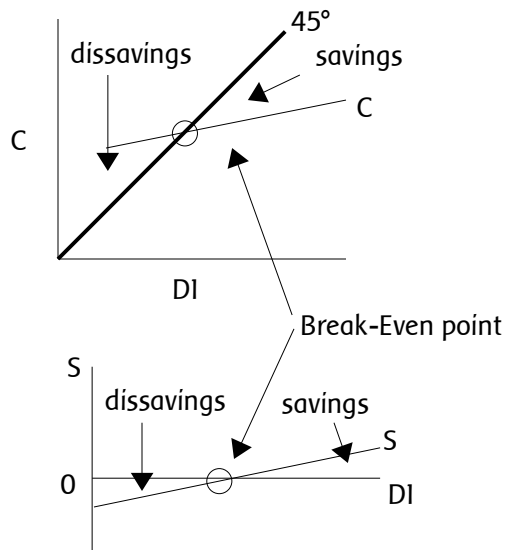


CONSUMPTION and SAVING

*More Schedules, given Disposable Income (DI), Consumption (C) and Saving (S). $DI = C + S$ (You either spend or save your money)

Determinants:

- Wealth (opposite effects)
- Expectations (opposite effects)
- Consumer indebtedness (opposite effects)
- Taxation (decreases both C and S)



MULTIPLIERS

***Anything in the economy keeps going, so multipliers help us see the total effect of a single action after everybody has extended it fully.

- Average Propensity to Consume/Save (APC/APS) is how quickly you spend or save.
 $APC = C / DI$, $APS = S / DI$
- Marginal Propensity to Consume/Save (MPC/MPS) is how likely you are to spend or save the next dollar you receive.
 $MPC = \text{Change in } C / \text{Change in } DI$
 $MPS = \text{Change in } S / \text{Change in } DI$
- Investment Multiplier (Government Spending Multiplier) is how much GDP will increase if G is increased by a given amount.
 $= 1 / MPS$
- Tax Multiplier is how much a tax will reduce GDP.
 $= -MPC / MPS$

Unit III – Keynesian Economics, Aggregate Economy, Fiscal Policy

AGGREGATE DEMAND (AD)

***Simple Demand obeys the Law of Diminishing Utility:

Quantity of Goods versus Price.

***AD is Output (GDP) versus Price Level (PL)

***Factors of Downward Slope:

- Interest Rate Effect: increasing inflation reduces DI, reducing C, and raising interest rates.
- Wealth Effect: compare value of wealth to price level (PL)
- Net Exports Effect: GDP demanded increases and PL rises so Net Exports decrease and there are higher prices in this economy so it begins to import even more, decreasing AD.
- Determinants of a Shift in AD
 - Expectations of future Income, inflation, profits
 - Government Spending/Taxes
 - Money Supply
 - Foreign Exchange Rates or Incomes

AGGREGATE SUPPLY (AS)

Determinants of a Shift in AS

- Input or Resource Cost (labor, raw materials, capital (interest rates, nominal and real))
- Technology
- Capital Stock
- Expectations

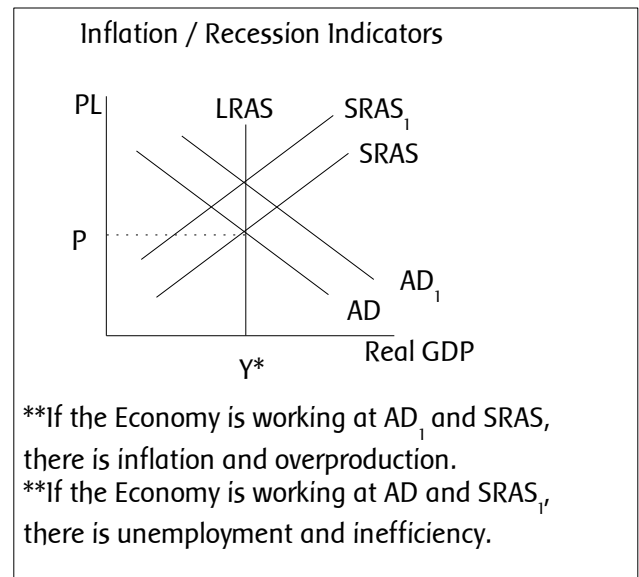
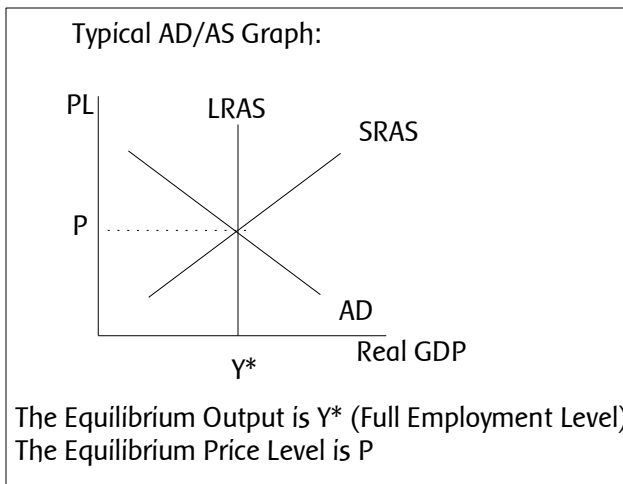
**On the SRAS (Short-run AS) there is either expansion or contraction in the business cycle. Wages and Prices are Sticky downward.

