Economics 1021, Section 1 **Prof. Steve Fazzari**
Solution Notes for Exam #2 **Spring, 2013**

Note: Multiple choice questions are randomized; the questions and alternatives on your exam may have a different order from what appears below, but the same questions and alternatives appear on all forms of the exam.

Correct answers appears with ** below.

MULTIPLE CHOICE (5 points each) Write the letter of the alternative that *best* answers the question in the - blank. Make sure you read all four alternatives before making your choice.

___ 1. Which statement best describes the link between a country's economic conditions and its trade deficit?

(A) The trade deficit means that the country is *not* accumulating capital goods from foreign countries that enhance its supply-side potential.
(B) A country with a trade deficit produces more output than it absorbs in consumption, investment, and government spending on goods and services.
(C) Appreciation of the country's currency is likely to reduce the trade deficit.
(D) **The trade deficit will likely fall if a country enters a recession while its trading partners continue to grow.

___ 2. Which of the following statements best describes the expansion or "boom" phase of "Minsky Cycle" (as applied to residential home construction)?

(A) **More aggressive lending leads to higher spending that stimulates income growth, validates risky financial practices, and encourages even more extensive lending.
(B) Low interest rates raise consumption, investment, and international trade which all contribute to higher demand, stronger sales, and more employment.
(C) Improved access to credit stimulates business investment that leads to more capital resources and higher potential output.
(D) Good economic results encourage government spending and boost the demand side of the economy.

___ 3. The exchange rate for the Japanese yen changed from 87 yen to the dollar in early January 2013 to 96 yen to the dollar in mid-March 2013. What can you say about the relationship between the dollar and the yen *from this information alone.*

(A) The yen and the dollar moved in the direction of purchasing power parity.
(B) Both the yen and the dollar depreciated.
(C) The dollar depreciated and the yen appreciated.
(D) **The yen depreciated and the dollar appreciated.

___ 4. There is some optimism that a stronger housing market in 2013 will stimulate business capital investment. Which alternative below best describes the logic of this prediction?

(A) An increase in the number of homes enhances the potential output the economy.
(B) If the housing market is stronger, the Fed will no longer keep interest rates low.
(C) A stronger housing market makes tax cuts on business investment more likely.
(D) **Demand-side stimulus from home construction is likely to increase capacity utilization of businesses.

____ 5. Which of the following statements correctly describes the broad trends in the government sector of the U.S. economy?

(A) **Recent federal spending on goods and services is low as a share of the economy, compared to the previous 50 years.
(B) Direct federal spending on goods and services now substantially exceeds the combined spending of state and local governments.
(C) Government tax revenues have had a strong upward trend as a share of the economy in recent years.
(D) Federal spending that directly creates demand has risen faster than federal transfer payments.

____ 6. Which of the following statements provides the best description of how the concept of purchasing power parity informs our understanding of exchange rates?

(A) A country will not experience exchange rate depreciation if purchasing power parity holds.
(B) If two almost identical goods are produced by different countries, they will always cost the same after adjusting for exchange rates.
(C) Purchasing power parity prevents currencies from appreciating or depreciating by a large amount, limiting volatility in the economy.
(D) **Purchasing power parity provides one measure of whether a currency is over-valued or under-valued.

____ 7. Which alternative below *does not* accurately describe a channel through which monetary policy influences a part of the economy?

(A) **Higher interest rates cause the currency to depreciate, increasing the trade deficit.
(B) Higher interest rates discourage people from borrowing, reducing consumption.
(C) Higher interest rates reduce the residential construction component of investment.
(D) Higher interest rates increase the cost of business capital and reduce business investment.

____ 8. Suppose that a consumer's income is initially $50,000 per year and that she consumes all of it. If the consumer's marginal propensity to consume is 0.5 and her income rises to $60,000, what will be her new total consumption?

(A) $65,000
(B) $60,000
(C) **$55,000
(D) $50,000

____ 9. Which of the following shocks is likely to have the biggest effect on a consumer's spending?

(A) News that the consumer's employer will give a $1,000 bonus because of an unusually good year.
(B) **Receiving an unexpected salary increase of $1,000 after a worker completes a night course.
(C) Winning $1,000 in a lottery.
(D) A one-time tax rebate equivalent to the after-tax value of $1,000 in wages designed to stimulate demand.

____ 10. Although many economic changes can have both supply-side and demand-side effects, which of the following statements most clearly *isolates* a prediction of supply-side theory?

(A) Lower interest rates reduce the value of the dollar which raises exports.
(B) **Lower income tax rates raise the incentive for people to work.
(C) Lower interest rates reduce the cost of capital and stimulate investment
(D) Lower income tax rates on interest income reduce the incentive to consume and raise the incentive to save.

