## Chapter 5. Box on the 2001 recession

## Focus: The U.S. Recession of 2001.

In 1992, the U.S. economy embarked on a long expansion. For the rest of the decade, GDP growth was positive and high. By 2000 however, signs appeared that the expansion might be coming to an end. GDP growth was negative in the third quarter, although it turned positive again in the fourth quarter. In 2001, GDP growth remained negative for the first three quarters, before becoming positive again in the last quarter. (Figure 1 shows the growth rate of GDP for each quarter from 1999-1 to 2002-4, measured at an annual rate. The shaded area corresponds to the three quarters of negative growth in 2001). The National Bureau of Economic Research (known as the NBER), a non-profit organization which has traditionally dated U.S. recessions and expansions, has concluded that the U.S. economy had indeed had a recession in 2001, starting in March 2001 and ending in December 2001.

Figure 1. The U.S. growth rate, 1999-1 to 2002-4

What triggered the recession was not, as in 1990-1991, a decrease in consumption demand (see the box on the 1990-1991 recession in Chapter 4), but a sharp decline in investment demand. Non-residential investment—the demand for plant and equipment by firms—decreased by 4.5% in 2001. The cause was the end of what Alan Greenspan had dubbed the "irrational exuberance": During the second part of the eighties, firms had been extremely optimistic about the future, and the rate of investment had been very high: the average yearly growth rate of investment from 1995 to 2000 exceeded 10%. In 2001, it became clear to firms that they had been overoptimistic, and had invested too much. This led them to cut back on investment, leading to a decrease in demand, and through the multiplier, a decrease in GDP.

The recession could have been much worse. But it was met by a strong policy response, which certainly limited the depth and the length of the recession.

Take monetary policy first. Starting in early 2001, the Fed, feeling that the economy was slowing down, started increasing the money supply and decreasing the federal funds rate aggressively. (Figure 2 shows the behavior of the federal funds rate, from 1991-1 to 2002-4.) It continued to do so throughout the year. The funds rate, which stood at 6.5% in January, stood at less than 2% at the end of the year, a very low level by historical standards.

Figure 2. The Federal funds rate, 1999-1 to 2002-4

Turn to fiscal policy. During the 2000 campaign, then candidate George Bush had run on a platform of lower taxes. The argument was that the Federal budget was in surplus, and so there was room to reduce tax rates while keeping the budget in balance. When President Bush took office in 2001 and it became clear that the economy was slowing down, he had an additional rationale to cut tax rates, namely the use of lower taxes to increase demand and fight the recession. Both the 2001 and the 2002 budgets included substantial reductions in tax rates. On the spending side, the events of September 11 led to an increase in spending, mostly on defense and homeland defense.

Figure 3. U.S. Federal government revenues and spending (as ratios to GDP), 1999-1 to 2002-4.

Figure 3 shows the evolution of Federal government revenues and spending during 1999-1 to 2002-4, both expressed as ratios to GDP. Note the dramatic decrease in revenues, starting in the third quarter of 2001. Even without decreases in tax rates, revenues would have gone down during the recession: Lower output and lower income mechanically imply lower tax revenues. But, because of the tax cuts, the decrease in revenues in 2001 and 2002 was much larger than can be explained by the recession. Note also the smaller but steady increase in spending, starting around the same time. Note how, as a result, the budget surplus—the difference between revenues and spending—turned from positive until 2000 to negative in 2001 and, much more so, in 2002.

Figure 4. The U.S. recession of 2001.

The effects of the initial decrease in investment demand, and the monetary and fiscal responses can be represented using the ISLM model. In Figure 4, assume that the equilibrium at the end of 2000 is represented by point A, at the intersection of the initial IS and the initial LM curves. What happened in 2001 was the following:

- The decrease in investment demand led to a sharp shift of the IS curve to the left, from IS to IS". Absent policy reactions, the economy would have been at point A", with output Y".
- The increase in the money supply led to a downward shift of the LM curve, from LM to LM'.

• The decrease in tax rates and the increase in spending both led to a shift of the IS curve to the rig, from IS" to IS'.

