Economics 1021, Section 1 **Prof. Steve Fazzari**
Homework Solutions: Part 3 **Spring, 2013**

1a) Monetary policy is usually described as a demand-side policy. Changes in the cost of borrowing affect what businesses and households spend. You might argue that if monetary policy lowers interest rates, it would affect investment spending which has an impact on the supply side, in which case you could say that this statement comes from both demand and supply perspectives. Most likely, however, any supply-side effect of monetary policy on investment and the capital stock would be small and temporary. (We will discuss this issue in more detail at the end of the course.)

b) Technological change is perhaps the most important supply-side variable. Most economists believe that technology is the key to long-run growth of potential output.

c) Because the statement emphasizes the "incentive effect" of low taxes on decisions to work, this is a supply-side idea.

d) In contrast to part c, this statement emphasizes the impact of tax policy on spending, so it refers to the demand side.

e) This statement reflects both demand-side and supply-side thinking. In the short-run, higher saving reduces consumption and so it could slow the economy through the demand side. In the long-run, higher saving releases more resources for investment and capital accumulation (that works through lower interest rates). This long-run aspect of saving works through the supply side.

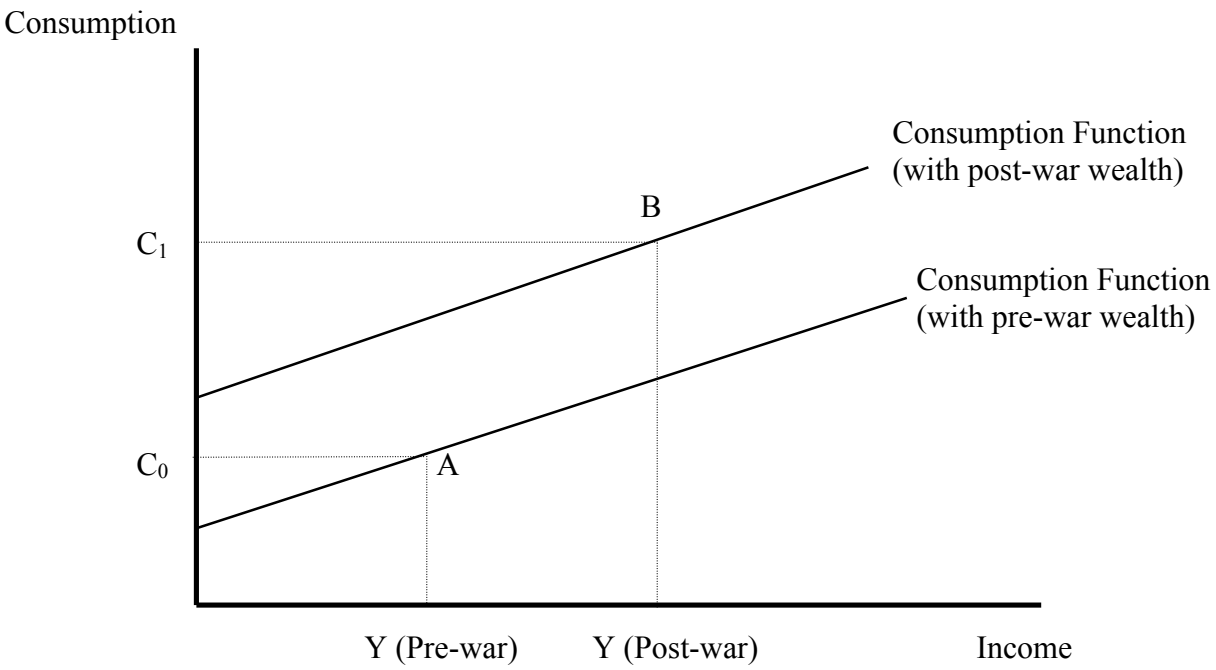
2. Human capital represents the skills that people have to undertake their jobs. Skills can increase in a variety of ways, most obviously education. Greater skill makes labor more effective at producing output, raising labor resources, and increasing potential output.

There are other ways for human capital to increase. For example, as workers gain more experience, their human capital usually rises (economists often call this kind of human capital accumulation "learning by doing"). improved incentives to work hard; greater responsibility of a society to avoid shirking on the job. You could probably suggest other coherent explanations as well.

