

Iwan J. Azis

Periphery and Small Ones Matter

Interplay of Policy and Social Capital



BI INSTITUTE

OPEN ACCESS



Springer

Periphery and Small Ones Matter

Research Team:
Arnita Rishanty
Canyon Keanu Can

Iwan J. Azis

Periphery and Small Ones Matter

Interplay of Policy and Social Capital

Iwan J. Azis
Dyson School of Applied Economics
Cornell University
Ithaca, NY, USA



BI Institute

ISBN 978-981-16-6830-2 ISBN 978-981-16-6831-9 (eBook)
<https://doi.org/10.1007/978-981-16-6831-9>

© BI Institute 2022. This book is an open access publication.

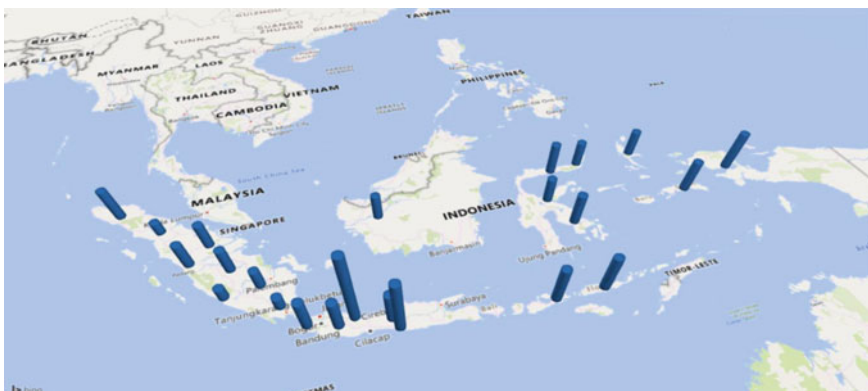
Open Access This book is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this book are included in the book's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the book's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Singapore Pte Ltd.
The registered company address is: 152 Beach Road, #21-01/04 Gateway East, Singapore 189721, Singapore



Locations of survey respondents

*They would not listen
They did not know how
Perhaps they'll listen now*
—DM

*Listen and don't interrupt.
Wait till the story ends up.
Half life of their exertion is forever.
The bells I hear aspiring for the better.
We are all shaped by dialogue.
These are just my thoughts.*
—IJA

Foreword

If a democracy's power lies in her people, then an economy's true powerhouse lies in the millions of households and individuals with the boldness to pave their own futures as entrepreneurs. These micro-, small and medium enterprises (MSMEs) have been the lifeblood of the Indonesian economy, acting as catalysts for innovation, employment, and growth.

Yet, despite the large policy strides made by both the national and local governments to foster the development and prosperity of MSMEs, their welfare continues to hang in the balance. Classical and prevalent challenges such as credit constraints, supply chain frictions, and institutional barriers continue to hinder the sustainability of MSMEs. Emerging challenges such as digitalization and globalization add further pressure on MSMEs, with the COVID-19 pandemic exacerbating structural weaknesses and widening the gap that MSMEs must climb to continue surviving. These converging threats foreshadow an alarming rise in inequality if policymakers do not agilely respond.

With a commitment to build strong economic foundations for MSMEs to flourish in, Bank Indonesia has established an arsenal of policies designed to provide guidance, resources, and marketplaces as MSMEs grapple with old and new challenges. Bank Indonesia's 46 local representative offices have taken the task of facilitating and nurturing over 1200 MSMEs across the islands of Indonesia in sectors ranging from primary agriculture to traditional weaving.

Where pure policy has failed, Bank Indonesia's strategies have relied on the abundance of social and cultural capital unique to each locale, creating inclusive clusters of MSMEs which encourage an agglomeration of skills, innovation, synergy, and sustainability to bring MSMEs across the tipping point, swinging the scales of opportunity in their favor and allowing them to become independent together. As conventional policy and social capital interact with each other in distinct patterns within each region, Indonesia provides a unique laboratory of cases to study how governments can better design their policies around particular characteristics.

In this age of increasing complexity, technology, and information, a one-size-fits-all policy is difficult to justify for the hundreds of millions of MSMEs in Indonesia and, indeed, around the world. By leveraging the existing social and cultural capital

of communities in the development of MSMEs, policymaking through a regional rather than a national lens can become more strategic and effective in lifting up the communities they are designed to serve.

Bank Indonesia therefore presents the book “Periphery and Small Ones Matter” as an effort to highlight the regional fractures in the Indonesian economy, showcasing how those fractures can be mended with policies that put the people on the forefront. It is our hope that this book will be of benefit as a medium of learning for academicians and policymakers and for the MSMEs themselves.

The open access publication of this book reflects Bank Indonesia’s intent to spark a conversation as wide and inclusive as possible regarding the future of MSME policy at the local, national, and international levels. By delving into the singular perspectives of over 120 MSMEs spread throughout 7 islands and 27 representative offices, this book offers conversations with MSMEs that urge readers to rethink conventional economic approaches.

Amidst a pandemic, Bank Indonesia was able to remotely gather research evidence on behavioral policies rooted in the interactions between policy components and various types of social capital. The remote nature of this book’s research and writing also serves as a reminder of the changing, uncertain times that the world faces.

Hope remains in the undying spirit of the people. The resilience, creativity, and talent of MSMEs are in great abundance, but success cannot be achieved alone. Creating centers and communities of excellence requires relentless support, dedication, and assistance to allow MSMEs gradually grow independent. Governments cannot fall complacent in their duty to deliver the wealth and health of nations.

As we navigate a world in the wake of the pandemic, MSMEs have become the heart of the economic recovery.

So let us listen to their pulse.

Jakarta, Indonesia

Perry Warjiyo
Governor of Bank Indonesia

Preface

The issues covered in this book make stopping points almost arbitrary. The book could have been written several years or even decades earlier, with a few omissions and shorter period of data and evidence. I could have also waited until next year, the following years, or at a later point in time when some of the topics I leave will perhaps be included, especially given the effect of the dreadful pandemic. The main reasons being that the raised issues are perennial and likely to stay: inequality and dualism.

The relationship between development and inequality is largely accounted for by transitional development processes related to the dualism, including inequality between core regions and periphery and between traditional small businesses and modern large businesses. The phenomena are not new. Many studies typically found a curvilinear relationship between development and inequality. What is rather surprising is that the evidence in many countries shows that inequalities persisted, lasting longer than expected, even until the post-structural change period and after numerous countervailing policies had been promulgated. The dictum of comparative advantage and free trade that predicts a convergence is far from being supported by the evidence.

It was the combination of my desire to understand how regional inequalities persisted in many countries and why the standard conventional economics failed to explain such a trend that led me to explore the issue through a book on “Regional Economics: Fundamental Concepts, Policies, and Institutions” (World Scientific, 2020). Frequent discussions with the late Walter Isard, my mentor and colleague, who was genuinely concerned with the growing inequality around the world, also gave me a strong motivation to write that conceptual book. As soon as it was released, many asked how to apply the concepts discussed in the book to a particular country. As people asking the same question grew in number, I became intrigued. While visiting Jakarta, colleagues at the central bank, Bank Indonesia (BI), offered me to conduct a study that would apply the book’s fundamental concept for Indonesia. Long story short, that led to the writing of this book.

But there is more. Inequalities also exist in business activity, where modern and large-scale enterprises typically located in core regions perform better and have a

superior network of relations (social capital) than the small enterprises do. Exploring ways to help improve the performance of micro-small and medium enterprises (MSMEs) as part of mitigating inequalities is hence crucial from the development policy perspective. This turns out to be also of interest to BI. Looking at the evidence where many policies in the past were not fully effective, and having visited many MSMEs throughout the country myself, I argued that if we are to go that path we need to understand the underlying problems faced by MSMEs from their perspective, not from the perspective of researchers or outside experts. Understanding their “mental bandwidth” is far more crucial than conducting more analysis with another proposed set of measures.

The challenge, however, is how to juxtapose the two different yet related problems of inequalities, i.e., between regions and between MSME and large enterprises. Unarguably, it is a daunting challenge, one that is made all the more difficult by the fact that a field survey is necessary for understanding MSMEs’ real problems and challenges, yet is hard to conduct during the pandemic. Firmly convinced that overcoming these problems is a central part of the exercise of development in a large and heterogenous country like Indonesia, I accepted the challenge. This led to a research project sponsored by BI in which I acted as an external research scholar. This book is the product of that research project.

The starting point is a set of straight questions, where the answers are “yes” “no” and “yes.” The questions are: “do we have dualism and inequalities in our economy?” “were policies in the past effective in reducing them?” and “do non-policy factors have any effects on policy effectiveness?” The first two questions and answers are addressed in Chap. 2, and the third is what the rest of the book deals with.

The basic principles of the analysis rest on the concepts of centripetal forces associated with agglomeration economies. On regional inequalities (the core–periphery problems), the tendency for activities to concentrate due to agglomeration forces associated with external or agglomeration economies takes the center stage. The implications are, policies directed toward a higher growth at the national level may come with the price of amplifying the interregional inequalities, where measures to countervail a concentration tendency without taking account agglomeration forces bound to fail. Incongruously, MSMEs operating in a cluster can exert the same forces that may help improve their operations and mitigate the performance gap between them and large businesses. Seizing such forces by encouraging MSME to form a cluster is hence desirable. How to reconcile the different effects of agglomeration on two types of inequalities is the core of the analysis in the book.

The mechanisms how those principles work are complex, crucially influenced by the existing institution and social capital. In governing the behavior and activities of agents, social capital is inescapably constrained by the prevailing institution. On the other hand, institution is shaped by social choice (aside from history), implying that it is also influenced by social capital (aside from human capital); e.g., greater trust makes cooperation and collective actions easier to achieve, and better education generates higher participation. There is hence a deep complementarity between institution and social capital. Compared to the purely economic factors, this nexus of institution–social capital could transmit greater influence on inequalities and dualism.

Centering on that message, the book is intended for public discussion, not just for social planners, policy makers, or academics. The presentation, including results of the survey, is made as nontechnical as possible. For those inclined to the technical and formal aspects of the subject, the reference list provides relevant sources and the appendix gives a brief technical explanation of the approach used in the survey.

Ithaca, NY, USA

Iwan J. Azis

Acknowledgments

A great many individuals and colleagues have contributed to the thinking behind the research on which this book is based. I have benefitted hugely from reading their work and discussing many of the issues and ideas with them.

But for the analysis and the survey on micro- and small enterprises (MSE), nothing was more valuable than the opinions, reflections, and perceptions expressed by the MSEs leaders, owners, and operators, before, during, and after the survey. Listening to them and absorbing their reflections gave me an incredibly useful learning value, aside from creating a tremendous joy. They say listening is the language of love. I could not agree more. I had the pleasure of meeting some of those MSEs myself in the past including during the last few years and always valued highly their sincere and candid thoughts about various problems and challenges they had to face. Those thoughts reflect their “mental bandwidth” that is almost impossible to acquire by using a standard survey. I humbly offer my sincere appreciation for the learning opportunities they provided. This book is dedicated to them.

I cannot express enough thanks to Bank Indonesia’s Governor, Dr. Perry Warjiyo, who persuaded me to work on the book and provided the support through Bank Indonesia Institute (BINS). I also thank Destry Damayanti, MSc, Senior Deputy Governor of Bank Indonesia, for her interest on this research and who made constructive comments and suggestions during the Focus Group Discussions (FGD) along with Prof. Emil Salim and Dr. Chatib Basri. My special thanks also go to Dody Budi Waluyo, MBA, Deputy Governor of Bank Indonesia, with whom I had the first discussions about the possibility of applying the theoretical frameworks in my “Regional Economics” book to the Indonesian case.

I am immensely grateful to the management team of BINS under the leadership of its Head and Executive Director, Dr. Solikin M. Juhro, for the continued support and encouragement. In particular, I owe a debt of gratitude to Dr. Iman Gunadi, Head of Research Centre at BINS, and his predecessor Dr. Reza Anglingkusumo, who made tireless efforts in making sure that the preparation and conduct of the research went smoothly. The completion of this project could not be accomplished without the support of colleagues at BINS. I would also like to express my sincere appreciation to Dwi Pranoto, Head of Regional Department, Yunita Resmi Sari, Head

of SMEs Development and Consumer Protection, and Budi Hanoto, former Head of SMEs Development and Consumer Protection, for sharing the data and information on MSMEs.

At its best, research is a dialogue between those involved in exploring, investigating, conceptualizing, and expressing, during which questions and answers can be sought and evaluated. I tried to uphold this approach from day one, for which I needed dialogue partners. I could not ask for better researchers than Dr. Arnita Rishanty and Canyon Keanu Can SE. They were my closest dialogue partners who gave a lot of insights and suggestions and helped to make the entirety of the research work wrapped up in this book. They also delivered the necessary pre-survey messages, participated actively in the discussions with the MSMEs, and recapped the survey results. Conducting a survey during the COVID-19 pandemic is quite challenging. Several contact points with various respondents were required, all had to be done remotely. Sharing documents in low-network settings was equally hard, so was scheduling an appointment. My physical location being 10,000 miles away from them did not help either. But they did them all. I cannot thank them enough for the great work they did.

We learned a lot from this experience; e.g., zoom and phone surveys had to be shorter and simpler, respondents' fatigue and being distracted by other tasks could occur more quickly, and building trust without face-to-face interactions requires more patience. The risk of having a poor network connection was also real. Only through relentless hard work of the research team members and the tremendous supports from the 27 Bank Indonesia's Representative Office across Indonesia including their consultants that we could complete the survey with minimum glitch. We are extremely grateful for their help. We also benefited from the efficient assistance of Kunto H Wibowo and Mohammad A Fikry during the survey.

I also benefited from the discussions with many colleagues from various institutions who have a long-standing experience working on MSME. In particular, I owe thanks to Ralph Christy, the Director of the Emerging Markets Program at Cornell University, who put me in contact with colleagues working on MSME in Africa and Asia. My walking buddy, Mike Kniffin, raised what he called "layman questions" during our regular walk in Allan H. Treman Park and Sapsucker Woods. Those questions had actually allowed me to look at the research inquiry through different lenses, free from economist's biases. My heartfelt thanks to him.

Finally, my deep and sincere gratitude to my caring and supportive family, Erina, Mirko and Mariko, for their continuous encouragement and unparalleled love. They endured my passion in doing this research. Erina's kombucha, amazake, and miso had always given me the stamina I needed. Love you all.

“Iwan Azis’ new book has all the elegance of his deep understanding of institutions and policies, the pursuit of which will strengthen widespread development through MSMEs. He also uses baseline information to describe inequality and its consequences. His book has widespread interest for those working on problems of the populous countries of the Third World. As we coast through the pandemic Azis shows the light at the end of the tunnel.”

—Yoginder. K. Alagh, *Former Minister of Power, Planning & Science & Technology of India*

“As a vast archipelagic nation, Indonesia faces a daunting double challenge of social and regional inequality. Hitherto both theory and policy have failed by ‘betting on the strong’. This path-breaking book by one of Indonesia’s most experienced economists focuses on how MSMEs can drive development and reduce both forms of inequality. The key is bottom-up policies that allow for regional variation and draw on hitherto neglected social capital. This sophisticated analysis integrates regional economics, institutional economics and social capital theory with case study data and a keen eye to policy. Essential reading.”

—Howard Dick, *University of Melbourne*

“The disconnect between policies and their implementation must be solved if governments are to help MSMEs and their people achieve prosperity. This book reflects on the role of social capital and participation in bridging that gap, delving into the perspectives of MSMEs themselves to shine a light on areas where government policies have failed to reach. Bringing the regional disparities and the disconnect to the forefront of the discussion, the analysis shifts the narrative towards the people and the MSMEs that should be the focus of policies. It demonstrates how local and national governments should look beyond political and economic elements towards the social capital that promotes sustainable and collective development rather than mere individual growth.”

—Emil Salim, *Former Minister of Environment of the Republic of Indonesia*

“Just listen to them. This is the striking conclusion of this excellent study of the interface between policy and social capital in nurturing MSMEs, in their role of creating economic vitality and equitable development. Conceptually elegant and quantitatively rigorous, with original data collection which will be of use to researchers and policy makers for years to come, the central narrative of the volume is that the answers are there to be discovered, simply by leaving aside top down perspectives and taking a ground level approach to diagnosis and design. Just listen to them.”

—Ravi Kanbur T.H., *Lee Professor of World Affairs, International Professor of Applied Economics and Management, and Professor of Economics, Cornell University.*

“Given that inequality is expected to rise with the pandemic, this is a timely publication. Prof Azis is to be congratulated in adopting a novel approach by looking at the nexus between policies, institutions and social capital in looking at regional

inequalities and issues faced by MSMEs. Its main conclusions are first, to address dualism effectively, investments in the periphery must account for interregional interactions and institutional arrangements. Second strengthening MSMEs is not just about financial assistance, but developing business clusters based on existing social capital and local wisdom. These insights will be valuable for all development policy practitioners.”

—Mari E Pangestu, *Managing Director of Development Policy and Partnerships*,
World Bank

“Developing countries are composed of nations with great diversity. Applying ‘one-size fits all’ programs is destined for failure. Having consulted several international organizations and governments, Professor Iwan Azis has a very firm grasp on various development issues. Taking the fact that each province in Indonesia is facing different problems, he personally visited various provinces to understand the problems and explore ways to handle them appropriately. This book partly reflects those visits. As is well known, visiting backward regions far from major cities is never an easy task. It would be impossible without the self-motivated passion of the author. The value of the book lies in the fact that the recommendations about policy are based on real cases. I recommend this book not only to Indonesian readers and policymakers, but also to those in many developing countries as well as development specialists in international organizations.”

—Taeho Bark, *Professor Emeritus of Seoul National University and Former Trade Minister of Korea*

Dr. Azis’ new book provides an excellent analysis of the factors behind wide regional disparity as well as development disparity between MSMEs and large firms in Indonesia, and makes numerous useful and insightful policy suggestions to deal with the obstacles and challenges faced by MSMEs. The analysis makes a number of important contributions to the studies of regional disparity and MSMEs, not only from academic perspectives, but also from the perspectives of policy formulation, by pointing out the importance of various inter-connected relations/factors, which have been ignored or given little attention in the studies, including inter-firm linkages in agglomeration/clusters, interactions between policies on the one hand and institutions and social capital on the other hand, in order to understand and overcome the problems facing MSMEs. What is remarkable about this study is to obtain actual views and opinions of MSMEs by conducting a survey and use the information for the analysis, ensuring validity of the analysis and discussions.

—Shujiro Urata, *Professor Emeritus, Waseda University, Japan*

“The role of MSMEs in sustainable economic development in far too many places has been largely ignored in both theory and practice. The term entrepreneur is rarely found in economic development theory, but a growing recognition is emerging of the centrality of small businesses in economic growth and development. This book provides highly relevant analysis and sage policy advice that centers small enterprises

across Indonesia as part of a sustainable solution for regional inequality and post-pandemic recovery. A major contribution of this volume is in its call for policy makers to better understand the importance of all forms of capital in the design, formulation, and implementation of private strategies and public policies. While Azis recognizes that financial and human capital are better understood and measured, he skillfully advances our collective understanding of the essential role of social capital as applied to sustainable development.”

—Ralph Christy, *Director of the Emerging Markets Program, Cornell University*

“This important new book promises to address two critical issues. First, it provides strong empirical evidence that should convince macroeconomic policy analysts in Indonesia that they need to address the problem of spatial heterogeneity in reformulating their models and policy prescriptions. Secondly, it affirms the important role that banking institutions can play in enhancing regional development since the presence of local representative offices provides the opportunity for Bank Indonesia to more successfully tailor policies to local needs and opportunities. Reducing the spatial information asymmetry provides an innovation itself that can potentially enhance the economic success of many more MSME.”

—Geoffrey J. D. Hewings, *Director Emeritus, Regional Economics Applications Laboratory, University of Illinois*

“By highlighting the role of social capital in government policy, this book provides a timely and critical analysis of the institution that shape the welfare of MSMEs and society. A one-size-fits-all policy cannot succeed, and this book’s analysis through a regional rather than a national lens draws contrasts and similarities in the challenges faced by MSMEs across various islands of Indonesia. The emphasis on the ecosystem of policy variables, social institution, and economic factors allows readers insight into a breadth and depth of understanding on the wide diversity of conditions that MSMEs must overcome to flourish in the wake of the pandemic, while offering a solution of hope in the clusters of MSMEs that can lift each other up.”

—Chatib Basri, *Former Minister of Finance of the Republic of Indonesia*

“I am very excited as well as grateful that my Guru and mentor, Professor Iwan Azis has taken up a research project on looking at regional economics and MSMEs, culminating in this very important book. There has been plenty of work done on both topics. However, this book and the research project behind this book are novel. They tackle two big problems in one go: unequal development and the role of MSMEs in mitigating inequalities in Indonesia, a large and dynamic economy, by bringing in the role played by social capital in explaining the performance of MSMEs. The book offers unique insights on how non-policy factors impact on policy effectiveness. Coming at this point in time when Indonesia and the entire World are grappling

with the Covid-19 pandemic, the analysis in this book will help policy makers and development finance institutions in many practical ways.”

—Ramesh Subramaniam, *Director General, Southeast Asia Department, Asian Development Bank*

“With their pivotal role as the foundation of the economy and as wellsprings of culture, MSMEs have become Bank Indonesia’s most crucial sector. Efforts to raise the quality and quantity of guidance provided to MSMEs have been prioritized to ensure effective outcomes that foster the persistence and sustainability of MSME development. The diverse characteristics of MSMEs from each region of Indonesia affects the creation of social capital and the formation of collective action. Thus, centering this research around the components and interaction of government policy and social capital, Bank Indonesia presents a holistic, multidimensional view of the challenges faced by MSMEs, as well as the road forward where government policy alone is no longer sufficient.”

—Destry Damayanti, *Senior Deputy Governor of Bank Indonesia*

“By looking at the role of institutional approach and social capital in the dualism between center and periphery and between MSME and large businesses, the book exposes the forces that lead to dualism and concentration phenomena. The important implication is that, not only policies but also the design of those policies matter, particularly the extent of their compatibility with the prevailing institutional arrangement unique to each society.”

—Willem Thorbecke, *Senior Fellow at Japan’s Research Institute of Economy, Trade and Industry (RIETI)*

“As the pandemic puts pressure on MSMEs, governments must be innovative in their policymaking to prevent the foundations of the economy from buckling under the weight. MSMEs has long been the bedrock of the Indonesian economy. However, rife inequality and turbulent growth have constrained their development. This book offers an alternative perspective to designing policies for MSME development by combining conventional government policy with the rich and diverse social capital across Indonesia. Using field surveys to draw a comprehensive picture of the complementary roles of social capital and government policy, the research analysis presents a valuable resource for policy makers, academicians, and MSMEs as they navigate these uncertain times.”

—Dody Budi Waluyo, *Deputy Governor of Bank Indonesia*

“With his unique ability to go from a 30,000 feet view to the ground level with equal ease, Dr. Azis has again produced an elegant and instructive book of great relevance in these trying times, not only for Indonesia but for all developing countries. Based on deeply analytical work, and yet presented for a wider, general audience, the book recognizes the key role MSMEs can play in fostering local economic growth and addressing inequality. The unique contribution of this book is that it goes well beyond the usual economic factors, and emphasizes the need to also recognize complex

human and social behavioral aspects at play. The advice then to eschew a top down approach in favor of listening to the MSMEs themselves and their clients on the ground facing the realities of their daily struggles and challenges is well taken.”

—Rajat M. Nag, *National Council of Applied Economic Research, Delhi, India*

“Indonesia has long been plagued by structural inequality, rooted in differences in demographic and geographic endowments between Java and the Outer Islands, and between the small-scale operations of the massive numbers of micro, small and medium enterprises (MSMEs), and the handful of powerful big businesses which dominate modern economic activity. This dualism, first described by J.H. Boeke in 1953, is rightly characterized by Azis as a result of differences in endowments, scale of operations, institutions and social capital. Efforts to directly close regional gaps through regional development investment may likewise backfire if this, paradoxically, simply makes it easier for advanced regions to extract resources from weaker regions. This book provides ample evidence that programs which are designed without taking into account local customs and beliefs, and without considering whether MSMEs could better solve their problems without external support, are likely to backfire. Listening carefully to the MSMEs, who operate in an enormous variety of cultural and economic settings, and then designing policies that matches their perceptions of what is needed to tackle binding constraints is critical to the design and implementation of public policies aimed at tackling dualism.”

—Steven R. Tabor, *Former Country Director of the Asian Development Bank, Indonesia*

Contents

1 Introduction	1
References	6
2 Dualism and Development	9
A Historical Source	10
Evidence of Dualism	14
Policy Measures	29
References	33
3 Agglomeration, Institution, and Social Capital: Main Concepts and Methodologies	35
Duality from Different Lenses	36
Agglomeration and External Economies	38
Institutional Change: Decentralization and Transaction Costs	43
Social Capital	47
References	54
4 Mitigating Dualism and Exploiting the Interplay of Policy-Social Capital	57
Interregional Multipliers	58
Survey Results and Analysis	62
Sensitivity Analysis	75
References	77
5 Case-Based Evidence and Local Custom	79
Example of Cases	81
Inflation Control Through Trust and Local Norms: Rice Farmers in Manggarai Barat, East Nusa Tenggara	81
Meeting Challenges with Trust and Own Solution: Breadfruit Business in Manokwari, Papua, and Coffee Business in Aceh	83
Replication Through Trust, Local Solution, and Policy Announcement: Cattle Growers in Kupang, East Nusa Tenggara	86

Circular Economy, Policy Asymmetry, and Vicious Circle	
Problem: Rice Farm Cluster in Ngawi, East Jawa, and Banana	
Chip Producer in Banten, West Jawa	88
Customary Law and Social Capital	91
References	98
6 Summary	101
Reference	107
Appendix	109
Envoi	141
Bibliography	143
Index	145

Chapter 1

Introduction



Abstract Dualism is closely linked with inequality. Any process of development entails forces of dispersion (centrifugal) and forces of concentration or agglomeration (centripetal). The tendency for activities to concentrate is driven by the external economies that exceeds the negative externalities (higher prices, congestion, etc.) caused by the concentration. On the other hand, external economies can help mitigate the inequality between MSMEs and large businesses by offering benefits to MSMEs if they work through clusters for collective action.

