

FEDERAL RESERVE BANK OF KANSAS CITY

ECONOMIC REVIEW

Fourth Quarter 2016

Volume 101, Number 4

- Residential Rent Affordability
across U.S. Metropolitan Areas 5
By Kelly D. Edmiston
- The Dispersion of Farmland Values
in the Tenth District 29
By Cortney Cowley
- Enforcement Actions and Bank Loan Contracting 69
By Raluca A. Roman

Residential Rent Affordability across U.S. Metropolitan Areas

By Kelly D. Edmiston

Owner-occupied housing has become more affordable in most markets since the housing crisis. In contrast, many renters and their advocates have reported that rental housing has become increasingly unaffordable. National trends seem to support these reports: from 2010 to 2015, growth in median rent outpaced inflation by 0.6 percent per year. Over the same period, rent growth outpaced income growth by 1 percentage point per year.

However, national data on rent affordability may mask important details about local markets. Affordability—and changes in affordability—vary widely across metropolitan statistical areas. Kelly D. Edmiston examines patterns in rent affordability for both low- and middle-income households and across metropolitan areas. He finds that only a few areas have seen significant changes in affordability over the past five years. These areas typically have small populations and an institution or industry that in some sense dominates the area.

The Dispersion of Farmland Values in the Tenth District

By Courtney Cowley

The value of U.S. farmland has varied widely within and across regions over the last 15 years. Although average farmland values have declined modestly over the past couple of years, farmland values in some areas have fallen sharply, while farmland values in other areas have risen. In recent years, unusually high or low prices at farmland sales have become increasingly likely.

Understanding what drives farmland values across regions can provide crucial information about the financial health of farms. Courtney Cowley examines the effects of soil quality, natural amenities, climate, agricultural production, and other location-specific characteristics on farmland values in the Tenth Federal Reserve District. She finds that better soil quality, more precipitation, and larger corn and cattle sales are associated with higher farmland values, while greater distance from urban areas and higher temperatures are associated with lower farmland values.

Enforcement Actions and Bank Loan Contracting

By Raluca A. Roman

Enforcement actions against banks and their management officials are important supervisory instruments that address rule violations, breaches of fiduciary duty, and unsafe or unsound banking practices. But enforcement actions can be costly for banks. Affected banks are sometimes required to pay fines or spend resources to correct violations. In addition, because enforcement actions are publicly announced, they may carry severe reputational costs.

In response, some banks may offer borrowers loans with lower interest rates and more favorable terms to compensate for the reputational damage. However, other banks may raise interest rates and offer more stringent terms to reduce risk. Raluca A. Roman investigates the effects of enforcement actions on bank loan contracting to discover which effect dominates. She finds that loans initiated after enforcement actions have statistically and economically significantly lower interest rates than loans initiated before enforcement actions. In addition, non-price loan terms such as maturity and covenant intensity become more favorable for borrowers after an enforcement action.

Economic Review

PRESIDENT AND CHIEF EXECUTIVE OFFICER

Esther L. George

RESEARCH STEERING GROUP

Kelly J. Dubbert, First Vice President and Chief Operating Officer
Troy Davig, Senior Vice President and Director of Research
Kevin L. Moore, Senior Vice President
Barbara S. Pacheco, Senior Vice President
Diane M. Raley, Senior Vice President

ECONOMIC RESEARCH

Craig S. Hakkio, Senior Vice President and Special Advisor on Economic Policy
George A. Kahn, Vice President and Economist
Jonathan L. Willis, Vice President and Economist
San Cannon, Assistant Vice President and Economist
Willem Van Zandweghe, Assistant Vice President and Economist
Huixin Bi, Senior Economist
Taeyoung Doh, Senior Economist
Andrew Foerster, Senior Economist
Jun Nie, Senior Economist
Jordan Rappaport, Senior Economist
Nicholas Sly, Senior Economist
Aaron Smalter Hall, Senior Data Scientist
Brent Bundick, Economist
José Mustre-del-Río, Economist
A. Lee Smith, Economist
Didem Tüzemen, Economist

