

ECON1102 – S2 2019 – WEEK 10 TAKE-HOME ASSIGNMENT (15 MARKS TOTAL)

General Guidance: Answer the question as it is written and make sure you identify any particular assumptions you might be using in your answer. Please follow the guidance provided for each question below on answer length. Excessively long answers will be penalized. (Page lengths refer to text only. Graphs and diagrams do not count in the page limits, though make sure you do not include irrelevant inserts). You must work on this assignment by yourself, without help from, or collaboration with, others and the work you submit must be your own. Breaches of these protocols will be severely penalized.

For diagrams, you may insert, as an image file, a hand-drawing into your submission. Format should be A4, font size 12, single space.

(a) Understanding of economic concepts and terms (maximum half-page) (3 MARKS)

TRUE/FALSE/MAYBE and EXPLAIN. According to Solow-Swan, it is impossible for a country to maintain high growth rates in real GDP per capita (and per hour worked) with overall diminishing returns to capital.

(b) Understanding and using economic theory and models (maximum one page) (4 MARKS)

Use the appropriate AD-AS model diagram and explanation to depict the following:

- (a) An exogenous shock where equilibrium price level and real GDP move higher. (1 MARK)
- (b) An exogenous shock where equilibrium price level and real GDP move in opposite directions. (1 MARK)
- (c) a rise in price level and real GDP without any exogenous shock. (2 MARKS)

Explain your answers briefly.

(c) Understanding and analyzing data (maximum one page) (5 MARKS)

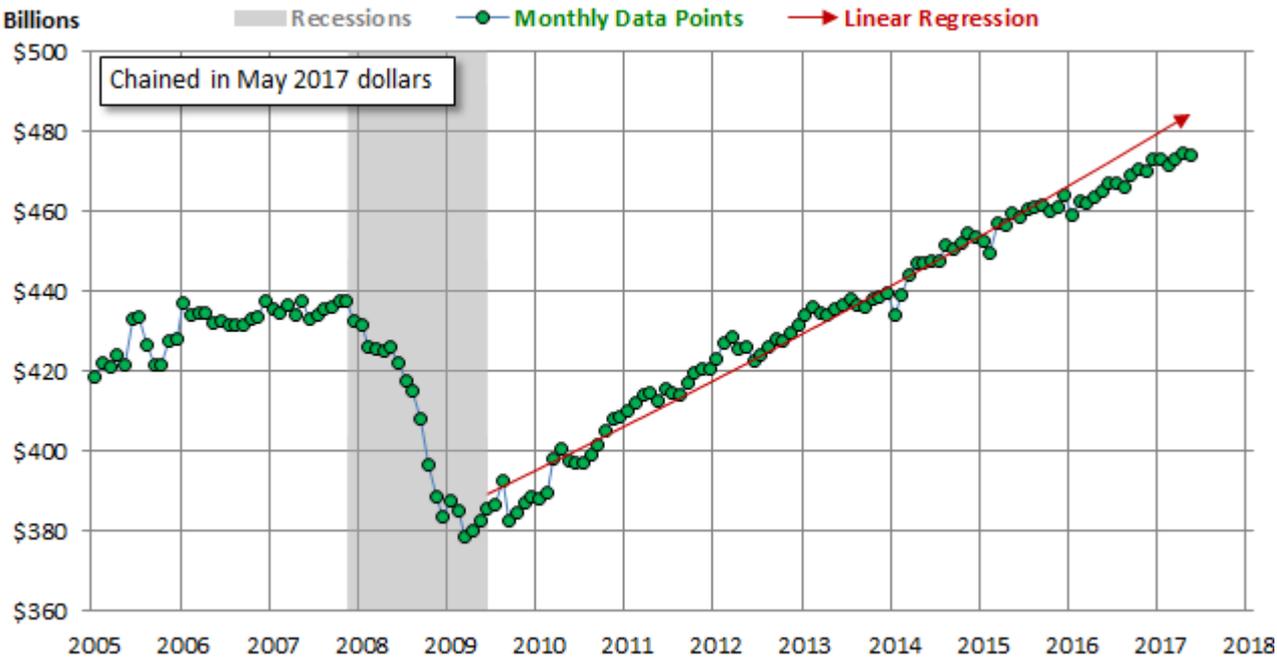


Figure 1: US real retail sales

- (a) Describe what the data in Figure 1 are saying. (1 MARK)
- (b) Use the AE model and an AE diagram to indicate what happened before, during, and after the “Great Recession” of 2007-09 to AE and its various components, explaining the economic dynamics. Focus in particular on the likely behaviour of inventories during this cycle and the potential role that these played. (4 MARKS)

(d) Calculation exercise (Maximum half-page) (3 MARKS)

A country’s economy begins with a level of autonomous expenditure of 760 and a real GDP of 1520. A government is facing a reelection and increases G from its current level of 200 to 240. The MPC = 0.5. Calculate the resulting NET (MARGINAL) changes in the quantities below (and show your calculations and explain your answer briefly).

- (a) Autonomous expenditure, the multiplier (1 MARK)
- (b) Induced expenditure (1 MARK)
- (c) Equilibrium total output (GDP) (the net change) and the new TOTAL real GDP after this process (1 MARK)