Keywords Agglomeration • External economies • Spatial distribution • Policy interplay • Institution

Defined as the state of being dual or consisting of two parts, dualism is reflected in the co-existence of two systems, i.e., large modern sectors (core regions) and small traditional sectors (periphery regions). It occurs everywhere, developed and developing countries alike. It only differs in characteristics and degree. Among several indicators of economic dualism, the most widely applied is the productivity gap or the relative labor productivity. The productivity gap between regions within a country indicates regional dualism, and the productivity gap between small and large businesses denotes business dualism.

The sources of productivity gap between regions are found to be not mutually exclusive. They range from industry mix, capital intensity, investment in information and communication technology (ICT), and the extent of product market regulation and labor market flexibility (OECD, 2018). Location-specific factors including local institutions matter too. Acemoglu and Dell (2010) argued that the availability of local public goods and the security of property rights in developing countries significantly explain the variation of relative productivity between regions within a country. Although dualism between large and small firms, income and wage differentials are sometime used as an alternative measure, productivity gap remains the most important indicator. The relative productivity difference between large and small firms fluctuates considerably across countries. Typically, the productivity of small firms is in the range of 20–60% of that of larger firms, although the number varies between sectors.

Dualism has a close link with inequality. By using the ratio of labor productivity in agriculture to that in the rest of the economy as a measure of economic dualism, Bourguignon and Morrisson (1998) showed that, given a set of control variables, the relative labor productivity plays a major role in explaining the differences in income distribution across developing countries. For Indonesia, the average relative labor productivity during the last decade has been around 0.36 compared to 0.38 during the 1990s decade.

But dualism goes beyond economics. In countries where interregional inequality is high and productivity gap between small and large businesses is wide, the concept of social dualism is highly significant. Incorporating it into economic dualism and inequality, however, increases the complexity of the analysis. Yet, it is imperative in our case and is precisely the approach we take in the book. By using the case of Indonesia, the focus of the analysis is on the inequality between regions and the challenges surrounding the efforts to improve the country's micro small and medium enterprises (MSMEs). The main intention is to understand the key factors and forces behind the country's interregional inequality, and the reasons behind difficulties to boost MSME competitiveness. Note, however, that while the conceptual analysis presented in the book can be applied to MSMEs in general, in Indonesia and other countries alike, the survey results reported in Chap. 4 are based almost entirely on micro and small enterprises (MSEs) in various regions throughout Indonesia.

The relevance of social dualism for Indonesia was first shown by a Dutch economist cum lawyer, J. H Boeke, in his landmark study on the causes of the dualistic characteristics in underdeveloped countries (Boeke, 1953). In the context of our book, one of the implications of Boeke's study is the need to take into account the characteristics of dualistic society if we intend to have a better understanding about the persistence of interregional inequality and the reasons why a good majority of MSMEs had difficulties to improve their performance. For that purpose, the role of institution and social capital cannot be ignored. Insofar the prevailing institution and social capital are shaped by the characteristics of the society, the interactions between policies and those two may hold the key to the problem. Making policies effective or be responded positively by the MSMEs requires a good comprehension about such interactions.

The starting point of the analysis is the recognition that any process of development entails forces of dispersion (centrifugal) and forces of concentration or agglomeration (centripetal). The interplay of those two forces determines the spatial configuration of activities. Interregional inequality occurs when the agglomeration forces are stronger than the dispersion forces. The inequality effect of it reflects the dualism of all sorts. The tendency for activities to concentrate is driven by the external economies that exceeds the negative externalities caused by the concentration (higher prices and costs, congestion, etc.). On the other hand, the same external economies can help mitigate the inequality between MSMEs and large businesses by offering benefits to the MSMEs if they work through clusters or operate in close proximity to each other.

It has been long recognized that spatial concentration of activities can be the socio-economic engines for competitiveness and growth (Azis, 2020a, 2020b; Krugman, 1991a; Porter, 1998). When activities concentrate in few regions within a country,

national efficiency improves, but the gap between those regions and the rest of the country tends to widen, that is, the interregional inequality increases. The resulting equilibrium is therefore sub-optimal. When firms and other activities agglomerate in few localities or areas within a region, either organically or lured by government-provided incentives (e.g., industrial zone), both the region's growth and the inequality between localities tend to increase, which is another sub-optimal equilibrium. The source of the sub-optimality is obviously the arising inequality or divergence between the core and the periphery. Arguably, the precise conjecture linking spatial concentration and inequality is conditional to where the concentration occurs. Rising dualism and inequality emerge when increased agglomeration occurs in the developed regions/areas which typically are in a better position to attract new activities at the first place.

Insofar dualism and inequality are multidimensional, they can occur on various levels; e.g., between rich and poor households, between rural and urban, between small and large businesses, and between traditional and modern sectors. If, for some reasons, activities concentrate in the less-developed areas, or, in the case of business activities small businesses operate in a cluster to benefit from agglomeration economies, the outcome could be more optimal. Consider dualism and inequality between large firms and MSMEs. By definition, MSMEs are very different than large businesses not only in size but also in terms of legal structures, management style, financing arrangements, technology, and market size and niches. MSMEs also have limited networks for expansion (e.g., lobbying capacity, business contact, communication), and their location tends to scatter. These characteristics prevent them from enjoying the benefits of input sharing, labor market pooling, and knowledge spillovers (sources of agglomeration economies). By operating in a cluster, they will have the opportunity to reap those benefits. Thus, there is a great deal of similarity between the concepts associated with forces leading towards spatial concentration applied to regions and those applied to business sectors of different sizes. While the earlier results in a stronger growth with more intense dualism, the latter has the potential to foster growth and reduce dualism, if the agglomeration-related external economies can be enjoyed by MSMEs operating in clusters.

From this perspective, the general direction of the policy should be to mitigate the effects of agglomeration forces leading towards concentration of activities in developed areas, and exploit the same forces by encouraging small businesses to operate in a close proximity to enable them enjoy the external economies. If serious efforts to foster inclusive growth are to be made, these two are among the important tasks of social planners. The question is, how? The book addresses this question by focusing on the role of interactions between policies and institution, of which social capital is an important part.

The analysis in Chap. 3 delves into the nature of interactions between policy and institution. The approach taken is to link the concept of agglomeration leading towards dualism and inequality with the mechanisms of how the combined policies and institution including social capital affects the outcome. The working hypothesis is: observed dualism and inequality are not only the results of development policy but also the consequence of agglomeration forces and the interplay of policies and

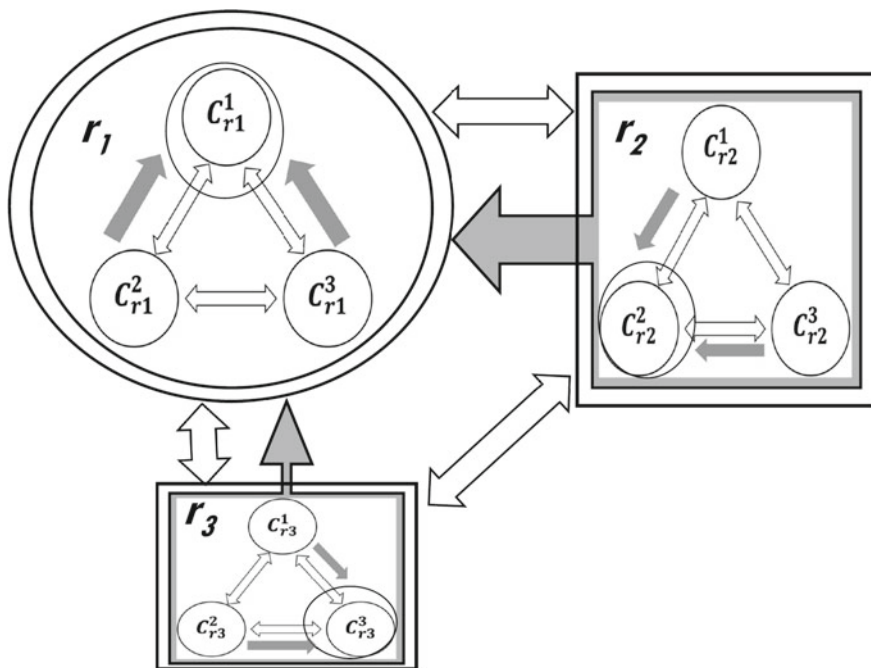


Fig. 1.1 Development with agglomeration and intersectoral-interregional interactions

institution. Policy alone is likely to fail if social capital based on the prevailing institution is ignored. Attempts to verify this hypothesis are made in Chap. 4, in which alternative scenarios of redirecting spending towards different regions are compared, and the results of MSE survey are discussed. Since institution and social capital are at the center of the hypothesis, the discussion about their role and mechanisms of interactions with policies takes up most part of Chaps. 3 and 4.

Putting all together, Fig. 1.1 depicts the line of reasoning behind the analysis throughout the book. It epitomizes a typical development process involving agglomeration forces and interactions between regions. Within each of the three regions, r_1 -circle, r_2 -square, and r_3 -square, there are three sectors each is represented by the small circles; for example, c_{r1}^1 denotes sector 1 in region r_1 -circle, c_{r3}^3 denotes sectors 3 in region r_3 -square, etc. The clear arrows pointing towards two directions indicate the interactions, both between sectors and between regions, and the grey arrows pointing towards one direction represent the forces of agglomeration. r_1 -circle is assumed to be the developed (core) region—hence the circle has the largest area—and region r_2 -square and r_3 -square are less developed regions, of which r_3 -square is the least developed one (smaller size of the square).

The three activities in each region are interacting via both, the intraregional multipliers (measurable by the intersectoral input–output relations) and the interregional multipliers (measurable by the interregional input–output relations). Based on those

two multipliers, all three regions will grow, and this is depicted by expanded r_1 -circle, r_2 -square, and r_3 -square. But there is another source of regional growth, i.e., external economies driven by agglomeration or concentration of activities in $C_{r_1}^1$, $C_{r_2}^2$ and $C_{r_3}^3$ (to which the one-direction arrows point towards). This is depicted in the Figure by the expanding circles $C_{r_1}^1$, $C_{r_2}^2$ and $C_{r_3}^3$. Obviously, the precise extent of expansion depends on how much external economies can be reaped by the sector, which could be influenced by the type and effectiveness of policy measures designed to exploit those external economies.

Nonetheless, three things happen: first, all regions grow, albeit at different rates, implying that the national economy grows; second, the distribution between regions is altered, implying a change in interregional inequality; and third, the spatial distribution of activities in each region is altered, implying that the intraregional inequality is changed as well. What is the outcome of it? A growing national economy is a forgone conclusion, but the resulting inequality—between and within regions—is uncertain.

This is where our proposition becomes relevant, i.e., to mitigate the effects of agglomeration forces that lead to concentration, and exploit those forces by encouraging small businesses to operate in close proximity in order to enjoy the external economies. Failure to do the first results in growing interregional inequality, failure to do the second widens the gap between small and large activities. To avoid those failures, the book argues that one needs to delve into the dynamics of interactions between policies and institution. In the first case, the role of regional and interregional structure that reflects the existing institutional arrangements ought to be considered in designing policies to reduce the gap between core (r_1) and periphery (r_3). In the second case, the direction of policy should be to encourage small businesses to cooperate and act collectively through clusters, and provide measures that are compatible with the prevailing social capital.

All the discussions and analysis up to Chap. 4 demonstrate how the model framework is used to explain the role of agglomeration forces and the interactions between policies and institution-cum-social capital in shaping dualism and inequality. On the role of social capital, the use of a model framework and the survey reflects our attempt to generalize the results by using data and people perceptions as a piece of evidence. Yet, the actual relationship between policy making, institution, and outcome is more complex than what is conceptualized, and to some extent such a relationship is unforeseeable. In reality, how do the institutional arrangements and social capital actually work in affecting small businesses operations? Do cases on the ground corroborate what has been conceptualized and concluded in the analysis? To answer these questions, a number of case-based evidence is discussed in Chap. 5. In particular, the presented narratives involve real people doing small business in different regions throughout Indonesia. They obviously operate within the prevailing institutional arrangement. The discussions show how they cope with challenges and possible disputes by using the prevailing social capital, and how the role of local customs and customary laws affect their business operations.

The book is structured as follows. The first part of Chap. 2 discusses the historical ‘source’ of dualism in Indonesia, with a particular emphasis on the relevance of Boeke’s concept of ‘dualism,’ and the second part presents the evidence of inequality

in a dualistic system in Indonesia despite the fact that various policies to address inequality have been implemented. The methodologies and the main concepts to explain why such inequality happened are discussed in Chap. 3. Insofar they describe the sources of agglomeration, and conceptualize the interactions between policies and social capital through collective actions, they are subsequently used to develop the questionnaire for the survey on MSEs, the results of which are discussed in Chap. 4. The first part of that chapter discusses how the intra and inter regional economic structure as part of the prevailing institution influences the effectiveness of policy to reduce interregional inequality. The second part, which is the bulk of the chapter, is devoted to the analysis of MSE survey on the interplay between policies and social capital in affecting the type of MSE cluster. Overall, Chap. 4 exposes the importance of mitigating the inequality caused by the agglomeration forces and exploiting the elements of those forces through MSME clusters. To complement the analysis on the effect of interactions among policies, institution, and social capital on MSME performance, Chap. 5 presents some examples of evidence from cases throughout different regions in Indonesia. Chapter 6 summarizes the overall finding.

References

- Acemoglu, D., & Dell, M. (2010). Productivity differences between and within countries. *American Economic Journal: Macroeconomics*, 2(1), 169–188
- Azis, I. J. (2020a). *Regional economics: Fundamental concepts, policies, and institutions*. World Scientific Press.
- Azis, I. J. (2020b). Regional development and noneconomic factors. In A. Kobayashi (Ed.) *International encyclopedia of human geography* (2nd Ed., Vol. 11, pp. 269–274). Elsevier.
- Boeke, J. H (1953). *Economics and economic policy of dual societies*, Tjeenk Willink & Zoon, Haarlem.
- Bourguignon, F., & Morrisson, C. (1998). Inequality and development: The role of dualism. *Journal of Development Economics*, 57, 233–257.
- Krugman, P. (1991). *Geography and trade*. MIT Press.
- OECD. (2018). *OECD regions and cities at a glance 2018*. OECD Publishing. https://doi.org/10.1787/reg_cit_glance-2018-en
- Porter, M. E. (1998). Clusters and the new economics of competition. *Harvard Business Review*, 76(6), 77–91.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.



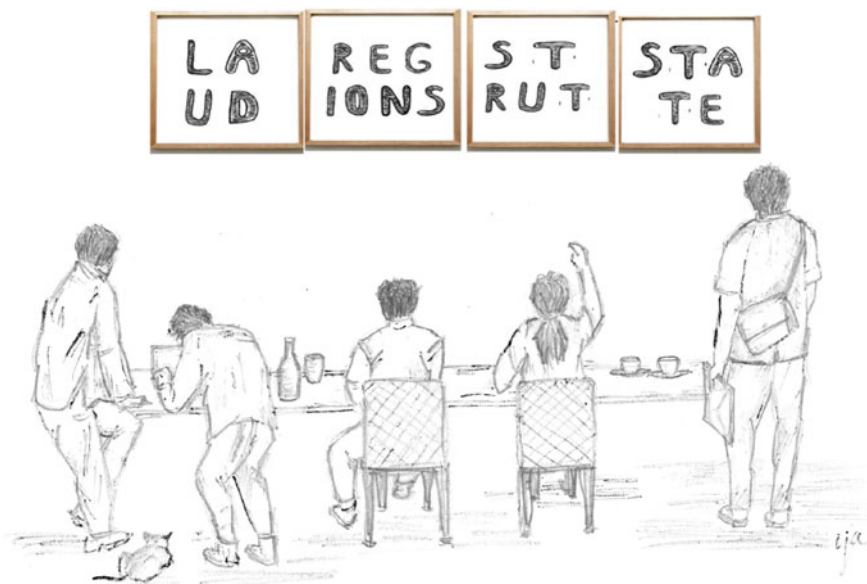
Chapter 2

Dualism and Development



Abstract Historical ‘source’ of dualism in Indonesia is first discussed, with a particular emphasis on the relevance of Boeke’s concept of dualism. Despite the presence of various policies to address the issue, the inequality between regions in the country is large by international standard. The productivity gap of micro-small enterprises and large businesses are also stark. As policy goals tend to be ambiguous, some proposed measures are not well received by the MSMEs.

Keywords Interregional inequality • Poverty • Productivity • Wealth distribution • Policies



Conversation

A: *"We LAUD the achievements in macro indicators."*

B: *"But the aggregate picture conceals inequalities that plague the DUAL system."*

A: *"To reduce interregional inequalities, we have allocated more funds and built infrastructure in periphery REGIONS."*

B: *"That is an incomplete conjecture as it IGNORES the role of agglomeration forces and the prevailing institutional arrangement."*

A: *"Although inequalities remain and dualism persists, we certainly do STRUT our policies when it comes to bringing higher growth and lower poverty."*

B: *"The effectiveness of policies and how they are received by the public is also determined by the level of TRUST as part of social capital."*

A: *"The STATE has been actively engaged in programs to support small businesses during a crisis."*

B: *"In helping the small businesses we need to understand and have a TASTE of what we miss about the complex relationships between policies and institutions and the behavioral insights of the programs."*

A Historical Source

By choosing the appropriate assumptions of the institutional framework in under-developed countries, Boeke (1953) provided a systematic analysis of development through his 'dualistic theory,' also known as the 'social dualism.' He elaborated the concept by using numerous examples of cases in Indonesia based on detailed descriptions of the colonial society during the Dutch East Indies period between 1910 and 1929.¹ Boeke's investigations were stimulated by the problems of declining welfare of the Indonesian population. He lamented that, "social dualism is the clashing of an imported social system with an indigenous social system of another style. Most frequently the imported social system is high capitalism. But it may be socialism or communism just as well, or a blending or them" (Boeke, 1953, p. 4). He saw a co-existence of such two systems in Indonesia—and also India—and argued that the resulting dualistic economy would be a permanent feature of the countries' economic structure (Boeke, 1961).

¹ In 1914, when he became an advisor to the Dutch institution as part of the imperialistic policies designer, he was assigned to improve the education, health care, and rural credit cooperatives for the indigenous population. Upon returning to the Netherlands, he was appointed as the chair of tropical-colonial political economy and professor of Eastern Economics at Leiden University to lecture "Dualistic Economy." What he observed and learned during his stay in Indonesia made him critical to the Dutch's policies. Some of those critiques were put in writing, for which he was interned in the concentration camp for several years, after which he returned to Indonesia and stayed there until 1955.

Boeke analysis essentially implies a culture-related backward-bending supply curve for labor, driven by 'limited wants' as well as inelastic demand behavior among the indigenous social system. Bearing in mind that institution differs across cultures, he argued that it cannot be easily implemented elsewhere in a top-down manner. Hence, a distinct economic approach is needed for the Dutch-Indonesian colonies where the indigenous population responded otherwise than expected to the economic incentives set by the western colonial institution. The implication is, if a specific policy or institutional framework is imposed onto another culture, it will only be partially adopted by the respective population.

Boeke's work along with his concept of economic dualism was among the earliest attempts to diagnose the causes underlying the dualistic characteristics and their implications for the developmental process in underdeveloped countries. It is this dualism that served as one of the necessary reasons for the persistence of informal economy in many developing countries. It is also one that led to the marginalization and exclusion of social groups from formal economic activities (Clement, 2015). Boeke's theory laid the foundations for a series of concepts and other theories on socio-economic duality that came later, e.g., the work of Lewis (1955), Hirschman (1957), and Geertz (1963), the labor surplus model of Fei and Ranis (1964), including the relevant comments by Eckaus (1965) and Dixit (1970).

Not all scholars, however, agreed with Boeke. Among several issues causing disagreements concerns the static nature of his theory. Boeke clearly believed that the dual society in Indonesia is "permanent at least within a measurable distance of time." He also wrote "that a precapitalistic society is driven further and further away into an exchange economy for which it is not fitted and which it cannot master." In his view, the static feature of his theory could be used in the context of pre-capitalistic sector. Higgins (1966) countered that if they are static in the sense that per-capita incomes are not rising and capital accumulation proceeds at slow rates, not only the description bears little resemblance to the theoretical abstraction of static economy but it also ignores the fact that a non-growing economy is actually a special case of economic dynamics. Itagaki (1960) made further arguments that since no transitional process is considered, the static nature of Boeke's theory undermines the dynamic aspects of the problem of structural changes. In his view, what should be important to analyze—yet missing in Boeke's analysis—is the critical role of 'colonial capitalism' that caused the 'unequalizing factors' suggested by Myint (1964), and the 'backwash effect' expounded by Myrdal (1957), both of which could either preserve or reinforce the initial dualism by hindering further development of the indigenous economic sectors. But other than highlighting the important role of state and economic nationalism to eliminate those forces, Itagaki did not offer specific solutions. Nonetheless, Boeke's failure to recognize the dynamic elements in Indonesian life has been one of the sources of criticisms against his theory.

Boeke's concept was used not only by the colonial authority but also by the Indonesian government in a post-independence period to serve as the basis of a protectionist policy. The goals were to prevent social disintegration and preserve social coherence. Sadli (1957) concurred with Boeke's assessment: "It cannot be denied that Boeke's descriptions of the Eastern (or perhaps only the Javanese) village

are in many instances true. Boeke knows a lot about the Javanese village life in the colonial period.” On the other hand, he was also critical about Boeke’s idea being thought as a new theory. In his words “Boeke explained much about the social impact of a high capitalistic system upon a precapitalistic society but this can hardly be called a separate economic theory.”

The concept of dualism continues to be relevant in today’s environment, as it is closely associated with inequality.² Not that Boeke was entirely right. He was not. It was Lewis (1955) who provided a thorough analysis and showed that the movement of labor from traditional agriculture to modern industrial activities is what makes growth and development possible. Hence, dualism is not static. The intersectoral labor migration is the source or engine of economic development. However, the notion that the gap between economic and social organizations, that is, the gap between a relatively modern economy performed by large businesses and the traditional indigenous economy of small businesses continues to persist, is hard to deny. So is the development gap between core regions and periphery. The coexistence of such contrasting economic and social organizations is a fundamental aspect of today’s growth process in many countries. The trend of income and wealth inequality has not been too encouraging in almost everywhere around the world.

Globally, over the course of twentieth century, income inequality within countries followed a more-or-less U-shape pattern, but the trend in most countries have been worsening. Unlike what was assumed in Boeke’s theory, this occurred even with the traditional sectors experiencing a process of transition. On the other hand, Boeke’s prediction that dualism will be “permanent at least within a measurable distance of time” does not seem to be off target. The overall picture of within-country dualism continues to exist, albeit with certain fluctuations. Income inequality persists and continues to be high in some countries, and the performance gap between large and small businesses (where the latter are generally traditional) remains large.

For a country like Indonesia, given the size and its archipelagic nature, inequality between regions including between rural and urban area is particularly important. Discussed in the next section, the country’s interregional inequality is indeed large by international standard.

Another reason why it is important to address the issue of dualism and inequality is because of its intricate relations with growth. The classical economic thinking (Kaldor, 1956) posited that the rich have a higher marginal propensity to save than the poor so that a higher degree of initial income inequality tends to result in higher savings and investment, hence higher growth. But the modern view asserted that greater inequality causes a lower growth through the following mechanisms (Nissanke & Thorbecke, 2007): less secured property due to unproductive rent-seeking activities, uncertainty due to diffusion of political and social instability, disincentives among the rich to invest due to redistributive policies to address inequality, underinvestment by the poor caused by imperfect credit markets, and higher fertility

² Of several accounts on the reasons behind the transitional aspects of temporal evolution of income inequality (the famous Kuznets’ inverted-U shape curve), the one focusing on the dualism-based inequality is among the most credible explanations.

associated with smaller income share of the middle class. The United Nations summed up its recent report with the following message: “High or growing inequality not only harms people living in poverty and other disadvantaged groups. It affects the well-being of society at large. Highly unequal societies grow more slowly than those with low inequality and are less successful at reducing poverty. Without appropriate policies and institution, inequalities in outcomes create or preserve unequal opportunities and perpetuate social divisions. Rising inequality has created discontent, deepened political divides and can lead to violent conflict” (United Nations, 2020). Whichever forces at work, high inequality and greater dualism tend to worsen the growth prospect.

Having recognized the importance of addressing the issue of dualism and inequality, it is imperative to understand the mechanisms of how they emerge and affected by policies. Many of the sources behind dualism are institutional, not direct economic in nature. Local characteristics, culture, tradition, and social capital are parts of the institution that shape the backward-bending supply curve and the inelastic demand behavior of the traditional sectors. The incompatibility of the indigenous (receiving) culture and the colonial (giving) culture reflects the clash between imported social system with indigenous social system. To the extent that economic development must be understood as larger socioeconomic processes, not only as economic processes, recognizing the importance of local characteristics and culture is imperative. When imposed policies are designed to be compatible with the local culture and characteristics, they have a chance to work and be adopted by the local population.

