

JAHRBÜCHER FÜR NATIONALÖKONOMIE UND STATISTIK

JOURNAL OF ECONOMICS AND STATISTICS

EDITOR-IN-CHIEF

Peter Winker, Gießen

EDITORS

Thiess Büttner, Erlangen-Nürnberg

Regina T. Riphahn, Erlangen-Nürnberg

Werner Smolny, Ulm

Joachim Wagner, Lüneburg

ASSOCIATE EDITORS

Christiane Clemens, Bielefeld

Gebhard Flaig, München

Michael R. Frenkel, Vallendar

Ullrich Heilemann, Leipzig

Klaus-Dirk Henke, Berlin

Sylvia Kaufmann, Zürich

Christian Pfeifer, Lüneburg

Winfried Pohlmeier, Konstanz

Susanne Prantl, Köln

Dirk Schindler, Bergen

Stefanie Schurer, Sydney

Willi Semmler, New York

Frank Westerhoff, Bamberg

Volker Wieland, Frankfurt a.M.

Joachim Winter, München

Conny Wunsch, Basel

**DE GRUYTER
OLDENBOURG**

The Journal of Economics and Statistics (Jahrbücher für Nationalökonomie und Statistik) is a scientific journal published in Germany since 1863. It is indexed in SCOPUS, JSTOR, Gesis, Social Science Citation Index, RePEc, Journal of Economic Literature, GBI/Genios, Handelsblatt Ranking.

ISSN 0021-4027 · e-ISSN 2366-049X

All information regarding notes for contributors, subscriptions, Open Access, back volumes and orders is available online at <http://www.degruyter.com/journals/jbnst>.

EDITOR-IN-CHIEF Prof. Dr. Peter Winker, Justus-Liebig-Universität Gießen, FB 02, Statistik und Ökonometrie, Licher Str. 64, 35394 Gießen, Germany. Tel.: +49 (0)641 99 22640, Fax.: +49 (0)641 99 22649, Email: Jahrbuecher@uni-giessen.de

JOURNAL MANAGER Katharina Kaupen, De Gruyter, Genthiner Straße 13, 10785 Berlin, Germany. Tel.: +49 (0)30 260 05-385, Fax: +49 (0)30 260 05-250, Email: katharina.kaupen@degruyter.com

RESPONSIBLE FOR ADVERTISEMENTS Claudia Neumann, De Gruyter, Genthiner Straße 13, 10785 Berlin, Germany. Tel.: +49 (0)30.260 05-226, Fax: +49 (0) 30.260 05-264, Email: anzeigen@degruyter.com

© 2018 Walter de Gruyter GmbH, Berlin /Boston

TYPESETTING Integra Software Service Pvt. Ltd., Pondicherry, India

PRINTING Franz X. Stückle Druck und Verlag e.K., Ettenheim



Contents

Special Issue: Big Data

Editorial

Harry J. Paarsch and Karl Schmedders

Introduction — 183

Original Articles

Jay Dixon, Robert Petrunia and Anne-Marie Rollin

Studying Firm Growth Distributions with a Large Administrative Employment Database — 189

Konstantin Golyaev

Randomization in Online Experiments — 223

Jason Ansel, Han Hong, and Jessie Li

OLS and 2SLS in Randomized and Conditionally Randomized Experiments — 243

John McClelland and John Rust

Strategic Timing of Investment over the Business Cycle: Machine Replacement in the US Rental Industry — 295

Leonard Sabetti, David T. Jacho-Chávez, Robert Petrunia and Marcel C. Voia

Tail Risk in a Retail Payments System — 353