

## Answers to Questions: Chapter 17

1. Over the period 1923–29, the inflation rate was almost zero, the unemployment rate was below 5 percent, and the output ratio was near 100 percent. This is consistent with an economy that tends toward equilibrium at natural real GDP. The period 1930–33 saw the output ratio fall to 67 percent and the unemployment rate rise to 25 percent. This is inconsistent with an economy that tends toward equilibrium at natural real GDP. Moreover, the output ratio and unemployment rate stayed high until the onset of wartime spending.
2. In the late 1930s, the money supply soared, yet unemployment remained high. The economy did not recover fully until the wartime government spending took effect. This is consistent with the old Keynesian theory's emphasis on fiscal policy. Also, the fact that short-term interest rates were near zero meant that expansionary monetary policy was useless.
3. The reaction of the economy to increased governmental wartime spending tended to confirm the Keynesian emphasis on fiscal policy. In addition, it was seen that an economy that was not responding on its own would respond to governmental spending. This reinforced the view that the Keynesian theory was superior to the classical theory.
4. Prior to the Great Depression, economists' thoughts on economic policy were based primarily on the quantity theory of money. They believed that the economy was self-correcting and that any change in the money supply would mainly result in a change in the price level as opposed to output.

The Great Depression drastically altered how economists viewed the economy because not only did the price level fall during the early 1930s in response to a sharp decline in the money supply, but real GDP also fell as the output ratio declined to 67 by 1933. In addition, unemployment remained high throughout the remainder of that decade. Those facts gave rise to the Keynesian revolution that prices are sticky and changes in aggregate demand result mainly in changes in output and unemployment. Finally, the combination of the recession of 1937–38, despite very low short-term interest rates, and the strong growth of the economy during World War II when government spending made up half of GDP, caused economists in the two decades following the end of the war to stress the role of fiscal policy when compared to monetary policy in terms of stabilizing the economy.

5. The legislative lag of 18 months before the 1968 tax surcharge was enacted cast serious doubt on policy activism. In addition, the permanent-income hypothesis cast doubt on the stimulative power of temporary tax changes.

The natural rate hypothesis, developed by Friedman and Phelps, argued that, in the long-run, there is no trade-off between inflation and unemployment and that any attempt to drive the unemployment rate below the natural rate would result in accelerating inflation. Inflation did accelerate in the 1960s which gave credence to the natural rate hypothesis and resulted in its quick acceptance by economists.

6. The rise of the monetarist approach to economic policy with its advocacy of rules over activism and monetary policy over fiscal policy was due to a number of events in the late-1960s. First, Friedman's pessimistic view that activist policy would do more harm than good due to long lags became credible as a result of the long legislative lags in enacting changes in fiscal policy. Second, monetary policy was accommodative in spite of the rapid growth of output in 1964–65 and 1968, causing people to consider the use of a rule to determine policy. Finally, the failure of a temporary increase in taxes to slow the economy in 1968, when combined with the end of the expansion in 1969 as a result of tight money, provided an additional lift for monetarism into the macroeconomic mainstream.
7. The natural rate hypothesis, developed by Friedman and Phelps, made the distinction between short-run and long-run Phillips Curves. It argued that, in the long-run, there is no trade-off between inflation and unemployment and that any attempt to drive the unemployment rate below the natural rate would result in accelerating inflation. The acceleration of inflation in the late 1960s gave credence to the natural rate hypothesis and resulted in its quick acceptance by economists.
8. The twin peaks were caused by supply shocks. The adverse oil and food price shocks caused inflation to accelerate while unemployment increased. This cast doubt on the Keynesian theory (augmented by the Phillips curve) which was entirely a demand-side theory at the time. The theoretical innovations were the new classical macroeconomics and the supply-shock analysis of inflation.
9. Under Paul Volcker, the Fed instituted a tight monetary policy beginning in 1979 to slow the growth of nominal GDP and bring down the high inflation rates the economy was experiencing. This created a recession, during which the output ratio fell and unemployment rose. When the tight monetary policy was reversed in the second half of 1982, inflation was lower and the unemployment rate subsequently fell as the economy recovered from the 1981–82 recession. The maintenance of lower inflation was aided by reduced inflation expectations and by favorable supply shocks in the form of a declining real price of oil.

