

## THE INFORMAL ECONOMY IN DEVELOPING NATIONS

### Hidden Engine of Innovation?

The informal economy represents a significant share of output and employment in many developing countries. Yet little is known about this hidden engine of innovation. This book addresses some of the following crucial questions:

- What is the role of the informal sector in economic development?
- How does innovation occur in the informal economy? How does it spread, who are the key actors and what impacts does it have?
- How do inventors and entrepreneurs in the informal economy reap benefits from their innovations? And what stops informal sector innovation from scaling up?
- How can informal sector innovation in developing countries be measured?
- What policies might support informal sector innovation and improve its impacts?

This book will stimulate further work on this crucial but under-researched subject. As well as rich empirical evidence from several groundbreaking studies, it includes conceptual and methodological tools and policy recommendations to help researchers and policy makers understand innovation in the informal economy.

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Cambridge University Press & Assessment  
978-1-107-15754-5 — The Informal Economy in Developing Nations  
Erika Kraemer-Mbula , Sacha Wunsch-Vincent  
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“This book’s strong point is its emphasis on better measurement and evidence as essential prerequisites to improved policy making.”

Mark Dutz, Lead Economist, Trade and Competitiveness,  
World Bank Group

“Innovation may seem like a luxury; something countries can afford only once they have transcended issues of survival. But this attitude is outdated. Innovation can provide fundamental solutions to low-income countries and this book underlines this potential.”

Xiaolan Fu, Founding Director of the Technology and Management  
Centre for Development (TMCD), University of Oxford, UK

“The divorce between informal endeavors and prevailing knowledge production practices developed in this book is immediately recognizable for all developing countries.”

Judith Sutz, Professor, Universidad de la República, Uruguay, and former  
Secretary of Science, Technology and Development, Latin American  
Commission of Social Sciences

“The democratization of innovation, a wider participation of individuals and small firms in innovation, is a key factor for more inclusive growth. Considering the informal sector is critical in this regard, making this book an important contribution to this policy agenda.”

Dominique Guellec, Head of Division, and Caroline Paunov, Senior  
Economist, Directorate for Science, Technology and Innovation, OECD

“The authors have managed to put into perspective the hitherto hidden and unexplored contribution of the informal sector to Kenya’s modern economy and its industrialization process.”

Joseph K. Kiplagat, Ministry of Industrialization and Enterprise  
Development, Kenya

“This book is timely and important. Developing countries need to build development strategies and design public policies on the basis of what they have.”

Bengt-Åke Lundvall, Secretary General, Globelics and Professor,  
Aalborg University, Denmark

“This book encourages policy makers to better enable innovation in the informal sector. It is a meaningful contribution to the development of South Africa’s innovation policy.”

Nonhlanhla Mkhize, Department of Science and Technology, South  
Africa

“This book will contribute to making the innovation statistics and measurement work of the African Observatory for Science, Technology and Innovation more relevant to the African community.”

Philippe Mawoko, Director, African Observatory for STI,  
African Union Commission

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978-1-107-15754-5 — The Informal Economy in Developing Nations  
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“Mainstream innovation and IP debates have for the most part ignored what is commonly referred to as the ‘informal’ economy. This book aims to redress this deficit.”

Shamnad Basheer, Honorary Research Chair Professor of IP Law at  
Nirma University, India, and Founder of SpicyIP

“This volume provides valuable insights that will help guide further research and evidence-based policy not only in South Africa but also in emerging economies in general.”

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# THE INFORMAL ECONOMY IN DEVELOPING NATIONS

Hidden Engine of Innovation?

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CAMBRIDGE  
UNIVERSITY PRESS

Cambridge University Press & Assessment  
 978-1-107-15754-5 — The Informal Economy in Developing Nations  
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 Frontmatter  
[More Information](#)



CAMBRIDGE  
UNIVERSITY PRESS

Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

103 Penang Road, #05–06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment,  
 a department of the University of Cambridge.

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 education, learning and research at the highest international levels of excellence.

