

Week 6 Recitation

Practice Problems

This week we are going to work on the AD/AS model. It is similar to the traditional supply and demand model you learned on ECON202 – Principles of Microeconomics (and that's why we reviewed it in the first week of class!), but there's a fundamental difference: here we are considering the whole economy instead of just homogeneous firms within a sector, selling to representative households. Therefore, we are talking about Aggregate Demand and Aggregate Supply, and we are interested in understanding how they interact in the short and in the long-run, and what are the impacts of those dynamics for growth, employment, and inflation.

1. Draw the AD/AS model. Your graph must clearly show: the label of the X-axis, the label of the Y-axis, the (Short Run) Aggregate Supply curve with the appropriate slope, the Aggregate Demand curve with the appropriate slope, and the Long Run Aggregate Supply (or Potential GDP) curve with the appropriate slope.
2. Where is the equilibrium of your graph? Where is the full-employment point? What does the full-employment point tell us about cyclical unemployment and natural unemployment?
3. Suppose that the workers of this economy came up with a new organizational method that increased their productivity considerably and can be applied in a vast variety of different industries, impacting the whole economy. Does that shift the SRAS, LRAS, or AD? To which side? What are the impacts on prices, real GDP, and unemployment, if any?
4. Now assume that, due to pressure from the business owners, all wages decrease in real terms, decreasing the purchasing power of the population. What will happen to the AD curve? If we assume the SRAS and LRAS curves stay fixed, what will be the impact on the price level, real GDP, and unemployment?
5. In Exercise 4, we assumed that the SRAS and the LRAS were constant, because we were interested in studying the impact on AD. However, since workers are an input for production, a decrease in wages represents cheaper inputs. How does that impact the SRAS? And the LRAS? Do you believe that the impact would be greater on AD or SRAS? How does that relate with the Keynesian zone, the intermediate zone, and the neoclassical zone of the AD/AS model?
6. Using the AD/AS model, how would each of the following most directly affect output, prices, and unemployment?
 - a. Personal income tax increase
 - b. Corporate tax cut
 - c. Increased environmental regulations
 - d. Covid relief payments to most households
 - e. Spike in international sugar prices due to foreign drought
 - f. Increase government spending on infrastructure (e.g., roads and bridges)
 - g. Expanded Child Tax Credit for parents