From this perspective, the consequence of Boeke’s conjecture about the permanence of dualism does not have to be far-reaching in the sense that it excludes the possibilities of development and rejects any policy measures. We do not have to be defeatist. As long as the plan and policies are carefully designed by considering the prevailing institutional arrangements, we do not need to accept what Boeke lamented, “I will expose no plans, except to stress the need for a village restoration.” Yet, his position on how to conduct the restoration/policy is hard to disagree with. He specifically emphasized the need to conduct the restoration democratically and to have local leaders with strong sense of social responsibility. In his words: “This restoration will not take place through a revival of the rural gentry, but must follow more democratic ways. New leaders must spring from the small folks themselves, and must be accompanied by a strong feeling of social responsibility in the people themselves.” Thus, between Boeke’s position on the stagnancy of dualism—where no policy will work except village restoration—and the view that external interventions are needed to modernize the traditional sectors, there is a middle position. This book takes such a position.

Although dualism and inequality emphasized in concern with spatial dimension and the gap between small and large businesses, other forms of inequality are no less important. The bulk of discussions in the following chapter is on the evidence of inequality in Indonesia. To the extent various policies intended to reduce dualism have been promulgated, the observed high inequality implies that there is indeed a

gap between policy and outcome. On the other hand, given the heterogeneity and size of the country, some degree of dualism and inequality should have been expected.

Evidence of Dualism

Being the world's fourth most populous and diverse archipelago with 300-plus ethnic groups and more than 700 spoken languages, Indonesia is one of the highly heterogeneous countries in the world. It is ranked 175th (out of 218 countries) in language fractionalization and 161st in ethnic fractionalization (Alesina et al., 2002). Although much of Indonesia's diversity is explained by its peoples' differing histories rather than their isolated development (Geertz, 1963), the inherent dualism is likely high in a country with such an attribute. No matter what the aggregate trends based on macro data show, features of dualism will always be part of them. It is only the degree that may be different from one episode (or one region) to another. Any analysis ignoring the implications of such inherent dualism is likely distorted, incomplete at best.

Most aggregate and macro data show that Indonesia has made a tremendous progress in raising people's living standard. The relative per-capita income compared to that of the United States increased significantly albeit not steadily due to the severe crisis in 1997 (Fig. 2.1), and the poverty rate declined persistently from a double digit to a single digit rate until the Covid-19 pandemic strike in 2020 (Fig. 2.2). Reasons behind the impressive performance range from the country's strategy and policies, richness of natural resources, strategic location, and evolving external conditions such as increased global supply chains, capital flows, and technology transfers.

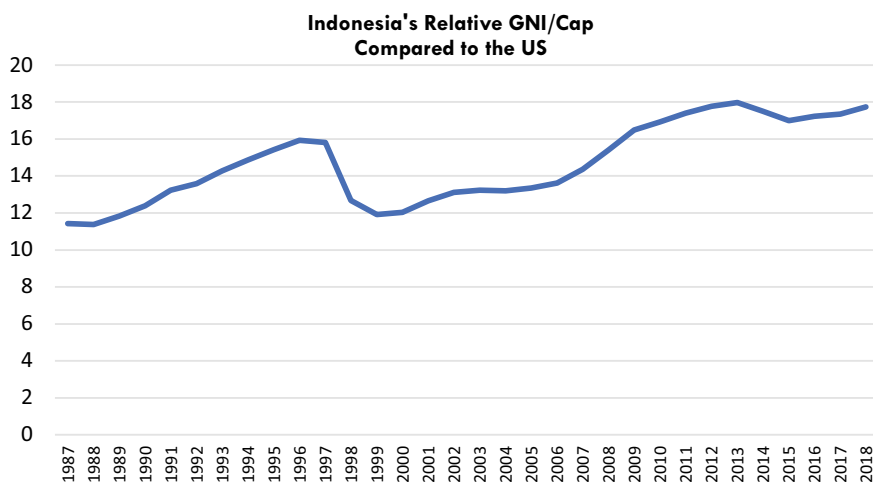


Fig. 2.1 Source CEIC data

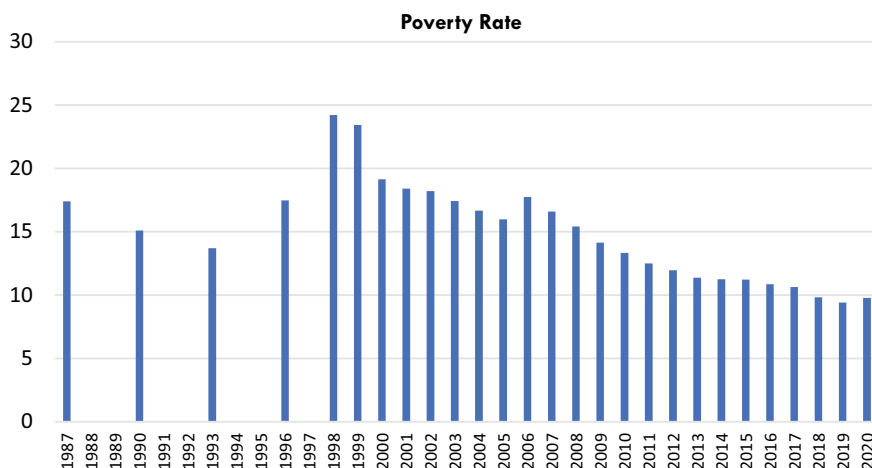


Fig. 2.2 Source World Bank and CBS data

Going deeper, however, reveals the inherent dualism. First is on income inequality. Figure 2.3a shows that the trend of inequality, measured by the Gini index, has not been too encouraging. In particular, since 2005 the index has been persistently higher than during the decade of 1990s, and the trend up to the first half of 2000s was worsening, only slightly improved since then. The worsening trend of inequality is further confirmed if we look at the recent Gini index by region as compared to the same index in 1996. As displayed in Fig. 2.3b, virtually in all regions the Gini index moved up above the 45° line over the two decade period. In 1996, only 3 provinces had a Gini index greater than 0.3 (DI Yogyakarta, Sulawesi Tengah, and Papua), and more-than 2 decades later only 1 province (Bangka Belitung) registered a Gini index of less-than 0.3, and 6 provinces had a Gini index greater than 0.4. All these trends occurred before the pandemic hit. If experts' prediction is to be believed, the post-pandemic recovery is likely to be K-shape, implying that the inequality will get even worse since the hardship has fallen disproportionately on flexible, low income workers and young people. On the other hand, unable to go out, eat out, shop or travel during the pandemic, the middle and upper income group build up their savings.

Inequality between regions displays another dimension of dualism. Figure 2.4 shows that the coefficient of variations (CoV) of per-capita gross regional product (GRP/cap) was high and failed to register a meaningful decline over the last two decades. Marked improvements occurred only during the 1980s; but even that trend was due primarily to a high CoV at the base point. Compared to the interregional inequality in other countries that also have a large population, such as India, China, and Brazil, Figure 2.5 clearly shows that Indonesia is at the lower edge of the list as it has the most unequal distribution between regions. A study shows that the contribution of inequality across urban-rural and across regions or districts in Indonesia's overall inequality is ranked the second, only surpassed by the inequitable access to education (Chongvilaivan & Kim, 2016).

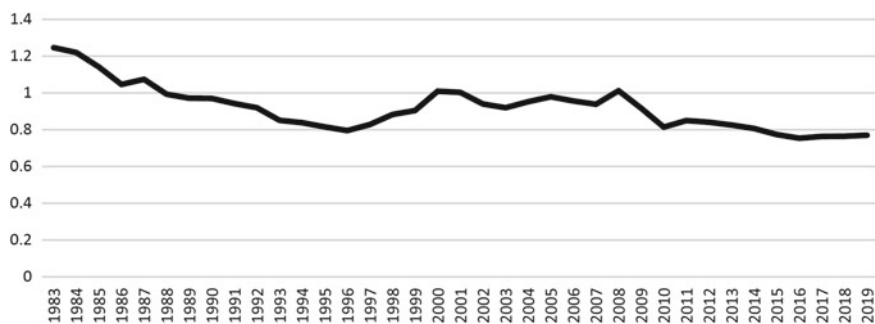


Fig. 2.4 Coefficient of variations of Gros Regional Product/Capita (current price). *Source* Calculated from CBS data

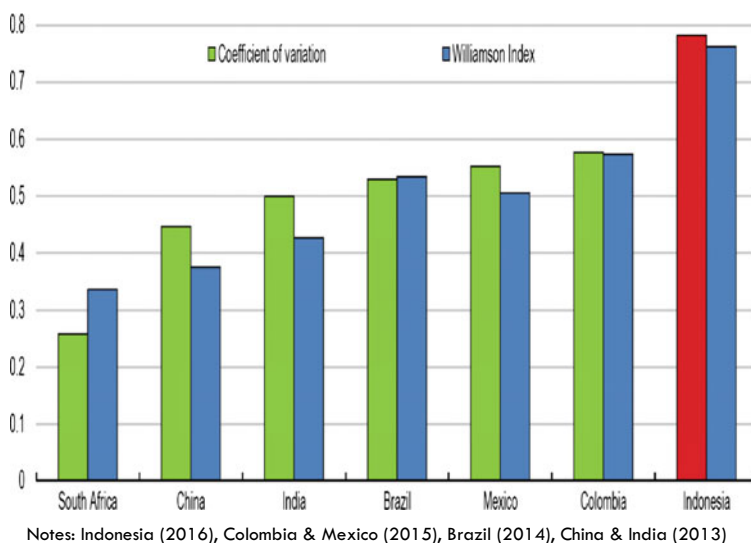


Fig. 2.5 Interregional inequality in selected countries. *Notes* Indonesia (2016), Colombia and Mexico (2015), Brazil (2014), China and India (2013). *Source* Statistik Indonesia and OECD Regional Database

Part of the reasons behind the inequality can be linked to what happened with the country's wealth distribution. Wealth as a stock concept generates flows of income. Given the rate of returns, wealth inequality generates income inequality. The implication and evidence of the relation between the two has been shown by many authors, including Piketty (2017) who used the data since the 18th century in Europe and the United States. Although using the cases of two countries, his evidence-first approach helped set off a global debate on income inequality and no longer makes one be able to assert that rising inequality is a necessary byproduct of growth and prosperity, or that capital deserves protected status because it brings growth.

During the last few years alone, the wealth share of the top wealthiest 10 percent in Indonesia had increased from 36.4% in 2014 to a whopping 74.1% in 2019. Those numbers imply that the wealthiest 1% of population owned 45% of total wealth, making the country's wealth inequality among the worst in the world (Credit Suisse, 2019). It is not surprising that in 2019 the wealth Gini index in Indonesia (83.3) was higher than in other large countries such as China (70.2), India (83.2), and Mexico (77.7). As predicted, the fastest growth occurred in the financial asset. When we look at the ratio of the growth of market capitalization (a proxy for financial asset) over the growth of housing price (a proxy for non-financial asset) during the last 10 years before the pandemic, the number has reached 345.5%, much higher than the world average. In 2000, the share of financial wealth in the total wealth was 21.8%, and by 2019 the share had already reached 42.3% (Fig. 2.6). Hence, a considerable portion of wealth inequality in Indonesia—which eventually translates into income inequality—has been largely caused by a rapid expansion of the financial wealth which is predominantly owned and controlled by the urban-based middle to upper level income group.

Growing financial assets cannot be separated from financial liberalization. Although the worsening impact of liberalization on inequality has been confirmed by many studies, those using the case of Indonesia have been rare. To the extent 'financialization' is easier to detect and measure than financial liberalization, some studies looked instead at the impact of 'financialization' by using a standard indicator such as the size of financial assets on inequality. Using stock market capitalization

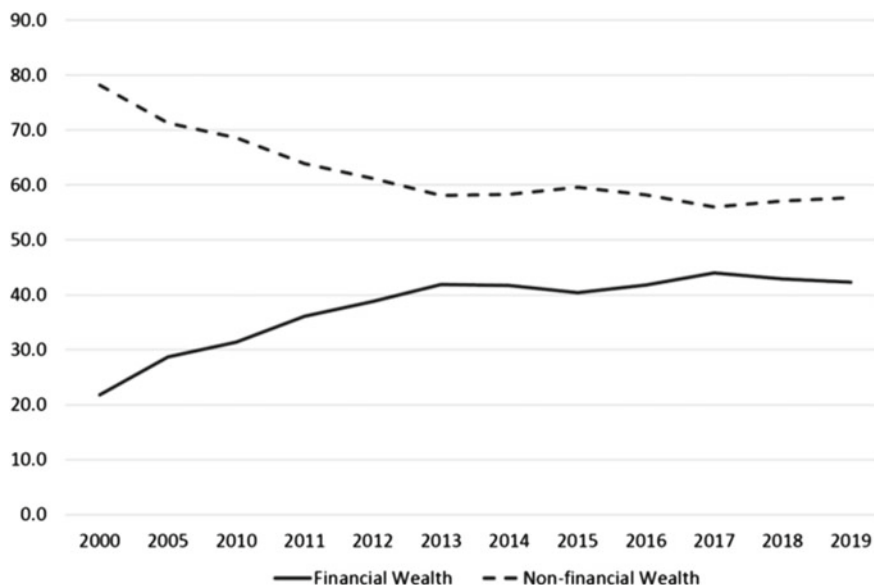


Fig. 2.6 Financial and non-financial assets/gross household wealth (%). *Source* Processed from Credit Suisse (2019), Global Wealth Databook 2019, October

and returns on asset (ROA) as indicators of financialization, Buhaerah (2017) used panel data of ASEAN countries including Indonesia and found a negative effect of financialization on inequality. Greater capitalization and higher ROA tend to worsen inequality. Measuring financial liberalization, let alone its impact on inequality, is far more difficult due to the diverse type of financial liberalization and the complex channels of transmissions to reach household income or consumption. By using a financial computable general equilibrium (FCGE) model with the Flow-of-Fund data to evaluate the impact of financial liberalization-driven inflows of portfolio capital, Azis and Shin (2015) confirmed that financial liberalization in Indonesia tends to worsen inequality. By exploring counterfactual experiments and tracing the channels of transmission, it was further revealed that the relatively lower growth of the non-financial sector (more employment-generating activities) and the increase of financial returns (mostly owned by and accrued to high income households) contribute significantly to the country's growing inequality.

Behind the impressive reduction of Indonesia's poverty shown in Fig. 2.2, two important observations need to be highlighted: the dynamic trend of the link between growth and poverty, and the regional dimension of poverty including non-income or non-consumption poverty.

Numerous factors affecting consumption poverty in Indonesia have been identified by different authors; some are macro in nature, including sectoral composition of employment, others are more of micro-social type. On the macro side, the positive link between national growth and poverty reduction has become a standard hypothesis. By focusing primarily on trends in measurable poverty and inequality indicators, Hill (2021) made it clear that the link applies for all episodes. During the mid-1970s, when the government promoted rice and other food crop production, and during the 1980s when the labor intensive along with exports program was emphasized, higher growth led to a sharp decline in poverty. Since the 1980s, by using the growth incidence curves (GICs), the link remained intact. Although the last chart of Fig. 2.7 shows that for the whole period (1980–2017) the consumption growth of all households were positive, supporting the trend of declining poverty, variations occurred during different periods. Comparing two political eras, i.e., *Orde Baru* up to 1996 and post-*Orde Baru* after 1997, the outcomes differed significantly: growth was faster and inequality was stable in the first, and growth was slower with segmented labor market and growing inequality in the second. But so was the poverty rate: it fell sharply in the first and much slower in the second, confirming the established link between national growth and poverty reduction. Variations in the inequality outcomes are clearly detected during the four periods shown in Fig. 2.7. In the early years up to 2000, a relatively egalitarian growth occurred except during the financial liberalization period (1990–1996) where higher income households benefited the fruits of growth at a much faster rate, consistent with what was discussed earlier. In the subsequent 2000–2017 period, inequality has clearly become worse. Overall, for the whole period since 1980 Indonesia's higher income households have been benefiting the fruit of growth at an unmistakably faster rate than the lower income households.

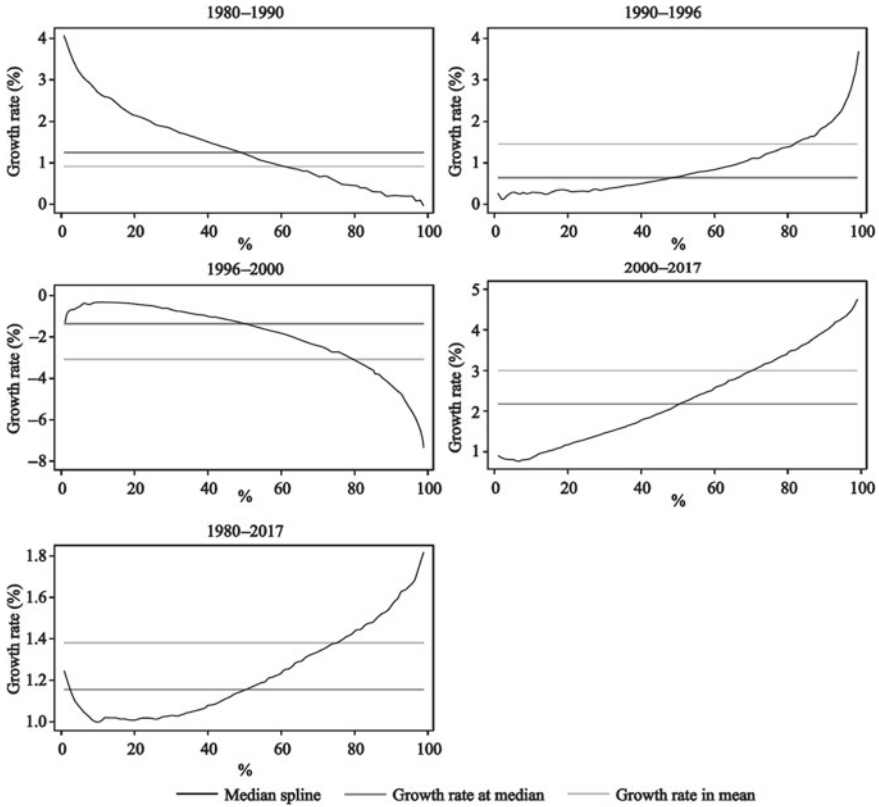


Fig. 2.7 Growth incidence curves-spatial plus temporal, 1980–2017. *Source* Hill (2021)

On regional dimension of poverty, the headcount index in Papua and Maluku was 1.5 times higher than the national average, while the index in Sulawesi failed to improve. If poverty is measured based on factors other than income, particularly health and education, the spatial gap of non-income poverty is fairly big. A study by Hanandita and Tampubolon (2016) showed that based on the health-related deprivation, including having illness for more-than 3 days and a disease for more-than 4 days (morbidity), the difference between rural and urban throughout the country was markedly large. Although it followed an inverted U-shape trajectory, the urban–rural health inequality during 2003–2013 did not show an improvement. Across regions, the gap between Nusa Tenggara and the rest of the country was particularly high, i.e., up to 2.13 times greater than the national average for illness deprivation, and up to 3.70 times greater for morbidity.

In terms of education-related poverty (having primary education and ability to read and write latin characters), variations across regions were also high. Rural deprivation was over twice of that in urban area, and the gap did not seem to narrow over the years. While the contribution of income poverty in Indonesia’s multidimensional poverty

is higher than that of non-income poverty, the contribution of the latter has been increasing steadily. It is also important to note that poverty reduction in rural area was driven by improvement in both, the income and non-income components, whereas the reduction in urban area was driven mainly by improvements in the non-income (deprivations) component. As a result, nearly a quarter of Indonesian adults living in rural areas failed to complete primary school. This occurred despite a substantial reduction in poverty and the constitutional mandate for the provision of universal primary schooling and for the allocation of 20 percent government expenditure to education (the 20% rule).

But duality is particularly stark at the district level. Based on the multidimensional poverty measure (taking into account the simultaneous deprivation), a large variation is found between districts across regions. The divide between Western and Eastern Indonesia cannot be more obvious. From 346 districts, 5 out of 10 of the poorest are in Papua. Dualism also occurs within each region; for example, in East Jawa province, the multidimensional poverty in Kabupaten Bangkalan is 7 times higher than in the city of Surabaya.

The multidimensional poverty has been always higher in rural than urban areas. Most of the least-deprived districts are in urban areas including municipalities. Hence, by looking deeper at the data to include the non-income poverty across regions and rural-urban, the impressive poverty reduction over the last decade has not been complemented by strong improvements in the non-income dimensions. Consistent with the results of a study using income or consumption poverty (Sumarto, Vothknecht, & Wijaya, 2014), the spatial inequality of non-income poverty is fairly high, with a large variation between districts. Suryahadi, Rishanty, and Sparrow (2020) argued that the trust among people across different ethnic groups, being the most important social capital, plays an important role in poverty reduction. At any rate, a regional disparity of high poverty unarguably continues to characterize Indonesia's journey to prosperity.

One of the most important institutional changes that has affected Indonesia's intra and inter regional development was the decentralization policy implemented in early 2000s followed subsequently by direct elections at the local level (*pemilihan kepala daerah*, PILKADA). At the beginning, PILKADA was conducted in only few regions. By 2005, a full scale implementation began. Since then, data on socio-economic performance show that some regions experienced improvements but others did not. On the basis of per-capita gross regional product (GRP/cap), more than 60% of Indonesia's provinces experienced a reduction in annual growth after PILKADA, and in terms of human development index (HDI) more-than 90% provinces experienced a decline in annual growth (Fig. 2.8).

Dualism in regional performance is also detected when we consider institutional factors of decentralization. By applying the 'institutional model of decentralization' (IMD), the detailed of which is discussed in the next chapter, a survey conducted in seven regions/districts throughout Indonesia after a full swing PILKADA—over the period of 2008–2009—reveals that the importance of peoples' participation in determining local welfare is overwhelming. Yet, the quality and intensity of participation have been highly diverse among regions. From all seven regions combined, the

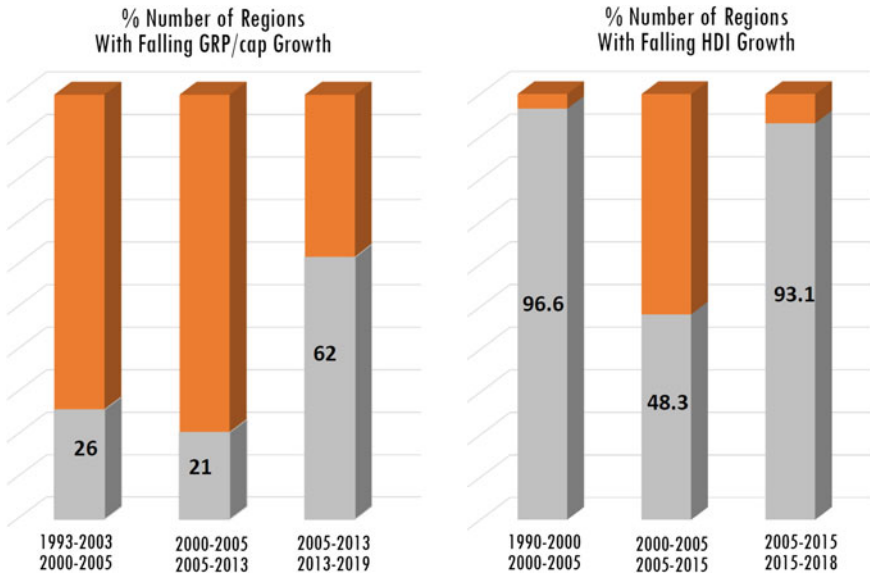


Fig. 2.8 Annual growth of GRP/cap and HDI before and after decentralization. *Source* Based on CBS data

results show that participation is the most critical factor followed by the size of local budget, and subsequently by the initial conditions (Table 2.1). The test of robustness of the results through a dynamic sensitivity analysis corroborates the finding.

While the importance of local budget is obvious (poor regions with low budget have more difficulties to improve welfare), the role of initial conditions cannot be overlooked. Evaluating the breakdown of the survey results, in some least developed regions the initial socio-economic conditions matter more than the size of local budget, indicating the presence of path dependence, i.e., regions that were poorer than others some decades ago remain poorer now. On the other hand, more developed regions tend to grow faster. The welfare effect of decentralization is greater when local people are more politically aware and actively participate in various local development programs. What this suggests is, the gap between less-developed and more-developed regions (duality) after decentralization tends to persist or even widen, consistent with the finding using the secondary data discussed earlier.

Similar to the development gap between regions, dualism in business activities is equally stark. While the number of business establishment and business unit is dominated by MSME, i.e., more-than 99% and over 96%, respectively, their productivity has been way below the large businesses. Before delineating this productivity gap, let's first look at the trend of Indonesia's productivity at both the national and regional level where another type of dualism exists.

