

Public Sector Innovation

Governments around the world are under pressure to do more with less. Dispelling the conventional wisdom that government is the enemy of innovation, this book argues that the promise of innovation addressing the most compelling societal problems will only come to fruition if governments become full partners and participants in innovation. The authors provide a systematic overview, analysis, framework, research agenda, and strategic directions for the study of public sector innovation, examining drivers, sources, barriers, typologies, and outcomes of innovation along with ethics. They suggest that innovation in government requires a new approach to public sector strategy, organization, human resources, and culture. Featuring large data analyses and poignant case studies drawn from best practices across the globe, Demircioglu and Audretsch identify what works and what doesn't in transforming governments from the periphery to the very heart of the most profound innovations driving societal change and development.

MEHMET AKIF DEMIRCIOGLU is Faculty Member in the School of Public Policy and Administration at Carleton University. He is also affiliated with the Executive Education program at the National University of Singapore, the Institute for Future Government at Yonsei University, the Institute for Development Strategies at Indiana University, and Arizona State University. He was ranked among the top 2% of the world's top scientists released by Standard University (2023), and received three research excellence awards (National University of Singapore) and a teaching award (Indiana University).

DAVID B. AUDRETSCH is Distinguished Professor in the O'Neill School of Public & Environmental Affairs at Indiana University. He was recognized as a Clarivate Citation Laureate in 2021 and awarded the Global Award for Entrepreneurship Research by the Swedish Foundation for Entrepreneurship. He has received honorary doctorate degrees from the University of Augsburg, Jonköping University, and the University of Siegen, and has been awarded the Schumpeter Prize from the University of Wuppertal.



More Information

Public Sector Innovation

MEHMET AKIF DEMIRCIOGLU

Carleton University

DAVID B. AUDRETSCH

Indiana University







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.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781009279239

DOI: 10.1017/9781009279277

© Mehmet Akif Demircioglu and David B. Audretsch 2024

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press & Assessment.

First published 2024

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

Library of Congress Cataloging-in-Publication Data

Names: Demircioglu, Mehmet Akif, author. | Audretsch, David B., author. Title: Public sector innovation / Mehmet Akif Demircioglu, Carleton

University, David B. Audretsch, Indiana University.

Description: New York, NY : Cambridge University Press, 2024. $\$ Includes bibliographical references and index.

Identifiers: LCCN 2023047139 | ISBN 9781009279239 (hardback) |

ISBN 9781009279277 (ebook)

Subjects: LCSH: Public administration. | Organizational change. | Public policy. | Industrial management – Philosophy. | Public

administration - Economic aspects.

Classification: LCC JF1321 .D46 2024 | DDC 351-dc23/eng/20240111 LC record available at https://lccn.loc.gov/2023047139

ISBN 978-1-009-27923-9 Hardback ISBN 978-1-009-27924-6 Paperback

Cambridge University Press & Assessment has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.



This book is dedicated to the public sector champions of innovation, who prove through example and leadership that government is part of the solution, not the problem.



Contents

List of Figures	page viii
List of Tables	ix
Acknowledgments	X
1 Introduction	1
2 What Is Public Sector Innovation?	10
3 Public versus Private	23
4 The Context of Public Sector Innovation	40
5 Innovation Typologies	55
6 Why Public Sector Innovation?	68
7 Drivers and Conditions for Innovation	84
8 Sources of Knowledge and Collaborative Innovation	110
9 Barriers to Public Sector Innovation	133
10 National Systems of Innovation and Market	
and Government Failure	149
11 Outcomes of Public Sector Innovation	170
12 Ethics and Public Sector Innovation	185
13 Conclusions	198
References	203
Index	241

vii



Figures

6.1 Employment in general government as a percentage	2
of total employment, 2019 and 2021	page 75
6.2 Annual average growth rate of general government	
employment and total employment, 2019-2021	76
7.1 Conditions for innovations	85

viii



Tables

3.1	Innovation between public and private organizations	page 38
5.1	Types of innovations	60
5.2	Innovation typologies	66
6.1	General government revenue as a percentage of GDP	73
6.2	General government spending as a percentage of GDP	74
6.3	2022 Global Innovation Index	78
8.1	Sources of innovation	114
9.1	Barriers to innovation and levels of analysis	142



Acknowledgments

We started this book project when the first author (Mehmet) approached the second author (David) in early 2017 regarding research gaps in the public sector innovation literature. Mehmet thanks David for encouraging him to write a book about these ideas. Since then, we have met in several places, including Bloomington, Munich, and Singapore, to finish the book. Similarly, David is grateful to Mehmet for leading the project.

