ECO 120: Macroeconomics **Your Name:** ____________________

In-class Exercise

Keynesian Model **Section (Circle One): 7:45am-9:10 9:25am-10:50**

Directions: Work in groups of up to four people and answer the following questions. All papers will be collected, but only one member's paper will be randomly selected and graded and all members of the group will receive the same grade.

By signing below, you agree that the following work represents the efforts of everyone in the group, and you are willing to accept as your own grade for the group project the grade earned from this representation of your group's work.

____________________	____________________	__________
Signature Group Member 1	Print Name	Date
____________________	____________________	__________
Signature Group Member 2	Print Name	Date
____________________	____________________	__________
Signature Group Member 3	Print Name	Date
____________________	____________________	__________
Signature Group Member 4	Print Name	Date

1. Suppose the marginal propensity to save is 0.10 and the marginal propensity to import is 0.15. Suppose an increase in consumer confidence leads to a $250 billion increase in consumer spending. What is the change in real GDP?

2. Suppose in a country the marginal propensity to consume 90% and imports are unaffected by disposable income or real GDP. Suppose firms expect the price of oil to significantly increase next summer, which would increase the cost of transporting goods between factories and retailers, and ultimately hurt profits. Expecting this to happen, investment in the economy decreases by $100 bn. What is the immediate change in real GDP?

3. Suppose an increase in income in Europe causes an increase in demand for U.S. exports to Europe by $200bn. Workers and business owners experience an increase in income, of which they put about 10% towards saving and 15% towards purchasing imported goods. Compute the immediate change in real GDP in the United States.

4. Suppose U.S. consumers preferences change so that increase their demand for by \$50bn. Suppose the marginal propensity to consume is 0.92 and the marginal propensity to import is 0.12. Compute the immediate change in real GDP in the United States.

5. Suppose that when consumers earn an additional dollar of income, they typically spend \$0.67 domestically and the rest is saved or spent on imported goods. Suppose businesses' economic outlook improves, leading to an increase in investment demand equal to \$150. Compute the immediate change in real GDP in the United States.

6. Suppose there is a Federal tax rebate equal that totals \$100bn for U.S. consumers, in which each full-time working American receives a check for \$500. Suppose the typical person puts \$100 of this money towards their savings accounts or paying towards existing debts. They spend the rest of this, including approximately \$50 on imported goods. Compute the immediate change in real GDP.

7. Suppose the Chinese Yuan appreciates against the U.S. dollar. Suppose if income were to increase by \$1, savings would rise by \$0.05 and imports would rise by \$0.20.

   (a) All other things remaining the same, will U.S. exports to China increase, decrease, or stay the same? Will U.S. imports from China increase, decrease or stay the same. Explain.

   (b) Suppose in response to the appreciation of the Yuan, the initial change in U.S. exports is \$10 billion and the initial change in U.S. imports is \$15 billion (you should know whether each of these is an increase or decrease). What will be the impact on real GDP?

8. Suppose the marginal propensity to consume is 95% and the marginal propensity to import is 10%. The economy is in a recession. Real GDP is \$5.5 trillion, and at full employment real GDP would be \$6 trillion. The president decides to increase government spending to solve the problem. How much should government spending be increased by?

9. What happens to the multiplier if MPS increases from 5% to 10% (assume MPM=0). Which MPS gives the government greater power to influence GDP? Does this imply that the government should persuade people not to save?

10. Suppose in a closed economy, the marginal propensity to save is 5%. Suppose the economy decides to remove its trade barriers and freely allow imports and exports. As a consequence the marginal propensity to import becomes 20%.

    (a) How does this effect the expenditure multiplier?

    (b) How does this change affect the ability of the government to fix recessions?

    (c) How does this affect the stability of GDP in the face of volatile decreases in investment caused by changes in expectations?

    (d) Is opening up the economy a good thing or a bad thing? Explain.