Why productivity matters? Many arguments and rationales can be put forth. Krugman (1994) summarizes it well: "Productivity isn't everything, but, in the long run, it is almost everything. A country's ability to improve its standard of living over

Table 2.1 Results of IMD-based field survey: group, individuals, and combined hierarchy

Hierarchy				
Name	Rank	Ideals	Normals	Raw
<i>Group Survey</i>				
Summarized result of the group survey in 7 regions based on Hierarchy model based on ‘Super Decision’				
1. People’s participation	1	0.9361	0.4361	0.7660
2. Initial condition	3	0.4167	0.1941	0.3410
3. Available budget	2	0.7069	0.3293	0.5784
<i>Individual survey</i>				
Summarized result of the individual survey in 4 regions based on Hierarchy model (Using Super Decision software)				
1. People’s participation	1	0.7342	0.3776	0.6914
2. Initial condition	3	0.4046	0.2081	0.3810
3. Available budget	2	0.6191	0.3184	0.5830
<i>Combination of group and individual surveys</i>				
Summarized result of the group and individual survey based on Hierarchy model (using Super Decision)				
1. People’s participation	1	0.8290	0.4058	0.7277
2. Initial condition	3	0.4106	0.2010	0.3604
3. Available budget	2	0.6615	0.3238	0.5807

Sources Taken from Azis (2010, 2013)

time depends almost entirely on its ability to raise its output per worker.” Fig. 2.9a shows the productivity growth at the national level, and a set of charts in Fig. 2.9b at the regional level. In both, the productivity growth is decomposed into “within” and “structural” components.³ At the national level, a deceleration of productivity growth is clearly observed. Across regions, the deceleration is also evident, albeit varies. It is obvious that the changes in productivity have occurred predominantly in the “within” category, implying that improvements in one sector tend to confine to that same sector, hardly diffusing to the rest of the region’s economy. The absence of spillover has not only dragged down the region’s productivity growth but also widened the gap between sectors. The trend of productivity growth since 1990 varied between regions—some show an acceleration, others display a deceleration. But since 2011, the trend became more obvious, i.e., virtually all regions suffered from a declining

³ The “within” part captures the productivity improvement at individual unit (firm or sector), whereas the “structural” component captures the productivity change as a result of sectoral shifts in conjunction with the structural change in the national economy, keeping productivity growth unchanged. The two components do not always move in the same direction, especially when a sector’s productivity improvement does not spillover to other sectors (Azis, 2018; McMillan, Rodrik and Verduzco-Gallo, 2014).

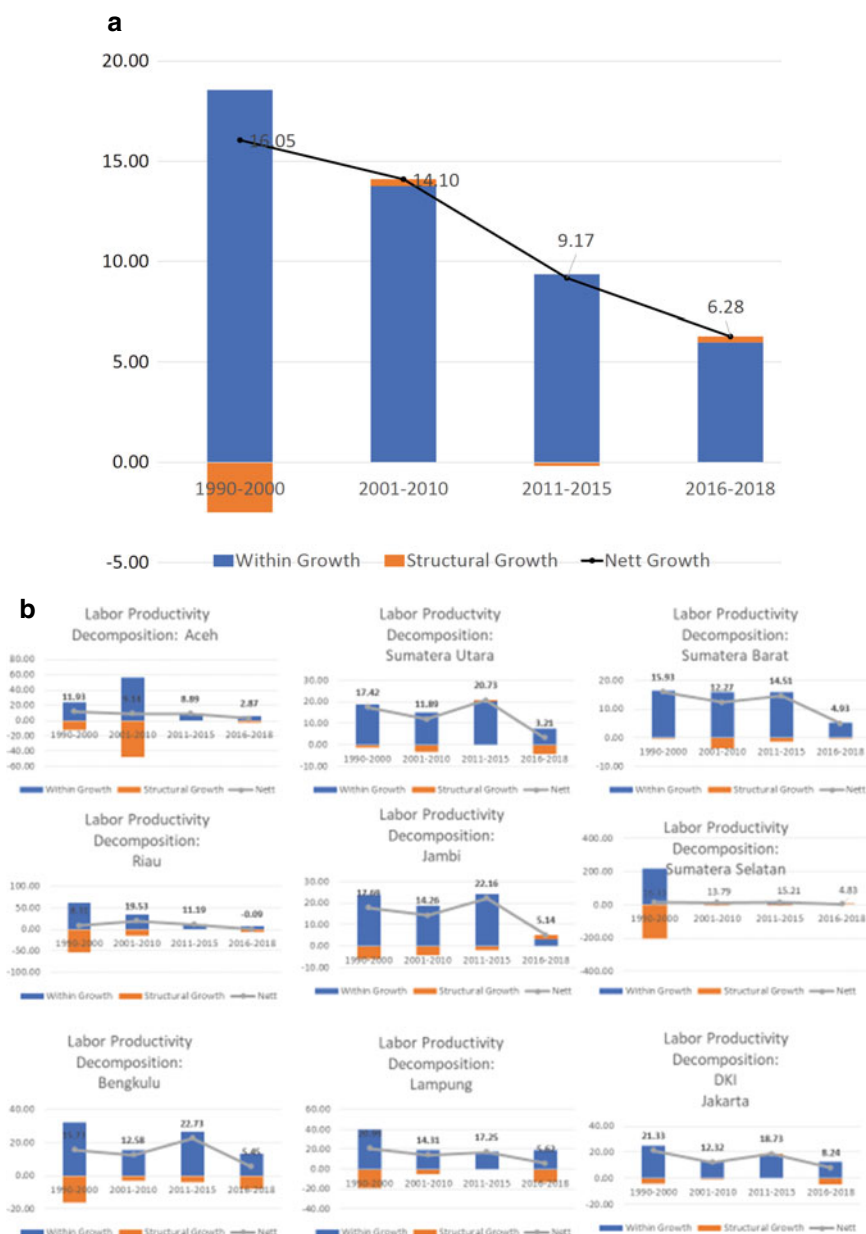


Fig. 2.9 **a** Decomposition of Labor productivity growth: “within” and “structural” components. *Source* Calculated from APO and Conference Board, **b** Decomposition of labor productivity growth by regions. *Source* Calculated from APO, CBS, and various sources



Fig. 2.9 (continued)

productivity growth. Looking at the data more closely, the sharp fall of productivity occurred mostly in provinces of Eastern Indonesia.

Dualism in terms of interregional inequality and the level of productivity was stark. During the last decade, measured by the relative productivity of the agriculture and the total average, the ratio in provinces with the highest degree of economic dualism reached 3.6 times than the ratio in provinces with lowest degree of dualism. Inequality in productivity level was even starker: the highest productivity in regions like Jakarta and East Kalimantan reached 13 and 11 times more, respectively, than the productivity in East Nusa Tenggara. Since 1990, the divergence between regions also increased, where the standard deviation rose from 17.1 in 1990–2000 to 19.2 and 21.1 in 2000–2010 and 2010–2018, respectively (Fig. 2.10).

What about the trend of MSME productivity? Based on the World Bank Enterprise Survey, the productivity per worker of micro enterprises in Indonesia was only 3 percent of that in large enterprises, and for small and medium firms the percentage was 16% and 31%, respectively. To put into perspective, these levels are equivalent to roughly only one-quarter of the OECD median value. Consequently, based on the direct and indirect exports (MSMEs supplying products to exporters) Indonesian MSMEs are less integrated into global markets compared to their counterparts in some ASEAN countries, particularly Cambodia, Malaysia and Vietnam. Despite the increasing use of internet and e-commerce, and that various measures had been taken to encourage small business internationalization, very few Indonesia's MSME were able to penetrate the export market.⁴ Their already low contribution in total exports excluding oil and gas continued to decline (OECD, 2018). The World Bank Enterprise Survey (WBES) Database indicates that in 2016 the share in total exports for medium-size firms was 11.5%, and for small firms and micro enterprises were only 2.8% and 1.4%, respectively. Having fewer resources to meet the high costs associated with engaging in international markets, facing greater challenges than larger firms in navigating foreign markets, and having less capacity to address complex regulatory requirements, are all binding constraints.

The proliferation of free trade agreements (FTA) in which Indonesia has been actively seeking to be part of, did not seem to contribute significantly to MSME's participation in global and regional trade. Even for those who have been actively exporting, a large portion of them did not utilize FTA facilities. Part of the reasons is a lack of knowledge regarding their use (Anas, Mangunsong, & Panjaitan, 2017). More generally, the complexity of rules and agreements, and the low margin-of-preference are among the top reasons why the utilization of FTA facilities has been low (Azis, 2019). Trade has grown due to the unilateral trade liberalization, not because of the FTA proliferation. Nonetheless, MSMEs tend to be underrepresented in international trade.

⁴ Efforts to encourage business internationalization include export financing services (i.e. credit, guarantees and insurance), non-financial services, such as market information, product development, export information and export training, and innovative program managed by The Ministry of State-Owned Enterprises (SOEs) and Business Aggregator Program in which SOEs act as trading houses for small enterprises which plan to export but find it difficult to deal with export regulations and documentation (OECD, 2018).

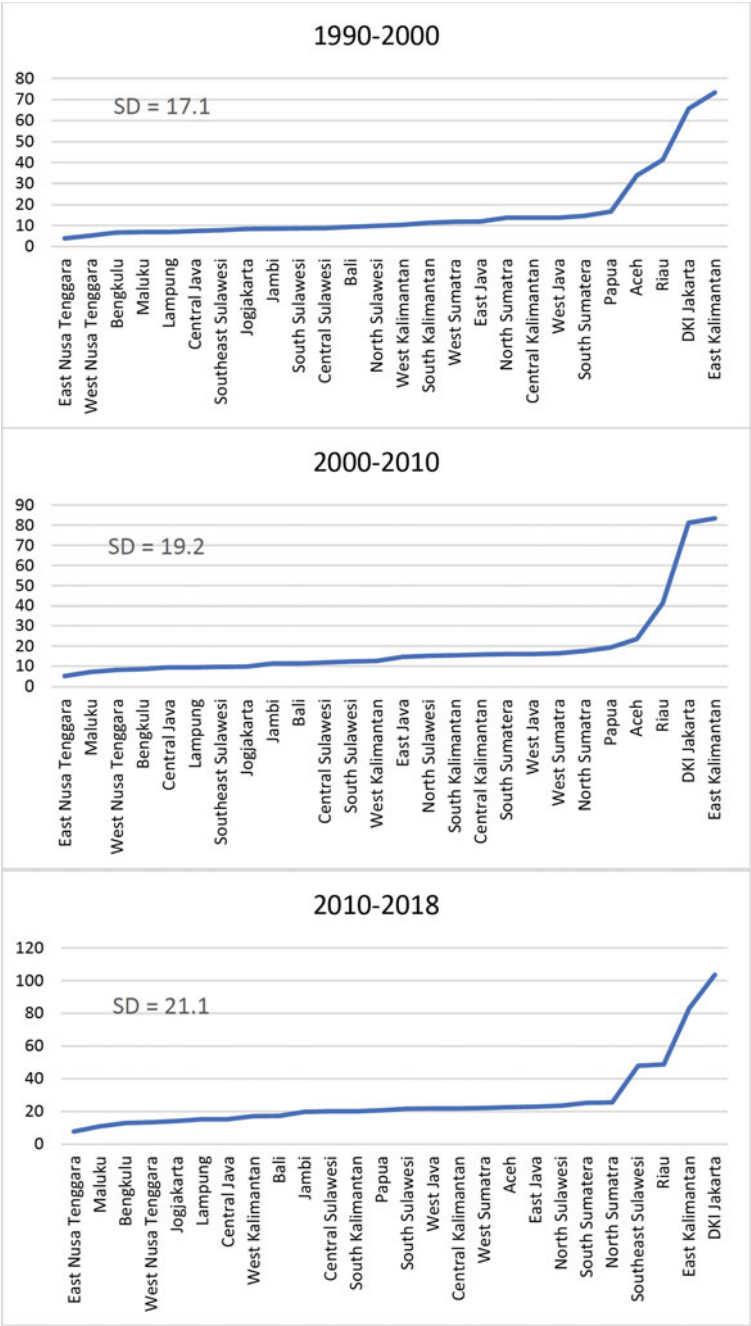


Fig. 2.10 Interregional inequality in productivity. *Source* Calculated from APO, CBS, and various sources

There are multiple reasons behind the dismal productivity performance of MSMEs. They range from a lack of innovation, limited quality of entrepreneurship, asymmetric information, and problems in financing, including access to trade financing, opening LC, and securing scheduled payment from importers. In terms of innovation, the dualism is reflected in the R&D spending. While in average only 2% of all firms in Indonesia invest in R&D, the share in large companies is about 10%, implying a very tiny portion of MSME's investment in R&D. Not surprisingly, having a lack of innovation, the number of small and medium enterprises that managed to introduce a new product and/or service during the last three years prior to the survey was only 5% and 9.7%, respectively.

Across regions, the inability of MSME to enhance productivity was also due in part to the limited programs designed to boost productivity growth at the firm level. Differences in regulations and licensing between regions, as shown by large variations in the ease of doing business, also contribute to the diverse performance of MSME productivity across regions. So do variations in local government capacity, which plays a significant role in a paternalistic society like in Indonesia. Note that the decentralization-related Law 23/2014 on the role of local governments assigns the responsibility to different tiers of government: national governments are assigned to support co-operatives and medium-sized enterprises, provincial governments to support small enterprises; and cities and regencies are mandated to support micro-enterprises. While useful on paper, such a distinction exacerbates the already widened interregional disparity, and its implementation tends to confuse regulators and MSME operators. For variety of reasons, bureaucracy at the local level and the attitudes of some local officials are not sufficiently conducive for productivity improvements. Often, they behave as if they deserve respect from local residents, and MSME operators ought to obey and listen to them rather than the other way round. Their conduct tends to serve their own interest rather than the interest of the residents they are supposed to serve. Expressed by MSMEs participating in our survey, the role of local government in assisting MSME has been thus far weak. Some also complained about the practice of nepotism among local officials. Many MSMEs operating in the agricultural sector indicated that the impact of government-initiated social programs were either very little or none at all.

On the financing front, interregional variations are no less obvious. Unlike in Jawa, many MSME in remote regions of Eastern Indonesia received loans from cooperatives. In regions like Papua, many MSME receive loans from banks. Across all regions, however, middlemen remain the most active lenders, and in recent years the so-called fintech lenders have also been proliferating. According to some MSMEs with whom we had discussion, both of these financing sources imposed too-high interest rates. Another challenge is getting the payment promptly from foreign buyers. Some MSMEs in outside Jawa reported that after putting much efforts and energy to penetrate the foreign market, they were finally able to find foreign buyers. But they complained that after delivering the products they could not get the full payment promptly despite the agreed transactions. Payments were made only after a long delay, putting pressures on the business cash flow. At the end, they had no choice but abandoning the contract all together, at the cost of no more exports and sales.

Having limited network and connection, those exporting MSMEs need help from the government. Assisting them should be neither difficult nor costly, yet absolutely necessary given the weak domestic demand especially during the pandemic, and the government's repeated assertion to encourage MSMEs to reach beyond the domestic market.

Looking at the experience of other countries, aside from the continuous efforts to improve the various schemes of credits for small business and rural activities, new initiatives of financing should be continually explored.⁵ For example, a cash-flow based (instead of collateral-based) system of lending has been adopted in some countries. In others, third-party insurers are actively involved to lower lenders (banks)' disincentive-to-lend by guaranteeing a sufficient portion of loan repayment. For MSMEs that are able to find and secure foreign buyers, some sort of guarantee per purchase-order (PO) can be explored, for example by allocating a guarantee based on the MSME's business track record. Still another potential scheme that takes advantage of the mobile system is the so-called pay-as-you-go (PAYGO) which requires a nominal down payment to take possession of an asset electronically, followed by frequent small payments made via a mobile payment system. For the lenders, such a system is relatively cheap and easy to disable the flow of services, insuring them against default, and for the borrowers (MSMEs) who are unable to make a payment, they do not lose the asset, rather they are simply unable to consume the flow of services from the asset until they start paying again. They may lose something of value but that provides incentive to repay, or they can decline the loan offer all together. Many other options could be explored, and ideally they should involve the MSMEs as potential borrowers right from the planning, the policy design, all the way to the implementation stage.

Policy Measures

Given the trends discussed above, one may wonder if the numerous policies taken over the years had any meaningful effects on the SME performance. Early in the development plan of the New Order government, efforts were made to provide financial and technical assistance to help improve the operations of SMEs; some implemented through cooperative units, others through regular business operations. Attempts were also made to promote the SMEs through regulation and coercion, including to enforce subcontracting schemes (mainly in the automotive and electronic industries), and to

⁵ Numerous documents and studies have analyzed the progress and lack of progress of microcredits in Indonesia, the defining moments for which were the 1983 financial deregulation and the 1988 banking reform known as PAKTO. Equally numerous are studies on the role of the lending institutions such as *Bank Rakyat Indonesia* (BRI) and *Bank Perkreditan Rakyat* (BPR) in financing MSMEs since PAKTO until now. Given the results thus far, however, a conventional way of microcredits and lending through those institutions may need to be complemented with alternative schemes by taking advantage of the new development in technology and various initiatives implemented in different countries.

use a foster father or ‘*Bapak Angkat*’ system where state enterprises or large firms were required to sponsor the local SMEs. In addition, the government also imposed preferential procurement programs and issued regulations allowing only firms of a certain size that can produce certain goods. Table 2.2 tabulates the key policies, programs and organizations relevant to the promotion of SMEs in Indonesia during the three decades since the first five-year plan (REPELITA) began in 1969.

Although a comprehensive analysis to evaluate their effectiveness has never been made, several studies deduced that most of these supply-side programs were not effective, having low participation rate, and often beset by problems of corruption (Berry, Rodriguez, & Sandee, 2001; Musa & Priatna, 1998; Hill, 2001; Sandee et al., 1994; Tambunan, 2007). Part of the reasons is because most of them were not designed with a clear and unambiguous framework. Where SMEs succeeded to make improvements, they did so in spite of, not because of, government programs. The growth of MSME over the years have been found to be influenced by factors other than government assistance, and the probability of receiving assistance is positively related to the firm size (Berry et al., 2001).

Since the early 2000s, the government continued to use various measures to promote micro enterprises and SMEs, hereafter MSMEs. The list of detailed measures is too long to show here, but they cover the financial, technical, and regulatory assistance. For example, in the financing front the measures taken include subsidized small credits such as those allocated through the *Koperasi Unit Desa* (KUD) for small farmers and village cooperatives; *Kredit Investasi Kecil* (KIK), *Kredit Modal Kerja Permanen* (KMKP), *Kredit Usaha Kecil* (KUK) for general purposes, *Kredit Umum Pedesaan* (KUPEDES) for village units, *Badan Kredit Desa* (BKD) for small rural development banks, and *Kredit Umum Rakyat* (KUR) for MSME (launched in 2007). For technical assistance, a wide range of measures have also been taken, from training and improving product design, marketing, promotion, accounting and book-keeping, and using digital technology such as e-commerce, fintech, and other internet-based activities. In the regulatory front, the government continues to require banks to allocate 20% of credits to MSME, assigns lower tax rates or grants tax exemptions for some MSMEs, streamlines the procedure to obtain license and other documents/permits, creates linkages between MSMEs and large enterprises and other related activities (subcontracting), as well as linkages among the MSMEs themselves, etc. Policy makers have also made frequent and numerous statements supporting the MSME operations especially during the pandemic.

Some of the measures taken before 2020 continued and some were expanded during the pandemic, such as providing unconditional cash transfer program or *bantuan langsung tunai* (BLT) for ultra-micro and micro enterprises through banking and finance company, restructuring credit and interest subsidy for micro enterprises, restructuring coop credit through revolving fund agency known as the *Lembaga Pengelola Dana Bergulir Koperasi dan Usaha Mikro, Kecil, dan Menengah* (LPDB-KUMKM), subsidizing credit interest to cooperatives, and providing liquidity assistance to cooperatives with low interest rates and easy mechanisms. Attempts have also been made to entice MSMEs to take training programs by providing stimulant fund to the participants through a Pre-Employment Card Program (*program kartu pra-pekerja*).

Table 2.2 Policies, programs and organizations for the development of SMEs in Indonesia

<i>1. Technology</i>	1969	MIDC (Metal Industry Development Center or Institute for R&D of Metal and Machinery Industries) was established
	1974	BIPIK (Small Industries Development) Program was formulated as a technical support program for small industry
	1979	Under BIPIK program, LIK and PIK (Small Industrial Estates) were constructed and technical assistance was extended to small industry in or near LIK/PIK mainly through UPT (Technical Service Units) staffed by TPL (Extension Field Officers)
	1994	BIPIK program was finished and PIKM (Small-scale Enterprises Development Project) was launched
<i>2. Marketing</i>	1979	Reservation Scheme was introduced as protection measures of markets for small industry
	1999	Anti Monopoly Law was enacted
<i>3. Financing</i>	1971	PT. ASKRINDO was established as a state-owned credit insurance company
	1973	KIK (Credit for Small Investment) and KMKP (Credit for Working Capital) were introduced as government subsidized credit programs for small-scale industry
	1973	PT. BAHANA was founded as a state-owned venture capital company
	1974	KK (Small Credit) administered by BRI (Indonesian People's Bank) was launched and later (1984) changed to KUPEDES scheme (General Rural Savings Program) aimed at promoting small business
	1989	SME Loans from state-owned enterprises (1 to 5% benefits) were introduced
	1990	Government subsidized credit programs for small industry (KIK and KMKP) were abolished and unsubsidized KUK (Credit for Small Businesses) scheme was introduced
	1999	The function of directed credit programs was transferred from Bank Indonesia (the central bank) to PT. PNM (State-owned Corporation for SMEs) and Bank Export Indonesia
	2000	Government credit programs for SMEs including KUK are abolished
<i>4. General</i>	1973	Ministry of Light Industry and Ministry of Heavy Industry merged into Ministry of Industry
	1976	Deletion (Localization) Programs for the commercial vehicles were introduced (motorcycle in 1977 and some other products such as diesel engine and tractors later on)
	1978	Directorate General for Small-scale Industry was established (in Ministry of Industry)
	1984	Foster Father (Bapak Angkat) Program was introduced to support small industry
	1991	Foster Father-Business Partner Linkage was extended to a national movement

(continued)

Table 2.2 (continued)

1991	SENTRAs (Groups of small-scale industry) in industrial clusters were organized as KOPINKRA (Small-scale Handicraft Cooperatives)
1993	Deletion Programs for the commercial vehicles were finished and Incentive Systems were adopted
1993	Ministry of Cooperatives started handling small business development
1995	Basic Law for Promoting Small-scale Enterprises was enacted
1997	Foster Father (Bapak Angkat) Program was changed into Partnership Program
1998	Ministry of Cooperatives and Small Business added medium business development
1998	SME promotion was emphasized in People's Economy as a national slogan
1999	New Automobile Policy was announced and Incentive Systems were finished

Source Hayashi (2000)

Some demand-side measures have been also taken to maintain and enhance the purchasing power of consumers to buy MSME/cooperative products, for example by allocating funds for a discount to purchase MSME goods (offline and online), distributing discount voucher, utilizing stall/shop (*warung*) data connected to e-commerce, establishing partnerships with nine state-owned enterprises (e.g., in food cluster), and utilizing young influencers to encourage people to shop MSME products around their neighborhood. Measures are also taken to boost SME exports through virtual business match-making events.

While remains to be seen whether these programs are effective to help improve the MSME performance, a clear and important lesson from the past is that, addressing MSME problems caused by genuine market failures should not be mixed-up with other objectives. Even if the latter are important, they should be addressed by different policies designed specifically to meet them, not by policies for MSME. For example, programs to help MSME are often confused with targeting employment creation because MSMEs are seen to be more labor intensive than large firms. Yet, evidence suggests that enterprise scale is not a reliable guide to labor intensity: many MSMEs are in fact more capital-intensive than larger firms in the same industry. Policies to boost employment should instead focus on altering the pattern of demands in favor of labor-intensive industries rather than on supply-side efforts to change the size distribution of firms. Another important lesson is that, if the goals are not specific enough or too ambiguous, there is a risk that facilities provided by the policies will not be well received or even avoided all together by the MSMEs. It is hence imperative to understand the internal problems faced by MSMEs and why such a case occur.

The remaining chapters of the book discuss the above issues by way of establishing a framework of analysis capturing the interplay of policies and institutions to explain the phenomena of interregional inequality and challenges faced by MSMEs

to improve their performance. The latter is validated by a micro and small enterprise (MSE) survey conducted in different regions and sectors throughout Indonesia.

References

- Alesina, A., Devleeschauwer, A., Easterly, W., Kurlat, S., & Wacziarg, R. (2002). Fractionalization. Discussion Paper, Harvard Institute of Economic Research, No 1959.
- Anas, T., Mangunsong, C., & Panjaitan, N. A. (2017). Indonesian SME participation in ASEAN economic integration. *Journal of Southeast Asian Economies*, 34(1), 77–117.
- Azis, I. J. (2010). Endogenous institution in decentralization. In *Peace economics, peace science and public policy*, De Gruyter, 16(2), Article 12.
- Azis, I. J. (2013). Complex interplay of factors in the institutional model of decentralization: Theory and application. *Regional Statistics*, 3, 3-2.
- Azis, I. J. (2018). ASEAN economic integration: Quo Vadis. *Journal of Southeast Asian Economies*, 35(1).
- Azis, I. J. (2019). RCI in Asia—Quo Vadis? In *Regional Cooperation and economic integration in Asia*. The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany.
- Azis, I. J., & Shin, H. S. (2015). *Managing elevated risk: Global liquidity, capital flows, and macroprudential policy—An Asian perspective*. Springer
- Berry, A., Rodriguez, E., & Sandee, H. (2001). Small and medium enterprise dynamics in Indonesia. *Bulletin of Indonesian Economic Studies*, 37(3), 363–384.
- Boeke, J. H. (1953). *Economics and economic policy of dual societies*. Tjeenk Willink & Zoon, Haarlem.
- Boeke, J. H. (Ed.). (1961). *Indonesian Economics. The concept of dualism in theory and policy*. W. van Hoeve Publishers Ltd.
- Buhaerah, P. (2017). Influence of financialization of income inequality in ASEAN: Data panel analysis. *Buletin Ekonomi Moneter Dan Perbankan*, 19(3), 335–352.
- Chongvilaivan, A., & Kim, J. (2016). Individual income inequality and its drivers in Indonesia: A theil decomposition reassessment. *Social Indicators Research*, 126(1), 79–98. <https://doi.org/proxy.library.cornell.edu/10.1007/s11205-015-0890-0>.
- Clement, C. (2015). The formal-informal economy dualism in a retrospective of economic thought since the 1940s. Schriftenreihe des Promotionsschwerpunkts Globalisierung und Beschäftigung, Working Paper No. 43.
- Credit Suisse. (2019). *Global Wealth Databook 2019*. October.
- Dixit, A. (1970). Growth patterns in a dual economy. *Oxford Economic Papers*, 22, 229–234.
- Eckaus, R. S. (1965). Development of the labor surplus economy-theory and policy: Book review. *American Economic Review*, 55(1–2).
- Fei, J. C. H., & Ranis, G. (1964). *Development of the labor surplus economy: Theory and policy*. Homewood, IL: Richard A. Irwin, Inc.
- Geertz, C. (1963). Old societies and new states: The quest for modernity in Asia and Africa. In *Committee for the Comparative Study of New Nations*. University of Chicago Press.
- Geertz, H. (1963). Indonesian cultures and communities. In R. T. McVey (Ed.), *Indonesia*. Hraf Press, Southeast Asia Studies, Yale University.
- Hanandita, W., & Tampubolon, G. (2016). Multidimensional poverty in Indonesia: Trend over the last decade (2003–2013). *Social Indicators Research*, 128, 559–587.
- Hayashi, M. (2000). *Support mechanisms for the development of SMEs in Indonesia, with special reference to inter-firm linkages*. Australian National University, Canberra.
- Higgins, B. (1966). Review of development of the labor surplus economy: Theory and policy, by G. Ranis & John C. H. Fei. *Economic Development and Cultural Change*, 14(2), 237–243.
- Hill, H. (2001). Small and medium enterprises in Indonesia: Old policy challenges for a new administration. *Asian Survey*, 41(2), 248–270.

