

# HEALTH AND LABOR MARKETS

# RESEARCH IN LABOR ECONOMICS

Series Editor: Solomon W. Polachek

IZA Co-Editor: Konstantinos Tatsiramos

## Recent Volumes:

- Volume 38: New Analyses in Worker Well-Being  
*Edited by Solomon W. Polachek and Konstantinos Tatsiramos*
- Volume 39: Safety Nets and Benefit Dependence  
*Edited by Stéphane Carcillo, Herwig Immervoll, Stephen P. Jenkins, Sebastian Königs and Konstantinos Tatsiramos*
- Volume 40: Factors Affecting Worker Well-Being: The Impact of Change in the Labor Market  
*Edited by Solomon W. Polachek and Konstantinos Tatsiramos*
- Volume 41: Gender Convergence in the Labor Market  
*Edited by Solomon W. Polachek, Konstantinos Tatsiramos and Klaus F. Zimmermann*
- Volume 42: Gender and the Labor Market  
*Edited by Solomon W. Polachek, Konstantinos Tatsiramos and Klaus F. Zimmermann*
- Volume 43: Inequality: Causes and Consequences  
*Edited by Lorenzo Cappellari, Solomon W. Polachek and Konstantinos Tatsiramos*
- Volume 44: Income Inequality Around the World  
*Edited by Lorenzo Cappellari, Solomon W. Polachek and Konstantinos Tatsiramos*
- Volume 45: Skill Mismatch in Labor Markets  
*Edited by Solomon W. Polachek, Konstantinos Pouliakas, Giovanni Russo and Konstantinos Tatsiramos*
- Volume 46: Transitions Through the Labor Market: Work, Occupation, Earnings and Retirement  
*Edited by Solomon W. Polachek and Konstantinos Tatsiramos*

RESEARCH IN LABOR ECONOMICS VOLUME 47

# HEALTH AND LABOR MARKETS

EDITED BY

**SOLOMON W. POLACHEK**

*State University of New York at Binghamton,  
Liverpool Hope University and IZA*

**KONSTANTINOS TATSIRAMOS**

*University of Luxembourg, LISER and IZA*

**I Z A** Institute  
of Labor Economics

Initiated by Deutsche Post Foundation



United Kingdom – North America – Japan  
India – Malaysia – China

Emerald Publishing Limited  
Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2019

Copyright © 2019 Emerald Publishing Limited

**Reprints and permissions service**

Contact: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)

No part of this book may be reproduced, stored in a retrieval system, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without either the prior written permission of the publisher or a licence permitting restricted copying issued in the UK by The Copyright Licensing Agency and in the USA by The Copyright Clearance Center. Any opinions expressed in the chapters are those of the authors. Whilst Emerald makes every effort to ensure the quality and accuracy of its content, Emerald makes no representation implied or otherwise, as to the chapters' suitability and application and disclaims any warranties, express or implied, to their use.

**British Library Cataloguing in Publication Data**

A catalogue record for this book is available from the British Library

ISBN: 978-1-78973-862-9 (Print)

ISBN: 978-1-78973-861-2 (Online)

ISBN: 978-1-78973-863-6 (Epub)

ISSN: 0147-9121 (Series)



**ISOQAR**  
REGISTERED

Certificate Number 1985  
ISO 14001

ISOQAR certified  
Management System,  
awarded to Emerald  
for adherence to  
Environmental  
standard  
ISO 14001:2004.



