ENTREPRENEURSHIP AND DEVELOPMENT IN THE 21ST CENTURY
This page intentionally left blank
ENTREPRENEURSHIP AND DEVELOPMENT IN THE 21ST CENTURY

EDITED BY

BRUNO S. SERGI
AND
COLE C. SCANLON
# Contents

About the Editors vii
About the Contributors viii
Preface by Bill Drayton CEO, Ashoka xi
Acknowledgments xiii
Praise Page xv

**Introduction**

*Bruno S. Sergi and Cole C. Scanlon* 1

**Chapter 1** Entrepreneurship and Economic Growth: The Experience of Developed and Developing Countries

*Bruno S. Sergi, Elena G. Popkova, Aleksei V. Bogoviz and Julia V. Ragulina* 3

**Chapter 2** Entrepreneurial Development and Business Innovation in the Democratic People’s Republic of Korea’s Financial Sector

*Abdul Knowles* 33

**Chapter 3** A Proposed Framework on the Role of Entrepreneurial Education and Contextual Factors

*Tariq Ahmed, Ijaz Ur Rehman and Bruno S. Sergi* 47

**Chapter 4** Diné Entrepreneurship: Indigenous Contemporary Entrepreneurship

*Damon Jack Clark* 69

**Chapter 5** Value Chain Integration as an Alternative to Fair Trade for Chiapas Coffee Farmers

*Stephen Pitts S. J.* 103
Chapter 6  The Influence of Collectivism on Microfinance in Senegal
Cole C. Scanlon, Keaton Scanlon and Teague Scanlon  139

Chapter 7  The Evolution of Financing Entrepreneurship
James E. Owers and Bruno S. Sergi  161

Chapter 8  The Entrepreneurial Criminal: How Trust Coordinates Illicit Drug Cryptomarkets
Christian Linder  171

Chapter 9  AI Revolution: How Data Can Identify and Shape Consumer Behavior in Ecommerce
Renata Thiebaut  191

Chapter 10  Calculating the Reputation of a Reviewer
Surya Narayanan  231

Index  241
About the Editors

**Bruno S. Sergi** is an instructor on the Economics of Emerging Markets and the Political Economy of Russia and China at Harvard University and an Associate of the Harvard Davis Center for Russian and Eurasian Studies and the Harvard Ukrainian Research Institute. He also teaches International Economics at the University of Messina, is the Series Editor of *Cambridge Elements in the Economics of Emerging Markets*, is the Co-series Editor of the Emerald Publishing book series *Lab for Entrepreneurship and Development*, is an Associate Editor of *The American Economist*, is the Scientific Director of the Lab for Entrepreneurship and Development, and is the Scientific Director of the International Center for Emerging Markets Research at RUDN University in Moscow. He has published over 150 articles in professional journals and twenty-one books as author, co-author, editor, or co-editor.

**Cole C. Scanlon** is an entrepreneur and researcher whose areas of expertise include social policy, international development, and K-12 education. He co-directs the Lab for Entrepreneurship and Development (LEAD), co-founded/co-directs FairOpportunityProject.org (an education technology nonprofit), and was awarded Forbes 30 Under 30. He has also worked for Google and The World Bank Group. Cole graduated from Harvard College with an A.B. in Applied Mathematics and is enrolled as a graduate student in Oxford University’s Department of Social Policy and Intervention.
About the Contributors

**Tariq Ahmed** is an Associate Professor and Dean at Faculty of Management Sciences BUITEMS, Quetta. He received his PhD in Entrepreneurship and Innovation from the University of Malaya in Malaysia and has taught courses in entrepreneurship, statistics, and research methods. Dr. Ahmed is also a consultant in the field of entrepreneurship and development and gives speeches about the viability of business ideas, business growth, marketing, and promotion.

