

Long Run

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Economists and policymakers frequently differentiate between the short-run and long-run effects of various economic changes and policies, but sometimes the difference between the two can seem unclear. To give one example, a Congressional Budget Office (CBO) report concluded that the 2009 American Recovery and Reinvestment Act (ARRA) had “raised real (inflation-adjusted) gross domestic product (GDP)” in 2014, even though it “will reduce output slightly in the long run.” What is the difference between the short run and long run, and how does this distinction actually matter for policy?

Broadly speaking, the long run is commonly defined as a period in which all relevant economic factors are flexible — for example, firms can enter or leave industries, or wages can fully adjust. Beyond that, no specific single definition exists, because the term means different things in different contexts. Economists cannot say how long this period of full adjustment actually takes for a given economic shock, so it is impossible to identify a precise future point separating the short and long runs.

In microeconomics, the long run is the period when all factors of production, including land, labor, and capital, are variable. In contrast, in the short run, at least one factor of production (usually capital) is fixed. Consider the case of a single manufacturing firm. It may take only weeks or even days for a firm to increase production by hiring more workers. But it could take several years for the firm to increase its capital by building another manufacturing plant. In this case, capital is fixed for a far longer period than labor, and the long run would be the period after this plant can be built.

One interesting microeconomic application of long-run effects stems from the fact that demand for most goods is more elastic — more sensitive to changes in price — in the long run than in the short run. When the price for, say, gas increases, many consumers who drive gas-powered cars will initially have no choice but to continue buying gas at the higher price level. As time goes on, however, they may begin to turn to alternatives such as hybrid vehicles and public transportation. In this long run, consumers have time to fully adjust their buying behavior in response to the increase in gas prices.

In macroeconomics, the long run is defined as the period in which factors such as prices, wages, output, and employment have returned to equilibrium after a shock. In the short run, these variables may not have fully adjusted, leaving the economy in a state of disequilibrium. This distinction has important implications for macroeconomic policy. In

particular, changes in the price level can affect short-run but not long-run output. Consider an increase in the total demand for goods and services, which increases the economy’s price level. In the short run, a firm may mistake the higher price level for greater demand for its particular good and thus produce more of it. Eventually, the increased production will bid up wages and other input prices, returning the firm’s supply of the good to its long-run level.

The inability of prices to influence long-run output affects the Fed’s monetary policy. Increasing the money supply can increase both short-run output and the price level, but in the long run, the money supply theoretically has no effect on real GDP, only on prices. Largely for this reason, the Fed does not set a quantitative

goal for its output-related objectives: In the long run, the level of output — and relatedly, employment — that the economy can achieve is determined by factors outside monetary policy.

Many macroeconomists have criticized the profession as well as policymakers for focusing excessively on the long run and neglecting short-run impacts of policies. John Maynard Keynes, often considered the father of macroeconomics, famously

said, “In the long run, we are all dead.” Contrary to popular belief, Keynes did not think the long run was unimportant; rather, he believed that economics would not be useful if it couldn’t show what happens in the short run and the processes by which the economy eventually returns to its long-run equilibrium. As he put it, “Economists set themselves too easy, too useless a task if in tempestuous seasons they can only tell us that when the storm is long past the ocean is flat again.”

Indeed, a fixation on maximizing long-run output may hurt the economy in the short run, and vice versa, as many economic policies have very different if not completely opposite short-run and long run effects. For instance, macroeconomic theory predicts that, all else being equal, expansionary fiscal policy such as the ARRA increases output in the short run by raising the total demand for goods and services in the economy. In the long run, however, such policy can actually reduce the economy’s output through an accumulation of debt and a lowering of the saving rate. Analysis by the CBO and others indicates that most likely the ARRA has indeed had these contrasting short- and long-run effects on the American economy.

The distinction between the short and long run thus reflects one of the most important lessons in economics: All decisions have trade-offs. The long run is important — but, as Keynes argued, the short run is too. **EF**

