

NAME: \_\_\_\_\_

DATE: 02/08/2017

**ASSIGNMENT: Money and Consumption Multipliers**

**DIRECTIONS:** The Asher Edelman endorsement of Bernie Sanders was based on the velocity of money: the more times money changes hands to purchase goods and services, the better the economic outcome.

The velocity of money is closely correlated with the Multiplier Effect.

The multiplier is calculated two similar ways:

Consumption

$$\frac{1}{1 - \text{MPC}^*}$$

Deposits

$$\frac{1}{\text{Reserve Ratio}^{***}}$$

\*MPC = marginal propensity to consume = our consumption rate extra dollars

\*\*MPS = marginal propensity to save = our savings rate of extra dollars

\*\*\*Reserve Ratio = percentage of deposits banks may not loan to customers

1.) Explain why a reduction in MPC results in a reduction in the multiplier...

a) mathematically: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

b) economically: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2.) On January 23rd, 2017, the St. Louis Fed reported total savings deposits at national depository institutions (banks) to be \$8.8 tn. If Janet Yellen lowers the reserve ratio from 10% to 8%, what is the effect on the money supply? (show calculations)

\_\_\_\_\_

\_\_\_\_\_

3.) Average per capita GDP in Guatemala was \$5,200 in 2012 and \$5,300 in 2013 (actual data). Average per capita income in Guatemala in 2012 was \$3,697 while in 2013 was \$3,712. What is the spending multiplier and MPC in 2013 for Guatemala assuming the GDP increase was completely due to an increase in consumption?

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3.) Asher Edelman also mentioned the equation for velocity of money:  $MV = PQ$

a) If the average price of all goods and services in a particular economy is 18, 3500 of these goods and services are sold, and the velocity of money (the number of times this currency is transacted in a year) is 12, how much money is in the system? (show your work)

Money in the system = \_\_\_\_\_

b) In a different economy, there are 40 trillion units of currency in the system, the average price level is 20, and 500 billion goods & services are transacted. How many times is the currency transacted in the given year?

Velocity of money = \_\_\_\_\_

c) Which variable, M, V, P, or Q, does the FOMC control directly?  
What are the 3 strategies the FOMC utilizes to manipulate this variable?

1) \_\_\_\_\_

\_\_\_\_\_

2) \_\_\_\_\_

\_\_\_\_\_

3) \_\_\_\_\_

\_\_\_\_\_

4.) How does a cyclically balanced budget work? Are states and the federal government legally allowed to run a cyclically balanced budget?

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### Answer Key

- 1.) tutorials or read the articles on the website
- 2.) \$22 trillion
- 3.) 6.67; 0.85 MPC
- 4.) \$5,250
- 5.) 4 times