MULTINATIONAL ENTERPRISES AND SUSTAINABLE DEVELOPMENT
INTERNATIONAL BUSINESS & MANAGEMENT

Series Editors: Xiaolan Fu, Pervez N Ghauri, Juha Väätänen

Published:

Volume 32
Global Talent Management
Pervez N Ghauri

Volume 31
Reintegrating Iran with the West: Challenges and Opportunities
Mohammad Elahee, Farid Sadrieh & Mike Wilman

Volume 30
Evaluating Companies for Mergers and Acquisitions
Ibne Hassan & Pervez N. Ghauri

Volume 29
Challenges for the Trade of Central and Southeast Europe
Sanda Renko & Blazenka Knezevic

Volume 28
Business, Society and Politics: Multinationals in Emerging Markets
Amjad Hadjikhani, Ulf Elg & Pervez Ghauri

Volume 27
The Role of Expatriates in MNCs Knowledge Mobilization
Mariano, Mohamed & Mohiuddin

Volume 26
Product Market Integration: A Multifaceted Approach
Guimaraes & Faria

Volume 25
Use of science and technology in business: Exploring the impact of using activity for systems, organizations, and people
Håkansson, Waluszewski, Prenkert & Baraldi

Volume 24
Markets and Compensation for Executives in Europe
Oxelheim & Wihlborg

Volume 23
Corporate Governance and Firm Value
Rashid & Islam

Volume 22
Do Multinationals Feed Local Development and Growth?
Piscitello & Santangelo

Volume 21
Corporate Crisis and Risk Management
Aba-Bulgu & Islam

Volume 20
Developments in Work and Organizational Psychology
Jackson & Shams

Volume 19
Corporate and Institutional Transparency for Economic Growth in Europe
Oxelheim

Volume 18
Managing Customer Relationships on the Internet
Lindstrand, Johanson & Sharma

Volume 17
Non-Business Actors in a Business Network
Hadjikhani & Thilenius

Volume 16
The Common Glue
Morosini

Volume 15
Managing Networks in Transition Economies
Johanson

Volume 14
European Union and the Race for Foreign Direct Investment in Europe
Oxelheim & Ghauri

Volume 13
International Business Negotiations
Ghauri & Usunier

Volume 12
Strategic Alliances in Eastern and Central Europe
Hyder & Abraha

Volume 11
Intellectual Property and Doing Business in China
Yang

Volume 10
Co-operative Strategies and Alliances
Contractor & Lorange

Critical Perspectives on Internationalisation
Havila, Forsgren & Håkansson
Managing International Business Ventures in China
Li

Business Network Learning
Hakansson & Johanson

The Global Challenge for Multinational Enterprises
Buckley & Ghauri

Network Dynamics in International Marketing
Naude & Turnbull

Relationships and Networks in International Markets
Gemünden, Ritter & Walter

Managing Cultural Differences
Morosini

Related journals—sample copies available on request:

Baltic Journal of Management
Cross Cultural Management
Chinese Management Studies
European Business Review
Euro Med Journal of Business
International Journal of Commerce and Management
International Journal of Emerging Markets
Contents

List of Contributors ix

About the Authors xi

Chapter 1. Introduction: How Multinational Enterprises Can Contribute to Achieving Sustainable Development Goals
Juha Väätänen and Roman Teplov 1

Chapter 2. The Impact of Multinational Enterprises on Sustainable Development and Poverty Reduction: Research Framework
Pervez N. Ghauri and Fatima Wang 13

Chapter 3. The Contribution of the Pharmaceutical Industry to the Health Status of the Developing World
Eduardo Urias 41

Chapter 4. MNEs Contribution to the Indian Pharmaceutical Sector
Aashna Mehta, Habib Hasan Farooqui and Sakthivel Selvaraj 69

Chapter 5. On Nudging MNE Toward SDG1: A Policy Perspective
Shyama V. Ramani, Rushva Parihar and Shankhajit Sen 89

Chapter 6. MNE Led New Market Creation in Emerging Countries: The Case of Bt Cotton
Shyama V. Ramani, Ajay Thutupalli, Mhamed-Ali El-Aroui and Praachi Kumar 131

Chapter 7. Returns from Strategies Adopted by MNEs to Improve Global Health and Wellbeing: Third Sustainable Development Goal
Suraksha Gupta 151
Contents

Chapter 8. MNEs and Capabilities Building in Ghana
  Xiaolan Fu, George Essegbey and Godfred Frempong 173

Chapter 9. MNEs’ Contribution to Sustainable Energy and Development: The Case of “Light for All” Program in Brazil
  Shaheen Akter, Xiaolan Fu, Leonardo Bremermann, Mauro Rosa, Valerie Nattrodt, Juha Väätänen, Roman Teplov and Iulduz Khairullina 195