INVESTOR IN PEOPLE

# CONTENTS

<i>List of Contributors</i>	vii
<i>Editorial Advisory Board</i>	ix
<i>Preface</i>	xi
<b>Health and the Wage Rate: Cause, Effect, Both, or Neither? New Evidence on an Old Question</b>	
<i>Daniel Dench and Michael Grossman</i>	1
<b>Women’s Labor Market Participation After an Adverse Health Event</b>	
<i>Zornitza Kambourova, Wolter Hassink and Adriaan Kalwij</i>	25
<b>Job Insecurity and Older Workers’ Mental Health in the United States</b>	
<i>Italo A. Gutierrez and Pierre-Carl Michaud</i>	71
<b>Diabetes Morbidity After Displacement</b>	
<i>Annette Bergemann, Erik Grönqvist and Soffia Guðbjörnsdóttir</i>	99
<b>The Effect of Disenrollment from Medicaid on Employment, Insurance Coverage, and Health and Health Care Utilization</b>	
<i>Thomas DeLeire</i>	155
<b>The Incentive Effects of Sickness Absence Compensation – Analysis of a Natural Experiment in Eastern Europe</b>	
<i>Márton Csillag</i>	195
<b>The Role of Employer-provided Sick Pay in Britain and Norway</b>	
<i>Alex Bryson and Harald Dale-Olsen</i>	227
<b>US Employment and Opioids: Is There a Connection?</b>	
<i>Janet Currie, Jonas Jin and Molly Schnell</i>	253
<b>Parental Migration Decisions and Child Health Outcomes: Evidence from China</b>	
<i>Carl Lin and Yana van der Meulen Rodgers</i>	281

## LIST OF CONTRIBUTORS

<i>Annette Bergemann</i>	University of Bristol, Bristol, UK
<i>Alex Bryson</i>	University College London, London, UK
<i>Márton Csillag</i>	Budapest Institute for Policy Analysis, Budapest, Hungary
<i>Janet Currie</i>	Princeton University, Princeton, USA
<i>Harald Dale-Olsen</i>	Institute for Social Research, Oslo, Norway
<i>Thomas DeLeire</i>	Georgetown University, Washington, DC, USA
<i>Daniel Dench</i>	City University of New York Graduate Center, New York, USA; Institute of Labor Economics (IZA), Bonn, Germany
<i>Erik Grönqvist</i>	IFAU, Uppsala, Sweden
<i>Michael Grossman</i>	City University of New York Graduate Center and National Bureau of Economic Research, New York, USA
<i>Soffia Guðbjörnsdóttir</i>	The Swedish National Diabetes Register, Gothenburg, Sweden
<i>Italo A. Gutierrez</i>	RAND Corporation, Santa Monica, USA
<i>Wolter Hassink</i>	Utrecht University, Utrecht, The Netherlands
<i>Jonas Jin</i>	Princeton University, Princeton, USA
<i>Adriaan Kalwij</i>	Utrecht University, Utrecht, The Netherlands
<i>Zornitza Kambourova</i>	Utrecht University, Utrecht, The Netherlands
<i>Carl Lin</i>	Bucknell University, Pennsylvania, USA
<i>Pierre-Carl Michaud</i>	HEC Montréal, Montréal, Canada
<i>Molly Schnell</i>	Northwestern University, Evanston, USA
<i>Yana van der Meulen Rodgers</i>	Rutgers University, New Jersey, USA

# EDITORIAL ADVISORY BOARD

Orley C. Ashenfelter  
*Princeton University*

Daniel S. Hamermesh  
*University of Texas*

Francine D. Blau  
*Cornell University*

James J. Heckman  
*University of Chicago*

Alison L. Booth  
*Australian National University*

Alan B. Krueger  
*Princeton University*

Richard Blundell  
*University College London*

Edward P. Lazear  
*Stanford University*

David Card  
*University of California*

Christopher A. Pissarides  
*London School of Economics*

Ronald G. Ehrenberg  
*Cornell University*

Yoram Weiss  
*Tel-Aviv University*

Richard B. Freeman  
*Harvard University*

Klaus F. Zimmermann  
*UNU-MERIT, Maastricht University  
and GLO*

Reuben Gronau  
*Bank of Israel*

# PREFACE

*Research in Labor Economics* is a series that publishes new labor economics research. Articles apply economic theory and econometrics to policy-relevant topics often with an international focal point. This volume contains nine articles originally presented at the IZA Workshop on Health and Labor Markets. Four articles deal with the link between health events and labor market outcomes, three with incentive effects of health insurance, one with the relationship between opioid use and employment, and finally one with the health effects on children of parental migration. As you will see, published articles in *Research in Labor Economics* focus on important issues and maintain the highest levels of scholarship. They are indexed in EconLit, Google Scholar, RePEc, and SCOPUS. Readers who have prepared manuscripts that meet these stringent standards are encouraged to submit them via the IZA website (<http://rle.iza.org>).