**Aleksei V. Bogoviz** is a Professor in the Department of Local Administration at the School of Public Administration and a Faculty of Social Sciences in the Higher School of Economics in Moscow, Russia. His spheres of scientific interest include economic growth, sustainable development, globalization, developing countries, institutionalization of social development, planning of development and strategic planning, agriculture, agro-industrial complex, digital economy, and state management. He has more than 200 publications in Russian and foreign peer-reviewed journals and books.

**Damon Jack Clark** is an enrolled member of the Navajo Nation from Bowl Canyon, New Mexico. As an undergraduate at Harvard College, Mr. Clark was President of Native Americans at Harvard College, a summer intern at the White House and Department of Commerce, and a Public Policy and International Affairs Fellow at Princeton University. He graduated from Harvard College in 2017 with a degree in Social Studies and was awarded a Trustman Postgraduate Traveling Fellowship to travel to New Zealand and Australia. Currently, Mr. Clark is developing a cultural nonprofit organization that educates people about Diné culture.

**Abdul Knowles** is a Researcher at the Lab for Entrepreneurship and Development (LEAD) and is a business educator with extensive experience in Asia. He has lived in Beijing, China, for 17 years and has lectured in several Asian countries. He has taught at numerous top-ranked universities including Tsinghua University, Renmin University of China, China Agriculture University International MBA Program, and Beijing University of Chemical Technology (BUCT). At BUCT, he served as Director of an intensive business program for third-year international economy and trade students. Dr. Knowles, who holds a PhD in International Law, was a Graduate Visiting Researcher at Harvard Law School in 2012 and, since 2014, has served as an Adjunct Business Professor in Pyongyang, North Korea.
**Christian Linder** is an Associate Professor of Strategy and Leadership at the ESCP Europe Business School and the Academic Director of the ESCP Europe MBA Programme for the London (UK) campus. Prior to his current affiliation, he held positions as an Assistant Professor in Italy and Germany and as a Research Manager for a German Federal Agency. Christian was a Visiting Scholar at the China Europe International Business School (CEIBS) Shanghai, Ateneo Center for Asian Studies (ACAS) Manila, and Southwestern University of Finance and Economics (SWUFE) Chengdu. Christian holds a PhD in Philosophy from the Munich School of Philosophy and a PhD in Technology Management from the University of Stuttgart.

**Surya Narayanan** is an Undergraduate Student at Stanford University studying Economics. He has work experiences in consulting, finance, and international development, and is passionate about encouraging entrepreneurs and growing businesses. Mr. Narayanan plans to complete post-graduate studies in finance and enter the financial sector.

**James E. Owers** is the Director of the Economics Program in the Harvard University Summer School and a Professor in the Program. He has also served on the faculties of the University of Massachusetts, the Massachusetts Institute of Technology (MIT), and the University of California. He has visited numerous universities around the world and has research affiliations with several organizations. Professor Owers has published more than 100 articles on financial topics. His foundational paper on Spin-Off Restructuring in the Journal of Financial Economics has now been cited in over 1,000 published research papers. SSRN rates the downloads of his research papers as being in the all time top 10% of all financial economist researchers. Dr. Owers has broad experiences consulting, teaching executive programs, and hosting financial seminars for more than thirty Fortune 500 Firms.

**Stephen Pitts S. J.** is the Director of Religious Formation at Sacred Heart Catholic Church in El Paso, Texas. He entered the Jesuit order after undergraduate studies in Math and Computer Science and, in his Jesuit training, earned master’s degrees in Philosophy, Theology, and International and Development Economics. Stephen has taught at Jesuit College Preparatory of Dallas and the University of San Francisco. In addition, he has worked with migrants in Tijuana, Mexico and with indigenous populations in Chiapas, Mexico. As the Director of Religious Formation at Sacred Heart Catholic Church, Mr. Pitts studies the relationship between migration and local economic development.