  Pervez N. Ghauri, Xiaolan Fu and Juha Väätänen 225

Index 237
List of Contributors

Shaheen Akter, Oxford University, Oxford, UK
Leonardo Bremermann, Federal University of Santa Catarina, Araranguá, Brazil
Mhamed-Ali El-Aroui, Université de Carthage, Tunisia
George Owusu Essegbey, Science and Technology Policy Research Institute (STEPRI) of the Council of Science and Industrial Research (CSIR) of Ghana, Ghana
Habib Hasan Farooqui, Indian Institute of Public Health-Delhi, Public Health Foundation, India
Godfred Frempong, Science and Technology Policy Research Institute (STEPRI) of the Council of Science and Industrial Research (CSIR) of Ghana, Ghana
Xiaolan Fu, Professor of Technology and International Development Director, Technology & Management for Development Centre ODID, University of Oxford
Pervez Ghauri, Birmingham Business School, Birmingham, UK
Suraksha Gupta, Kent Business Scholl, UK
Iulduz Khairullina, Lappeenranta University of Technology, Finland
Praachi Kumar, United Nations University - MERIT, The Netherlands
Aashna Mehta, Public Health Foundation of India, Gurugram, Haryana, India
List of Contributors

Valerie Nattrodt Monteiro, INESC P&D Brasil, Brazil
Rushva Parihar, United Nations University-MERIT in Maastricht, Netherlands
Shyama V. Ramani, United Nations University-MERIT in Maastricht, Netherlands
Mauro Augusto da Rosa, INESC P&D Brasil, Brazil
Sakthivel Selvaraj, Public Health Foundation of India, India
Shankhajit Sen, Calcutta University, Calcutta, India
Roman Teplov, Lappeenranta University of Technology, Finland
Ajay Thutupalli, United Nations University-MERIT in Maastricht, Netherlands
Eduardo Urias, United Nations University-MERIT in Maastricht, Netherlands
Athena Institute at Vrij Universiteit in Amsterdam, Netherlands
Elabora Consultoria, in São Paulo, Brazil
Juha Väätänen, Lappeenranta University of Technology, Finland
Fatima Wang, King’s College London, London, UK
About the Authors

**Shaheen Akter** received her Ph.D. in agricultural economics from London University and is presently working as an independent research consultant with the Technology and Management Centre for Development in the Oxford University’s Department of International Development. Her research covers a wide range of development topics. Her research interests include multinationals in development and knowledge transfer. She has worked in various capacities at the Shahjalal University of Science and Technology, Bangladesh, the North South University, Bangladesh, the Papua New Guinea University of Technology, and the Bangladesh Rice Research Institute.

**Leonardo Bremermann** is professor of energy engineering at the Federal University of Santa Catarina–UFSC, Araranguá Center, and is the head of the Energy and Sustainability Department of the same center. His research activities are in the areas of planning and operation of electric power systems, considering renewable energy sources in the Power Systems Planning Laboratory – LabPlan in UFSC, applied to the reliability of power systems. He is a member of the Technological Nucleus of Electric Energy Research Group (NTEEL) and collaborates with INESC P&D Brazil – Institute of Systems and Computer Engineering, Research and Development of Brazil.

**Mhamed-Ali El-Aroui** is a Professor of statistics and econometrics at the Université de Carthage in Tunisia. He received his Ph.D. in applied mathematics from the Université Joseph Fourier de Grenoble in France. His research topics include applied statistics, econometric modeling, data analysis, risk management, computational statistics, and simulation. He has published and refereed papers in several scientific journals, including *Journal of Applied Statistics, Extremes, Computational Statistics and Data Analysis, Research Policy, International Journal of Emerging Markets, Computational Economics*, and *Developing Economies*.

**George Owusu Essegbey** is the Director of the Science and Technology Policy Research Institute (STEPRI) of the Council of Science and Industrial Research (CSIR) of Ghana, in Accra. He was a member of the country’s National Development Planning Commission (NDPC). Currently, he is a member of the Ghana National Commission for UNESCO. He has several years of experience in Science and Technology (S&T) policy research, innovation studies, research on new technologies, climate change and sustainable agriculture. He holds a Ph.D. in Development Studies (University of Cape Coast) and M.A. in International Affairs (University of Ghana). He did Ph.D. internship at the United Nations University (Institute for New Technologies, now UNU-MERIT) in Maastricht, The Netherlands and a Commonwealth Fellowship at the
Policy Research in Engineering, Science and Technology (PREST) of the University of Manchester. Dr. Essegbey has served various national and international organisations with his expertise including FAO, UNESCO, UNCTAD, UNEP, WIPO and the World Bank. He is currently a member of the 10-Member Expert Group supporting the United Nations Technology Facilitation Mechanism with the UN Inter-agency Task Team on Science, Technology and Innovation (STI) for the SDGs.

Habib Hasan Farooqui is currently serving as an associate professor at the Indian Institute of Public Health – Delhi, Public Health Foundation of India (PHFI). His areas of expertise include vaccinology and decision analytical modeling. In his current position, Dr. Farooqui is a member of various expert groups including, vaccinology at Vaccine Center, LSHTM, Task Force of the Indian Council of Medical Research, and various technical committees for the Government of India. He has successfully completed projects such as Situational Analysis of Rotavirus and Pneumococcal Vaccines in India funded by Gates Foundation, Inequalities in Immunization in India funded by Save the Children, Identification of Priority Policy Research Questions in Access to Medicines in India funded by WHO, Geneva, Procurement and Distribution of Medicines in India funded by the Norwegian government as well as Governance and Accountability in Medicine Supply in India funded by the Results for Development, Washington, DC.