In the first article, Daniel Dench and Michael Grossman investigate whether and to what extent health changes induce wage changes, or the opposite, whether a change in the wage rate induces a change in health. Employing longitudinal data of US young adults they uncover a novel causal relationship between one's health and one's wage, namely that a reduction in health leads to an increase in one's wage rate. This seemingly counterintuitive finding is consistent with two models. First is the compensating wage differential model. In this model, a large amount of effort required for a promotion and subsequent wage gain causes a reduction in health. Second is a model in which investments in career advancement compete for time with investments in health.

Adverse health events may not only induce wage changes but also could affect an employee's work capacity as time is needed to recover from a health shock. In the second article, Zornitza Kambourova, Wolter Hassink, and Adriaan Kalwij examine the employment effects of an unfavorable health event among women in the Netherlands, a country which provides employment protection during the first two years after a diagnosis. Using administrative data, which follow women aged 25 to 55 for four years after a medical diagnosis, they find that, independent of severity, diagnosed women start leaving employment during the protection period, and four years later they are about one percentage point less likely to be employed. Looking at working hours, the authors find minor adjustments in the short-term and no adjustments in the long-term. Unlike employment and hours, wages adjust depending on the severity of the health condition with women diagnosed with temporary health conditions experiencing a short-term wage penalty of about 0.5 to 1.7 percent, while those



diagnosed with chronic and incapacitating conditions experienced a long-term wage penalty of about 0.5 percent.

Workplaces often experience financial difficulties and undergo restructuring which involves periods of downsizing. The risk and experience of job loss may affect workers' health. In the third article, Italo A. Gutierrez and Pierre-Carl Michaud examine the effects of job insecurity on the mental health of older workers in the United States. They provide evidence that job insecurity, as measured by the self-reported probability of job loss, increases stress at work and the risk of clinical depression. Their analysis exploits panel data and plausibly exogenous changes in job loss expectations following eliminations of similar positions and other types of jobs at the worker's employer, as well as changes in employment at the industry-state level. This evidence suggests that job insecurity which is outside the control of workers may have large effects on mental health.

While downsizing affects workers' mental health, the next article by Annette Bergemann, Erik Grönqvist, and Soffia Guðbjörnsdóttir shows that career disruption of workers does not impact morbidity for those already diagnosed with type 2 diabetes (T2D). The authors combine unique, high-quality longitudinal data from the Swedish National Diabetes Register (NDR) with matched employer–employee data and focus on individuals diagnosed with T2D, who are established in the labor market and who lose their job in a mass layoff. Using a conditional difference-in-differences evaluation approach, their findings give limited support for job loss having an impact on health behavior, diabetes progression, and cardiovascular risk factors.

One way to estimate the impact of public health insurance on a population's well-being is to examine what happens when an insurance program is arbitrarily eliminated. In the next article Thomas DeLeire examines the effect of disenrollment from Medicaid, a US federal government program that provides health coverage on employment, on sources of health insurance coverage, and on health and health care utilization. Following a change in eligibility rules, the Tennessee Medicaid program disenrolled approximately 170,000 adults from July to September 2005 resulting in a reduction by over 5 percentage points in the fraction of adults covered by the program. The author finds no evidence of an increase in employment rates in Tennessee following the disenrollment. Further, self-reported health and access to medical care worsened. These findings suggest that access to public health insurance increases health insurance coverage, provides access to health care, and improves health, without affecting work incentives, at least for Tennessee's Medicaid eligible population.

