

FEDERAL RESERVE BANK OF KANSAS CITY

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## *Tracking U.S. GDP in Real Time*

*By Taeyoung Doh and Jaeheung Bae*

Measuring the current state of the U.S. economy in real time is an important but challenging task for monetary policymakers. The most comprehensive measure of the state of the economy—real gross domestic product—is available at a relatively low frequency (quarterly) and with a significant delay (one month). To obtain more timely assessments of the state of the economy, the Federal Reserve Bank of Kansas City has developed a GDP tracking model that combines new econometric methods with two conventional approaches to estimating GDP.

Taeyoung Doh and Jaeheung Bae review the KC Fed model's underlying details and illustrate its performance by comparing the model's tracking estimates to those from other real-time tracking models. Their results suggest the KC Fed model provides a useful tool for policymakers by combining estimates and forecasts from factor and accounting-based models.

## *The Uneven Recovery in Prime-Age Labor Force Participation*

*By Didem Tüzemen and Thao Tran*

The labor force participation rate of prime-age individuals (age 25 to 54) in the United States declined dramatically during and after the Great Recession. Although the prime-age labor force participation rate has been increasing since mid-2015, it remains below its pre-recession level. Understanding the reasons for this decline requires detailed analysis; aggregate statistics on labor force participation may mask potential differences in labor market outcomes by sex or educational attainment.

Didem Tüzemen and Thao Tran identify these differences, finding that prime-age men and women without a college degree experienced larger declines in their labor force participation rates during the recession than their college-educated counterparts. The disappearance of routine jobs over the last few decades may explain these declines. In addition, they find that only prime-age women with a college degree have seen their labor force participation rate fully recover to its pre-recession level, although their participation rate remains well below that of both college-educated and non-college-educated men.

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*Did Local Factors Contribute to the Decline  
in Bank Branches?*

*By Rajdeep Sengupta and Jacob Dice*

Although the total number of bank branches in the United States increased from the mid-1990s to 2007, this number has declined since the 2007–08 financial crisis. A loss in bank branches is potentially problematic because it may reduce customers' access to financial services as well as small businesses' access to credit. Changes in local conditions may partly explain this loss: the number of branches varies significantly across geographic areas, and local conditions have been shown to influence past trends in bank branching.

Rajdeep Sengupta and Jacob Dice examine the relationship between bank branching and local conditions over the last two decades to assess which factors contributed to the decline in bank branches. They find a strong association between the number of branches in a county and that county's population, income, and employment. In addition, they find that the relative influence of local market and competitive factors on branch openings and closings strengthened after the financial crisis, while the influence of local demographic and economic factors weakened.

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