Godfred Frempong is the chief research scientist of the Science and Technology Policy Research Institute (STEPRI) of the Council for Scientific and Industrial Research (CSIR) in Ghana. His research interest spans science, technology, and innovation, small and medium enterprise and ICT studies. He has written extensively on ICT reform, regulation and development, and application and usage of ICT by SMEs. Dr. Frempong holds a Ph.D. in sociology from the University of Ghana and an M.Sc. degree in science policy from the University of Lund (Sweden). Dr. Frempong has also received post-qualification training from the University of Amsterdam, Wageningen University, and the Centre for Information Technologies at the Technical University of Denmark and PREST of Manchester University (as a Commonwealth Professional Fellow in 2006). He has been involved in policy research for the past 27 years and has acquired vast experience.

Xiaolan Fu is Founding Director of the Technology and Management Centre for Development (TMCD), Professor of Technology and International Development at Oxford University. She is appointed by the Secretary-General of the United Nations to the Ten-Member High Level Advisory Group of the UN Technology Facilitation Mechanism and to the Governing Council of the UN’s Technology Bank for Least Developed Countries. She was President of the Chinese Economic Association (Europe) and CEA (UK) (2010-2011). Her recent books include China’s Path to Innovation, China’s Role in Global Economic Recovery, and The Rise of Technological Power in the South. Her papers appeared widely in leading international journals. She is recipient of the EURAM 2017 Innovation SIG ‘Best Paper Award’ and EFMD 2005
'European Best Paper Award', is also a Senior Research Associate of the University of Cambridge and a Visiting Professor at Fudan University. She currently leads an ESRC/DFID funded project on The Diffusion of Innovation in Low Income Countries and an EC FP7 funded project on MNEs and Development.

Pervez Ghauri is a professor of international business and the editor in chief for International Business Review and the director of Ph.D. programs at Birmingham Business School. He is Fellow of AIB and EIBA and sits on the EIBA board. He has an extensive career as a professor in different universities such as Manchester Business School, University of Manchester, King’s College, among others, and he has published more than 30 books on international business and international marketing topics and numerous articles in journals such as Journal of International Business Studies, Journal of World Business, and so on. Moreover, he consults and offers training programs to a number of organizations such as BP, Airbus Industries, and Ericsson.

Suraksha Gupta is the Professor of Socially Responsible Marketing at Newcastle University London. She holds a PhD from Brunel University in UK, MBA from Institute of Management Technology in India and Bachelor of Commerce from University of Delhi, India. Research publications of Suraksha Gupta have appeared in highly reputed journals such as Journal of World Business, Journal of Business Research, Industrial Marketing Management, European Journal of Marketing, Technological Forecasting and Social Change, Thunderbird International Business Review, Studies in Higher Education, Qualitative Market Research: An International Journal, International Studies in Management Education etc.

Iulduz Khairullina, M.Sc. (Tech) was a research assistant in a large international project MNEmerge (mnemerge.com) financed under the European FP7 program. Her previous experience includes qualitative research and working as a project manager in an IT company. She holds a bachelor’s degree in informatics and a master’s degree in industrial management. Her interests are focused on the internationalization, IT sphere, and e-commerce.

Praachi Kumar is a project associate at UNU-MERIT. She holds an M.Sc. degree in public policy and human development from Maastricht University and UNU-MERIT with specialization in social protection policy design and finance. Her previous experience includes working as a strategy and management consultant in the fields of international strategic communications and quantitative research where she helped develop strategies and narratives for key political parties, industry leaders, and blue chip organizations across the globe.

Aashna Mehta is a research associate at the Public Health Foundation of India (PHFI). Her research focuses on pharmaceutical economics and policy as well as healthcare financing. Specifically, she has been working on medicine pricing policies, procurement, and supply chain management practices, pharmaceutical market structure, intellectual property issues, and so on. She holds a bachelor’s degree in business economics.
About the Authors

and a master’s in economics with specialization in development and health economics. She is currently pursuing her Ph.D. in economics at the Centre for Economic Studies and Planning (CESP), Jawaharlal Nehru University (JNU), Delhi.

Valerie Nattrodt Monteiro received a B.Sc. degree in electrical engineering from the Federal University of Santa Catarina, Santa Catarina, Brazil, in September 2016. She has been working as a research intern for INESC P&D Brasil, Santos, Brazil, since 2014. Her areas of interest include renewable energies, microgeneration, and distributed power generation.

Rushva Parihar is currently a research associate and a Ph.D. scholar at the United Nations University-MERIT in Maastricht. His work focuses on the governance of technology and innovation for the attainment of the Sustainable Development Goals (SDGs). His research interest covers both firm strategy and government policy for the SDGs. His special interests in SDG3 and SDG6 are further anchored by his engagements with copewithcancer.org and Friend In Need India, respectively.