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Information on this title: [www.cambridge.org/9781107157545](http://www.cambridge.org/9781107157545)

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First published 2016

*A catalogue record for this publication is available from the British Library*

*Library of Congress Cataloging-in-Publication data*

Kraemer-Mbula, Erika, editor. | Wunsch-Vincent, Sacha, editor

The informal economy in developing nations : hidden engine of innovation? / edited by  
 Erika Kraemer-Mbula, Sacha Wunsch-Vincent.

New York : Cambridge University Press, 2016. | Series: Intellectual property, innovation  
 and economic development | Includes bibliographical references and index.

LCCN 2016026816 | ISBN 9781107157545 (hardback)

LCSH: Informal sector (Economics) – Developing countries. | International organization. |  
 International cooperation.

LCC HD2346.5 .I5254 2016 | DDC 330–dc23

LC record available at <https://lcn.loc.gov/2016026816>

ISBN 978-1-107-15754-5 Hardback

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## FOREWORD

BENGT-ÅKE LUNDVALL

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This book is timely and important. Developing countries need to build development strategies and design public policies on the basis of what they have. As demonstrated in this book, in Africa, as in most low-income countries in other parts of the world, most people work in the informal sector. When they work, they use more or less advanced tools and produce more or less sophisticated products, sometimes doing things in new ways and delivering new kinds of products and processes. This book provides conceptual frameworks to understand such processes and ideas about how to measure such activities and outcomes as well as recommendations for policy.

The book is unique in addressing the role of innovation in the informal sector in a systematic manner. General analysis of this phenomenon is combined with in-depth case studies analyzing three different technological fields in three different countries, helping the reader get a concrete understanding of what is at stake. One important insight when it comes to innovation is that there is a need to look into the interaction between the formal and informal sectors. Workers move between formal and informal work, and enterprises that operate in the formal sector may depend upon activities in the informal sector – or vice versa.

The book corrects a general misunderstanding about economic growth and the evolution of the informal sector. While it is correct that the informal sector constitutes a bigger share of all economic activities in the poor countries, there is no simple correlation between the rate of economic growth and the rate of reduction in informal sector activities as a share of economic output and employment. The fact that African countries with high growth rates have been characterized by a growing share of workers in the informal sector can be interpreted in different ways. Some would say that it reflects a highly problematic growth path where some leading natural resource sectors related to mineral and oil have very low capacity to create jobs. Others would argue that the natural



resource-based sectors that dominate growth can play a dynamic role in relation to the whole economy (Lundvall and Lema 2014).

The project that led to this book was initiated by member countries of the World Intellectual Property Organization (WIPO) and one important purpose was to understand the role of the protection of intellectual property (IP) in the informal sector. Do innovators within that sector make efforts to protect new ideas that are materialized in new processes and new products? What kind of means do they use? Would innovation activities be stimulated by changes toward more formal means of protection? Chapter 6 and the three case studies indicate that formal IP rights are not significantly used in the informal sector.

One way to understand related difficulties is to consider the link between innovation and different kinds of knowledge. It is useful to view the innovation process as one where “knowledge” is both an input and an output. Innovations typically reflect the introduction of a new combination of existing knowledge into the economy, and the innovation itself represents new knowledge. But knowledge is complex. Some knowledge takes the form of information that is easy to absorb and diffuse. Such knowledge can be regarded as a public good. If innovations take this form – as they do, for example, when it comes to the development of drugs that can easily be copied by others – public production or IP rights need to be introduced in order to keep the search for new or better drugs moving ahead.

But there are important elements of tacit knowledge that are necessary to develop and use new technologies and products. As we have demonstrated elsewhere (Jensen *et al.* 2007), it is useful to distinguish between two “modes of innovation.” Some processes of innovation are rooted in experience-based learning (by doing, using and interacting (DUI)) while others are more directly linked to scientific information (science, technology and innovation (STI)). The DUI mode dominates in low-technology areas such as construction, clothing and food production while the STI mode dominates in sectors such as informatics, pharmaceuticals and aerospace.

It is quite obvious that the dominant mode of innovation in the informal sector is based upon experience-based (DUI) learning. Therefore it is not surprising that we find very little evidence of formal IP right protection in the sector. The proposal that there should be a creative search for alternative incentives that fit better the characteristics of the informal sector is especially interesting. In the case of