As a result of the decrease in investment demand and of the two policy responses, the economy in 2001 ended up at point A', with a decrease in output, and a much lower interest rate. The output level associated with A' was lower than the output level associated with A—there was a recession—but it was much higher than the output level associated with A", the level that would have prevailed in the absence of policy responses.

Let me end by taking up three questions you are probably asking at this point:

• Why weren't monetary and fiscal policy used to avoid rather than just to limit the recession?

The reason is that changes in policy affect demand and output only over time (more on this in section 5–5). Thus, by the time it became clear that the U.S. economy was entering a recession, it was already too late to use policy to avoid it. What policy did was to reduce both the depth and the length of the recession.

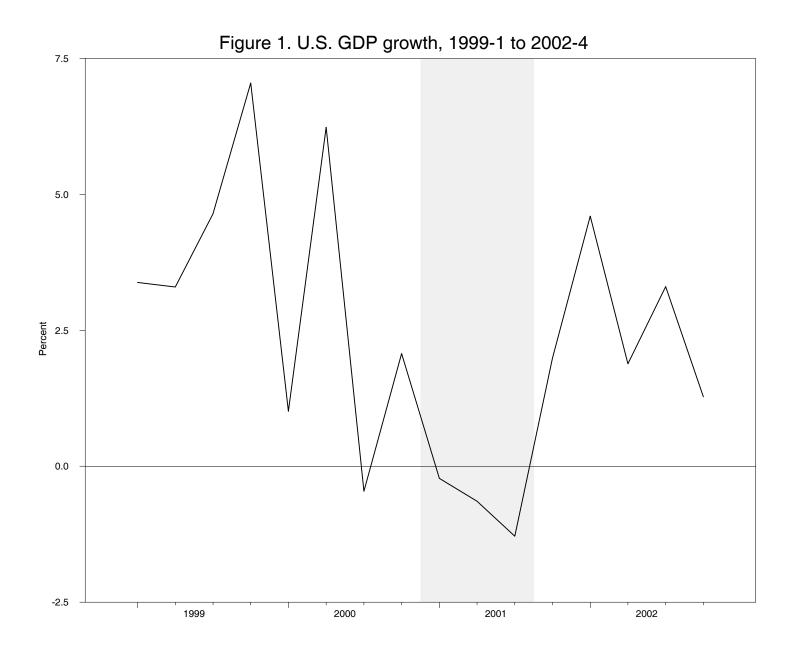
• Weren't the events of September 11, 2001 also a cause of the recession?

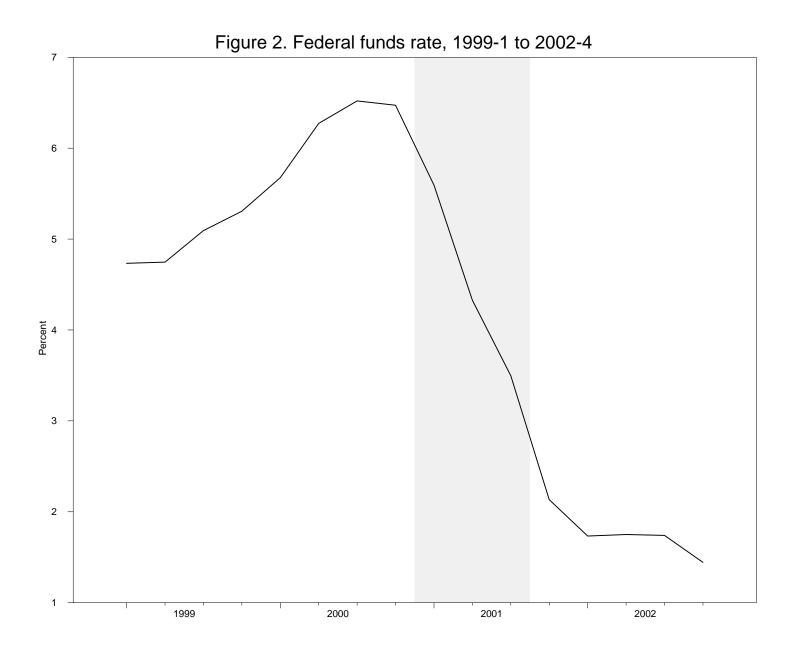
The answer, in short, is no. As we have seen, the recession started long before September 11, and ended soon after. Indeed, GDP growth was positive in the last quarter of 2001. One might have expected the events of September 11 to have large adverse effects on output, leading in particular consumers and firms to delay spending decisions until the outlook was clearer. In fact, the drop in spending was short and limited. Decreases in the federal funds rate after September 11 and large discounts by automobile producers in the last quarter of 2001...—are typically believed to have been crucial in maintaining consumer confidence and consumer spending during that period.

