Another look at the great moderation
Starting in roughly 1984, the volatility of annual economic growth began a noticeable decline—a phenomenon that some economists call the “great moderation.” Bruce T. Grimm and Brian K. Sliker, economists at the Bureau of Economic Analysis (BEA), have taken a new look at the great moderation, basing their analysis on specific states, regions, industries, and industry groups and how they affect the volatility of overall economic growth.

Specifically, they disaggregated gross domestic product (GDP) growth by states and economic regions as well as by 63 industries and 13 industry groups. A key finding of the study is that declines in covariances—between states and regions as well as industries and industry groups—are the key factors leading to a decline in the volatility for the whole economy.

These covariances measure the effects of the interactions between industries or states on the aggregate economy. A decline in the covariance between two industries suggests a decline in the tendency of the industries’ output to move in concert.

Some specific conclusions:
- Declines in the volatility of states, regions, industries, and industry groups do not account for much of the decline in the volatility of GDP growth. In fact, when disaggregating by regions and industry groups, less than one-eighth of the decline in the variance of GDP growth is due to declines in variances of the regions and industry groups. When disaggregating by states and individual industries, less than one-fifth of the decline is due to declines in their variances.
- Increases in the shares of services industries have been roughly offset by declines in the shares of even less volatile government industries. Thus, changes in shares, on net, have not been important components in the overall decline in volatility. This runs counter to the view of some analysts that an increased share of less volatile services industries and a decreased share of more volatile manufacturing industries have led to reduced volatility.
- Explanations of the decline in volatility suggested by some analysts—such as better inventory management, improved labor markets, and better technology in general—seem best suited for some specific industries or industry groups rather than for the entire economy.
- Declines in volatility are far from universal across regions and industries. Just under half of industries and nearly one-third of states experienced increases in volatility. In nearly one-fourth of economic regions and industry groups, there were increases in the variance of GDP-by-state growth. These increases are not consistent with the general explanations that have been advanced for great moderation.

Grimm and Sliker’s paper also takes a brief look at an earlier, very large decline in volatility that occurred after the era of the Great Depression and World War II. The paper suggests that institutional factors have historically been important in determining volatility.

The paper is available at www.bea.gov by clicking on “Papers and Working Papers” and then on “Working Papers.”

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The work in this special program is conducted under strict guidelines and procedures that protect the confidentiality of company-specific data, as required by law.

For a look at the research performed by program participants, see www.bea.gov/papers/SSE_papers.htm. Questions can be addressed to William Zeile at william.ziele@bea.gov.