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Trading Trade-offs?

It was once popular among economists to say that a nation could accept a higher average rate of inflation in return for faster economic growth and lower unemployment. There was a trade-off: Faster growth was good, but so was lower inflation, and one should not expect both simultaneously. The experience of the industrialized countries in the last three decades has made this trade-off idea much less popular in recent years. However, in its place, some analysts are now discussing a new trade-off—one between the volatility of inflation and the volatility of growth in real gross domestic product (GDP).

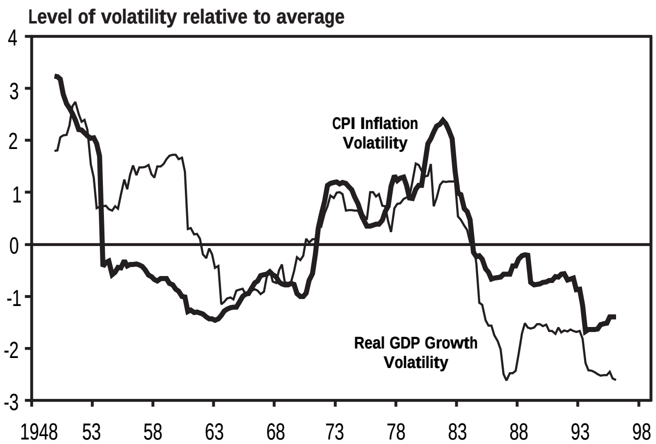
The argument runs like this: Suppose the Fed tries to focus very sharply on maintaining a low average rate of inflation, with very little deviation from the target allowed. This might mean the Fed would be very aggressive in reacting to deviations of actual inflation from target, and as a consequence, adjustment to disturbances would occur through changes in real output. Inflation would be close to target most of the time, the thinking goes, but real output growth would be volatile. If on the other hand, the Fed tries to keep real output very close to trend, adjustment to disturbances would occur through changes in the price level. Economic growth would be fairly smooth, but inflation would be volatile. Thus, there might be a trade-off between inflation volatility and output growth volatility.

The chart illustrates some of the difficulties with this hypothesis. The thick line is a measure of the volatility of consumer price index (CPI) inflation during the postwar era in the United States, and the thin line is a measure of the volatility of economic growth. Both are scaled so that a reading above zero means "above-average volatility," and a reading below zero means "below-average volatility." The most striking feature of the figure is that the volatility of inflation and the volatility of output growth tended to move together during the last 50 years. Far from trading off against one another, it appears that the two volatilities move hand-in-hand. The major exception is the period centered on 1958, during which relatively low inflation volatility was indeed associated with relatively high output growth volatility.

The evidence in the chart is only suggestive. For instance, it could be that some third factor, such as the volatility of energy prices, contributes both to inflation volatility and to output growth volatility. Properly controlling for such influences might reveal the trade-off. But another interpretation is that monetary policy has at times been erratic: When the Fed has allowed higher inflation, inflation variability has also increased, and greater inflation variability has itself contributed to greater variability in the real economy. Conversely, the relatively low inflation of the 1990s has been associated with low inflation volatility, and this has helped stabilize output growth during the present expansion.

—James Bullard

The Volatilities of Inflation and Output Growth



NOTE: Volatility is measured as a 21-quarter centered moving standard deviation of CPI inflation rates and real GDP growth rates.

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