- Hill, H. (2021). What's happened to poverty and inequality in Indonesia over half a century? *Asian Development Review*, 38(1), 68–97.
- Hirschman, A. (1957). Investment policies and dualism in underdeveloped countries. *American Economic Review*, 47(5), 550–570.
- Itakagi, Y. (1960). Some notes on the controversy concerning Boeke's "Dualistic Theory": Implications for the theory of economic development in underdeveloped countries. *Hitotsubashi Journal of Economics*, 1(1), 13–28.
- Kaldor, N. (1956). Alternative theories of distribution. *Review of Economic Studies*, 23, 83–100. <http://dx.doi.org/10.2307/2296292>.
- Krugman, P. (1994). *The age of diminished expectations: U.S. Economic Policy in the 1990s*. MIT Press.
- Lewis, A. (1955). *The theory of economic growth*. Richard D. Irwin.
- Musa, A., & Priatna. (1998). The Policy Reform for capital of SME (Small–Medium Enterprises) in Indonesia: Impact analysis of financial crisis: Study report. Report for the Asia Foundation, Jakarta.
- Myint, H. (1964). *The economics of the developing countries*. Hutchinson & Co.
- Myrdal, G. (1957). *Economic theory and under-developed regions*. Gerald Duckworth & Co.
- Nissanke, M., & Thorbecke, E. (2007). Channels and policy debate in the globalization-inequality-poverty nexus. In M. Nissanke & E. Thorbecke (Eds.), *The impact of globalization on the world's poor: Transmission mechanisms*. Palgrave MacMillan.
- OECD. (2018). *SME and entrepreneurship policy in Indonesia 2018. OECD Studies on SMEs and Entrepreneurship*. OECD Publishing, Paris.
- Piketty, T. (2017). *Capital in the twenty-first century*. Harvard University Press.
- Sadli, M. (1957). Some reflections on Prof. Boeke's theory of dualistic economics. *Ekonomi dan Keuangan Indonesia*, 363–384.
- Sandee, H., Rietveld, P., Supratikno, H., & Yuwono, P. (1994). Promoting small-scale and cottage industries in Indonesia: An impact analysis for Central Java. *Bulletin of Indonesian Economic Studies*, 30(3), 115–142.
- Sumarto, S., Vothknecht, M., & Wijaya, L. (2014). Explaining regional heterogeneity of poverty: Evidence from a decentralized Indonesia. In H. Hill (Ed.), *Regional dynamics in a decentralized Indonesia* (pp. 285–314). ISEAS Publishing.
- Suryahadi, A., Rishanty, A., & Sparrow, R. (2020). Social capital and economic development in a large multi-ethnic developing country: Evidence from Indonesia. WP/04/2020.
- Tambunan, T. (2007). The role of government in technology transfer to SME clusters in Indonesia micro-level evidence from the metalworking industry cluster in Tegal, Central Java. *South East Asia Research*, 15(3), 385–406.
- United Nations. (2020). *World Social Report 2020: Inequality in a rapidly changing world*. Department of Economic and Social Affairs of the United Nations Secretariat.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.



Chapter 3

Agglomeration, Institution, and Social Capital: Main Concepts and Methodologies



Abstract The concepts and methodologies used to develop the survey questionnaires are discussed here. The dualism and inequality are not merely the results of policies but also the consequence of agglomeration forces and the interplay of policies and prevailing institution. On the other hand, potential benefits of the same forces could provide incentives for MSMEs to operate in clusters for collective action, the effectiveness of which depends crucially on the interplay of policies and social capital.

Keywords Interregional multipliers • Local capture • Cooperation • Cluster • Collective action



Conversation

A: *“Dualism decreases when ABLEST firms and regions generate technological spillovers.”*

B: *“Without incentives and resource mobility, no such spillovers will occur. As a result, the STABLE outcome would be a catastrophic agglomeration.”*

A: *“To avoid that, and to improve the overall welfare, direct and open elections of local LEADERS during decentralization will help because local people know best about local conditions.”*

B: *“But with widespread local capture and money politics, numerous REDEALS made by elected officials tend to worsen the overall welfare.”*

A: *“In that case, we need to redouble the existing programs and policies RELATED to small businesses and periphery regions.”*

B: *“The approach of relying on policies alone needs to be ALTERED. We need to use a set of design principles in formulating programs that capture the interplay of policy, institution, and social capital.”*

Duality from Different Lenses

An upshot of the analysis throughout the book is that, dualism and inequality in a large and diverse country like Indonesia are not merely the results of policies but also the consequence of agglomeration forces and the interplay between policies and the prevailing institution, in which social capital is an important part of. The concepts and methodologies based on relevant theories presented in this chapter provide a back up to such a conjecture. After discussing the process of agglomeration and external economies, the role of institution in shaping the duality in regional performance is explicated by using the institutional model of decentralization (IMD). The last part of the chapter presents a framework and the mechanisms how policies, institution and social capital work to affect the MSME performance. Before taking up those tasks, let us first interpret the observed inequality discussed in the preceding chapter from various lenses.

From the Game Theory perspective, inequality is an equilibrium solution similar to that in a ‘prisoners dilemma’ case, which is the most well-known social dilemma in which rational individuals in pursuit of their optimal outcome may end up not cooperating, resulting in a negative outcome, i.e., greater dualism. Think of MSMEs that need external assistance but for some reasons are neither willing nor able to utilize it even after considering the short and long term impact of it.¹ As demonstrated in Beckenkamp (2006), prisoner’s dilemma can become social dilemma even without

¹ Social dilemma refers to a setting in which individuals choose actions in an interdependent situation. When at least one outcome yields higher returns for all participants but participants making independent choices are not predicted to achieve such an outcome, individuals will take actions that generate lower joint outcomes than could have been achieved although these actions maximize

a conflict between short-and long-term decisions. In Game Theory, social dilemmas are multi-persons decision-making problems in which individual interests are at odds with collective interests (Colman, 1995; Poppitz, 2011). In some cases, however, when individuals are given the capacity to recognize trustworthiness in others and able to withdraw from the program, the possibility of cooperation increases over time and it can reach relatively high levels when the number of participants also increases (Janssen, 2008).

From the Mechanism Design theory (Hurwicz, 1973), inequality is an outcome based on equilibrium decision that is best according to the information/messages that social planners use. In this case, the mechanism specifies the set of those messages. Once such a mechanism is in place, social planners “play a game” where they send the messages (e.g., providing low interest credit, lowering tax, introducing digital technology to MSMEs) as a function of their information. Hence, unlike the conventional assumption that policy makers “know everything,” here conditional to a set of received messages (the ‘mechanism’) any transmitted information and decision that leads to dualism is optimal. The main task is to find that mechanism. In the context of dualism, that task translates into modeling social institutions that will produce an equilibrium decision compatible with the individual’s or society’s incentives that maximize social welfare.

Viewed from the perspective of Institutional Economics (North, 1990), observed inequality can be the results of interactions between the ‘right’ kind of policies and the ‘wrong’ kind of formal and informal institutions. While according to the standard economic theory a particular policy will produce an equilibrium outcome with minimum dualism, the implicit assumptions about enabling institutional arrangements may not hold. This is likely to occur when the assumed institutional arrangements are not compatible with the prevailing formal institution (e.g., rules, regulations) and informal institution (traditions, habits, enforcement). In the case of dualism, the prevailing institution may work to meet certain goals (say, higher growth and macro stability) but fail to avert a growing inequality or to make any compensating policies work effectively. While most literature on institution use property right as an example, as it can improve business environment, in cases when power asymmetry is strong to protect such a property right can worsen dualism (work only for the rich and the powerful).

Dualism and inequality can also be viewed from the perspectives of sociology, particularly in relation to the role of social capital in conferring information, influence, control, and sense of solidarity. Different people define social capital differently. Generally speaking, social capital is referred to as features of social organization, such as trust, networks, and norms, that facilitate coordination and cooperation for mutual benefit (Six et al., 2015). While the relation between social capital and inequality is complex, a major and most relevant dimension of inequality concerns the *access* to social capital, e.g., direct and indirect access to resources and network. Social capital can add long-term value by providing opportunities or network to increase

short-term material benefits to self (similar to a game where the Nash equilibrium for a single iteration of the game yields less than the socially optimal outcome).

individuals' human capital (health, education, prestige), improve the ability of less-developed regions to innovate and attract businesses, or increase MSMEs' capacity to enhance productivity and competitiveness. In many less-developed regions with limited resources and human capital, a lack of access to networks and linkages as part of social capital worsens the dualism. Insofar the survey in our study puts the emphasis on the role of social capital and its interaction with policy, the concept and components of social capital are discussed in greater details in the next chapter.

It is from the lens of regional economics that dualism and inequality are explained through the forces of agglomeration, a subject we discuss next.

Agglomeration and External Economies

As part of external economies of scale, agglomeration economies are closely associated with market structure. In addressing external economies to formulate heterodox challenges to standard economic doctrine, economists often use a multiple equilibria concept (Krugman, 1987; Murphy, Shleifer, & Vishny, 1989; Romer, 1986). One of the contentious questions is, which equilibrium actually gets established? Unlike Marshall (1920) who contended that the outcome depends on the initial conditions (thus history), as well as tastes, technology, and factor endowments, Krugman (1991b) argued that expectations also matter, and both are in turn determined by the underlying structure of the economy. A long-established theory suggests that monopolistic competition in, say, intermediate goods, may lead to de facto external economies in the production of final goods (Graham, 1927). In a smaller configuration area (e.g., province versus nation, district vs province, etc.) with a smaller number of producers, market structure tends to be of the imperfect competition type along with increasing-returns-to-scale. Such a structure generates agglomeration forces that shape a country's spatial configuration. More specifically, they induce a concentration of activities in certain locations (Azis, 2020a; Fujita & Thisse, 2002; Krugman, 1991a). A similar line of argument is applicable when one tries to explain the emergence of cities and urban centers.

In a dynamic context, the presence of technology spillovers and innovation in developed regions (DR) could reinforce the agglomeration forces. The endogenous growth theory popularized by Romer (1986, 1990, 1994) emphasizes the role of monopolistic competition, externalities, and increasing returns to scale to explain why research & development (R&D) activities and innovation tend to persist in DR. Under imperfect competition, the incentive to spend on R&D in DR does not fall, while new technologies brought by new entrants and the presence of knowledge spillovers reduce the R&D costs. As a result, new ideas generate economic rents that attract capital accumulation, and this causes market to expand with higher profit, attracting more labor pools to cause market to expand further (cumulative causation). As more activities tend to locate in DR, a scenario of extreme inequality arises.

Take the case of infrastructure development. Increased capital accumulation due to lower transport costs and trade costs can be further boosted by the technology

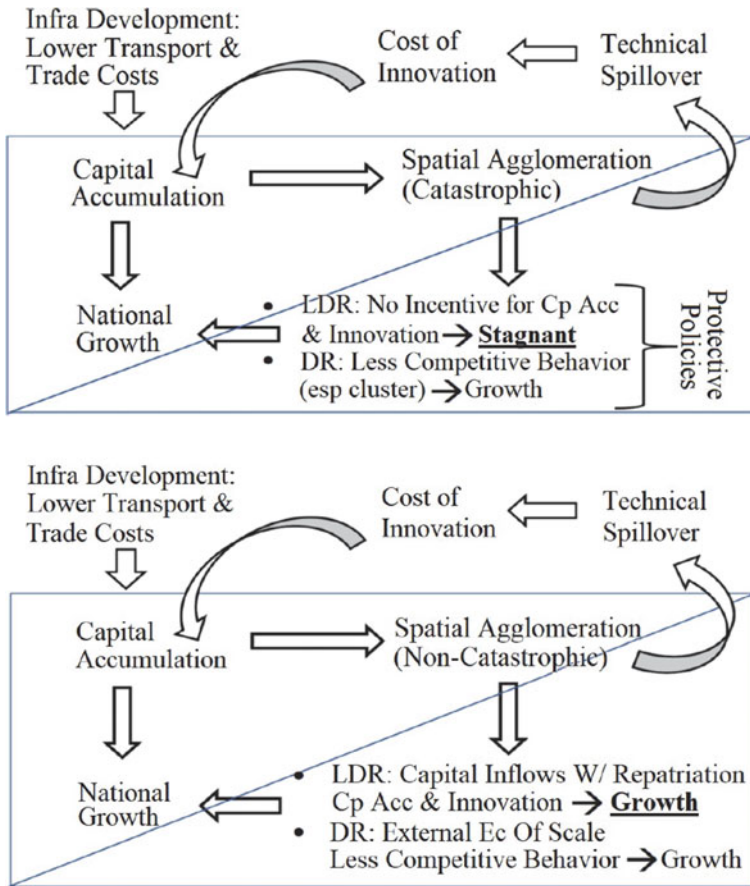


Fig. 3.1 Catastrophic and Non-Catastrophic Agglomeration. Source Azis (2020a)

spillover in DR that will reduce innovation costs. Such a spillover is reinforced by the agglomeration forces where activities continue to gain some external economies. As the process continues and becomes cumulative, DR capacity to boost national growth is strengthened. On the other hand, LDR remains stagnant if the interregional multipliers from DR to LR are not strong enough to counter the attractiveness of DR to pull more activities in. Hence, growth in DR accelerates while LDR economy remains stagnant. If capital and labor move from LR to DR, or resources in LR are exploited for activities in DR to process for export market, inequality between DR and LDR becomes worse. The mechanism of this ‘catastrophic agglomeration’ scenario is shown in the upper part of Fig. 3.1. To mitigate the effects, some protective policies are called for.²

² The terms ‘catastrophic agglomeration’ was first used by Baldwin et.al (2004), the property of which is called the ‘super-critical bifurcation.’

An alternative mechanism is associated with the postulate of spatial equilibrium theory. As the costs of staying in DR escalate and reach an exorbitant level (e.g., costs of living, density, pollution, and congestion), resources and activities begin to move away from DR. The incentives to move are higher for footloose activities and those relying less on physical contact. As the process continues, a new spatial equilibrium is reached where the gap between DR and LDR becomes narrower.

Note, however, that this postulate is sensitive to the price flexibility of factors and their mobility. In most developing countries, price rigidity and mobility frictions prevent utility in DR and LDR from being equalized.³ More importantly, even if some factors are mobile, the likely scenario implies an asymmetry, i.e., labor and capital may flow from LDR to DR but not the other way round. If, on the other hand, factors and resources move from DR to LDR (enabled by improved infrastructure), some degree of capital accumulation may occur in LDR. Together with the continued growth in DR due to sustained monopolistic competition and innovation, this will boost the national growth in a more inclusive way ('non-catastrophic agglomeration'). The mechanism of this scenario is captured in the lower part of Fig. 3.1.

At any rate, acknowledging agglomeration forces and incorporating them in the policy design can help us understand better why infrastructure development *per se* could paradoxically exacerbate the unequal development between regions. A similar framework is used in the context of inter-country in the New Economic Geography and the New Trade Theory to explain the emergence of intraindustry trade, in which trade of similar products occur between similar countries irrespective of factor proportions or initial endowments. Unless factors are symmetrically mobile, and protective policies are properly designed, the analysis of the theory implies that the effect of infrastructure development could be the opposite of what was originally intended (see again the discussions on interregional multipliers in the preceding chapter).

Granted that external economies are associated with monopolistic competition, there are three sources of external economies of scale (Marshall, 1920): input sharing, labor market pooling, and knowledge spillovers. The interplay of these three allows for intra-industry linkages to serve as key components of locational benefits. The knowledge spillover, often labeled the Marshall–Arrow–Romer (MAR) spillover or externality, is driven by the proximity of firms within a common industry. It is considered among the most powerful sources of growth and productivity improvements. Also emphasizing the role of intra-industry linkages, Porter (1990) highlighted the advantage of intensified local competition. According to his concept of competitive advantage, failure to improve productivity growth as evidenced in Indonesia can be viewed from a broader and more dynamic perspective, in which location or spatial dimension matters a lot. Spatial concentration improves the competitive advantage through its influence on firm's innovation-related productivity as the

³ Using data from 20 African countries, Gollin, Kirchberger, and Lagakos (2017) found that most metrics in all countries are not related to population density, and that rural-to-urban mobility are far more common than the reverse mobility, defying the postulate of spatial equilibrium theory.

concentrated industry acts as catalyst for the exchange of tacit knowledge, experience, and information.

There are two types of agglomeration economies: localization economies and urbanization economies, where both are the results of increased productivity due to factors outside of an individual firm. Localization economies occur when a particular activity in a certain location enjoys productivity gains due to increased size of an industry where that activity belongs to, whereas urbanization economies are associated with a variety of benefits in terms of complementarity due to the diversified economy of urban areas. The latter implies that urban growth leads to productivity improvements (Isard, 1956; Jacobs, 1969). Hence, while localization economies are linked to own industry scale, urbanization economies are linked to urban scale. Both, however, concern with the role of spatial concentration and highlight the importance of knowledge and information spillovers for innovation. But in practice other sources of Marshallian channels of economies may also at work. At any rate, it is the agglomeration economies that acts as a pull factor and it is the reason why activities grow and develop in certain locations (regions) that could widen the gap between regions. In a large and diverse country with a high degree of initial inequality like Indonesia, agglomeration forces tend to work more forcefully.

What is the connection between spatial concentration and firm's competitiveness? The link between the two is at the center of Porter's 'Diamond Theory of National Advantage' (Porter, 1990). Unlike the classical comparative advantage model that focuses on the role of factor inputs, three additional factors determine the comparative economic advantage of a country, region, or firm: first, the strategy, the structure and the rivalry; second, the related supporting industries; and third, the demand conditions. It is the interrelation of all four—the four points of a diamond shape—that will eventually determine the competitiveness of a location. Therefore, locational concentration matters for competitiveness. In particular, clustering of firms in a certain geographical location tends to boost firms' competitiveness, the source of which goes beyond what runs inside firms. Evidence indeed suggests that firms in a concentrated location tend to be more competitive than those in scattered locations. Unarguably, Porter's Diamond Theory can be used to guide firms to strategize when operating in different markets. The same arguments can be applied to MSMEs operating in a cluster.

Hence, on one hand regional economics exposes the mechanism and forces of agglomeration by systematically taking 'space' factor explicitly (individual operations take up space, not in a spaceless dimension), and treating location of activities endogenously (transport cost is binding). Without such specifications, it would have been utterly impossible to rationalize the emergence of inequality and other spatial phenomena. Another implication of the arguments is that, as long as trade across space occurs no competitive equilibrium is possible. This conjecture, known as the 'Spatial Impossibility Theorem,' defies one of the main tenets of general equilibrium theory in economics. On the other hand, the concept of competitive advantage emphasizes the role of interrelated influences of—and the interactions among—the four factors beyond cost minimization cited earlier. It is worth to note that some work have been done to look at the evolutionary process of agglomeration which combines

the spatial agglomeration with the industry life cycle concept and show that while at the early stage agglomeration economies generate a better regional or cluster performance with increasing returns, during the later stages they could produce diminishing returns and decreasing performance (see Potter & Watts, 2011).

What is crucial is, both concepts defy the myth that the importance of location in an increasingly globalized world is diminishing because countries, regions or firms can source inputs and technology from anywhere, and that government intervention loses its influence over competition to global forces. On the contrary, post-globalization has shown that location matters even more as activities gain external economies by agglomerating in certain locations. Of course, politics, policies, institution, geography, history, and heterogeneity also explain the extent of a country's dualism.

In the context of business operation, the benefits of agglomerations translate into gains from operating in a cluster, which is a system of interconnected firms whose value as a whole is greater than the sum of its parts. In addition to the earlier stated benefits, for many MSMEs operating within a cluster can also provide opportunities for distinctive competitive positions and diversified products, operational effectiveness, choosing differentiate products, and adopting strategies that are different from those commonly adopted by competitors. Even if the latter are also members of the same cluster, a concentration of visible rivals can motivate individual MSMEs to search for ways of competing indirectly. In a dynamic setting, clusters offer an environment for increasing the productivity and the capacity for innovation, as well as establishing new businesses to expand and support further innovation.

Juxtaposing cluster and regional development-cum-inequality is another approach that has attracted many scholars, particularly in looking at the impact of cluster operations on regional growth and productivity. Most of the early work, however, used the case of developed countries.

A ground-breaking study by Piore and Sabel (1984), for example, used the experience of American small and medium enterprises. Comparing the high volume manufacture of standardized goods using special-purpose machines and the craft production of general-purpose tools capable of small-batch and flexible production, they argued that had the latter been dominant the resulting institutional structure of the US industrial development would be community-based, more local and regional development oriented, and smaller in size. Unlike in a mass-production system, the smaller unit could foster a labor relation based on collaboration and paternalism, where artisan workers are the key operatives. This implies that activities with smaller unit operations contribute positively to regional prosperity.

Many studies searching for explanations of the regional clustering of MSME have been influenced by the above study. Some put it in the context of growing interregional inequality, others analyzed the issue by looking at the role of the institutional arrangements. Another strand of research has been focusing on the impacts of cluster operations on regional growth and productivity, where most confirm favorable impacts and some show that those impacts are independent of other locational qualities (see for example, Ketels & Protsiv, 2021). Since productivity growth at the macroeconomic level occurs only if capabilities at the microeconomic level improve,

the trend of productivity discussed in Chap. 2 could have been also analyzed by examining the way in which productivity increases at a firm and a cluster level.

At any rate, the above discussions substantiate one of the main messages of this book, that dualism and inequality should not be viewed merely as the effect of development policies but are also the outcome of endogenous forces of agglomeration and interactions among four factors identified in the competitive advantage concept. The advantage of operating in a cluster is practically the same with the benefits accrued from agglomeration and concentration. This brings up the intriguing questions: if dualism and inequality are caused by endogenous forces, will any major institutional change such as a big-bang decentralization in early 2000s be effective to reduce it? With respect to the gap between MSMEs and large businesses, what kind of intervention and policy design, if any, can help lower such a gap?

Institutional Change: Decentralization and Transaction Costs

Defined as formal and informal rules and norms that organize social, political and economic relations, institution has a normative content as they carry sanctions for non-compliance. There are formal and informal types of institution. Written laws, policies, and regulations are examples of formal institution. Informal institution includes intangible components such as social customs or traditions, spirit of comradery, sense of community, goodwill, etc. Both types shape the thought, behavior, as well as broader social capital of community. They can either enable or constrain individuals to act and behave, and hence play a critical role in shaping the results of development. Right policies with wrong institution can generate disappointing outcomes. Worse, they can produce the opposite results. It is not seldom to find cases in developing countries where the role of institution in affecting outcomes is more prevalent than that of policies.

The role of institution in regional development is widely acknowledged and has been extensively studied. To understand its theoretical foundation and in addressing the effect of institutional change on dualism and inequality, in this section we use the ‘Institutional Model of Decentralization’ (IMD) designed to delineate the process of interaction between institutional change—in the form of decentralization with direct local election—and economic conditions, and how such an interaction can influence the regional welfare (Azis, 2008). The model enables us to understand why the same institutional change can generate different outcome in different regions.