We are thankful to the many people who played an essential role in the process of writing this book. First, Senior Commissioning Editor Valerie Appleby and Editorial Assistant Carrie Parkinson have been fantastic support from the beginning to the end. In particular, we are grateful to Carrie because Carrie is patient, supportive, accommodating, and helpful despite our project being delayed several times. We want to thank Chloe Quinn and Ranjith Kumar for their support and guidance during the production stage. We are also thankful to our institutions: The National University of Singapore's Lee Kuan Yew (LKY) School of Public Policy, Carleton University's School of Public Policy, and Indiana University's O'Neill School of Public and Environmental Affairs. Mehmet received financial support from both LKY School and Carleton University's Faculty of Public Affairs to complete the book. He is thankful for this financial and institutional support.

We are grateful to our research assistants, including Roberto Vivona, Aarthi Raghavan, Kidjie Saguin, Ola El Taliawi, Burra Naga Trinadh (B. N. T.), Shaleen Khanal, and Lin Zhu, as well as our editors Molly Hamer, Brian Case, and Daniel Bingul. Mamta Jha did a tremendous job for indexing, so we are thankful to her. We are also grateful to Katie O'Shea for her outstanding assistance, particularly during the production stage of the book.

Mehmet is also thankful for his dissertation chair and PhD advisor Sergio Fernandez, his dissertation committee members - Claudia



Acknowledgments

xi

Avellaneda, Barry Rubin, and Lois R. Wise – his other professors from Indiana University, and most specifically to Roy W. Shin, Michael McGinnis, James L. Perry, Maureen Pirog, Edwardo L. Rhodes, Robert (Bob) Agranoff (RIP), Randell Baker (RIP), Patricia McManus, Jeffrey G. Covin, Dean Shepherd, Chuck Bonser, and Scott Long.

In addition, he is grateful to be an active member of the LKY School's Executive Education program since 2017. He appreciates support from Vice-Dean for Executive Education Francesco Mancini and his outstanding former or current Executive Education team members, including Sheila Kwek, Alvyn Lim, Jie Lin Cheong, Jasper Tan, Mei Mei Chen, Wai Linn Aye, Farisha Binte Ishak, Jessica Lim Yuan Chern, Janna Abdikyerim, Nurul Huda Binte Abdul Jalil, Nishalini Santharasagaran (Nisha Santhar), Muhammad Rusyaidi Bin Muhammad Radzi, Hui Won Lim, and several others. These opportunities allow Mehmet to merge theory and practice, thus adding important insights and examples to the book. Furthermore, LKY School's former and current Research Support Unit members are always helpful and available. Hence, we are grateful for their support: Thomas Chan Hean Boon, Ong Bee Leng, Sharon Ho, Diana Endang, Beiqi Chen, Evelyn Lee, Er Siew Ming, and Grace Lim.

Finally, we are also thankful to our colleagues, coauthors, and friends, such as Emre Cinar, Kohei Suzuki, Ali Asker Guenduez, Zeger van der Wal, Eduardo Araral, M. Ramesh, Evan Berman, Alfred Muluan Wu, Siong Guan Lim, Yong Soon Tan, Taha Hameduddin, Araz Taeihagh, Kanti Bajpai, Ben Cashore, Yuen Foong Khong, Weng Tat Hui, Vu Minh Khuong, Tommy Clausen, Petter Gullmark, Assel Mussagulova, Kim Moloney, Albert Link, M. Di (Manuel) Loreto, Yousueng Han, Hyesong Ha, Chung-An Chen, Farzana Chowdhury, Albert Meijer, Paul Trott, Christopher Simms, Serik Orazgaliyev, Mete Yildiz, Pablo Sanabria Pulido, Cenay Babaoglu, Aleksey Kolpakov, John Kamensky, Yuhao Ba, Ishani Mukherjee, Sreeja Nair, and many others, from whom Mehmet learned a lot while collaborating or interacting with them.