SHORT ANSWER QUESTIONS. Read each question carefully and answer in the space provided. Use clear economic reasoning and make sure you write clearly and *legibly*, otherwise your score may be lower.

1. (20 points) In early 2013, the U.S. government reached an agreement to avoid the so-called "fiscal cliff." This agreement raised tax rates for some Americans. Answer the questions below about the possible effects of this policy change.

a. (10 points) Describe <u>one</u> supply-side channel through which an increase in tax rates could weaken the economy. Explain *<u>both</u>* (1) how the policy affects behavior of households or firms in the economy *<u>and</u>* (2) how this change in behavior affects GDP. (Note there is more than one channel that you could use to answer this question. Pick the one you think is best and describe it clearly. Students who pad their answer by describing multiple channels will lose points.)

Several supply-side channels imply that higher tax rates reduce potential output and GDP. Here are some good possibilities:

- **Higher tax rates reduce the incentive of individuals to work because their after-tax ("take-home") pay declines. Lower supply of labor reduces labor resources which reduces supply-side potential output.**
- **Higher tax rates reduce the incentive to save. If households save less, fewer resources are available for capital investment. Lower investment reduces capital resources, lowers productivity, and reduces potential output.**
- **If you interpreted the higher tax rates as imposed on businesses (which was not the case for the fiscal cliff deal, but is OK for purposes of this question), you could argue that higher taxes on the returns from business capital reduce the incentive for firms to invest in new capital. As in the previous case, lower capital resources reduce potential output.**

Note that you should say more than just "GDP falls" to explain the macroeconomic effect of the channel you describe. You should explicitly mention how resources or productivity are affected.

b. (10 points) Describe <u>one</u> demand-side channel through which an increase in tax rates could weaken the economy. Again, explain specifically *<u>both</u>* (1) how the policy changes behavior *<u>and</u>* (2) how the change in behavior affects GDP. (The same rules from part a apply about choosing one channel.)

Two possible demand-side channels:

- **Higher tax rates reduce disposable income and discourage consumption spending. Lower consumption reduces firm sales which causes firms to reduce production, lowering GDP. (This is the most obvious channel.)**
- **Again, if you interpret the tax increase as affecting business, you could argue that the incentive to invest in new capital is reduced. Lower business investment reduces the demand for new capital goods. Producers of capital goods sell less and cut back on production and employment.**

Some mention of lower demand leading to lower sales and lower production is required for a full-credit answer.

2a. (10 points) The news article on the U.S. dollar distributed to the class states that "Economists say the dollar hasn't risen enough yet to pose a serious threat to the U.S. recovery." Why might one fear that a strong dollar could threaten recovery? Explain whether your analysis based on supply-side or demand-side macro theory. Describe specifically how the economy could become weaker through this channel.

A strong dollar makes imports cheaper for Americans and makes U.S. exports more expensive for foreigners. Demand-side theory predicts that these changes could weaken the economy. Higher imports and lower exports both reduce U.S. aggregate demand. If demand declines, firms sell less which causes them to produce less and employ fewer workers.

b. (10 points) The article also states that "Analysts, investors and experts say the dollar's rise reflects the same rosy view of the U.S. economy that is propelling the Dow Jones Industrial Average to records." Describe a single economic channel through which an optimistic outlook for the U.S. economy would strengthen the dollar.

If people think the U.S. economy is strong, they are more likely to want to invest their money in the U.S. Foreigners need dollars to buy U.S. assets. Their desire to invest more in the U.S. <u>increases the demand for dollars</u> and causes the dollar to appreciate. (A "rosy outlook" could also encourage Americans to sell foreign investments and bring their money home, also raising the value of the dollar, but you did not have to mention this channel to receive full credit.)

Some students mentioned speculation as the way in which a "rosy outlook" would cause a stronger dollar. If people expect the value of the dollar to rise, they are likely to buy it, pushing the value of the dollar higher. But we need something to get this process started. The logic in the previous paragraph is necessary to get things going. Once the dollar starts rising, speculation could magnify the effect on the dollar.

3. (10 points) The Bush income tax cuts were passed for a 10-year period in the early 2000s and extended several times. The tax cuts expired at the end of 2012. In early 2013, a budget deal in the U.S. government made most of the Bush tax cuts permanent. (There were some tax increases for a small number of people, as described in question 1, but ignore that detail for this question.) For most people, income taxes did not change from 2012 into 2013. Nonetheless, using your understanding of what determines consumption spending, explain why consumption might rise in 2013 compared to 2012. (Hint: consider what these people thought about taxes prior to the early 2013 budget.)

Taxpayers in 2012 reasonably could have expected that there was a chance of a tax increase in 2013. In this case, when the government reached a budget deal, <u>expected future taxes fell</u> (even though actual taxes stayed the same). Lower expected taxes encourage taxpayers to consume more in 2013.