**Elena G. Popkova** is a Doctor of Economics, Professor, and President of the Institute of Scientific Communications in Volgograd, Russia. Her spheres of scientific interest include economic growth, sustainable development, globalization, humanization of economic growth, developing countries, institutionalization of social development, development planning, and strategic planning. She is a guest editor for *International Journal of Educational Management* (special issue, 2016).
Julia V. Ragulina is a Doctor of Economics, Professor, and Head of the Compliance and Controlling Department of the RUDN University in Moscow, Russia. She is also an academic of the Russian Academy of Natural Sciences, an academic of the Russian Municipal Academy, an author of study guides on state and municipal management and economics of municipal entities, and an author of more than 200 publications. Dr. Ragulina’s scientific research interests include the knowledge economy, regional economics, and the interactions between the state and business.

Ijaz Ur Rehman is an Assistant Professor of Finance and Banking in the College of Business Administration, AL Falah University in Dubai, United Arab Emirates. He received his PhD in Finance from University of Malaya in Malaysia. Dr. Rehman’s research interests include macro-financial linkages, financial development, stock market liquidity, commodity markets, and corporate social responsibility.

Keaton Scanlon is an Agro Forestry student currently based in Southern Oregon, USA. She has experience working with agroforestry and medicinal plant preservation initiatives in Senegal, Mexico, Ecuador, and the United States. Passionate about exploring the connections between modern-day humans and traditionally used plants, Keaton is especially excited about how respecting and preserving these connections can empower women.

Teague Scanlon is an Undergraduate Student at Pomona College majoring in Environmental Analysis with a concentration in Sustainability in the Built Environment. His specific research interests include environmental resilience, urban design, and economic empowerment. Teague is currently exploring how creative uses of physical infrastructure can combat climate change and build community.

Renata Thiebaut is the Head of the Business Intelligence Unit at Alibaba Trade Partner Web2Asia and an Adjunct Professor of Digital Transformation and Artificial Intelligence at École Supérieure des Sciences Commerciales d’Angers. While originally from Brazil, Renata has lived in China for several years and studied at Renmin and Tsinghua Universities with full scholarship from the Chinese government. She has published papers on the institutionalization of the BRICS and Chinese politics and law. Dr. Thiebaut’s current research interests include cyber law, big data, and digital transformation.
Preface by Bill Drayton CEO, Ashoka

In an everything-changing world, *everyone* must be a changemaker.

And the highest level of changemaking, entrepreneurship, becomes ever more critical. This is so both because it is the primary engine causing the rate of change to continue to accelerate exponentially and because that very escalation requires ever more entrepreneurial responses.

Thus entrepreneurship is increasingly the wellspring that defines society’s well-being and the future. It sets our objectives, and it determines how quickly and wisely we develop – on all dimensions, not just economic.

We also live in a world where the degree and extent of interconnection is increasing exponentially. This *fact* (consider, e.g., the web) feeds the rate of change and vice versa. Again, entrepreneurship is the driving force – and the bridge that helps each of these two intertwined exponential curves feed and multiply the other.

The wonderfully diverse scholars of *Entrepreneurship and Development in the 21st Century* look deeply at entrepreneurship and how it works in wonderfully diverse environments – from North Korea to the Navajo nation to Senegal to criminal markets not served by the law.

The authors explore what enables entrepreneurship to flourish – ranging from particular types of graduate education to rapidly evolving ways that enable entrepreneurs (and allies) to collaborate. They also weigh how varying environments affect the vitality and direction of entrepreneurship – ranging from the collectivism of West African culture to the nature and availability of financial mechanisms.

Each of these lenses allows the reader to enter and understand a world that is fascinating in its own right.

However, the cumulative impact of the book is far greater than that.

Here we see the new engine of history at work. And we see it everywhere.

How did society get to this radically different place? A little history provides the necessary background.

By 1700, business said to *everyone*, “If you have a better idea and implement it, we will make you rich and respected – and we’ll copy you.” Thus inviting *everyone* to entrepreneur changed the world. From after Augustus to 1700, there was no growth in average per capita income in the West. Once business made this structural leap, the rate of change and the level of interconnectedness began their subsequent centuries’ exponential acceleration. This revolution has now spread across the globe and was joined structurally by the citizen sector after 1980.
As this book illustrates, the new world this revolution has brought about is today’s reality. The world of earlier millennia where one learned a skill (banker or baker) and repeated it for life in many-walled workplaces is now quickly dying. Instead, everyone must master the complex abilities required to be a changemaker, and all groups must become fluid, open teams of teams. People and groups that aren’t making these big changes are being left behind.