10. The main events that caused the discrediting of a role for a monetary aggregate in conducting monetary policy were the breakdown since 1980 between the relationship between the growth rates of M1 and nominal GDP and the financial deregulation that contributed to that breakdown.
11. The “Goldilocks” economy of the late 1990s refers to the achievement of what are, by comparison to recent decades, unusually low rates of unemployment (below 5 percent) and inflation (below 3 percent). Decreases in the natural rate of unemployment and preemptive changes in monetary policy by the Fed to prevent an increase in inflation have contributed to this favorable economic performance.
12. With the exception of the pre-emptive strike of 1994, the Fed appears to have been targeting the output ratio during 1994–2007. It lowered the federal funds rate aggressively in 2001 and kept it low until June 2004. Furthermore, the Fed failed to raise the federal funds rate in 1998–2000 very much above what it was at the end of 1994, despite signs that inflation was starting to rise.
13. The collapse of the 1996–2000 stock market bubble resulted in the mildest recession of the postwar period. In contrast, the collapse of the 1927–29 stock market bubble ended with the Great Depression, the 1987–89 stock bubble and real estate bubble in Japan resulted in the two “lost decades” of stagnant growth and price deflation for that country’s economy, and the collapse of the 2001–06 housing bubble was the main cause of the Global Economic Crisis. The difference between the stock market bubble of the late 1990s and the other three assets is that the stock market in the United States in the postwar era was highly regulated to prevent excess leverage; in particular, purchases of stocks required a 50 percent down payment for individuals buying stocks through mutual funds, the down payment was 100 percent of the value of the stocks.
14. The old ideas of assets bubbles and excess leverage, which are important in understanding the Great Depression, can be used to understand the causes of the Global Economic Crisis, as well as the fact that the collapse of an asset bubble leaves an excess supply of either housing or commercial real estate and excess debt, all of which can impede economic recovery following the downturn caused by the collapse of the asset bubble.
15. The impact of demand shocks on the economy since 1929 has been clear, whether those shocks originated in the private sector, as in the cases of the Great Depression or the asset bubbles of the late 1990s and 2001–07, or government spending, as in the cases of World War II, the Korean War, the Vietnam War, and the defense build-up during the Reagan administration, or from attempts by monetary policymakers to restrain inflation on numerous occasions in the post-World War II era. But supply shocks have had a significant influence on the economy’s performance as well, either adversely as was the

case of the 1970s, or beneficially, as was the situation most notably during the late 1990s. Therefore, any theory that attempts to explain the behavior of the economy must allow for both types of shocks to the economy.

16. There are five ways in which macroeconomics in Europe differs from the United States. First, since the European economies are more open, there is a greater emphasis on the international aspects of macroeconomics. Second, since unemployment had been higher in Europe up until 2007, there is more study of why that was. Third, people are puzzled why the U.S. productivity revival since 1995 did not occur in Europe. Fourth, whereas monetary policy has become the dominant tool in the conduct of stabilization policy in the United States, fiscal policy has remained ascendant in Europe. Fifth, there has been little interest in Europe in the new classical approach to macroeconomics; Keynesian macroeconomics, with its emphasis on sticky prices and wages has remained the dominant approach to macroeconomics.
17. The highly volatile exchange rates that followed the abandonment of the fixed exchange-rate regime disrupted the U.S. economy, particularly during the period 1980–85 when exchange rates appreciated 50 percent and during 1985–87 when they depreciated by the same amount. The appreciation caused a severe drop in exports that adversely affected our exporting industries. The farms and factories adversely affected tended to be localized regionally in the Midwest and New England. The depreciation took a long time to have its effect, but both the Midwest and New England recovered. While the depreciation had a beneficial effect, both the appreciation and depreciation were disruptive. Consequently, there is an interest in a return to fixed exchange rates.
18. The sources of the debate involve first, the use of monetary policy to lift the economy is limited by the Zero Lower Bound, plus the concern among some economists that the measures already taken by the Fed have provided a basis for a rise in inflation further down the road. Second, the debate over whether to use fiscal policy to provide additional stimulus arises from a fear of further increases in the government deficit and the widespread perception of the ineffectiveness of the 2009–10 Obama fiscal stimulus program. Those favoring additional fiscal stimulus point to how the concept of the balance budget multiplier indicates that fiscal policy can add to aggregate demand without any rise in the government deficit and how that Fed can buy any debt required to finance additional stimulus without any increase in the net public debt and therefore no need for future interest payments from current and future taxpayers.
19. Within the United States, the main unsettled issue for long-term economic growth is what causes productivity growth to rise and fall, particularly as higher productivity growth is needed to ensure both a continued rise in American living standards and to pay for the entitlement programs of Social Security, Medicare, and Medicaid. Outside of the

United States, the major long-term economic growth issue is how can some poor countries achieve higher living standards in the face of political barriers to growth that result from corruption, the lack of enforcement of property rights, and the discouragement of foreign trade, as well as geographical factors that are unfavorable to economic growth.