International Economic Trends

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## International Perspectives on the "Great Moderation"

acroeconomic activity in the United States has been substantially less volatile since the early 1980s, a phenomenon that has been dubbed the "Great Moderation." The chart illustrates this fact with a plot of the growth rate of U.S. real gross domestic product (GDP) since the early 1950s. The standard deviation of quarterly real GDP growth, a statistical measure of variability, was 4.7 percentage points before 1984, the year commonly assigned to the beginning of the Great Moderation. After 1984, this standard deviation fell to 2.1 percentage points, a decline of more than half.

Other things equal, smoother economic activity has many potential benefits. For example, businesses enjoy less uncertainty when they make investment decisions, while individuals experience smaller swings in their income and consumption. Also, economic recessions—the most costly phase of the business cycle in terms of wasted resources—have become less frequent and less severe since the beginning of the Great Moderation.

While the Great Moderation in the United States has been extensively discussed, recent research has found evidence for moderations in the business cycles of other countries as well. Economists James Stock and Mark Watson<sup>1</sup> document significant reductions in the volatility of real GDP growth for several G7 countries over the past 50 years. However, the particular pattern of the moderation often differs from that seen in the United States. For example, the reductions in macroeconomic volatility observed in Germany, Italy, and the United Kingdom all began earlier and were far more gradual than that observed in the United States. On the other hand, Canada's reduction in volatility did not occur until the early 1990s, later than in the United States. Japan displayed falling volatility during the 1970s, but has actually experienced a rebound in volatility since the early 1980s. Finally, France was the only G7 country for which volatility appeared approximately constant over the sample period.

Why has the volatility of output growth fallen in the United States and abroad? One possibility is that improved macroeconomic policy has tamed the business cycle. For example, in many countries the conduct of monetary policy is thought to have

improved in recent decades, as central banks have gained increased independence and become more committed to the goal of price stability. Stock and Watson considered the possibility that improved monetary policy generated the Great Moderation. To investigate this claim, they conducted counterfactual experiments using theoretical models that attempted to ask the following question: If the conduct of monetary policy had never changed, would the Great Moderation have occurred? Stock and Watson found only a small role for improved monetary policy in explaining the reduction in the volatility of output growth in the G7 economies. Instead, they argue that most of the reduction in volatility comes from a lessening of common international "shocks," such as the large disruptions in the supply of oil that occurred in the 1970s. This conclusion is somewhat discouraging, as it suggests that if such shocks return, macroeconomic volatility will also. Discovering the source of the Great Moderation, both at home and abroad, remains an active area of research for macroeconomists.

## -Michelle T. Armesto and Jeremy M. Piger

<sup>1</sup>Stock, James H. and Watson, Mark W. "Has the Business Cycle Changed? Evidence and Explanations." Symposium, *Monetary Policy and Uncertainty: Adapting to a Changing Economy*, Jackson Hole, Wyoming, August 28-30 2003, pp. 9-56.



Views expressed do not necessarily reflect official positions of the Federal Reserve System.