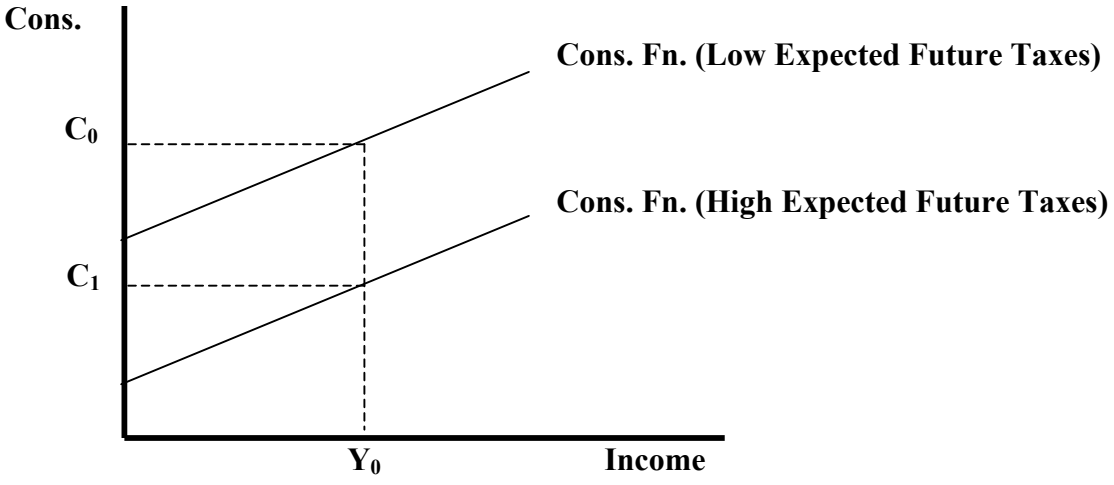
3. The marginal propensity to consume is the proportion of each additional dollar of income that individuals spend on consumption of goods or services. If the MPC for the nation is 0.90, then we expect that consumers will spend $0.90 for each additional dollar of income they receive. Of course, only you can determine your personal MPC! It is important that you think of it as the amount you spend out of each *additional* dollar you receive. For many of you, this number may be 1.0 at this point in your lives.

4. The marginal propensity to consume is the slope of the consumption function, so the steeper curve has the higher MPC.

5. The income increase caused a movement along the consumption function. Higher wealth shifted the consumption function upward for a given level of income. The total effect on consumption is shown by the movement from point A to B on the graph below. Consumption rises from C_0 to C_1



6 a) For a given level of income, the news that taxes will be higher in the future reduces expected future disposable income and shifts the consumption function downward and lowers consumption from C_0 to C_1. (Note that <u>current</u> income, Y_0, doesn't change, it is the expectation of future income that is emphasized in this question.)



b) When consumption falls, firms sell less, their sales expectations decline, and they produce less output and employ fewer workers. According to this model, lower output is the result of a change in aggregate demand. That is the key feature of any Keynesian macroeconomic theory.

c) Higher taxes could weaken the economy through two supply-side channels. First, higher taxes reduce the incentive to work. Thus, fewer people may seek market employment and employed people may work fewer hours. Second, higher taxes reduce disposable income. Part of this reduction affects consumption, as discussed above (which is a demand-side effect). But people are also likely to save less with lower disposable income. Lower saving reduces the funds for investment, lowers the capital stock, and reduces long-run potential output.

7. Cash flow is the money that firms generate from their own operations over a period of time. It is the difference between a firm's revenues and its cash expenses. (The concept is quite similar to, but not identical to, "profits.") When cash flow increases, firms can invest more because their need to borrow decreases; they can finance more investment with their own funds. Firms prefer internal finance to borrowing because the opportunity cost of internal funds is usually cheaper than the cost of loans. For the same reason, investment declines when cash flow falls for firms. Cash flow varies a lot with the business cycle (it is strongly pro-cyclical). Therefore its volatility across the business cycle helps explain the large cyclical fluctuations of investment.