The model framework laid out in Fig. 3.2 illustrates the process starting from the beginning of decentralization policy denoted by “D.” Evidence shows that direct elections (PILKADA) in Indonesia has been beset by problems of ‘local capture’ denoted by “L.” Defined as a condition whereby elected local officials and elites use public funds, originally intended for either political campaign or provision of goods and services, for the benefit of a few individuals or groups in detriment to the

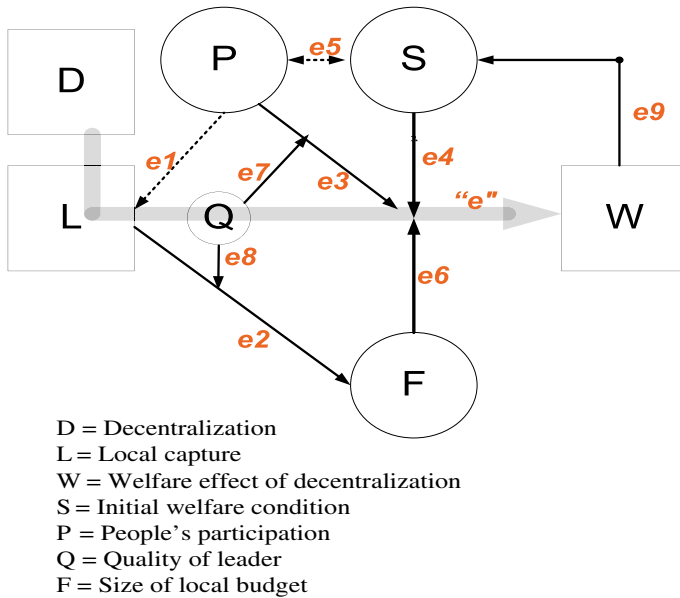


Fig. 3.2 Framework of institutional model of decentralization (IMD). *Notes* Different e in the framework denotes different relations. *Source* Azis (2010, 2013, 2020a, 2020b)

welfare of the larger population. The motivation is obvious: during the campaign, recipients of the fund helped the local officials win the election. Since it causes rent-seeking behavior and misallocation of resources, “L” can make certain segments of population experience reduced access to the process and outcome of development, resulting in increased inequality (Azis, 2020b). Different aspects of local capture in Indonesia and its implications have been discussed by several authors, among others, Dasgupta and Beard (2007), Azis (2013), Lucas (2016); Aspinall and Mas’udi (2017), Muhtadi (2019); and Azis & Pratama (2020). The effect of “L” on local welfare denoted by “W” can be positive (positive local capture) or negative (negative local capture), depending on the interplay between several factors, each of which is described below.⁴

Literature on institutional perspectives stresses the importance of participatory process, and the degree of political participation, which differs between countries and regions, is influenced by the initial welfare condition reflected in, among others,

⁴ The extent and severity of accountability problems and local capture (“L”) depend on the following factors: (1) Pre-existing distribution of power at the local level, e.g., allocation of social and economic power within communities; (2) Lobby and campaign contributions by wealthier or more influential groups; (3) Fairness and regularity of elections; and (4) Transparency in local decision-making processes. Establishing these conditions may require institutional and bureaucratic reform, yet it is precisely this type of reform that is most difficult to conduct. Overcoming institutional factors is always more difficult than choosing which policy to take, as it is complex, involving a strong path-dependence. Absence of this reform, a higher local capture will almost certainly produce lower benefits of decentralization (Azis, 2020b).

the human development index (HDI) and the level of poverty and income inequality. A larger share of poor people implies a smaller fraction of informed voters or lower political awareness, i.e., upward mobility, where those at the upper end tend to raise political awareness more significantly than those at the lower end (concavity hypothesis). The quality of public services and “W” can be constrained by low awareness, lack of critical voices, and absence of check-and-balance. Hence, of several factors determining the effect of “L” on “W,” three stand out: the initial welfare condition (“S”), people’s participation (“P”), and the size of local budget (“F”).⁵ The implied mechanisms could result in either a persistent/wider gap, or a smaller/narrowing gap between rich and poor regions. The interplay of all the above factors will determine the welfare outcome (Azis, 2020b).

As discussed in the preceding chapter, applying the IMD framework in several districts throughout Indonesia confirms the importance of participation (“P”) in determining the way the local capture affects welfare. In some LDR, the initial condition matters more than the availability of local budget, highlighting the persistence of low (high) welfare influenced by poor (good) initial condition. It also confirms the presence of “negative local capture” and “positive local capture” in a path dependence fashion. When the dynamics of influences are taken into account, the importance of available fund in some regions is higher than that of the initial condition. Hence, the IMD helps explain why some LDR or backward regions remain less-developed or backward even after numerous efforts were made to make improvements, while other LDR or backward regions could thrive. The fact that people’s participation “P” and the size of local budget “F” vary across regions suggests that interactions between institutional change (decentralization) and economic factors indeed explain the widening welfare gap (dualism) between regions. The nature and extent of those interactions reflect the prevailing institution.

Insofar the ‘quality’ factor (participation) and the ‘quantity’ factor (local budget) are key to welfare progress, the quality of local leaders (denoted by “Q” in Fig. 3.2) determines the achievement of welfare. Obviously, better local leaders enable greater welfare achievement. Translating this into types of local leaders, Fig. 3.3 displays the typology based on the ‘quantity’ (column) and ‘quality’ (row) components of IMD. In the context of promoting efforts to improve MSME competitiveness, the typology suggests that even if we assume there is no corruption among local leaders and officials, their ability and capacity to motivate people’s participation could determine the welfare outcome. From the discussions with MSMEs in some regions, cases where local authorities (perceived as ‘local leaders’) fail to motivate participation of local residents and MSME are numerous. As shown in Fig. 3.3, in such circumstances even with no corruption the outcome will be of the ‘incomplete progress.’

⁵ The initial level of a region’s overall conditions “S” is supposed to capture both the traditional ‘quantity’ measures (income, education, poverty, employment, etc.), and ‘quality’ or institutional measures (social capital such as trust, collective actions, tradition, habit, enforcement, etc.). The resulting “W” will determine the subsequent level of initial condition “S,” that is, the steady-state level of initial welfare is influenced by any perturbations in the system that lead to changes in “W,” from which “S” in the subsequent period is in turn affected.

	$\frac{\partial F(L)}{\partial L} > 0$ Type-A Leader	$\frac{\partial F(L)}{\partial L} = 0$ Type-B Leader	$\frac{\partial F(L)}{\partial L} < 0$ Type-C Leader
$\frac{\partial H(.)}{\partial L} > 0$ High participation and/or low inequality/poverty	Complete progress	Propitious	Stagnant
$\frac{\partial H(.)}{\partial L} < 0$ Low participation and/or high inequality/poverty	Incomplete progress	Deviating	Deteriorating

Notes: “L” denotes local capture, “F” is local budget, and “H” represents the quality component that includes local capture, initial conditions (“S”), and people’s participation (“P”) Source: Azis (2010), Azis (2013), and Azis (2020a).

Fig. 3.3 Typology of local leaders based on IMD framework. Notes “L” denotes local capture, “F” is local budget, and “H” represents the quality component that includes local capture, initial conditions (“S”), and people’s participation (“P”). Source Azis (2010, 2013, 2020a)

Returning to the distinction between formal and informal institution, we often put more emphasis on formal institution when formulating policies and undermine the enforcement of those policies as part of informal institution. In some cases, when a policy with good intent is not sufficiently enforced, local communities may impose social control through neighborhood trust to ensure that the good intent can be materialized. On the other hand, they may not be able to overcome obstacles sanctioned by a higher authority. Since the quality and capacity differ between communities, the net-result and performance also differ. In poorer regions, the informality of social arrangement may put them in a more difficult position to counter the weak enforcement of a policy. This could prolong, if not worsen, the existing dualism.

In addressing dualism between small and large businesses, high transaction costs are at the center of the institutional problems faced by many MSMEs. Transaction costs could range from expenses incurred in business activities such as advertisement, management, finance, and public relations, to the costs of getting permits which is time-consuming and often involving payment or transfer of bribes and kickbacks.⁶ In some cases, personalized transactions are the rule rather than the exception. All these costs tend to be more burdensome for small businesses that have small and unsecured assets and lack of formal documents, making them to remain informal and small as they cannot afford to pay those costs. The persistence of informality

⁶ The well-known Coase theorem suggests that only at zero transaction costs an efficient outcome can prevail (Coase, 1960). However, Coase’s solution to lower such costs by establishing clear property rights to facilitate the smooth functioning of markets is less related to the problems commonly faced by MSMEs in most developing countries.

contribute to their productivity and competitiveness, which diminishes the chance for MSMEs to get credits and/or weaken their incentives to expand.

Other than transactions costs, problems associated with institution entail another intangible factor which by no means less important. To the extent institution define the incentive structure of societies, given a certain incentive structure a system will be in equilibrium if the implied regularity of behaviors of individuals or society to follow the rules are best-responses to the beliefs and internalized norms formed by the implied regularity of behaviors (North, 1993,2005). One of the consequences is, policies can fail to achieve their objectives if the institution in which those policies are elements of is not in equilibrium (Grief, 2006). To a large extent, the behaviors of individuals or society reflect their social capital, and institution has a strategic role in influencing and shaping that social capital. It is this social capital that jointly determine the effectiveness of policies to improve MSME performance. The survey reported in the next chapter is based on a framework specifically designed by positioning social capital and its interactions with policies at the center of the analysis. That framework is discussed below.

Social Capital

While methodologies about MSME development and promotion have not been well developed, and received a lack of consensus, there is a widespread agreement that ‘survival’ and ‘self-realization’ are among the important aspects of small business activities. Self-realization makes them capable of stimulating entrepreneurship, innovation, and productivity (Parrilli, 2007). More importantly, self-realization can strengthen social bonds and enlarge the circle of social relationships, which is an important feature of social capital. From this perspective, social capital can enhance the opportunity of self-realization and allow MSMEs to gain the benefits of it.

Insofar the networks of relationships among individuals in a society are formed based on the prevailing institution, they constitute social capital which maintains the relationships.⁷ Thus, institution and social capital can influence the behaviors of those who make the policy (or are responsible to enforce it), as well as the community affected by it. In this sense, enforcement is part of institution, and so is the response guided by the social capital of the affected communities. Any policy intended to foster regional growth and reduce interregional inequality could suffer from weak enforcement due to poor design, as well as from unexpected public response if the policy is not in line with the need, characteristics, and networks of relationships exist in the region. The disconnect makes policy ineffective. Similarly, policy measures to help MSMEs can fail due to irreconcilable response if the design of those measures does not make them compatible with the real needs, local values, and characteristics of MSMEs. For small businesses in particular, the goal achievement often critically depends on the prevailing institution and social capital.

⁷ Although social capital is not the same with institution, it can contribute to their development.

Putnam’s description of social capital is loaded with important implications. He referred social capital to “features of social organization, such as networks, norms, and trust, that facilitate coordination and cooperation for mutual benefit” (Putnam, 1993). Three terms are particularly relevant for our analysis: cooperation, coordination, and trust. The degree of trust is positively related to the probability of cooperation and coordination. For our purpose, we add another element of cooperation, that is, participation, and treat the whole as a system of collective action.

Collective action and participation in social activities are significantly lower in regions and localities that suffer from high inequality (Alesina & La Ferrara, 2000). The propensity of individuals, regions, or small businesses to join groups, associations, or cluster, to cooperate in various collective actions is negatively related to inequality. Higher dualism tends to lead to lower social capital, and in turn lower cooperation and collective actions. To the extent collective actions generate externalities, both positive (e.g., public goods) and negative (e.g., commons), observed dualism is the net result of such externalities.

Since cooperation and collective action are critical for the success of almost all organizations, large and small, it is important to understand how they are formed. Figure 3.4 displays the general framework of how different factors interact and lead to cooperation and collective action, and in turn influence MSME competitiveness. While the basic mechanism is applicable to most cases, the intensity and ranking of importance of the relevant factors as well as the potential benefits from cooperation

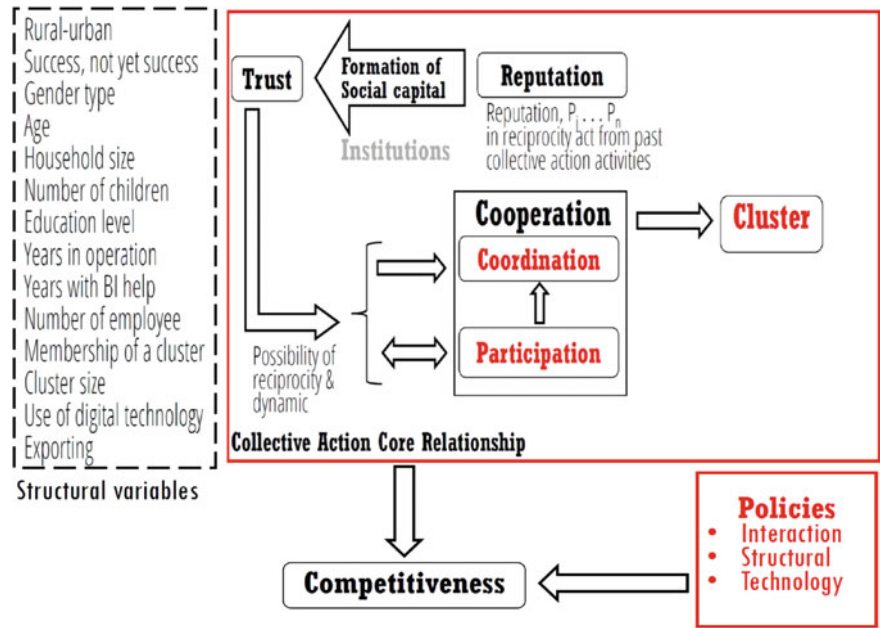


Fig. 3.4 Cooperation, collective action core relationship, and policies. *Source* Author’s own creation

may vary according to a set of “structural variables,” the types of which depend on the context and issues at hand (Ostrom, 2010).⁸ In our survey, we use fourteen categories but not all of them can be classified as structural variables. Those categories essentially represent different characteristics of the respondents (the left side of Fig. 3.4).

For cooperation to happen, trust is an important prerequisite. As a central component of social capital, trust can determine the strength of social ties and hence cooperation too. An MSME may cooperate in a cluster because it has come to embrace a norm (a worldview) of being prepared to trust other MSMEs. This exhibits a courage to cooperate, because one player trusts that others are also going to cooperate. In most cases, however, the process of formation of social capital is sensitive to the political and social forces as a result of the prevailing institutional arrangement.

If social capital associated with a set of largely informal relationships can lead to cooperation for collective action, then trust and reliance may become both, a condition and an outcome of it. The question is, how social capital—or more specifically trust—is formed? Under general circumstances, trust arises from received reputation, the process of which is influenced by existing institution. Given an individual’s reputation, different institutional arrangement results in different length of time required for others to trust (reciprocity), and different intensity of the trust (upper part of Fig. 3.4). Also, current reputation may be influenced by past reputation (another type of reciprocity). Unlike many studies on corporate reputation, here the pursuit of a better reputation is not an end in itself, rather a precondition that could eventually aid individuals to earn trust from others.⁹ Nonetheless, in cases related to cooperation among MSMEs, reputation factor can contribute to trust building, although the influence may evolve in different directions; in some cases it causes trust to disappear, in others it makes individual trust advance into a stronger mutual trust. In short, there are complex linkages among variables at multiple levels that could affect individual reputations, trust and reciprocity, and that may lead to cooperation.

What is the essence of cooperation? Strictly defined, cooperation is a situation whereby a group of individuals act together to a common end. Although it is often connotated as a good thing, cooperation is not always socially optimal. Collusion among firms that generate private benefits at a huge social cost (negative externalities) is a noted example. But in the efforts to improve MSME performance, cooperation is a positive thing to have, although the nature and size of the benefits depend on the type of cooperation, e.g., voluntary or compulsory. Individuals who decide to cooperate may do so either voluntarily, or forced and mandated by others (through government regulation). In general, there are usually positive externalities to voluntary cooperation and negative externalities to coerced cooperation. At any rate, it

⁸ Many formal game-theoretic models generated a list of “structural variables” that often affect the likelihood participants will be able to achieve outcomes greater than the deficient Nash equilibrium.

⁹ In the business strategy and marketing literature, the relation between trust and reputation is anything but consensual. Some argued that reputation is a consequence of trust (Walsh et al., 2009) and others suggested that reputation is an antecedent of trust (Doney & Cannon, 1997; Keh and Xie, 2009).

is important to distinguish these two features when discussing key components of cooperation.

Similar to the case of prisoner's dilemma, rational individuals in a social dilemma problem will take actions that maximize short-term benefits to self but generate lower joint outcomes than could have been achieved. Although in such a situation a better optimal outcome could be achieved if individuals cooperate by selecting strategies other than those prescribed by the Nash equilibrium, in pursuit of an optimal outcome they may end up not cooperating even if it is in their interest to do so (Ostrom, 2007). Hence, cooperation is not guaranteed. It requires an enabling institution that can be furnished by some policies.

Closely related to cooperation is the concept of collective action. It occurs when a group of individuals is required to contribute to an effort in order to achieve an outcome. The central difference—and the relation—between a strictly-defined cooperation and collective action lies in the words 'required to contribute.' In a cooperation, participants act together because they believe by doing so the outcome will be to their benefit, or that it will be better than if the work is done individually. But there is no stated guarantee that such an outcome will materialize; the emphasis is on 'acting together.' Collective action adds a condition that the outcome will be attained if everyone contributes, hence no free-ride. Consider a situation where MSMEs decide to join a cluster. While it may imply cooperation, only if every MSME operators contributes it qualifies as collective actions. This highlights the importance of distinguishing voluntary and forced cooperation. Most studies show that ownership of collective action through voluntary participation makes cooperation more effective.¹⁰

It is known in game theory that self-centered individuals can be better-off by being free-riders, i.e., letting others contribute to the collective action while they do not. This is a classical problem of public goods and common resources raised by Olson (1965), where the distinction between excludable goods (benefits can be excluded from individuals who do not contribute) and nonexcludable goods (benefits can be reaped by all, irrespective of contributing or not) is fundamental. Because of free-ride, collective action can run into a problem, especially when it is difficult to exclude non-participants from benefiting the outcome of collective action of others. For cooperation and collective action in MSME, the risk of free-riding is also there. It is therefore necessary to safeguard the virtues of cooperation and collective action by exposing the components that could either eliminate or minimize the possibility of free-ride. Two of such components are 'participation' and 'coordination.' Whether cooperation will effectively improve MSME performance depends on the quality of cooperation, for which active participation and coordination matter (see again Fig. 3.4). Expressing the willingness to cooperate without actually participating in collective action opens up the possibility of free-ride, and cooperation

¹⁰ Using the case of cooperative water projects in least developed countries, Grootaert (2001) showed that returns to voluntary projects are greater than returns to similar projects implemented by governments.

without coordination may result in a sub-optimal outcome. Thus, both participation and coordination can potentially remove or minimize the possibility of free-ride.

While trust can initiate participation through cooperation, the reverse may also be true: trust in others is created through regular participation in voluntary associations (Newton, 1999). The implication is, when a norm to trust is absent, participation may help to develop trust; hence the two-way arrow between participation and trust in Fig. 3.4. The type of participation—imposed or voluntary—will determine the nature of that two-way relation. Coordination among members of a cluster can improve individual capacity and potentials through cooperation with other MSMEs, for example in production technique, digital use, and networking. The gained benefits range from monetary (joint purchase of inputs, joint sales) to non-monetary (knowledge, information, experience) category, and the effectiveness to reap those gains depend on the type of coordination, e.g., strictly for business purposes or for other social considerations (e.g., sense of camaraderie, pity, shamefulness) and the nature of coordination (e.g., voluntarily versus imposed). Nonetheless, the resulting benefits are likely larger than if they are obtained without coordination.

What is then the role of policies? Human actors are able to solve—Ibeit not all—collective action problems on their own without external rules and outside intervention. But for that to happen, institutional arrangements and policies furnishing the enabling environment are necessary. To the extent the ability to cooperate in collective action problems is key for improving MSME performance, it is important to identify which policies and institution discourage opportunistic behavior (free-ride) and which promote cooperation in collective action. Providing the latter should be the emphasis of policy. On the other hand, policy intervention can also be problematic if the basis for reliability falls short; for example, when state-owned enterprise is involved directly with commercial activities that could compete with MSME's activities. Coercion through instructions is another institutional approach that may not be well-received and is likely to create opportunistic behaviors or free-riders.

In the current research, we classify policies to furnish the necessary institutional arrangements into three categories: First, linkages policies aimed at supporting the interactions and cooperation among MSMEs as well as between MSMEs and other relevant parties (large firms, financing institutions, supporting industries); second, structural policies to promote and improve MSME performance, many of which have been tried by the government but may require improvements and better prioritization (e.g., training, promotion, financing); and third, policies aimed at providing MSMEs with a greater access to digital or other technology (green technology).

The framework in Fig. 3.4 and the discussions above suggest that cooperation and collective action have an important role in improving MSME performance, and the interplay between policies and a set of social capital can determine the nature and size of the improvement. Insofar establishing clusters of MSME has been common throughout Indonesia, these clusters serve as some sort of 'vehicle' for cooperation and collective action. However, since the types of cooperation and collective action can influence the outcome, distinguishing the types of cluster is also necessary.

Note that the term "cluster" here is close to the standard and formal definition according to The United Nations Industrial Development Organization (UNIDO),

which is “geographical concentrations of inter-connected enterprises and associated institutions that face common challenges and opportunities.” A similar definition by Porter (2000) is “a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities.” In our case, the relevant emphasis from those two definitions are the terms ‘geographical concentration/proximity’ and ‘common challenges and opportunities/commonalities.’ More specifically, MSME clusters refer to the agglomeration of the inter-related MSMEs and the related institutions. Members of a cluster usually produce and sell a range of related or complementary goods and services, and experience the same challenges as well as opportunities. If the ensuing network results in new ideas, initiatives, and innovations, it is said that the clusters are robust (Ceglie & Dini, 1999). It is important and highly relevant to highlight the role of local-own initiatives in problem solving, especially giving the decision-making power to the MSME themselves. Otherwise, the external parties tend to see the situation and problems faced by MSMEs through the lens of their own biases, and not recognizes the real or hidden needs of the cluster members based on their experience. The behavioral biases can range from overoptimism, confirmation bias, and fixation on first solutions, without considering what will or will not work. As demonstrated in Chap. 5, the local community tend to find their own solutions to problems and challenges they are facing. External parties can help facilitate the implementation of such solutions.

The relevant parameters to reflect different perceptions of cluster members are the “structural variables” discussed earlier, such as location (rural–urban, and across regions), size (number of employees), status (success or not, length of operation and BI assistance), technology (digital and green), and market (local, non-local, or exports).

To verify the relevance of the above concept and capture the perceptions of MSEs, we conducted a survey during the period of September–November 2020. The survey involves 121 + MSE as the respondents. The goal is to get the perceptions directly from them over the role of a set of policies, social capital, and the interactions between the two, based upon which the type of cluster deemed most relevant for competitiveness is determined. The trust-based cooperation, in which the key components are participation and coordination, is subsequently analyzed based on the responses/perceptions of respondents.

To set the stage, Fig. 3.5 summarizes the outline of the framework used in the survey. Although in the survey we applied it largely to MSEs, the framework in Fig. 3.4 and the outline in Fig. 3.5 is fairly general and applicable to medium enterprises as well (hence the MSMEs). As discussed earlier, the government policy to establish an enabling institutional arrangement and a set of social capital to induce cooperation for collection action will jointly determine MSME performance, which, in this survey is defined as improved competitiveness. For cooperation and collective action to work more effectively, participation and coordination as the components of social capital are required. The three sets of policy expected able to improve the institutional arrangements are: those intended to strengthen the interactions among MSMEs as well as between MSMEs and other relevant parties, structural policies to

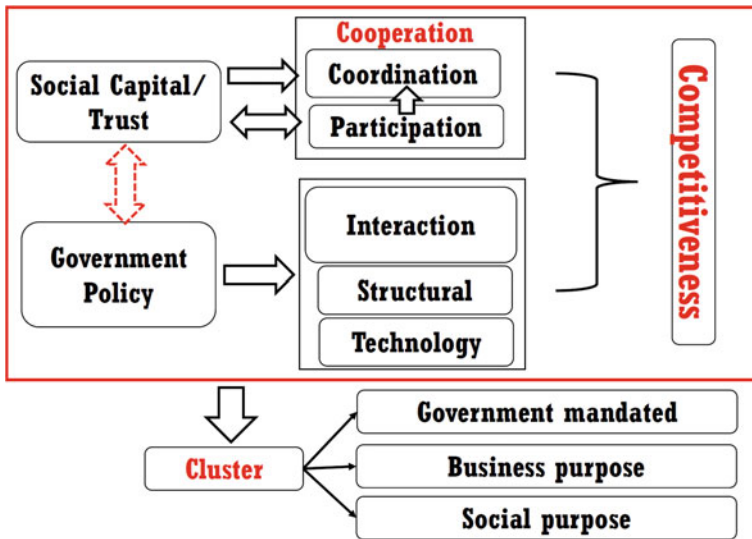


Fig. 3.5 Summarized framework of the survey. *Source* Author’s own creation

improve MSME operations, and policies to enable MSMEs to use better technology (digital and green technology).

The interplay of policies and social capital components works through MSME clusters, some of which are imposed or mandated by the government, some are formed for purely business purposes, and others are used for social and other purposes. Practically speaking, for those who are member of a cluster, the joint-effects of the interplay between policies and social capital are constantly felt and experienced during their day-to-day operation. For those who are not members of any cluster, the choice of cluster type should only reflect what they aspire. It is in this context the perceptions directly obtained from MSME operators are expected to capture both, their true and real conditions and their aspirations.

The technique we are adopting in the survey emphasizes the power of human perceptions acquired by asking the respondents to compare relevant attributes or factors in a pairwise fashion, from which we then derive the corresponding ratio scales.¹¹ Unlike in a standard way of ranking which uses either a simple ordering as in indifference curve (ordinal scales), or absolute physical measure as in most economic indicators (cardinal scales), using ratio scales allows us to evaluate human perceptions in a more balance way. First of all, insofar there is no absolute valuation on every attributes—or on everything in life for that matter—especially when those

¹¹ Perceptions are the ultimate lens through which human beings view reality and operate with versions of that reality. Hence, there is no such thing like “right” or “wrong.” What matters is what they perceive and express. In order to understand the real situation and problems faced by MSMEs, we need to know what they actually think and perceive, not the “reality” that others see or want MSMEs to see.

attributes are intangible, each of them has to be evaluated in comparison with other attributes; hence, running a pairwise comparison on relevant attributes is imperative. Secondly, since any ranking of attributes conveys human judgement after considering (“calculating”) the pluses and the minuses of those attributes, the revealed choices reflect not only the preference toward one attribute over another but also the weight of that preference. Thirdly, once the preference and the weight of attributes are made, depending on how we structure the framework, we may need to compare the resulting scale of selected attributes that represent the plusses with the scale of attributes that reflect the minuses; that is, the upside (the benefit) needs to be compared with the downside (the cost). When intangible attributes are involved, as in our case, such a comparison cannot be made unless ratio scales are used.

