Lesson 5

The Supply Side of the Economy

This presentation is related to material from the textbook’s Chapter 9

- This PowerPoint lecture supplements, but does not substitute for, the textbook.
- The technical parts of the lecture are thoroughly explained in the textbook.
- Additional examples are provided in Course Materials on Blackboard.

The Supply Side

- The Mundell-Fleming model only describes the demand side of the economy.
- It implicitly assumes that there are no limits to supply.
- This Keynesian approach effectively ignores the basic economic problem addressed by traditional microeconomic analysis, which is that we have limited resources with which to satisfy our unlimited wants.
- This chapter corrects this deficiency of the Keynesian macroeconomic model by detailing the supply side of the economy.
- We begin by looking at the labor market, a market never explicitly analyzed in the Keynesian model.

The Supply Side

- This chapter explains an economy’s aggregate supply.
- The aggregate supply function incorporates modern macroeconomic concepts such as expectations and the dynamics of price adjustments in the economy.
- This chapter also introduces the important concept of economic growth.
- Aggregate supply increases when the economy grows.
- Once we have aggregate supply in hand, we can build a more complete aggregate demand-aggregate supply (AD/AS) macroeconomic model.

The Supply Side

- The productive capacity of an economy depends on both the availability of resources and the level of technology or know-how.
- That is, the supply side of the economy is in large part determined by the availability of natural resources, the accumulation of capital goods, and the level of knowledge about how to transform resources and inputs into welfare-enhancing output.
- The Mundell-Fleming model took productive resources and technology to be given, and further assumed that aggregate demand did not strain the economy’s capacity.
- Hence, the assumption of constant prices.

In the Keynesian macro model, the total supply of products is effectively a perfectly horizontal aggregate supply function, as shown in Figure 9-1.
- When output increases from Y* to Y', the horizontal aggregate supply curve results in the overall price level remaining unchanged at P*.
• In general, output is not unlimited because resources are scarce.
• If the quantity of resources does not increase and there is no technological progress, increases in demand for output will sooner or later cause the overall price level to rise as the economy’s capacity is approached.
• Even if only a few resources are in limited supply, there will be diminishing returns to increased use of other inputs, causing the marginal cost of goods and services to rise.

• While an upward-sloping aggregate supply curve seems more reasonable than the Keynesian horizontal curve, we still need a good explanation for the upward-sloping aggregate supply curve.
• How steeply does the aggregate supply curve slope upward?
• Is the slope the same for all quantities of output?
• Is the slope the same in the short run and the long run?
• And, how does economic growth affect the slope?
• Precise answers to these questions are very difficult to find; they depend on markets and the institutions that guide the markets.

• Output does not follow a steady path on which output grows neatly along with inputs and technological progress.
• Recall the circular flow diagram and how even with its aggregation illustrates the complexity of an economy.
• The sum of the millions of decisions do not always add up to a smooth dynamic path for an economy’s aggregate variables such as employment, prices, output, international trade, or investment.
• The labor market in particular is often distinguished as the main culprit for causing short-run variations in output.

• Rational workers are interested not so much in their nominal wage, but they do very care about what their wage can actually buy.
• Employers are also interested in the nominal cost of labor relative to the prices of the goods that labor produces.
• They behave in accordance with the real wage.
• The real wage is just the nominal wage, w, divided by the general price level, P, which reflects the purchasing power of the nominal wage.
• The real wage can therefore be written as w/P.
• For a given nominal wage, \( w_1 \), when \( P_2 > P_1 \), then \( w_1/P_2 < w_1/P_1 \).
• If the general price level falls while the nominal wage remains the same, the real wage \( w/P \) rises and unemployment increases.
• Unemployment also rises if the price level remained at \( P_2 \) while the nominal wage increases from \( w_1 \) to \( w_2 \) so that \( w_2/P_2 > w_1/P_1 \).
The Supply Side

• If economic growth shifts the aggregate supply curve to the right, output increases from Y* to Y' but the price level remains at P*.
• In the long run, the economy in figure 9-5 behaves as if the aggregate supply curve is the horizontal curve AS, not the short-run AS' and AS" curves.

Figure 9-5
Aggregative Supply with Economic Growth

The Supply Side

• This simple example suggests that if we want to analyze the economy from a long-run perspective, we had better take into consideration how an economy grows and how the AS curve shifts over the period analyzed.
• The next section of this lesson looks at the process of economic growth and begins an examination of the first of two important models that help explain an economy’s long-run aggregate supply.