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Shocks, structures or monetary policies? The Euro Area and US after 2001

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Abstract

The US Federal Reserve cut interest rates more vigorously in the recent recession than the European Central Bank did. By comparison with the Fed, the ECB followed a more measured course of action. We use an estimated dynamic general equilibrium model with financial frictions to show that comparisons based on such simple metrics as the variance of policy rates are misleading. We find that – because there is greater inertia in the ECB's policy rule – the ECB's policy actions actually had a greater stabilizing effect than did those of the Fed. As a consequence, a potentially severe recession turned out to be only a slowdown, and inflation never departed from levels consistent with the ECB's quantitative definition of price stability. Other factors that account for the different economic outcomes in the Euro Area and US include differences in shocks and differences in the degree of wage and price flexibility.

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1. Introduction

It is tempting to measure the degree of activism of a central bank by how often it moves its policy instrument. A central bank that makes frequent and large changes would, under this measure, be viewed as very responsive to the state of the economy. A central bank that moves more slowly would qualify as passive and unresponsive. On the basis of this measure of activism, some analysts conclude that the European Central Bank (ECB) is a passive central bank, while the the US Federal Reserve (Fed) is active. We use estimated dynamic general equilibrium models to show that comparisons based on this simple measure of activism are misleading. Comparative assessments of monetary policies cannot abstract from a careful analysis of the shocks and the underlying economic structures that shape the macroeconomic landscape which central banks face.

We concentrate on the most recent international downturn, after 2001, in the United States (US) and the Euro Area (EA). We use estimated versions of our model on US and, respectively, EA data and we reach three conclusions. First, a central bank that moves its policy rate sharply in response to each twist and turn in the data would have only a limited impact on economic activity. This is because policy shifts that lack persistence have little impact on longer-term interest rates.[1] According to our estimates, ECB policy is characterized by greater persistence than Fed policy. As a result, to achieve a given economic effect the ECB must move its policy rate by much less than the Fed. This is why we find that interest rate actions by the ECB had a greater stabilizing effect on output than the Fed interest rate actions did, even though the latter were bigger. The slowdown in economic activity after 2000 in the EA was so mild that it technically does not even meet the definition of a recession (see log, per capita real GDP in the EA and the US in Fig. 1).[2] We estimate that, had it not been for the supportive monetary policy shocks implemented by the ECB, the EA growth slowdown after 2000 would instead have been a substantial recession.

A second finding is that the US and EA were hit by different shocks. For example, it is true that the Fed's response to the 2001 recession was very aggressive. Indeed, we find that the Fed's reaction was greater than what one would have predicted on the basis of its past behavior in recessions. It is true that the ECB did not spring into action at the same time and with the same abruptness as the Fed. But, that is because the shocks that produced the EA recession did not occur until later (see Fig. 1b). When the bad shocks that produced the EA slowdown finally did strike one year later, the ECB reacted by deviating from past patterns. The ECB continued to keep rates low longer than the Fed did, because unfavorable shocks lingered longer in the EA than in the US (see Fig. 1). The ECB was able to provide support to economic activity, without violating its definition of price stability (see Fig. 1).

A third factor also helps to account for the differences between the US and the EA. Our estimates indicate that wages and prices are more flexible in the US than in

[1] This principle has been analyzed extensively by Rotemberg and Woodford (1999) and Woodford (1999, 2003).

[2] We never see two consecutive quarters of negative growth.