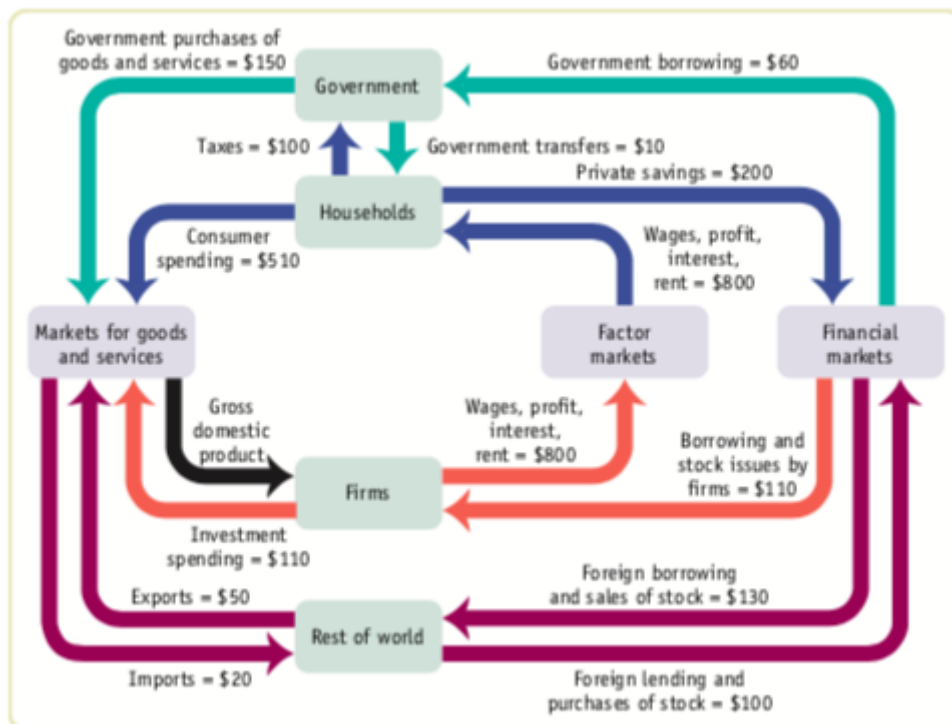


Course: ECO 204 Macroeconomics - I  
Final Exam

April 29, 2019

1. Based on the circular flow of income for the economy of Macronia, answer the questions below: [5x2=10]



- What is the value of GDP in Macronia?
  - What is the value of net exports?
  - What is the value of disposable income?
  - Does the total flow of money out of households - the sum of taxes paid, consumer spending, and private savings - equal the total flow of money into households?
  - How does the government finance its spending?
2. Please write whether the following statements are true or false giving reason for your answer. [5 x 5 = 25]
- Taylor's rule and the Taylor's principle are used synonymously.
  - In the Permanent Income Hypothesis, if the propensity to consume out of disposable income is lower than 0.5, then the average propensity to consume

- is higher than the marginal propensity to consume in the Keynesian theory of consumption.
- (c) A rise in the profit tax rate leads to a decline in the desired level of capital and a decline in investment.
  - (d) Tobin's  $q$  is the inverse of the ratio of Replacement Cost of Installed Capital to the Market Value of Firm.
  - (e) Labour supply is necessarily upward sloping.
3. The monetary authorities globally have been following the conventional monetary policy (such as the Taylor's principle) to reduce output fluctuations in the short-run. However, in the last financial crisis of 2008, it was observed that the authorities failed to do so. [**15+15 = 30**]
- (a) Explain the genesis, and describe how it led to the central bank losing its control over the economy through the conventional monetary policy. Explain this graphically.
  - (b) If you were appointed as an advisor to the central bank, what alternative policies would you suggest that will help it regain its control over the economy? Explain this graphically.
4. It is not unlikely that consumers face an imperfect credit market while making their consumption decisions over time. An imperfect credit market is one in which an individual faces two different interest rates while borrowing and lending. Please answer the following in context to this situation: [**4+6+6+3+5+5+6 = 35**]
- (a) Set up the consumer's two period optimization problem.
  - (b) Explain the consumer's equilibrium graphically, emphasizing on how is it different from a case of perfect capital market setting.
  - (c) If the consumer is asked to choose between a raise in the income either in the first or the second period (such that the present value of incremental income is same in both the periods), which period should she choose? Explain why.
  - (d) Explain graphically the net effect of an increase in the borrowing rate and a fall in the lending rate on the consumer's equilibrium.
  - (e) Consider a proportional income tax (such that only the labour income is taxed, and the interest income is tax free). Rewrite the consumer's optimization problem.
  - (f) In the recent union budget (in addition to (e)) the government announced exemption of tax on savings, but rather makes the interest income taxable. Rewrite the consumer's optimization problem.
  - (g) You are a policy advocate, and invited by NDTV to discuss the above policies. According to you which one is a better policy - (e) or (f)? Explain with arguments in favour of your stand.