Shyama V. Ramani is a professorial fellow at UNU-MERIT, United Nations University at Maastricht. She is currently studying the role of technology and innovation to attain the Sustainable Development Goals. She has published 40 articles in international peer-reviewed journals (including Social Science and Medicine, Research Policy, Nature Biotechnology, Technological Forecasting and Social Change, Technovation, and Theory and Decision) and has authored 19 chapters in books. She has edited two book volumes on Nanotechnology in Developing Countries and Innovation in India. She has coordinated eight research contracts. After the tsunami of December 2004, she founded two nonprofit action-research units “Association Un Ami” and “Friend in Need India,” in France and India, respectively, that aim to improve sanitation coverage in rural India (www.friend-in-need.org).

Mauro Augusto da Rosa (S’05–M’11) received his B.Sc. and M.Sc. degrees in electrical engineering from the Catholic University of Rio Grande do Sul (PUCRS), Porto Alegre, Brazil, in 1998 and 2003, respectively, and a Ph.D. in electrical engineering from FEUP, Porto, Portugal, in 2009. He has been a professor and senior researcher of electrical engineering with the Federal University of Santa Catarina (UFSC), Florianópolis, Brazil, and with INESC P&D Brazil, Santos, São Paulo. His research interests include distributed artificial intelligence, intelligent agents, and power system reliability. Professor Rosa is currently the director of Science and Technology of INESC P&D Brazil.

Sakthivel Selvaraj was a Takemi Fellow (post-doctoral fellow at Harvard School of Public Health, Boston, United States) and a Fulbright Scholar during 2006–2007. He has a Ph.D. in health economics (1996–2001) from Jawaharlal Nehru University, New Delhi. Dr. Sakthivel Selvaraj is a health economist who is currently engaged in teaching and research in the area of health care financing, pharmaceutical economics, and equity in healthcare financing and delivery in India. Earlier, he was engaged as a health

Shankhajit Sen is pursuing M.Phil. degree in gender studies at Calcutta University and is a research associate at Friend in Need India. His previous work includes assisting academics in Calcutta University to study the health status of the children of sex workers. He has written about the systemic forces that trigger the emergence of naxal groups that call for a systemic rather than targeted group response and change.

Roman Teplov M.Sc. (Tech.) is a Ph.D. scholar at the Lappeenranta University of Technology. His dissertation explores various approaches to open innovation perceived in companies of different size. Roman holds a master’s degree in industrial management and a bachelor’s degree in mechanical engineering. He has industrial experience as an R&D specialist and has been involved as a project manager and researcher in several international research projects. He has been conducting research on innovation, social responsibility, ecosystems, and cross-cultural aspects. Roman has teaching experience in methodology and innovation courses. His research interests include technology and innovation management, entrepreneurship, open innovation, TRIZ, and advanced simulation systems.

Ajay Thutupalli is an affiliated researcher at UNU-MERIT. He received his Ph.D. in economics and policy studies of technical change in November 2015. He has an M.Sc. degree in economics (science and innovation) from Barcelona Graduate School of Economics, Universitat Pompue Fabra & Universitat Autonoma de Barcelona, Spain. He holds an engineering degree in computer sciences from Jawaharlal Nehru Technological University, India. His research interests lie in systemic changes, technological transitions, sustainability, and technological catch-up.

Eduardo Urias is research fellow at UNU-MERIT (Maastricht, Netherlands) and Lecturer at Vrij Universiteit (Amsterdam, Netherlands). He received his Ph.D. in economics and policy studies of technical change from UNU-MERIT and Maastricht University in October 2015. He has published in Social Science and Medicine and Qualitative Marketing Research. He is currently working on access to medicines, intellectual property rights, diffusion of biosimilar drugs and social license to operate in different sectors. He was also awarded a research grant from the CAPES Foundation under the aegis of the Ministry of Education of Brazil (Grant No. 1020-12-9). Eduardo has a bachelor’s degree in Economics from São Paulo State University and a master’s degree in Scientific and Technological Policy from Campinas State University in Brazil. He is one of the cofounders of Elabora Consultoria, in São Paulo, that provides studies and services to assess, design, and implement innovation-based competitive strategies and public policies to promote innovation.
Juha Väätänen is a professor of international business and the vice dean of School of Business and Management at Lappeenranta University of Technology (LUT). His fields of expertise are international business, emerging economies, and enterprise competitiveness. He has published in such journals as the *International Journal of Innovation Management*, the *Multinational Business Review*, and *Industrial Marketing Management*. Prior to joining LUT, he worked in international finance and banking in the United Kingdom and Russia. He teaches courses focusing on international business, emerging economies, and international competitiveness. He has been a visiting scholar at ESADE Business School, Spain, and Rutgers Business School, United States.

