

1.	$C = 5 + .75Y_d$	Consumption
	$I_i = 18$	Investment
	$G = 20$	Government spending
	$X = 19$	Exports
	$I_m = .1Y$	Imports
	$T = 6 + .2Y$	Taxes
	$TR = 10$	Transfers
	$Y_d = Y - T + TR$	Disposable income

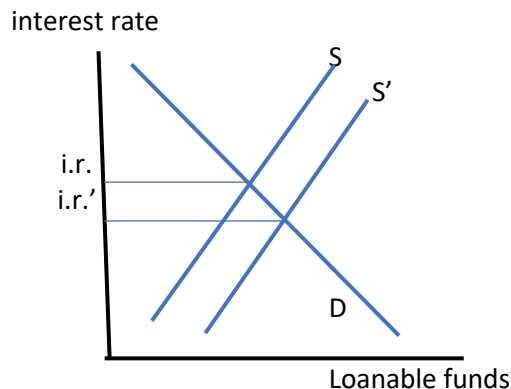
No Solow here. Look at the class slides. Also, no adjusting for inflation

- a. Solve for equilibrium GDP.
 - b. Find the budget deficit or surplus (specify which), and the trade balance (ditto).
 - c. What do classicals think the budget situation will do to the economy? Illustrate with a Loanable Funds diagram. What happens to investment? Household saving?
 - d. On balance, is this country accumulating foreign assets, or accumulating foreign debt?
 - e. Suppose the government wishes to undertake expansionary fiscal policy. What change in G will increase GDP by 2?
 - f. Choose a **specific** expansionary fiscal policy and justify it based on an additional benefit it will bring...**in addition to** increasing GDP and reducing unemployment.
2. Show each situation on a separate AD/AS diagram. Assume full employment to start, unless otherwise directed.
- a. There is a technological breakthrough in health care.
 - b. In a deep recession, government spending increases.
 - c. During a recession, a climate accord limits the use of fossil fuels.
 - d. Inflation expectations decrease.
- 3.a. The CB has decided on an expansionary monetary policy. What will they do, exactly?
- b. Suggest 3 interest rates that will change. What happens to bond prices? What happens to the value of the € in the foreign exchange market?
- c. Designate each person/institution as a winner (W) or loser (L) from the policy. With a few words, explain each of your choices.
- (i) savings account owner
 - (ii) city government, reliant on tax revenues
 - (iii) student who borrows to pay college costs
 - (iv) a firm that imports a lot of raw materials to use in production
4. a. Draw the \$ market, trading for ¥ (yuan). Shock: U.S. interest rates rise.
- b. Draw the € (euro) market, trading for \$. Shock: European stock markets slump.
- c. Draw the ₦ (Nigeria) market, trading for \$. Shock: Nigerian inflation falls.
- d. Draw the R\$ (real, Brazil) market, trading for dollars. Shock: U.S. interest rates rise.
- e. What do you think happens to net exports of the home country in each example?
5. Suppose a new policy is instituted: \$5000 paid to each household with one or more child. Assuming high and low income households are equally likely to have a child, what, if anything, happens to the Lorenz curve? Illustrate and explain briefly.

1. a. $E = Y$
 $C + I + G + X - I_m = Y$
 $5 + .75(Y - 6 - .2Y + 10) + 18 + 20 + 19 - .1Y = Y$
 $65 + .5Y = Y \quad Y = 130$

b. BB: $T - G - TR = 32 - 20 - 10 = +2$ surplus
 TB: $X - I_m = 19 - 13 = +6$ surplus

c. Government enters as a saver, increasing S of funds.
 The interest rate falls. Ii rises. HH saving falls
 (because of the interest rate decline). Classical are happy about Ii but would probably say "cut taxes."



- d. Trade surplus: accumulating foreign assets, more so than foreigners are here. Relative to GDP, a country with a trade surplus has a lower current standard of living. (More G&S leave the country than enter it the country on balance.)
- e. The multiplier is 2. $\Delta G = 1$ to get $\Delta Y = 2$.
- f. Your choice. There must be a distinct social/political/ideological objective.

2. a. AS right
 b. AD right
 c. AS left
 d. AS right

3. b. The CB will lower the interest rate on bank reserves.
 c. A typical bank will make more loans, adding to the public's checking accounts (dd). Loans \uparrow and dd \uparrow . M1 will increase as checking accounts grow. Real GDP (Y) should increase—borrowing and spending on investment goods and some consumption goods grows.
 d. Govt bond rate, corporate bond rate, mortgage rate, prime rate, inter-bank rate, car loan rate, student loan rate, credit card rate, savings account rate, CB rates.
 When interest rates fall, bonds prices rise.
 The lower interest rate pushes down the value of the € in the foreign exchange market.
- e. (i) loser, since interest earnings fall.
 (ii) winner—higher Y means higher tax revenues automatically
 (iii) winner since (maybe) student loan rates will fall
 (iv) loser since the \$ falls, making imports more expensive.

4. a. \$ mkt. D right, S left NX fall
 b. € mkt. D left, S right NX rise
 c. ₪ market. D right, S left NX rose
 d. R\$ mkt. D left, S right NX rise

5. The policy decreases income inequality. The payment to lower-income hh is disproportionately big. That increases their share of total income.