The approach of using ratio scales is fundamental in the Analytic Hierarchy Process (AHP) and Analytic Network Process (ANP), a brief description of which is given in Appendices A.1 and A.2. In cases where there is no feedback effect, using a hierarchy approach to structure the problem is appropriate, and we can apply a method using the eigen-vector based on principal eigen-value of the relevant pairwise comparison matrix. This is basically how the AHP works. But when feedback effects are present as in our second set of survey, in which elements in each level of a hierarchy are interrelated with elements in other levels or other elements in the same level, we need another approach capable of dealing with a system where each pairwise comparison matrix is directly or indirectly linked to other pairwise comparison matrices. This is where the use of the ANP is necessary, for which the so-called ‘super matrix’ needs to be constructed (see Appendix A.2 for more details). The results from using the ANP has been known to be more stable and robust than those from using the AHP.

References

- Alesina, A., & La Ferrara, E. (2000). Participation in heterogeneous communities. *Quarterly Journal of Economics*, 115(3), 847–904.
- Aspinall, E., & Mas’udi, W. (2017). The 2017 Pilkada (Local Elections) in Indonesia: Clientelism, Programmatic Politics and Social Networks. *Contemporary Southeast Asia*, 39(3).
- Azis, I. J. (2008). Institutional constraints and multiple equilibria in decentralization. *Review of Urban and Regional Development Studies*, 20(1).
- Azis, I. J. (2010). Endogenous institution in decentralization. *Peace Economics, Peace Science and Public Policy*, 16(2), Article 12.
- Azis, I. J. (2013). Complex interplay of factors in the institutional model of decentralization: Theory and application. *Regional Statistics*, 3, 3-2.
- Azis, I. J. (2020a). *Regional economics: Fundamental concepts, Policies, and institutions*. World Scientific Press.
- Azis, I. J. (2020b). Regional development and noneconomic factors. In A. Kobayashi (Ed.), *International encyclopedia of human geography* (2nd Ed., Vol. 11, pp. 269–274). Elsevier.
- Azis, I. J., Pratama, A. (2020). Polarization and local conflicts in post decentralization Indonesia. *Peace Economics, Peace Science, and Public Policy*, 26(2).

- Baldwin, R. E., Forslid, R., Martin, P., Ottaviano, G., & Robert-Nicoud, F. (2004). The core-periphery model: Key features and effects. In: *The monopolistic competition revolution in retrospect*. Cambridge University Press.
- Beckenkamp, M. (2006). A game-theoretic taxonomy of Social Dilemmas. *Central European Journal of Operations Research*, 14(3), 337–353.
- Ceglie, G., & Dini, M. (1999). SME cluster and network development in developing countries: The experience of UNIDO. Geneva, Switzerland: United Nations Industrial Development Organization.
- Coase, R. H. (1960). Problem of public costs. *Journal of Law and Economics*, 3.
- Colman, A. M. (1995). *Game theory and its applications in the social and biological sciences* (2nd Ed.). Butterworth-Heinemann.
- Dasgupta, A., & Beard, V. A. (2007). Community driven development, collective action and elite capture in Indonesia. *Development and Change*, 38(2), 229–249.
- Doney, P. M., & Cannon, J. P. (1997). An examination of the nature of trust in buyer-seller relationships. *Journal of Marketing*, 61, 35–51.
- Fujita, M., & Thisse, J. (2002). *Economics of agglomeration: Cities, industrial location, and regional growth*. Cambridge University Press.
- Gollin, D., Kirchberger, M., & Lagakos, D. (2017). In search of a spatial equilibrium in the developing world. NBER Working Paper No. 23916.
- Graham, F. (1927). Some aspects of protection further considered. *Quarterly Journal of Economics*, XXXVII, 199–227.
- Greif, A. (2006). *Institutions and the path to the modern economy*. Cambridge University Press.
- Grootaert, C. (2001). *Does social capital help the poor? A synthesis of findings and recommendations from the social capital initiative*. Social capital initiative working paper 24. Washington, D.C.: Social Development Department, World Bank.
- Hurwicz, L. (May 1973). The design of mechanisms for resource allocation. *The American Economic Review: Papers and Proceedings*, 63(2), 1–30
- Isard, W. (1956): Location and space-economy; A general theory relating to industrial location, market areas, land use, trade, and urban structure. Cambridge
- Jacobs, J. (1969). *The economy of cities*. Random House.
- Janssen, M. A. (2008). Evolution of cooperation in a one-shot prisoner's dilemma based on recognition of trustworthy and untrustworthy agents. *Journal of Economic Behavior & Organization*, 65, 458–471.
- Keh, H. T., & Xie, Y. (2009). Corporate reputation and customer behavioral intentions: The roles of trust, identification and commitment. *Industrial Marketing Management*, 38, 732–742.
- Ketels, C., & Protsiv, S. (2021). Cluster presence and economic performance: A new look based on European data. *Regional Studies*, 55(2), 208–220.
- Krugman, P. (1987). The narrow moving band, the Dutch Disease, and the competitive consequences of Mrs. Thatcher: Notes on trade in the presence of dynamic economies of scale. *Journal of Development Economics*, XXVII, 41–55.
- Krugman, P. (1991a). *Geography and trade*. MIT Press.
- Krugman, P. (1991b). History versus expectations. *The Quarterly Journal of Economics*, 106(2)
- Lucas, A. (2016). Elite capture and corruption in two villages in Bengkulu Province, Sumatra. *Human Ecology*, 44, p287-300.
- Marshall, A. (1920). *Principles of economics*. Macmillan.
- Muhtadi, B. (2019). *Vote buying in Indonesia: The mechanics of electoral bribery*. Palgrave Macmillan.
- Murphy, K., Shleifer, A., & Vishny, R. (1989). Industrialization and the big push. *Journal of Political Economy*, XCVII, 1003–1026.
- Newton, K. (1999). Social and political trust in established democracies. In P. Norris (Ed.), *Critical citizens: Global support for democratic governance* (pp. 169–187). Oxford University Press.
- North, D. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.

- North, D. (1993). Prize Lecture, The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel Lecture to the memory of Alfred Nobel, December 9.
- North, D. (2005). *Understanding the process of economic change*. Princeton University Press.
- Olson, M. (1965). *The logic of collective action: Public goods and the theory of groups*. Harvard University Press.
- Ostrom, E. (2007). Collective action theory. In C. Boix & S. Stokes (Eds.), *The Oxford handbook of comparative politics* (pp. 186–208). Oxford University Press
- Ostrom, E. (2010). Analyzing collective action, Vol 41, Issues1, November, pp. 155–166.
- Parrilli, M. D. (2007). *SME cluster development: A dynamic view of survival clusters in developing countries*. Palgrave MacMillan.
- Piore, M. J., & Sabel, C. F. (1984). *The second industrial divide: Possibilities for prosperity*. Basic Books.
- Poppitz, P. (2011). The collective risk of inequality: a social dilemma calling for a solution? DEP Discussion Papers: Macroeconomics and Finance Series, 6, University of Hamburg, December.
- Porter, M. E. (1990). *The competitive advantage of Nations*. Free Press.
- Porter, M. (2000). Location, competition, and economic development: Local clusters in a global economy. *Economic Development Quarterly*, 14, 15–34.
- Potter, A., & Doug Watts, H. (2011). Evolutionary agglomeration theory: Increasing returns, diminishing returns, and the industry life cycle. *Journal of Economic Geography*, 11(3).
- Putnam, R. (1993). *Making democracy work*. Princeton University Press.
- Romer, P. M. (1986). Increasing returns in long-run growth. *Journal of Political Economy*, 94(5), 1002–1037.
- Romer, P. M. (1990). Endogenous technological change. *Journal of Political Economy*, 98(5), 71–102.
- Romer, P. M. (1994). The origins of endogenous growth. *Journal of Economic Perspectives*, 8(1), 3–22.
- Six, B., van Zimmeren, E., Popa, F., & Frison, C. (2015). Trust and social capital in the design and evolution of institutions for collective action. *International Journal of the Commons*, 9(1), 151–176.
- Walsh, G., Mitchell, V. W., Jackson, P. R., & Beatty, S. E. (2009). Examining the antecedents and consequences of corporate reputation: A customer perspective. *British Journal of Management*, 20, 187–203.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.



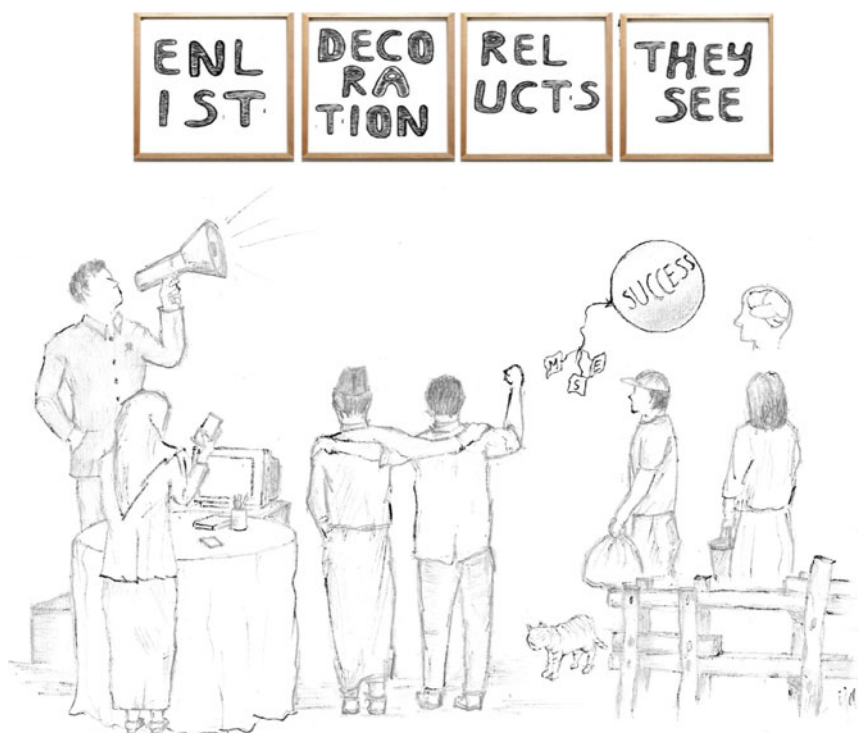
Chapter 4

Mitigating Dualism and Exploiting the Interplay of Policy-Social Capital



Abstract The centripetal forces of agglomeration, reflected among others in the structure of the economy and the nature of interrelations among regions (interregional multipliers), limit the effectiveness of spatial policies. Meanwhile, the importance of social capital is revealed from the MSE survey. Social planners could improve the design of policies by understanding the perceptions and aspirations of MSEs to make any measures more compatible with the prevailing social capital.

Keywords Quality of leaders • Hierarchy • Network • Policies • Social capital • Perceptions



Conversation

A: “We need to *ENLIST* local leaders and small businesses to support national policies to reduce inequalities and dualism.”

B: “Far more importantly, we need to *LISTEN* to those affected by the policies and the *SILENT* groups whose silence must not be mistaken for their absence.”

A: “If a small business operator *RELUCTS* to use green technology, e-commerce, and e-finance, there is nothing we can do to help.”

B: “Understanding their behavioral insights and encouraging them to work together in a *CLUSTER* will raise their propensity to adopt new technology by way of increased communication and interactions.”

A: “That is why mandating small businesses to form a cluster is not just for *DECORATION*, but it is meant to facilitate interactions among them.”

B: “While interactions in a cluster are necessary, active participation and *COORDINATION* are essential for the collective actions to work effectively.”

A: “We also used examples of success stories so that small businesses are motivated to replicate because *THEY SEE* the evidence directly.”

B: “People do not respond to what *THE EYES* and ears tell them but what the brain makes them see and hear.”

It is clear from the discussions in the preceding chapter that forces of agglomeration could risk a worsening dualism and inequality. On the other hand, potential benefits of the same forces offer incentives for MSMEs to operate in clusters, in which the effectiveness depends crucially on the interplay of policies and social capital.

One may argue that although Chap. 2 provides a clear evidence of interregional inequality in Indonesia, several factors and events unrelated to agglomeration may have caused the inequality. Disentangling sources of inequality, let alone isolating the effect of agglomeration, may not be empirically feasible. But the centripetal forces of agglomeration are undeniably at work. Other factors influencing the effect of such forces are the structure of the economy and the nature and scale of interrelations among regions, both of which are reflected in the intraregional and interregional multipliers. The first part of this chapter discusses the effect of these factors on growth and inequality between regions in Indonesia, and the second part is devoted to the analysis of survey results based on the framework discussed in the preceding chapter.

Interregional Multipliers

In conjunction with the earlier question about the role of institutional change, a more general question is what kind of policy intervention can effectively counter the forces of agglomeration? The question of interest here is whether redirecting

spending towards LDR can be effective to reduce the gap between DR (core) and LDR (periphery). To answer this question, we utilize the information associated with the structure of the regional and interregional economic relations from a series of Indonesia's multiregional input-output (MRIO) tables consisting of five regions: Sumatera, Jawa-Bali, Kalimantan, Sulawesi, and Nusa Tenggara-Maluku-Papua.

The theoretical basis of interregional multiplier rests on the idea that there is some sort of relationship between the national economic activity and the regional economy.¹ While standard I-O multipliers capture the direct, indirect, and induced effects of any changes in one sector of an economy upon other sectors, they are unconcerned with the location of the sectors. If the issue of interest is how to reduce the gap between core and periphery, location obviously matters. The location of sectors where the initial changes occur as well as the location of activities affected by those changes determine the net results of interregional inequality. To the extent increased spending in a sector located in a region will obviously boost the growth of that region but not necessarily lower the inequality between regions, in addressing the question whether redirecting investment towards periphery will reduce the gap between core and periphery cannot ignore the mechanisms of interregional multipliers.

Suppose a major infrastructure is to be built. We know that the project will boost growth of the region where the project is implemented as well as the national growth. But what about its impact on the gap between DR (core) and LDR (periphery)? Ignoring this question leaves us with criteria only about the costs and benefits of the project including the overall multiplier effects. Since DR is typically in a better position in terms of existing facilities or infrastructure (logistics, financial services, etc.) and the purchasing power that reflect market conditions, in most cases the decision ends up with DR as the preferred location of the project. The impact on inequality is addressed by the argument that infrastructure project in DR will not only boost national growth but also generate a positive impact on LDR growth, similar to the trickle-down effect mechanism. This argument, however, essentially puts growth above inequality, and it completely ignores the relative size of interregional multipliers when it is compared with a scenario whereby the project is built in different locations. That is, what about if the infrastructure is built in LDR?

One way to find out is by comparing two types of multipliers in both locations, the intraregional multipliers and the interregional multipliers in DR (μ_{DR} and $\mu_{DR \rightarrow LDR}$) and in LDR (μ_{LDR} and $\mu_{LDR \rightarrow DR}$). Even if the infrastructure project is built in LDR, the cross-regional direct and indirect effects of it could be larger in DR than the cross-regional effects in LDR if the infrastructure is built in DR, that is $\mu_{LDR \rightarrow DR} > \mu_{DR \rightarrow LDR}$.

¹ One of the issues of interest in regional growth theory concerns with the activities in a region that could be the source of regional growth. Focusing on the size of demand as key determinant, the "economic base" theory distinguishes internal and external demand (exports). The postulate is, export is the main driver of regional growth. Hence, the expansion of a sector whose products are largely exported (the "basic sector") will stimulate production of the non-exporting or "non-basic" sector through some sort of multiplier. Another theoretical basis rests on the idea that any dynamic sector located in a certain region, called the "growth pole," will create an impact on local and broader regional economies also through a multiplier.

We can think of a scenario whereby increased demand and production in LDR leads to a larger increase of demand and production in DR. The same applies to the effect of increased income and consumption (part of the final demand) in LDR on DR. It is not uncommon to find that residents in LDR prefer to spend their increased income for products and services produced in DR. At any rate, comparing interregional multipliers is an important step for addressing the question whether a policy to redirect spending towards LDR be effective to reduce the gap between core and periphery. To do so, we essentially conduct two different scenarios of regional investment allocation policy and compare their results. This is different from the “before-and-after” approach used in the discussions of Chap. 2.

Measuring the interrelationships between regions based on the coefficient of interdependence (COI) from Indonesia’s MRIO in 2005, 2010, and 2015, without looking at the detailed print the interactions within each region and between regions have generally increased, although by using different measure Anglingkusumo et al. (2014) found that regions throughout the country is far from being integrated. However, looking at the trend by pairs, the economic interactions between Jawa and non-Jawa except Sumatera have declined over the years, and so have the interactions between Sumatera and other non-Jawa regions. Increased interactions are most notable between Sulawesi and other regions.

A different trend is detected between interregional backward linkages and forward linkages; the two have not been moving in the same direction. On the one hand, the benefits from backward linkages received by regions outside Jawa from increased final demand in Jawa have been on the rise; that is, more activities in Jawa demand more inputs from outside Jawa. The opposite trend holds when the increase of final demand is reversed. The demand for inputs from Jawa mostly declines, with notable exceptions if the increase of final demand occurs in manufacturing and “other” sectors in Sumatera, as well as in mining sectors in Bali-NT and Maluku-Papua (Table 4.1). On the other hand, the interregional forward linkages show an opposite trend (growing activities in Sumatera generate greater consumers-oriented activities in Jawa).

Given the above trends, the overall net outcome shows that the benefits accrued to non-Jawa from increased activities in Jawa remains much smaller than the benefits received by Jawa from increased activities in regions outside Jawa. From the perspective of regional investment allocation, this can be interpreted as follows.

Since the interregional multipliers received by regions outside Jawa from adding investment in Jawa are much smaller than the interregional multipliers received by Jawa if the augmented investment is made in outside Jawa (compare the bar charts on the right with those on the left in Fig. 4.1), the cross-region gains enjoyed by Jawa from investing in outside Jawa are greater than the cross-region gains reaped by regions outside Jawa if the location of investment is reversed. As shown in the figure, although fluctuating the gap stood out persistently from 2005 to 2015.² This

² By 2015, the largest gains enjoyed by Jawa is when the new investment is made in Sulawesi followed by Sumatera, whereas the largest gains from adding investment in Jawa are enjoyed by Sumatera.

Table 4.1 Percentage of inputs demanded by non-java sectors from Java 2010 and 2015

Non-java sector	2010				2015			
	Agric	Mining	Manuf	Others	Agric	Mining	Manuf	Others
<i>Sumatra</i>								
% of total input from Java	2.40	3.38	6.82	3.57	2.01	1.47	4.32	3.68
% of inter. input from Java	7.89	12.06	12.03	10.64	5.40	6.45	7.85	8.75
<i>Kalimantan</i>								
% of total input from Java	8.72	8.30	8.56	6.31	1.70	2.68	4.03	3.07
% of inter. input from Java	25.93	27.15	13.00	17.36	5.00	14.47	6.39	9.51
<i>Sulawesi</i>								
% of total input from Java	5.23	10.26	5.85	6.88	2.39	2.93	3.19	2.79
% of inter. input from Java	22.40	43.83	8.48	22.52	10.86	19.29	4.95	7.63
<i>Bali-NT</i>								
% of total input from Java	5.47	0.17	19.76	11.60	3.00	1.24	13.96	5.71
% of inter. input from Java	17.67	3.23	27.86	29.25	10.16	10.10	21.70	16.32
<i>Maluku-Papua</i>								
% of total input from Java	11.47	0.02	5.55	7.43	1.99	2.07	2.57	4.25
% of inter. input from Java	38.36	0.06	9.15	18.90	6.62	5.73	5.22	12.68

Notes The value for a sector-region is calculated by dividing the sum of intermediate inputs from Jawa for that sector-region, divided by either total inputs or total intermediate inputs for that sector-region. Higher value means higher % of inputs demanded by non-Jawa from Jawa. Bold cells in 2015 columns indicate that the value increases from 2010

Source Calculated from Indonesia's MRIO tables, 2010, 2015

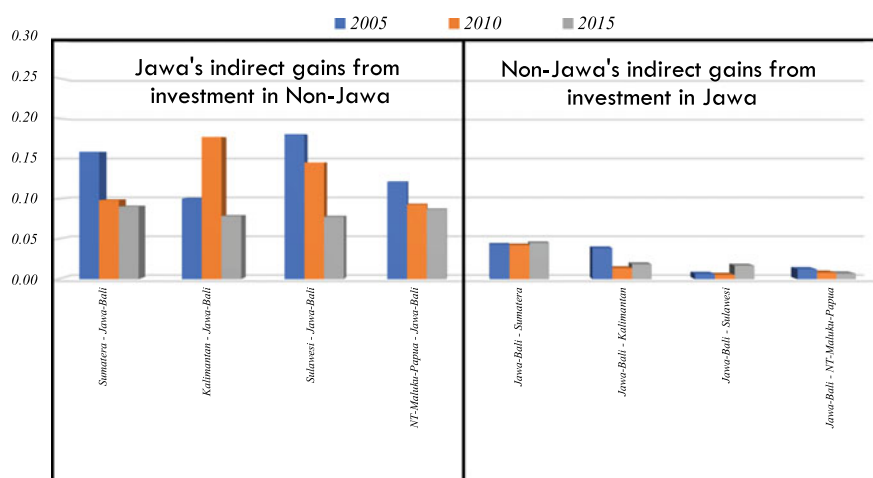


Fig. 4.1 Interregional multipliers: Jawa and regions outside Jawa. *Source* Calculated from Indonesia's MRIO tables, 2005, 2010, 2015

may come to a surprise for those who think that investing in outside Jawa at once will automatically reduce the gap between non-Jawa (LDR) and Jawa (DR).

As explained earlier, the main problem lies in the structure of the prevailing economic interrelationships between Jawa and non-Jawa. Depending on the size of the within-region effect (intraregional multiplier), simply reallocating more investment to non-Jawa without altering that structure will not guarantee a reduced gap between the two regions. The difference in the interregional structure combined with the forces of agglomeration are too strong for the policy to counter the divergence.

Altering the structure of a region's economy and the economic interrelationships among different regions is not an easy task. It involves changes in the institutional arrangement that go beyond strictly economic matters. Since the effectiveness of any policy intervention is influenced by how communities respond to the policy, social capital is playing an important role. To be effective, therefore, a policy ought to be designed such that it will be compatible with the prevailing institutional arrangements. Undermining the role such institutional arrangements can leave a well-intentioned policy ineffective, or it can even make the policy backfire.

Survey Results and Analysis

As described through the framework in Chap. 3, understanding the interactions between institutional arrangements and policies could be key for the efforts to improve MSME performance. By emphasizing the need for 'cooperation' and 'collective actions' among MSEs, the main focus of the survey is to delineate the mechanisms by using the perceptions and opinions of MSEs on how such interactions determine the type of cluster deemed suitable for making cooperation and collective actions effective to improve the competitiveness.³

To capture perceptions, we utilize both the AHP and the ANP. The starting point is to distill MSEs' current conditions and their experience and aspirations for cooperation in a cluster. In particular, given the prevailing conditions we wish to capture the respondents' preference towards different types of cluster deemed most relevant for improving their business performance. Three types of cluster are considered: clusters mandated by either local or central government, cluster formed for purely business purposes, and cluster for social and other purposes not directly related to business operations. To adopt a balance approach, two sets of hierarchy are built: one for the upside (benefit) another for the downside (cost). The prevailing conditions are exemplified by a set of factors or elements in each hierarchy: those leaning towards

³ Note that all samples used in the survey are obtained from, and suggested by, the SMEs Development and Consumer Protection of Bank Indonesia. According to the definition adopted by the 'Statistics Indonesia,' which is the country's Central Agency on Statistics (known as BPS or *Badan Pusat Statistik*), based on assets (outside land and building) and the size of sales, only 1 of all samples we used in the survey meets the BPS definition of 'medium' enterprise, i.e., > 500 million rupiah and > 2.5 billion rupiah, respectively. Hence, the survey analysis reported in this chapter applies more appropriately to the case of micro and small enterprises (MSEs).

the benefits of a cluster type (Fig. 4.2) and those towards the cost of such a cluster (Fig. 4.3).