Health insurance systems in many countries include compensation for sickness related work absences. The generosity of these benefits may affect one's incentives to claim sick days and is often subject to reforms. In the next article, Márton Csillag examines the change in the number of days spent on sick leave following the 2011 reform which halved the maximum sick day benefits provided by statutory health insurance in Hungary. The author evaluates the reform's short-term effect using a difference-in-differences methodology relying on high-quality administrative data. The analysis shows that the number of days

spent on sick leave fell substantially for those experiencing the full halving of benefits. The estimated elasticity is  $-0.45$ .

More generous sick benefits imply higher levels of absenteeism, yet in many countries employers provide sick pay in addition to the public sick pay. In the next article, Alex Bryson and Harald Dale-Olsen show that close to 50% of private sector employers in Britain and Norway provide sick pay in excess of statutory sick pay. The authors argue that employers provide such private sick pay in addition to other benefits in part to attract and retain valuable workers thus enabling them to maximize profits having accounted for different dimensions of labor costs. They also show that the sickness absence rate is much higher in Norway than in Britain, which relates to the threshold for statutory sick pay in the Norwegian public sick pay legislation.

Workers suffering from chronic health conditions often use opioid pain medications prescribed by their physicians, a practice which in the United States has led to an opioid epidemic associated with drug overdoses and mortality. In the next article, Janet Currie, Jonas Jin, and Molly Schnell ask whether the opioid crisis results from unemployment and economic dislocation among less-skilled American workers, or the reverse, whether excessively prescribed opioids brought about unemployment and economic dislocation by converting the chronically injured into addicts. The authors conclude that there is no simple causal relationship between economic conditions and opioid abuse. Using quarterly county-level data from 2006 to 2014 and instrumenting opioid prescriptions for younger ages by opioid prescriptions to the elderly, the authors find a slightly positive but small effect of opioids on employment-to-population ratios for women, but no such effect for men. Further, the impact of employment-to-population ratios on opioid prescription rates appears to be ambiguous. These findings suggest that improving economic conditions is unlikely to limit the opioid epidemic.

Well-being in adulthood depends to a large extent on childhood health, which in turn is influenced by the quantity and quality of family resources. In the last article, Carl Lin and Yana van der Meulen Rodgers investigate the tradeoff between family income and time spent with children on child health outcomes by examining how parental migration decisions are associated with the nutritional status of children in rural and urban China. Using migrant household survey data from 2008 and 2009, the authors show a substantial adverse effect of children's exposure to parental migration on height-for-age Z scores of left-behind children relative to children who migrate with their parents. Children who are left behind in rural villages have poorer nutritional status than children who migrate with their parents, and the gaps are biggest at lower portions of the distribution.

We thank IZA for sponsoring the Health and Labor Market Workshop as well as conference participants for lively discussion and important insights on a particularly vital policy related topic.

Lastly, *Research in Labor Economics* mourns the passing of Editorial Board member Alan B. Krueger. Alan was a trail blazer in many areas of economics especially those linking individual welfare to public policy. As an empirically

minded pioneer in quasi-experimental research Alan instigated important new studies spanning such topics as minimum wage legislation, educational attainment, labor in the gig economy, occupational licensing, opioid's effects on work behavior, non-compete clauses in employment contracts, as well as technical issues regarding the strength of government statistical data. He authored well over a hundred academic papers and a number of books including one on terrorism and a soon to be published book on the music industry titled *Rockonomics*. In addition, Alan served two U.S. presidents, first under President Clinton as Chief Economist of the Department of Labor, and then under President Obama as Assistant Secretary for Economic Policy in the Department of the Treasury and Chairman of the President's Council of Economic Advisers. Finally, Alan wrote two important articles in *Research in Labor Economics*. One extended his previous Pennsylvania-New Jersey minimum wage work with David Card to the Puerto Rican economy (Volume 14) and the other a joint article with Lawrence Katz (Volume 12) examined changes in the structure of U.S. public sector wages.