Indeed, the world is increasingly divided by “the new inequality” – between the very many who are successfully in the new change game and those left behind. The new inequality gets worse every year as the gap between the two groups widens. The world can’t get enough of the former and has disappearing demand for the latter. Hence the universal worsening of income inequality. Hence also the rapidly spreading “Us versus Them” politics fired by the permanent anger of the excluded other half.

Here is the biggest challenge for entrepreneurship: How can we end “the new inequality”? How can we ensure that every human is a giver, is powerful, is a changemaker?

Bill Drayton
CEO, Ashoka: Everyone a Changemaker
We would like to express thanks, first and foremost, to the contributors of *Entrepreneurship and Development in the 21st Century*, the first volume of the newly-created Lab for Entrepreneurship and Development Book Series, and our publisher, Emerald Publishing. In particular, we would like to thank the Executive Editor Charlotte Maiorana for her help setting up the new book series, Editorial Assistant Charlie Wilson for supporting the entire production process, and Project Manager S. Rajachitra for handling all of the final production steps. We would like to offer a special thanks to the Institute for Quantitative Social Science at Harvard University for supporting the creation of the Lab for Entrepreneurship and Development and for sponsoring our first annual Entrepreneurship and Development Conference, from which work on this inaugural volume of our new book series originated.

Bruno S. Sergi  
Cole C. Scanlon
Endorsements – Entrepreneurship and Development in the 21st Century

“Whether you are an academic economist, a financial industry professional, or simply interested in understanding the forces shaping our economies, you will find *Entrepreneurship and Development in the 21st Century* timely and relevant. It features a collection of papers related to how entrepreneurship leads to the creation of new technologies and jobs and ultimately to changes in the global economic landscape.”

*Apostolos Serletis, Professor and President of the Society for Economic Measurement, University of Calgary*

“*Entrepreneurship and Development in the 21st Century*, edited by Bruno S. Sergi and Cole C. Scanlon, features a diverse array of topics describing the new trends in entrepreneurship and development across countries, cultures, and industry sectors. Anyone interested in teaching or researching venture capital, micro-entrepreneurship, micro-finance, cryptocurrency, blockchain technology, or alternative fair trade will treasure this book.”

*Sunil Mohanty, Leonard and Claire Professor of Finance and Chairperson, Brooklyn College, City University of New York.*

“Eye-opening perspectives on entrepreneurship in the developing world and a refreshing counterpoint to the Silicon Valley worldview. Anyone interested in the mechanisms of entrepreneurship in communities around the world should read this.”

*Nick Slavin, Co-Founder & CEO, Fuzionaire, and Chairman, Slavin Family Foundation*

“This well-written edited volume is an excellent reading for practitioners, policy makers and academics who need to get a deeper insight into the rapidly evolving systemic changes in entrepreneurship in emerging markets. The Editors masterly links a number of highly relevant academic topics that provide a rounded picture about the challenges that entrepreneurs are to face in the following decades.”

*Professor Roman Matousek, Chair in Finance, Director of Research Excellence, Director, Global Centre for Banking and Financial Innovation (GCBFI), Nottingham University Business School*
“Entrepreneurship and Development in the 21st Century uses an interdisciplinary approach to the relationship between entrepreneurship and economic development – how such a relationship interacts with some determinants of economic development including institutional development, sustainability, financial development, technologies, culture, etc. It provides multi-faceted views on economic development and its determinants, which stimulate further research across disciplines on the issue of entrepreneurship and development. I highly recommend this book to researchers and postgraduate students in the fields of entrepreneurship, economic development, banking, microfinance, venture capital, etc.”