PAYMENTS SYSTEM RESEARCH

William T. Mackey, Vice President
Fumiko Hayashi, Senior Economist
Richard J. Sullivan, Senior Economist

REGIONAL AND COMMUNITY AFFAIRS

Alison Felix, Vice President and Branch Executive, Denver Branch
Chad Wilkerson, Vice President and Branch Executive, Oklahoma City Branch
Nathan Kauffman, Assistant Vice President and Branch Executive, Omaha Branch
Jason P. Brown, Senior Economist and Regional Executive
Kelly D. Edmiston, Senior Economist
Cortney Cowley, Economist
Nida Çakır Melek, Economist

SUPERVISION AND RISK MANAGEMENT

Charles S. Morris, Vice President and Economist
Jim Wilkinson, Assistant Vice President and Economist
Blake Marsh, Economist
Raluca A. Roman, Economist
Rajdeep Sengupta, Economist

EDITORIAL SUPPORT

Elizabeth Cook Willoughby, Editorial Advisor
Richard A. Babson, Senior Editor
Beth Norman, Layout Designer

Fourth Quarter 2016, Volume 101, Number 4

The *Economic Review* (ISSN0161-2387) is published quarterly by the Federal Reserve Bank of Kansas City, 1 Memorial Drive, Kansas City, Missouri 64198-0001. Subscriptions and additional copies are available without charge. Send requests to the Public Affairs Department, Federal Reserve Bank of Kansas City, 1 Memorial Drive, Kansas City, Missouri 64198-0001. Periodical postage paid at Kansas City, Missouri.

POSTMASTER: Send address changes to *Economic Review*, Public Affairs Department, Federal Reserve Bank of Kansas City, 1 Memorial Drive, Kansas City, Missouri 64198-0001. The views expressed are those of the authors and do not necessarily reflect the positions of the Federal Reserve Bank of Kansas City or the Federal Reserve System. If any material is reproduced from this publication, please credit the source.

STATEMENT OF OWNERSHIP

Title of publication: Economic Review
 Publication no.: 417-850
 Date of filing: October 1, 2016
 Frequency of issue: Quarterly
 No. of issues published annually: 4
 Annual subscription price: Free
 Mailing address of known office of publication: Federal Reserve Bank of Kansas City, 1 Memorial Drive, Kansas City, Missouri 64198-0001
 Mailing address of headquarters or general business office of publisher: Federal Reserve Bank of Kansas City, 1 Memorial Drive, Kansas City, Missouri 64198-0001
 Publisher: Federal Reserve Bank of Kansas City, 1 Memorial Drive, Kansas City, Missouri 64198-0001
 Editor: Elizabeth Cook Willoughby, Federal Reserve Bank of Kansas City, 1 Memorial Drive, Kansas City, Missouri 64198-0001
 Managing editor: Troy Davig, Senior Vice President, Federal Reserve Bank of Kansas City, 1 Memorial Drive, Kansas City, Missouri 64198-0001
 Owner: Federal Reserve Bank of Kansas City, 1 Memorial Drive, Kansas City, Missouri 64198-0001
 Issue date for circulation data below: Third Quarter 2016

<u>Extent and nature of circulation</u>	Average no. copies of each issue during preceding <u>12 months</u>	Actual no. copies of single issue published nearest <u>to filing date</u>
Total number of copies	2,250	2,250
Paid and/or requested circulation		
Paid or requested mail subscriptions	1,233	1,229
Total paid and/or requested circulation	1,233	1,229
Free distribution by mail (samples, complimentary and other free)	0	0
Free distribution outside the mail (carriers or other means)	178	175
Total free distribution	1,411	1,404
Total distribution	1,411	1,404
Copies not distributed	839	846
Office use, leftovers, spoiled		
Total	2,250	2,250
Percent paid and/or requested circulation	87.4	87.5