Faculty of Business and Economics
Department of Economics

ECON10003
Pre-Tutorial #3

Introductory Macroeconomics

Pre-Tutorial #3
Week Starting 22rd March 2021

The Tutorial. This week's tutorial provides an introduction to short run macroeconomics and the Keynesian model.

Note that your tutor is under no obligation to go through the answers to the pre-tutorial work in detail. The focus in the tutorial will be on the tutorial work itself – the questions here are preparatory.

Reading Guide. You should look carefully over your lecture notes for Week 3. You may also find Chapters 6 and 7 of BOFAH useful.

Key Concepts. Okun's Law. Planned aggregate expenditure. The multiplier.

Problems.

1. Let u_t^* denote the *natural rate of unemployment*. Using Okun's Law, answer the following questions. Explain your reasoning. The data are hypothetical.

Year	Real GDP	Potential GDP	u_t^* (percent)	u_t (percent)
2010	7480	8000	(a)	6.0
2011	8100	(b)	5.0	5.0
2012	(c)	8200	4.5	4.0
2013	8415	8250	5.0	(d)

   (a) In 2010, would u_t^* be larger, smaller, or the same as u_t?

   (b) In 2011, would Potential GDP be larger, smaller or the same as Real GDP?

   (c) In 2012, would Real GDP be larger, smaller or the same as Potential GDP?

   (d) In 2013, would u_t be larger, smaller or the same as u_t^*?

2. Define planned aggregate expenditure (PAE) and list its components. Why does planned spending change when output changes?

3. Sketch a graph of the consumption function, labelling the axes of the graph. Discuss the economic meaning of (a) a movement from left to right along the graph of the consumption function, and (b) a parallel upward shift of the consumption function.

4. Sketch the 45-degree Keynesian cross diagram. Explain in words the economic significance of the lines graphed in the diagram. Given only this diagram, how could you determine exogenous expenditure, the marginal propensity to consume, and short run equilibrium?

5. Consider a simple economy without government spending or taxation. The economy is described by the following equations

$$C = 1800 + 0.6Y$$

$$\bar{I} = 900$$

   (a) Derive an equation linking Y to planned aggregate expenditure (PAE).

   (b) What is the level of exogenous expenditure in this economy?

   (c) What do we mean by the marginal propensity to consume? What is the marginal propensity to consume in this economy?

   (d) What is the equilibrium level of GDP?

   (e) What is the value of the multiplier in this economy?