JOURNAL OF INSTITUTIONAL ECONOMICS

VOL 6 , NO 2 , JUNE 2010

CAMBRIDGEUNIVERSITY PRESS

IOURNAL OF INSTITUTIONAL ECONOMICS

EDITORS

Geoffrey M. Hodgson (Editor-in-Chief)

The Business School University of Hertfordshire Hatfield, UK

g.m.hodgson@herts.ac.uk

Benito Arruñada

Pompeu Fabra University, Barcelona, Spain benito.arrunada@upf.edu

Richard N. Langlois

Department of Economics University of Connecticut

richard.langlois@uconn.edu

Jason Potts

Department of Economics University of Queensland Brisbane, Australia j.potts@uq.edu.au

Esther-Mirjam Sent

Radboud University Nijmegen

The Netherlands e.m.sent@fm.ru.nl

OTHER TRUSTEES www.joje-foundation.co.uk

Ha-Joon Chang University of Cambridge, UK

Gráinne Collins

Trinity College, Dublin, Ireland

Francesca Gagliardi

University of Hertfordshire, UK

John Groenewegen

Delft University of Technology,

The Netherlands

Stavros Ioannides

Panteion University, Athens, Greece

Albert Jolink

University of Amsterdam, The Netherlands

Elias L. Khalil

Monash University, Australia

Thorbjørn Knudsen

University of Southern Denmark,

Odense, Denmark

Jackie Krafft

GREDEG-CNRS, Sophia-Antipolis, France

Nathalie Lazaric

GREDEG-CNRS, Sophia-Antipolis, France

Ioanna P. Minoglou Athens University of Economics, Greece

Klaus Nielsen

Birkbeck College, London, UK

Ugo Pagano

University of Siena, Italy Andreas Reinstaller WIFO, Vienna, Austria

Pier Paolo Saviotti Université Pierre Mendes-France,

Grenoble, France William Waller

Hobart and William Smith Colleges, USA

STATEMENT OF AIMS

Institutions are the stuff of social and economic life. The importance of understanding the role of institutions in economic growth is now widely appreciated. The Journal of Institutional Economics is devoted to the study of the nature, role and evolution of institutions in the economy, including firms, states, markets, money, households and other vital institutions and organizations. It welcomes contributions by all schools of thought that can contribute to our understanding of the features, development and functions of real world economic

institutions and organizations.

The Journal of Institutional Economics is an interdisciplinary journal that will be of interest to all academics working in the social sciences, including in economics, business studies, sociology, politics, geography, anthropology and philosophy. The Journal of Institutional Economics aims to provide all authors with an expert verdict on their articles within 50 days of submission.

INTERNATIONAL ADVISORY BOARD

Howard Aldrich

University of North Carolina at Chapel Hill

University of Durham

Masahiko Aoki Stanford University

Margaret Archer University of Warwick

W. Brian Arthur Sante Fe Institute

Mark Blaug

University of Amsterdam

Paul Dale Bush

California State University at Fresno

John Cantwell Rutgers University

Victoria Chick

University College London

Antonio Damasio University of Iowa

Marcello de Cecco

Scuola Normale Superiore, Pisa

Paul DiMaggio Princeton University

Ronald Dore

London School of Economics

Giovanni Dosi

Sant'Anna School of Advanced Studies, Pisa

Sheila Dow

University of Stirling

Massimo Egidi University of Trento

Nicolai Foss

Copenhagen Business School

John Foster

University of Queensland

Mark Granovetter Stanford University

Herbert Gintis

University of Massachusetts at Amherst

Avner Greif Stanford University Bruce Kogut

INSEAD

Janos Kornai Collegium Budapest

Tony Lawson

University of Cambridge Brian Loasby

University of Stirling

Uskali Mäki

Academy of Finland

J. Stanley Metcalfe

University of Manchester

Luigi Marengo University of Teramo

Claude Ménard

Université de Paris 1

Philip Mirowski

University of Notre Dame

Douglass North

Washington University at St Louis

Elinor Ostrom Indiana University

Malcolm Rutherford University of Victoria

Warren Samuels

Michigan State University

Thomas Schelling University of Maryland

Ekkehart Schlicht

University of Munich John R. Searle

University of California at Berkeley

Luc Soete

University of Maastricht

Robert Sugden

University of East Anglia

State University of California at Sacramento

Viktor Vanberg University of Freiburg Richard Whitley University of Manchester

H. Peyton Young Johns Hopkins University

Journal of Institutional Economics

June 2010

CONTENTS

145–165	Hayek on tacit knowledge Fuat Oğuz
167–190	Numbers as a cognitive and social technology: on the nature of conventional number sequences used in economic systems D_{AVID} $A.$ H_{ARPER}
191–214	Social capital and human development: an empirical investigation across European countries Asimina Christoforou
215–242	The origins of governments: from anarchy to hierarchy Matthew Baker, Erwin Bulte, and Jacob Weisdorf
243–259	Constraining the state's ability to employ force: the standing army debates, 1697–99 $S_{\mbox{\scriptsize Humphrey and}} \ B_{\mbox{\scriptsize Radley}} \ A. \ H_{\mbox{\scriptsize Ansen}}$
261–280	Ownership structure and incentives to invest: dual-structured irrigation cooperatives in Australia Bradley Plunkett, Fabio R. Chaddad, and Michael L. Cook