Fatima Wang is a lecturer in marketing and international business at the School of Business. Her research lies in the fields of marketing strategy and international business. In particular, she studies service providers, market orientation, and sustainability/corporate social responsibility. She has published in the *Journal of the Academy of Marketing Sciences, Journal of Business Research, International Business Review*, and *Journal of Business Ethics*.
Chapter 1

Introduction: How Multinational Enterprises Can Contribute to Achieving Sustainable Development Goals

Juha Väätänen and Roman Teplov

Abstract

In spite of the outstanding efforts of the United Nations, the poverty alleviation targets outlined in Millennium Development Goals have not been fully achieved. The further need for improving the living standard of the world population led to the introduction of a new set of revised and expanded Sustainable Development Goals in 2015. The private business and especially large multinational enterprises (MNEs) are playing a significant role in the implementation of the sustainable development program. However, in spite of decades of research, the mechanisms through which MNEs can contribute to host country economic development are still not fully understood. Furthermore, the role of local government and its possibilities to influence MNEs’ activities have not received sufficient attention. The aim of the MNEmerge project was to develop and test the framework for an analysis of the contribution of MNEs to sustainable development agenda. Specific attention is placed on the formation of linkages between subsidiary and local stakeholders such as society, business, and government. The chapters in this book outline the findings of the project and provide recommendations and implications for policy makers.

Keywords: Multinational enterprises, FDI; emerging countries; millennium development goals; sustainable development goals; MNEmerge project; framework building
1. Sustainable Development Agenda: How Far We Have Gone?

The dawn of the 21st century was marked with a resolute attempt to solve the world’s long-standing problems. The United Nations Millennium Declaration adopted at the Millennium Summit in September 2000 emphasized the collective responsibility of world leaders “to uphold the principles of human dignity, equality and equity at the global level” (United Nations, 2000) and established the set of development objectives summarized in eight Millennium Development Goals (MDG). The aims were to combat poverty and improve healthcare, enhance education, promote human right and gender equality, ensure environmental sustainability, and develop a global partnership (Millennium Project, 2006).

The call for improving living standards required the joint efforts of multinational enterprises (MNEs), government bodies, international organizations, and local business and industry players. Although the global community has achieved significant progress toward MDG objectives, the remaining unresolved problems still need to be addressed. At the UN Sustainable Development Summit in September 2015, the new document “Transforming Our World: The 2030 Agenda for Sustainable Development” has been accepted. This document presents the revised and extended version of 17 development aims referred as sustainable development goals (SDGs).

Among the various objectives presented in the UN Sustainable Development Agenda, the overarching motive is poverty alleviation and improvement of living standards. Although the poverty reduction objectives stated in MDGs (Millennium Project, 2006) have already been achieved by 2013 (World Bank, 2013), the greatest input was made by China. After removing the “China effect,” the results of 15 years’ activity are far less impressive (United Nations Conference on Trade and Development [UNCTAD], 2013). At the same time, statistics demonstrates the continuous growth of foreign direct investments (FDIs) with the simultaneous increase in the share of emerging countries. Thus, for 2014, the share of emerging economies reached 55% of the total FDI inflows (see, e.g., UNCTAD, 2015).

Facilitating access to medicine and sanitation is viewed as an important precondition for achieving goals to improving population health and combating diseases such as HIV/AIDS and malaria. In spite of significant progress in vaccination and improving treatment (United Nations, 2015), the problems still remain. Thus it was reported that many lower middle-income countries have been excluded from donation programs and preferential price lists, which has led to subsequent increase of the prices for essential medicine. These countries face the problem of poor availability of generic medicine in the public sector on the one side and relatively high prices for medicaments in the private sector on the other (United Nations, 2015a). Such situation hampers efficient treatment provision and may lead to consequent degradation of population health.

Compliance with TRIPS standards has significantly affected domestic medicaments producers (Cohen & Lybecker, 2005; Wade, 2003) and may place emerging economies, especially the ones with underdeveloped domestic medical industry, in an inferior negotiation position. These developments could lead into conflict of

Enabling access to clean energy is an essential requirement to sustainable development (Gómez & Silveira, 2010; Slough, Urpelainen, & Yang, 2015; Sovacool, 2012; Winkler et al., 2011). However, in spite of all efforts according to International Energy Agency in 2016, more than 1.2 billion people, which equals to 17% of the world population, are still living without access to electricity. According to expert estimations, even by 2040 this number will still exceed half a billion (International Energy Agency [IEA], 2016). Moreover, 95% of these people are predominantly living in remote rural areas, which hamper the implementation of traditional electrification programs based on grid extension. Private companies do not have economic incentives to operate in such remote areas, and many governmental programs are often suffering from the lack of alignment with regional objectives and poor implementation (Chaurey, Ranganathan, & Mohanty, 2004; Pereira, Sena, Freitas, & Da Silva, 2011; Ruiz, Rodríguez, & Bermann, 2007; Xu, Nthontho, & Chowdhury, 2016).

It is important to emphasize the interconnections between the SDGs. It has quickly become evident that without reaching the objectives of one target, it is impossible to fulfill others. Thus, thorough implementation of electrification programs will lead to simultaneous improvement in population wealth, stimulate new business, and create employment opportunities contributing therefore to poverty alleviation and consequent improvements in medicine and sanitation (Chaurey et al., 2004; Kooijman-van Dija & Clancy, 2010). Furthermore, access to modern technology facilitates education and gender equality (Daka & Ballet, 2011; Terrapon-Pfaff, Dienst, König, & Ortiz, 2014).

