

## Federal Reserve Bank of Kansas City / Denver / Oklahoma City / Omaha

# Agricultural Symposium Research

January 29, 2021

The Kansas City Fed's Agricultural Symposium explores topics of current and emerging significance to agriculture. Agricultural Symposium Research includes the papers written for each Symposium.

### 2020-2021 Agricultural Symposium Research: The Roots of Agricultural Productivity Growth

Complete 2020 Book | Front Matter

#### Foreword

The Federal Reserve Bank of Kansas City made the difficult decision to cancel the 2020 Agricultural Symposium titled "The Roots of Agricultural Productivity Growth," due to the pandemic. Esther L. George, the Bank's President and Chief Executive Officer notes that the topic of productivity growth, and the following papers that were written in anticipation of the 2020 symposium, remain relevant.

#### The Drivers of U.S. Agricultural Productivity Growth

By Philip G. Pardey and Julian M. Alston

For many years, investments in research and development have supported gains in agricultural productivity. These investments, which have slowed in more recent years, will be key determinants to future increases in productivity and technological innovation.

#### Interacting with the Next Wave of Farm Operators: Digital Agriculture and Potential Financial Implications

By Terry W. Griffin, LaVona S. Traywick and Elizabeth A. Yeager

The adoption and use of technology presents the agricultural sector an opportunity to improve productivity in the future. The use of technology has tended to differ across generations, however, which could have long-term implications for farm profitability and productivity as younger, technology-minded operators become a more prominent group of primary decision-makers.

### An Empirical Investigation of Productivity Spillovers along the Agricultural Supply Chain

By Sergio H. Lence and Alejandro Plastina

Changes to productivity on the farm could have implications for productivity in other segments of the economy. Identifying these productivity linkages can help reveal synergies between agriculture and other industries in an effort to promote

economic growth or to dampen negative spillovers that may also occur.

#### Environmental Drivers of Agricultural Productivity Growth and Socioeconomic Spillovers

By Wolfram Schlenker

Environmental factors are important contributors to the future outlook for agricultural productivity. Two factors that are likely to be especially important over the long-term include extreme heat and ozone pollution.

## Past Agricultural Symposium Research

- 2019: Exploring Agriculture's Path to the Long-Term, research published in a special issue of the Economic Review
- 2018: Agriculture in a Global Economy, research published in a special issue of the Economic Review
- 2017: Agricultural Consolidation: Causes and the Path Forward, research published in a special issue of the Economic Review
- · 2016: Agriculture's Water Economy, research published in a special issue of the Economic Review