**On the LRAS (Long-run AS) there is Full Employment and peak output. LRAS is perfectly inelastic (Vertical)

>>THERE MUST BE A SHIFT IN SRAS BEFORE LRAS SHIFTS<<

AGGREGATE EQUILIBRIUM

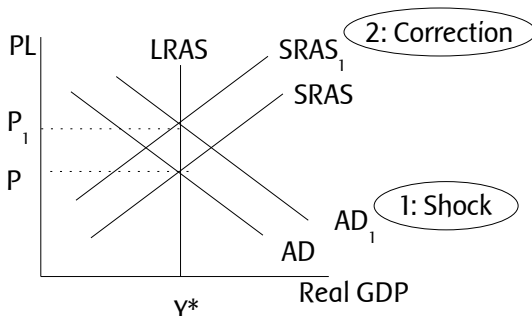
**Where AD and AS (SRAS) meet. This may or may not be on the LRAS, and which side the actual equilibrium is on indicates inflation or recession.



ECONOMIC SHOCKS AND NATURAL MARKET FORCES

**Natural Market Forces will push the economy toward the Full employment level of Output (Y^*).

**Follow the graph: the actual events that were responsible for the correction were Lay-offs and Declines in Production, because the Shock was to AD.



COMPARE AE and AD/AS

***Basically, the components of AE are the same as AD for a closed (no trade) economy. Therefore, any increase in AE is felt PROPORTIONATELY in AD. Remember to use Multipliers!!!

Unit III – Keynesian Economics, Aggregate Economy, Fiscal Policy

FISCAL POLICY - Congress

- There are automatic changes! More income leads to more taxes (progressive rates that charge more on higher incomes), without any intervention from the government.
- Policy can be either EXPANSIONARY or CONTRACTIONARY
- Policy can be either AUTOMATIC or DISCRETIONARY, meaning the change took place without the government, or as a result of government action, respectively.
- DISCRETIONARY: Congress can change Spending (affects G) or Taxes (affects C & I)
- All fiscal policy affects the budget. Government spending can either spend a surplus or borrow to get the money to spend, called DEFICIT SPENDING (Crowding-out effect raises interest rates). If the Government spends its surplus, it is contractionary, because that money can no longer be spent any more; they could have borrowed even more money to accomplish the fiscal policy action that was decided upon.
- Remember the Government Spending Multiplier ($1/MPS$)

LAGS IN FISCAL POLICY:

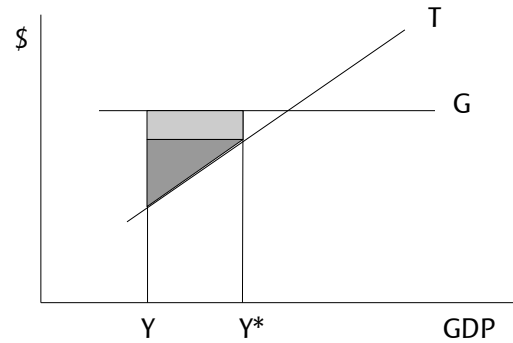
- Recognition Lag: realize the problem
- Administrative Lag: get through Congress (both houses)
- Operational Lag: getting results after enactment

PROBLEMS WITH FISCAL POLICY

- The Political Business cycle: fighting for re-elections
- Crowding-out Effect: expansionary fiscal policy increases interest rates and therefore decreases C and I, countering the desired effect.
- Net Exports Effect: expansionary policy raises interest rates, the dollar appreciates, and Net Exports decline (AD down). Contractionary policy decreases interest rates, the dollar depreciates, and Net Exports rise (AD up)

BUDGET ANALYSIS

Take a graph with dollars of the budget on the y-axis and GDP on the x-axis:



Y^* is the full-employment level of output; Y is the current level. Government Spending is constant for all levels of output, but taxes vary, because they are progressive rates and yield more revenue as GDP increases. The lightly-shaded region is the structural deficit because it connects with the full-employment level of taxes; the dark region is a cyclical deficit due to a number of adverse economic conditions. Together, both give the total deficit of the government.

SUPPLY-SIDE FISCAL POLICY

****Taxes****

- Savings and Investment: Taxes down leads to increased DI, S, and I, as well as Production Capacity.
- work incentives: Taxes down leads to increase in after-tax wages (DI increase) and increase Employment.
- Risk-taking: Taxes down: possibly a higher yield on any move by businesses.

****Cannot be represented by AE (Keynes has no supply)**

****Supply shifts take more time than demand shifts.**