At the same time, lack of coordination between programs results in poor implementation and misalignment between objectives when, for example, opportunities created by electrification are not supported by simultaneous improvement in infrastructure and skills and capabilities development among the local population (Ruiz et al., 2007; Winkler et al., 2011). Quite often, electrification programs employ suboptimal and non-sustainable technical solutions with limited scalability which does not allow for further increase in the demand, and diminish the development opportunities (Ilskog, 2008; Sovacool, Bazilian, & Toman, 2016).

In this regard, it becomes clear that mere efforts of local governments, international organizations, and charity funds are not enough for successful achievement of the sustainable development agenda objectives. The role of multinational enterprises cannot be underestimated. A significant number of studies explored the impact of FDI by MNEs on the host country economy and found a variety of positive effects.

Thus, the growth of productivity and industrial development of the host countries have been reported by numerous scholars (Arnold & Javorcik, 2009; Buckley & Ghauri, 2004; Dunning, 1994; Fatima, 2016). The positive effect of FDI arises also from technology transfer and creation of new workplaces (Braunstein, 2006; Buckley, Clegg, & Wang, 2002). Often new workplaces created by MNEs are characterized by a higher salary level and additional social benefits like medical insurance, higher occupational
healthcare standards, and better working conditions (Cotton & Ramachandran, 2001; Driffield & Taylor, 2000; Robbins, 1996). In emerging countries, the level of work security in foreign-owned enterprises tends to be higher than in locally owned firms (Braunstein, 2006).

The important role of MNEs is in the building and improving local managerial and technical capabilities, which are often reported as a bottleneck in emerging countries’ progress (Sutton & Kpentey, 2012). By forming linkages with local firms (e.g., through subcontracting or spillovers), multinationals bring advanced managerial practices and a sophisticated corporate culture, which positively affect the business environment in host countries (Giroud, 2007; Hansen, Pedersen, & Petersen, 2009).

Focus on the poorest population, the so-called Bottom of the Pyramid (BoP), opens new business opportunities for MNEs and simultaneously contributes to MDGs/SDGs implementation. Addressing the needs of the BoP population may trigger self-reinforcing positive feedback loops when growing wealth, enhancing further demand and increasing the profitability of business for MNEs.

At the same time, it should be always remembered that FDIs in emerging countries are primarily motivated by return of investments (Buckley & Ghauri, 2004). Combining with the possible “crowding out” effect on local firms (Aitken & Harrison, 1999; Hu & Jefferson, 2002), which do not have sufficient capabilities to compete with MNEs may lead to creation of “an oligopolistic market” where a few multinational companies decide the prices of essential products, such as medicines, adversely impacting the interest of the country’s population (Yip & Hanson, 2009). Economic incentives (e.g., tax preferences) offered by the host country government for attracting FDI also discriminate local producers and decrease possible input from the FDI to the country’s economy (Blomström & Kokko, 1996; Giroud & Scott-Kennel, 2009; Miozzo, Yamin, & Ghauri, 2012).

The popular practice of subcontracting local firms combined with high pressure on lowering costs may in fact lead to deteriorating work conditions and poor quality standards (Richards & Gelleny, 2007). Technological spillovers although often mentioned as a method for technology transfer are generally considered as a negative phenomenon by multinationals that take measures to prevent their emergence (Harris & Robinson, 2004).

The recent growth of FDI from emerging countries such as China provides another challenge. Multinational enterprises from emerging countries (EMNEs) may not have such a strong corporate culture and advanced managerial practices as well as long corporate social responsibility (CSR) traditions (Dunning & Narula, 2004). That is why their impact on host county economy may be less positive and require additional efforts from policy makers to elaborate proper policy measures.

Therefore, it becomes clear that although multinationals do have great opportunities to contribute toward the implementation of the sustainable development agenda, their engagement demands carefully designed policies and thorough orchestrating from the local government. Firth and Ghauri (2010) developed a framework describing the linkage formed between the headquarters, local subsidiary, and host country.
environment including policy makers, business, and other local stakeholders. The framework can be applied for the analysis of MNEs’ activities in the countries they enter and facilitate the development of regulatory policies.

However, in spite of understanding the importance of linkages formation (Giroud, 2007), the studies exploring this issue are still scarce. Furthermore, although the joint efforts of public organizations and businesses in different forms of public–private partnership (PPP) have been proposed by the United Nations as an essential mechanism for SDG implementation, there still exists confusion about the methods to facilitate the PPP as well as certain doubts about its outcomes. Consequently, further research is required to investigate the current situation and analyze the role of MNEs in the economic development of host countries.

2. MNEmerge Project: Aims and Objectives

In order to address the emerged research gap and elaborate policy implications for local governments as well as facilitate the implementation of UN sustainable development agenda, a large international research project “A Framework Model on MNE's Impact on Global Development Challenges” (MNEmerge) has been initiated in January 2014 under European Union’s Seventh Framework Programme for research, technological development, and demonstration (Grant Agreement No. 612889). In particular, this project aims to investigate the impact of MNEs on UN MDGs and successive SDGs.