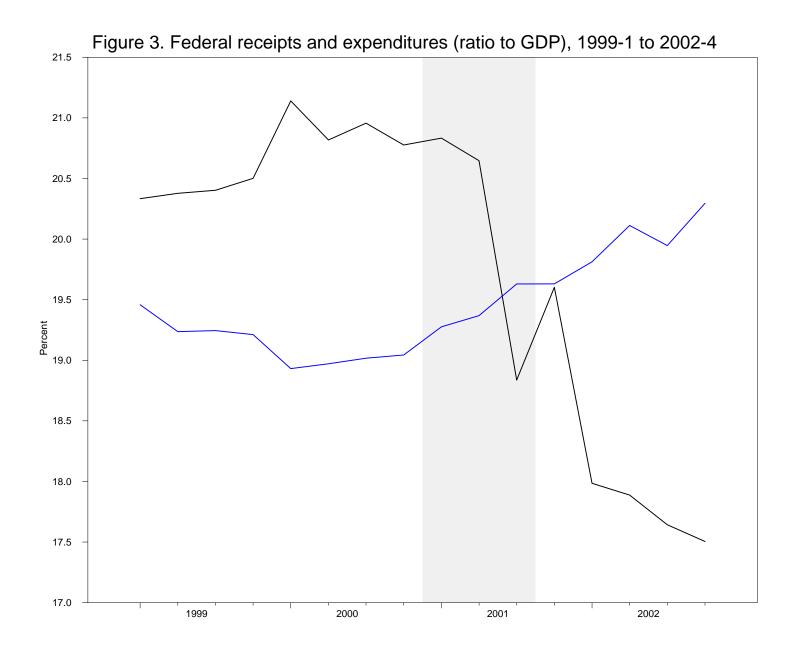
• Was the monetary-fiscal mix used to fight the recession a textbook

example of how policy should be conducted?

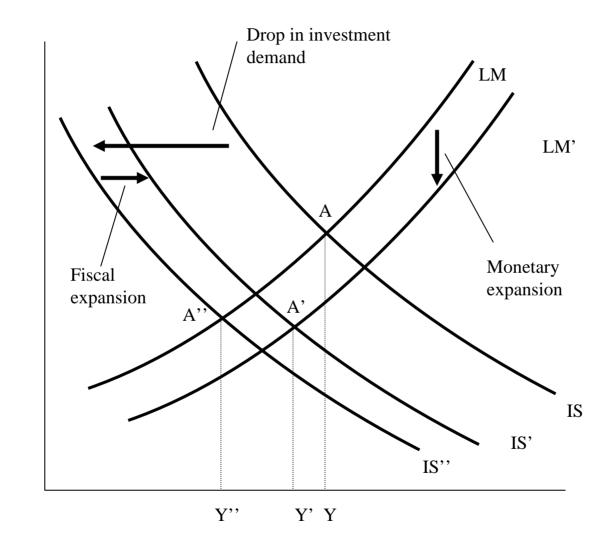
On this, economists differ. Most economists give high marks to the Fed for strongly decreasing interest rates as soon as the economy slowed down. But most economists are worried that the tax cuts introduced in 2001 and 2002 have led to large budget deficits for a long time to come. They argue that the tax cuts should have been temporary, helping the U.S. economy get out of the recession, but stopping thereafter. Instead, the tax cuts were permanent, and despite the fact that the U.S. economy is now going through a strong expansion, budget deficits are large, and projected to remain large for the indefinite future. This, they argue, will create very serious problems in the future. We shall return to this issue in depth in Chapter 26.







## Figure 4. The U.S. 2001 Recession.



Output, Y