Michael K Fung, Associate Professor of Economics, Hong Kong Polytechnic University

“This is a sound collection of academic papers on the ‘Entrepreneurship and Development in the 21st Century’ edited by Bruno S. Sergi and Cole C. Scanlon. The book provides a wide-ranging authoritative evaluation and in-depth coverage of the dynamic trend of entrepreneurship. The easy read collection also supports the Lab for Entrepreneurship and Development’s mission of generating knowledge of entrepreneurship and development across disciplinary and cultural boundaries.”

Dr. Abel Adekola, Dean and Professor of International Management, Jay S. Sidhu School of Business & Leadership, Wilkes University, Pennsylvania, USA

“I highly recommend the book Entrepreneurship and Development in the 21st Century co-edited by Bruno S. Sergi and Cole C. Scanlon, published by Emerald Publishing. Colleges and universities worldwide, in both developed and developing countries, have been embracing the importance of entrepreneurship and innovation and the creation of economic value for their communities. This book of readings bridges a literature gap by providing a new contribution to research frontiers on entrepreneurship. It is a timely book to be considered for adoption by scholars teaching entrepreneurship with all of its aspects. I taught entrepreneurial finance and published on venture capital and believe that this book will be enriching to scholars in both developing and developed countries considering different stages of entrepreneurial development.

Dr. Musa Essayyad, JP Morgan Chase Bank Professor of Business, McNeese State University

“Dr. Sergi and Mr. Scanlon have edited a wonderful book about entrepreneurship in the 21st century. This book embraces and celebrates the positive impact of entrepreneurship toward economic growth and job creation. It is a must-read for people who are interested in the future of entrepreneurship!”

Adjunct Prof. Kevin Chen, New York University.
Introduction

Bruno S. Sergi and Cole C. Scanlon

The 21st century has changed the face of entrepreneurship and development. The volume of venture capital has almost tripled since 2006 and, in the area of international development, concepts like microfinance have emerged and spread.

Importantly, there are within-country and across-country differences in the nature of this growth, political and cultural influences, and variability in how entrepreneurship manifests, from the entrepreneur receiving a microloan in India to the social entrepreneur starting an environmentally-conscious clothing business. These innovations will have profound impacts on the economic wellbeing of countries and on geopolitical dynamics. After a sharp rise in the number of billionaires in China, from 16 in 2006 to 318 at the beginning of 2017, there is a challenge to the traditional U.S. dominance in technological entrepreneurship: in 2017 China practically matched the United States in terms of the volume of venture capital financing at start-ups, recorded four times more patents related to artificial intelligence, and filed three times more patents related to blockchain and cryptocurrency. All the while, an increasingly socially-conscious generation is emerging that sees an opportunity in the environmental and social challenges we face.

Entrepreneurship and Development in the 21st Century features a collection of peer-reviewed academic papers related to how these new trends, along with a variety of political, cultural and social influences, have affected entrepreneurship and economic development. Many of the chapters in this book were developed at the Lab for Entrepreneurship and Development (LEAD), a now-independent research lab that first started at the Institute of Quantitative Social Sciences (IQSS) at Harvard University, and were presented at LEAD’s 2018 Entrepreneurship and Development Conference. And this book is very much aligned with LEAD’s mission to generate and share knowledge about entrepreneurship and development across cultural and disciplinary boundaries. While the paper chapters are extremely varied, they are synthesized by the common thread of investigating entrepreneurship through the elements that facilitate it and its effects on the broader economy. Towards this end, we organize the book to transition from the macro to the micro level-of-analysis.
This work is the inaugural volume of a book series published by Emerald Publishing Group on behalf of LEAD that strives to set the agenda for advancing research on the role of entrepreneurs in the context of finance, economic development, innovation, and society at large. Importantly, we have the overarching and ambitious aim of using the book series as a medium to synthesize research by academics and students who collaborate across disciplines to advance our understanding of modern entrepreneurship. We are excited to share this work with you.

Bruno S. Sergi & Cole C. Scanlon

Editors