The consortium of the project consists of highly professional multidisciplinary researchers from various countries. The geography of project partners includes European countries such as United Kingdom, Netherlands, and Finland and also India, Brazil, and Ghana. The rationale was to combine the expertise in international business with the outstanding knowledge of local objectives. The large varieties of topics studied during this project are consolidated by common focus on following areas: FDI, business functioning, technology and innovation strategies, corporate philanthropy, or socially responsible investment. The project addresses the gap in understanding of the impact from FDI on the economies of emerging countries. The aim is therefore to analyze how MNEs organize their activities in the aforementioned areas in order to contribute to the UN sustainable development agenda objectives such as poverty alleviation, ensuring food security, and provision of clean energy.

The objectives of the project are as follows*:

1. Development of a framework to analyze MNE impact toward socioeconomic development
2. Development of a model that describes the relationship between MNE, FDI, and the economy

*Source: https://mnemerge.com/
3. Understanding the role of public policies in supporting responsible business practices and the Millennium Development Goals
4. Using case studies to support the methodological framework model on health, environment, and energy

MNEmerge project considers both manufacturing and services. The project activities are (1) studying the role of MNEs in agriculture development (India and Ghana), (2) improving access to medicaments and sanitation (India), and sustainably providing electricity to remote areas (Brazil). The selection of specific areas was motivated by the importance of these industries for sustainable development agenda objectives. Furthermore, the understanding of the effect of MNEs’ operations in these areas highlights the interconnections between various SDGs/MDGs.

To address the established aims, the project applies a multimethod approach in combining both qualitative and quantitative data. The research combines in-depth case studies and site visits with large-scale surveys and secondary statistics data. The adopted approach enabled the understanding of the specific features and problems arising in case countries as well as evaluating the efficiency of policy measures and governmental programs.

The first step in project implementation was an extended literature review on MNEs’ impact on the development of the host countries and formulation of the preliminary framework of the research. The developed framework guided further project activities.

The second stage involved an empirical analysis of the FDI effect on poverty reduction and sustainability. The growing income gap in the international context instigates the growth of the health gap and poverty, while improving access to essentials can help reduce these disparities. The focus of the case studies was concentrated on agriculture, healthcare, and sanitation industries, which are able to contribute to access to food, medicines, and sanitation conditions. Main empirical studies were conducted in emerging countries. Indian samples were used in studying agriculture, healthcare, and sanitation industries. Africa became a base for investigating managerial capabilities transfer. Brazil provided data for electrification in the South America case study. These case studies provide the overall picture of MNEs’ impact on different levels. On the one hand, the FDI influences on poverty alleviation support the macro-level viewpoint by studying income and employment generation mechanisms as well as capacity building in the host country. On the other hand, the meso-landscape is investigated by studying health and energy. The health status of a nation’s citizens is determined by many factors such as poverty, food security, quality of water and sanitation, access to healthcare and medicines, education, empowerment of marginalized groups, capabilities of the local industries, cultural and socioeconomic characteristics, etc.

The final step presents a revised framework for systematic study of MNEs’ activity in emerging countries and its influence on sustainable and progressive local development. The framework is also appropriate for comparing MNEs’ impact on developed countries and that of emerging countries. The summary of the whole research based on
the previous results of framework development, literature review, and empirical analysis study provides existing policy analysis with recommendations for improvement and practical implementation.

The main outcomes of the project, therefore, include the framework model itself as well as policy analysis of the activities of MNEs and organizations operating in- and outside of the European Union (EU) with recommendations for improvement.

In order to deliver the result to the widest possible audience, the project contains a separate part for dissemination activities. All the partners in the consortium were responsible and participated in the dissemination. Local workshops were conducted in the emerging countries, whereas in Europe and United States, representatives from the consortium presented the project contributions on different conferences and panel sessions, for example, the European International Business Academy (EIBA) Conference 2014–2016 and United Nations Industrial Development Organization (UNIDO). The main goal is popularization of the research results among the widest possible audience including the research community, policy makers at various levels (UN and EU levels, and national and regional levels), business community, nongovernmental organizations (NGOs), and also the public at large, for which various tools of communication were utilized.

The research capitalizes on expertise from four continents: Europe, Asia, South America, and Africa. The focus of the studies are multinational companies from developed as well as from emerging countries and operating in all of these continents, which means that the results of the MNEmerge project are indeed global and widely applicable in multiple contexts, geographical locations, and economic conditions. Thus, the findings of the project presented in this book are applicable over multiple locations, both on theoretical and practical levels.

3. Chapters in this Issue

The chapters in this book addresses the problems of successful implementation of the sustainable development agenda summarized in the form of MDGs and successive SDGs, and specifically the role of MNEs in such activities. The findings presented results from a large 3-year international research project, MNEmerge, which focused on analyzing the relationships between MNEs and host country stakeholders, and on the resulting impact on the country’s social and economical development. The author group comprises experienced scholars and practitioners with broad expertise in the field of international business as well as in the following focus areas: medicine, sanitation, agriculture, and energy.

Chapter 2 by Ghauri and Wang outlines the main problems with the implementation of the sustainable development agenda and presents the main research framework. The framework helps to understand the role played by FDI and emphasizes the creation of linkages between MNEs and local players (business, policy makers, and society). Therefore, in addition to well-known direct effects (such as direct job creation
and investments), indirect effects arising though linkages formation (e.g., spillover effect) should also be taken into account in order to understand the impact of MNEs on the development of emerging countries. Authors derive the framework from an extensive literature review and validate using multiple case studies.

Chapter 3 written by Eduardo Urias continues the discussion and analyzes the reciprocal relationships between population health, economic growth, and development. By conducting a systematic literature review and meta-analysis, he examines the role of pharmaceutical companies (i.e., MNEs) in improving health and access to medicine in emerging countries. In particular, the findings reveal the misallocation of medicine (often referred as “the 10/90 gap”) caused by lower profitability of operations in emerging markets. The author reveals various market and nonmarket instruments applied by businesses, local governments, and NGOs to promote access to medicine thereby contributing to the implementation of MDGs/SDGs and eventually to the economic development of countries. PPP appears to be an effective mechanism for achieving such objectives.

Chapter 4 by Mehta et al. also considers population health but focuses specifically on the role played by MNEs in the Indian pharmaceutical sector. Being one of the major players in the world pharmaceutical market, Indian firms nevertheless have been lagging behind large MNEs in terms of R&D intensity. Adoption of the TRIPS Agreement forced domestic companies to increase R&D spending; however, still the main strengths of the domestic pharmaceutical sector are incremental improvements and generic medicines, whereas introduction of new medicaments remains the prerogative of MNEs. Adopting multiple data sources, authors discuss the Indian case and analyze the historical development of the domestic pharmaceutical industry and the impact of MNEs. Specifically, they consider several cases of FDIs and evaluate the modes of operation and contribution to the domestic pharmaceutical sector.

Although Chapters 3 and 4 focused on SDG3/MDG 4,5,6 (aimed for combating diseases and health improvement) and SDG17/MDG 8 (opting for establishing global partnership), Chapter 5 by Ramani et al. deals with poverty alleviation (SDG1/MDG1). To better understand the role of MNEs’ strategies in eradicating poverty, the authors propose a conceptual model explaining the effect of addressing the BoP markets. Bottom of the pyramid is the cornerstone of the chapter, and addressing the need of such a population by MNEs (and consequent involving of it in the market activities) is considered as an essential prerequisite for achieving the goals. The authors conduct a systematic literature review and provide an extensive list of various policy measures, which may be applied for encouraging MNEs, to help in poverty reduction and address BoP needs.

MNEs’ role in the creation of new markets in emerging countries is evaluated with the case of Bt cotton in Chapter 6 written by Ramani et al. This chapter not only focuses on the agricultural sector but also addresses broader issues of local capabilities building and the effect arising from the new products. The chapter considers adoption of genetically modified (GM) plants, a widely controversial topic in many countries, and analyzes the interplay between stakeholders. The findings from the case study are
backed by systematic literature analysis and summarized into four recommendations aimed at both MNEs and local policy makers. The study explores how the diffusion of the new advantageous product (Bt cotton in this case) can create a new market for MNEs and also can benefit the emerging country and address the sustainable development agenda objectives.

Suraksha Gupta in Chapter 7 continues the discussion on strategies addressing health and well-being improvement (SDG3). The author provides an overview of various strategies adopted by MNEs operating in the emerging market and analyzes them not only from the perspective of the sustainable development agenda but also from the point of view of MNEs aiming to receive profit from their FDIs. In this literature-based study, she places attention on indirect returns for MNEs arising from contributing to local communities via CSR or PPP mechanisms. By engaging in such activities, MNEs can increase brand equity, which eventually creates direct returns positively affecting the market position and profitability. The author concludes with a list of recommendations for MNEs aiming to increase the returns from contribution to sustainable development.

Chapter 8 by Fu et al. addresses another objective of the research project—capabilities building and specifically the role of MNEs in improving local skills and knowledge. Although capabilities building is not emphasized as a specific goal (neither SDG nor MDG), it is an essential prerequisite for sustainable development agenda implementation. The emerging topic is the differences between MNEs from developed countries (e.g., USA, Europe) and emerging countries (e.g., China). The authors explore these issues by conducting an extensive study in the Ghanian industrial sector. The findings based on a qualitative interview and survey data analysis demonstrate that policy makers should take into account whether FDI is coming from a developed and emerging country for better utilization of capabilities building potential.

In the next chapter, Chapter 9, Akter et al. analyze the Brazilian electrification case. The access to clean energy is an important objective for the sustainable development agenda and one of the enablers of economic growth. However, the electrification of remote rural areas is a very difficult task as private companies do not have enough economic incentives for entering such low-profitable market segments. The study utilizes secondary statistic data in combination with interviews and site visits. In particular, the study analyzes the results of the Brazilian electrification program “Light for All.” The results demonstrate that although the electrification program can be considered as successful, the policy makers should find the proper balance between incentives attracting MNEs and regulations prescribing the provision of electricity to remote low-profitable areas. This chapter also outlines other policy measures aiming to facilitate the engagement of private firms and avoid possible negative effects.

Chapter 10 by Ghauri et al. summarizes the findings of the project presented in this book and provides the concluding remarks and policy implications aiming to facilitate the engagement of MNEs in the implementation of sustainable development agenda objectives.
References