Prior to the survey, during the process of structuring the hierarchies we conducted informal interviews with some MSMEs, from which we learned among others that during the Covid-19 crisis some MSMEs began to produce masks to compensate for the substantial decline in sales of their main products. As many MSMEs are hit hard

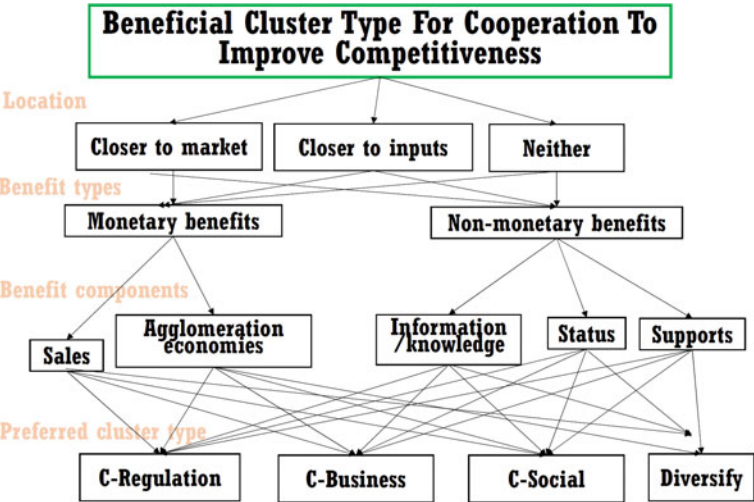


Fig. 4.2 Benefit hierarchy. *Source* Author’s own creation

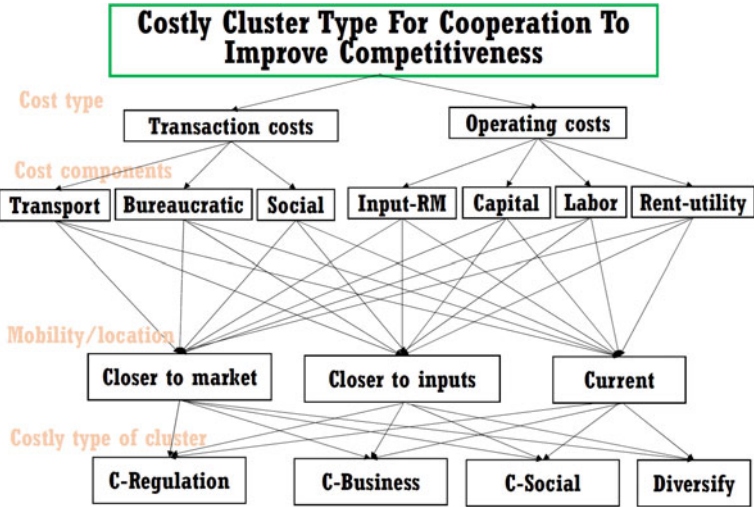


Fig. 4.3 Cost hierarchy. *Source* Author’s own creation

and struggling to survive, diversifying products is one of the changes they feel they have to make. Even among MSMEs who are not much impacted by the pandemic, some decide to do product diversification. But not all MSMEs are in a position to do so, depending on the nature of their business and other binding constraints. Nonetheless, we decided to include ‘diversification’ as another alternative option along with the three cluster types shown at the bottom level of hierarchies in Figs. 4.2 and 4.3.

Note that the options of cluster type and ‘diversification’ are intended to represent respondents’ preferences which may or may not reflect the current conditions. For example, it is possible that some MSEs who prefer a business-oriented cluster may currently belong to a government-mandated cluster, or not a member of any cluster. Similarly, some who express to prefer diversifying their products may have not done so currently.

In the benefit hierarchy, we begin with the spatial dimension of MSE by identifying their location of operation, whether they are closer to the market, closer to the inputs and other raw materials, or neither (footloose). The benefits are distinguished into two types, monetary and non-monetary. Under the monetary benefits, given their location the size of sales and the gains accrued from being concentrating in adjacent location (agglomeration economies) are ranked. Under the non-monetary benefits, three advantages are identified, ease to acquire information and knowledge, getting a good standing or status from being involved in the business, and receiving non-monetary supports from the community and family. By ranking the importance of the above elements in a pairwise fashion, and considering the relations between elements in one level of the hierarchy and other elements in the level below it, the preference of the respondents towards different types of cluster including the most beneficial type is determined (Fig. 4.2).

In the cost hierarchy (Fig. 4.3), we begin by identifying whether transaction costs are less or more burdensome than operating costs. There are three types of transaction costs to be considered, transport costs, costs associated with bureaucracy (e.g., to get license or permit, and to receive government supports and assistance), and social costs (e.g., community dissatisfaction due to pollution of all sorts and other negative externalities). Operating costs consist of cost of inputs and raw materials, cost of capital in terms of difficulty to access and interest rates, labor costs in terms of quality and wages, and utility costs including rent. Their locational preference is subsequently ranked. However, unlike in the benefit hierarchy, this time the respondents will make the ranking based on the prevailing cost structure, implying that they may feel it would have been less costly if they move either to a closer-to-market location or to a closer-to-inputs location, or they may feel that the current location is more preferable. Given such a preference, the ranking of cluster type is subsequently made.

By comparing the ranking of the type of cluster including ‘diversification’ from the benefit hierarchy and that from the cost hierarchy, we can deduce the true (net) preference of the respondents. This is done by taking the ratio of the resulting weights assigned to each option from the benefit hierarchy and those from the cost hierarchy. The most preferred choice is the one with the highest ratio.

The following are the summarized results from the survey based on the benefit/cost framework above. Given their current location, most urban-based MSEs are of the opinion that monetary benefits are greater than non-monetary benefits, where sales increase is considered the most important of all. The exceptions are for MSEs in Kalimantan who rank agglomeration economies to be more important than sales. A relatively high concentration of MSEs in low-density yet large area of Kalimantan may have been the reason why the gains from agglomeration are perceived greater than the gains from sales.

Unlike their counterparts in urban areas, majority of rural-based MSEs feel they obtain non-monetary benefits more than monetary benefits. The most important non-monetary benefits is the ability to acquire information. It is likely that in terms of making profits most rural-based MSEs have been doing less well compared to urban-based MSEs, but their persistence to improve, including through learning from new information, make them more resilient. There are quite a large number of rural-based MSE (62%) who consider that monetary benefits are smaller than non-monetary benefits. The spectrum ranges from male-owned, with education lower than average, household size is smaller than average, not yet successful, having a large number of employees, operate longer than the average period, using digital technology, not yet a member of any cluster, located in Jawa, Sulawesi, and operate in trade and services. Given the above prevailing conditions, the type of cluster that all categories of MSEs feel most beneficial is the business-oriented one (as an example, see the testimony from woven fabric MSM in Tidore in Appendix A.6).

On the cost side, all MSEs express that operating costs are more burdensome than transaction costs, and majority (30 out of 41 categories) believe that the costs of inputs and raw materials are most burdensome. The categories that consider costs of capital are more taxing consist of rural-based, age lower than average, education lower than average, household size is smaller than average, not yet successful, operate longer than the average, received supports from BI for a longer period than average, member of larger cluster, located in Sulawesi, Sumatera, and operate in the agriculture sector. Only MSEs in Kalimantan feel that the cost of labor is most burdensome. Again, this is likely due to the region's low population density that makes the cost of labor relative higher than in other regions (see the testimony of MSME rendang in West Sumatera and MSME red chili in Lhokseumawe in Appendix A.6).

Given the above, majority of MSEs perceive that the type of clusters not strictly intended for business purposes would be costly, especially if they are meant to serve only for social function. On the option of diversification, MSEs in Jawa, rural-based MSEs, and those operating in the agricultural sector feel that diversification is not a viable option. They even consider it as the costliest of all options. In the eyes of MSEs that have already used digital technology and those that operate in trade and services sector, the costliest option is to have a government-mandated cluster. There seems to be a strong perception among MSE in this category that such a cluster allows government controls and intervention that could hinder their business.

It is interesting to note that if we consider only the results from the benefit hierarchy, a government-mandated cluster is actually ranked second from the top (by more than half, or 26 out of 41 categories). Hence, it is also highly preferred by

the majority. However, given the potential costs of the option, a number of MSE categories (as mentioned above, the digital technology users and trade sector MSEs) feel at the same time that it is too costly. These both categories rank government-mandated cluster as the costliest option. This example demonstrates crucially the reason why we always need to consider the upside and the downside of perceptions when trying to acquire human preferences. At any rate, after considering the overall results from the benefit and the cost hierarchies, the benefit/cost ratio show that the majority of respondents pick business-oriented clusters as their top preference. Note again that this choice is irrespective of the clusters they are currently member—or not member—of.⁴

The reason why diversification does not seem to be preferred by most MSEs despite the difficulties caused by the Covid-19 crisis is because the nature of their business does not make such an option feasible. Rural-based MSEs, Jawa-based MSEs, and MSEs operating in the agricultural sector are particularly not in favor of diversification. For them, the possibility to do so is second to none.

Having revealed MSE's preference towards the type of cluster given the prevailing conditions, we now investigate the role of policies and social capital by unravelling their perceptions towards the relevant components, as well as the feedbacks or internal and external interrelations (the inner dependence and outer dependence) of these components. The previous approach cannot be used when feedbacks or interrelations are present. Therefore, we use a network system to allow for the feedback effects to operate (using ANP instead of AHP). As mentioned earlier, the ranking derived from using the ANP is more stable and robust than using the AHP. Figure 4.4 depicts the framework of the network.

To the extent both policies and social capital influence the effectiveness of a cluster for engaging cooperation and collective action, respondents are first asked to rank and weigh the importance of a set of policies and components of social capital. The framework of the network is structured such that the resulting ranking is eventually linked to the type of cluster. The results may or may not be different from the earlier ranking derived from using a hierarchy approach.

As described before, three categories of policies are selected based on their potential in providing—jointly with social capital—an enabling institutional arrangement. In the first category (linkages/interactions), there are four components deemed relevant to support cooperation and collective actions: policies to facilitate and enhance interactions among MSEs and between MSEs and larger firms/industries, policies to link MSEs with financial institutions, and policies to enable MSEs to access and use the product and services of supporting industries (e.g., packaging, logistics).⁵ Interactions among these policies are also considered, because in practice the effects of one

⁴ Two minor exceptions are: MSEs who generate highest benefit/cost ratio for diversification (urban-based, located in Kalimantan, Papua, and Sumatera), and MSEs whose benefit/cost ratio is highest for the government-mandated cluster (those operated by older people).

⁵ A survey on 1000 MSMEs across 9 major cities in Indonesia conducted in 2018 shows that MSMEs that joined a multi-service tech platform providing access to transport, payments, food delivery, and logistics find their partnership useful in raising their transaction volume and revenue. Moreover, majority MSME also viewed that the merchant management technology of the tech platform played

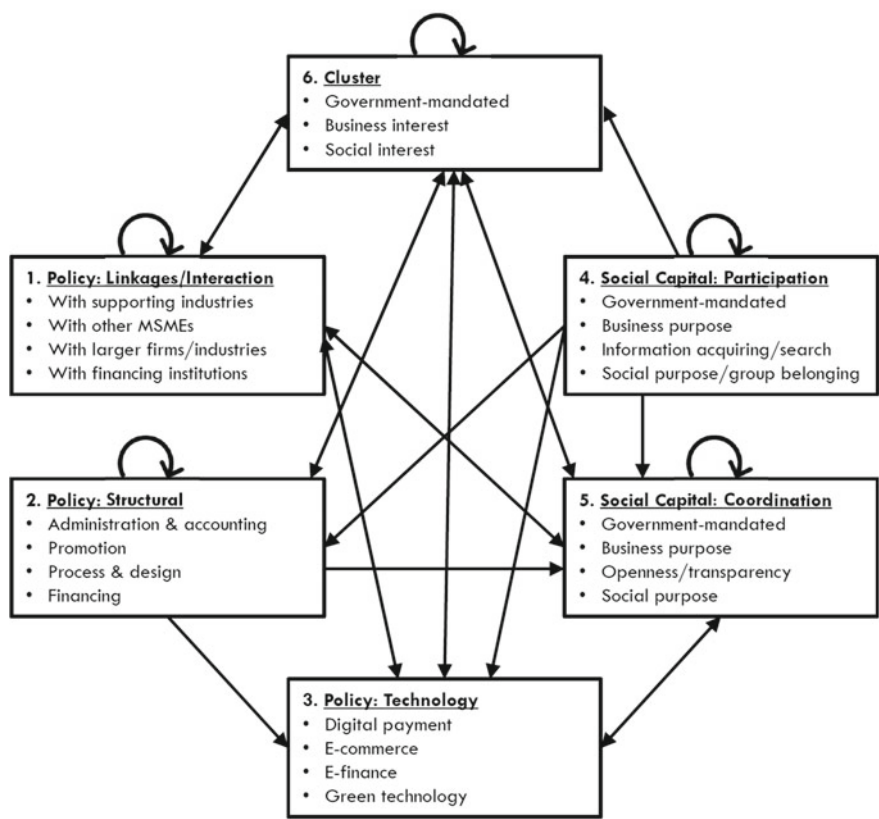


Fig. 4.4 Interplay of policies and social capital: A Network of feedback and interrelations. *Source* Author’s own creation

policy can influence—and be influenced by—the effects of other policies. For example, larger firms may help provide the financing facility and cooperation between several MSEs, and the presence of supporting industries allows several MSEs to jointly utilize the industries’ products and services. Such internal effects are denoted by circling arrows at the top of each policy box in Fig. 4.4.

Similar effects, albeit with a different degree of completeness that may also include feedback influences, are applied to the structural category of policy consisting of measures to strengthen the administrative and accounting capacity, policies to promote MSE, to assist MSE to improve the production process and product design, and to increase MSE’s access for low-cost financing. The feedback effects occur, for example, between promotion and product design where the preparation for promoting events may lead MSEs to come up with a new or modified design (e.g., matching

an important role in accelerating and improving MSME growth and competitiveness in the digital era (Lembaga Demografi FEB-UI, 2018).

with the taste of consumers), on the other hand the new design may change or refocus the type and content of the promotion.

In the category of technology policy, no feedback links are expected. There are four components in the category: digital payment, e-commerce including the use of social media, e-finance, and green technology. It is important to note that policy categories can be interrelated in one way or another. In the case of technology policy, for example, it is both affecting and affected by some components in the linkage policy, but is only affected by some components in the structural policy category. More crucially, they are all interrelated with the social capital components. These particular interrelations capture the core structure of systemic framework in our survey. The working of the interplay between policies and social capital determines the type of cluster where cooperation for collective action is expected to improve MSE performance.

As has been discussed earlier, there are two categories of social capital influencing the nature and quality of cooperation for collective action: participation and coordination. Under the participation category, there are four types to be ranked: participation mandated by regulation, participation for strictly business affairs, participation for acquiring information, and participation for social interactions. Related to this classification is the categorization under coordination, which also consists of four components similar to those under participation: coordination mandated by regulation, coordination for purely business purposes, coordination for transparency (where the role of information and communication is key), and coordination for social interactions purpose.

Similar to the policy categories, there are interactions among—and feedbacks between—all these components (see circling arrows above the participation and coordination boxes in Fig. 4.4). However, those interactions should be interpreted differently from the earlier case. For example, if individuals have chosen to participate in a cooperation for strictly business purposes, they may also wish to participate—or already participated—in different cooperation (through a different cluster) for other purposes, say, acquiring information or having social interactions. Which between the two is most preferred reflects how the business-oriented participation “influences” their preference towards participating for other purposes. On the other hand, if individuals have participated in a cooperation for, say, a social interaction purpose, they may wish to participate—or already participated—in another cooperation that is strictly business oriented. This example represents the interactions and feedback effects in the relations between participation for business purpose and participation for social interaction purpose.

Due to this distinctive nature of relations, and the possibility that MSEs participate in more-than one cooperation, we structure the internal feedbacks within the social capital categories in way that is depicted in Fig. 4.5. Similar explanations can also be used for the coordination category (Fig. 4.6).

Using the frameworks in Figs. 4.4, 4.5 and 4.6, results of the systemic survey are as follows. The first stage is to determine the respondents’ views towards the importance of policies viz social capital. This stage is used to test the hypothesis that

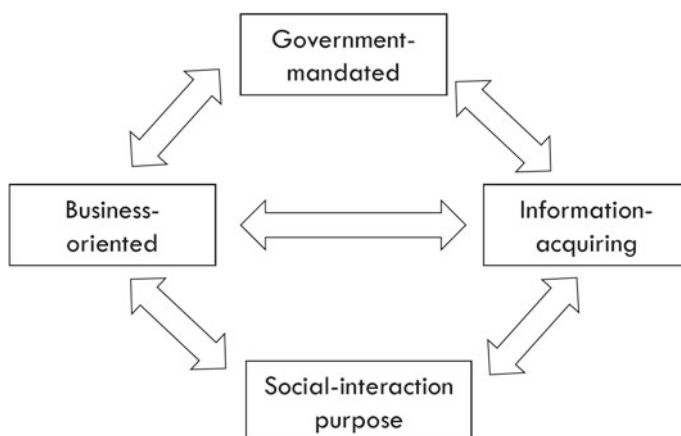


Fig. 4.5 Interactions within ‘participation.’ feedback in near completeness. *Source* Author’s own creation

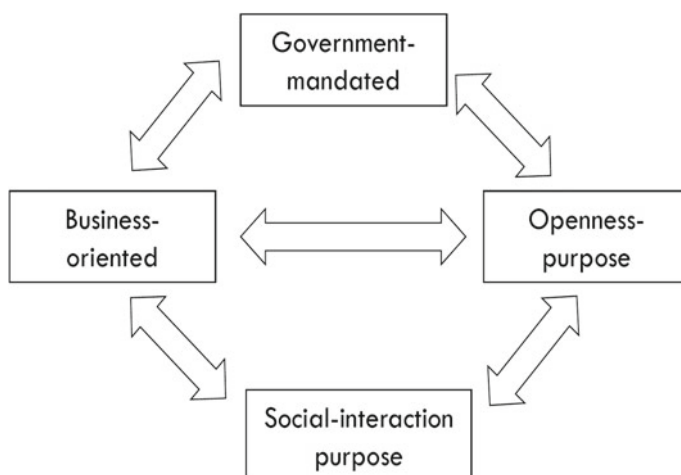


Fig. 4.6 Interactions within ‘coordination.’ feedback in near completeness. *Source* Author’s own creation

‘policy’ dominant scenario (policy is more important than ‘social capital’) does not suffice to ensure MSE improvement.

Results of the survey reveal that a slightly less-than half of the respondents in our sample consider ‘policy’ matters the most—more so than ‘social capital’—in affecting MSEs’ efforts to improve competitiveness. Among the other half who do think that it is not ‘policy’ that matters the most, about one-third are of the opinion that both ‘policy’ and ‘social capital’ are equally important (equally weighted), and one-sixth (17%) consider ‘social capital’ is more important than ‘policy.’ Two things influence

these results: the structural variables discussed earlier (see again Fig. 3.6), and the spatial dimension (regions).

Different characteristics of respondents (structural variables) give different results of judgement. For example, shown in Table 4.2, among MSEs operating in the agricultural sector, a considerably large share (64%) believe that social capital and its interplay with policy play a much more important role than policy-dominant scenario in influencing MSE performance. Another characteristic showing a large portion of MSE who believe that relying on policy more than social capital does not suffice to improve performance is the size or number of employee. More than 60% MSEs with a relative large number of employee hold such a view. Two other characteristics having high shares are related to the use of digital technology and the number of children in the family. MSEs that do not use digital technology and those whose operators have a relative large number of children are also of the opinion that policy-dominance cannot be effective to improve MSE performance; the corresponding shares are 57% and 56%, respectively.

Most MSEs (64%) that have been receiving assistance from BI for a longer-than-average period also believe that policy dominance is not sufficient. Looking into more details, the share of those having such a view who are both members of a cluster and receiving BI assistance is over 70%. To the extent most MSE assisted by BI-KPWs have performed well (in most cases better than those not assisted by BI-KPWs), we find this result particularly interesting. The criteria and procedure adopted by BI-KPWs to select MSE, and the comprehensive approach they use in assisting them have clearly contributed to the improved performance of those MSEs, making them understand better about the importance of social capital.

Among policy categories, majority MSE prefer linkage policy to help create and strengthen the interactions between MSEs and other relevant parties. Within social capital, coordination is considered most important partly because the majority of respondents are already actively participating in a cluster but still lack of coordination required to make the cooperation effective. For MSEs who strictly rank policy higher than social capital, the linkage policy is ranked the highest, with the exceptions of those whose owners have a large number of children, have a long relationship with BI, exporting, and those operating in the agricultural sector. According to these MSEs, policies related to technology is most important.

Among MSEs who strictly prefer social capital, the results are split equally, i.e., half prefer participation and another half prefer coordination. Only MSEs not using digital technology, exporting, member of a cluster, and operating in trade and services sector consider participation more important than coordination. Hence, while in average coordination is viewed more important than participation, for MSEs whose opinion is strictly leaning towards social capital the importance of participation exceeds that of coordination. A complete list of the ranking of policy and social capital categories broken down by “structural variables” (different characteristics of respondents) is displayed by spider charts in Fig. 4.7a–n.

The spatial/regional dimension is equally important. In contrast with urban-based MSE, the number of those in rural area who believe that policy dominance will not suffice far exceeds the number of those who believe otherwise (56% vs. 44%). By

Table 4.2 Distribution of perceptions towards the importance of policies and social capital

Categories	Urban-rural		Gender		Age		Education	
	Rural	Urban	Female	Male	Below mean	Above mean	Below mean	Above mean
Government policy	0.44	0.55	0.55	0.45	0.55	0.45	0.55	0.47
Social capital and interplay	0.56	0.45	0.45	0.55	0.45	0.55	0.45	0.53
Total	1	1	1	1	1	1	1	1
Categories	HH size		Number of children		Success		Employees	
	Below mean	Above mean	Below mean	Above mean	Not successful	Successful	Below mean	Above mean
Government policy	0.55	0.47	0.53	0.44	0.53	0.47	0.53	0.39
Social capital and interplay	0.45	0.53	0.47	0.56	0.47	0.53	0.47	0.61
Total	1	1	1	1	1	1	1	1
Categories	Years in business		Years with BI		Digital use		Export	
	Below mean	Above mean	Below mean	Above mean	Yes	No	Yes	No
Government policy	0.47	0.53	0.56	0.36	0.51	0.43	0.47	0.51
Social capital and interplay	0.53	0.47	0.44	0.64	0.49	0.57	0.53	0.49
Total	1	1	1	1	1	1	1	1
Categories	Cluster		Cluster size		Zoom		Intransitive	
	Yes	No	Below mean	Above mean	Zoom	No zoom	Intransitive	Not intransitive
Government policy	0.44	0.59	0.51	0.45	0.48	0.64	0.56	0.44
Social capital and interplay	0.56	0.41	0.49	0.55	0.52	0.36	0.44	0.56
Total	1	1	1	1	1	1	1	1
Categories			Jawa	Kalimantan	Papua, Maluku, NTT		Sulawesi	Sumatera
Government policy			0.44	0.75	0.48		0.44	0.58
Social capital and interplay			0.56	0.25	0.52		0.56	0.42
Total			1	1	1		1	1
Categories			Various industries		Consumption	Trade and services		Agriculture
Government policy			0.54		0.50	0.63		0.36
Social capital and interplay			0.46		0.50	0.38		0.64
Total			1		1	1		1

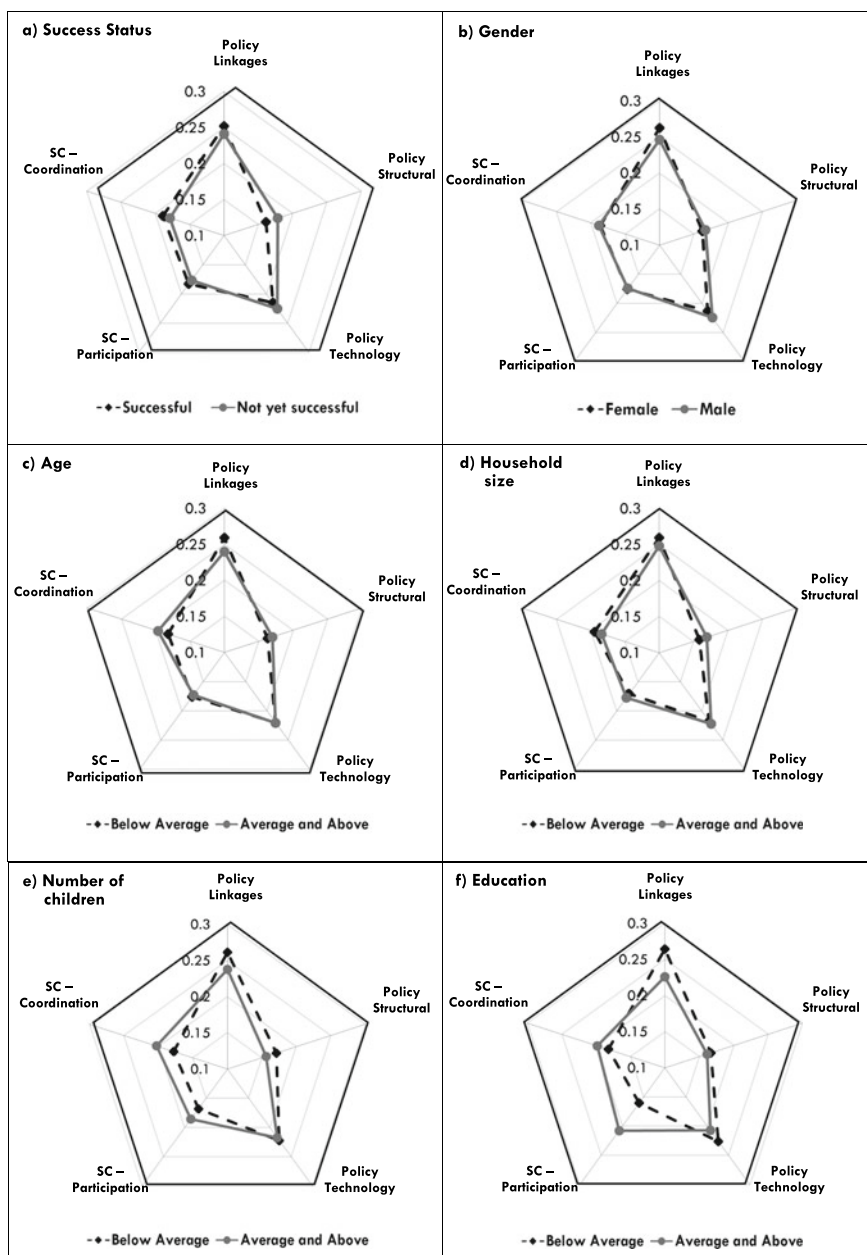


Fig. 4.7 Ranking of policy and social capital components: MSE characteristics. *Source* Compiled Survey results

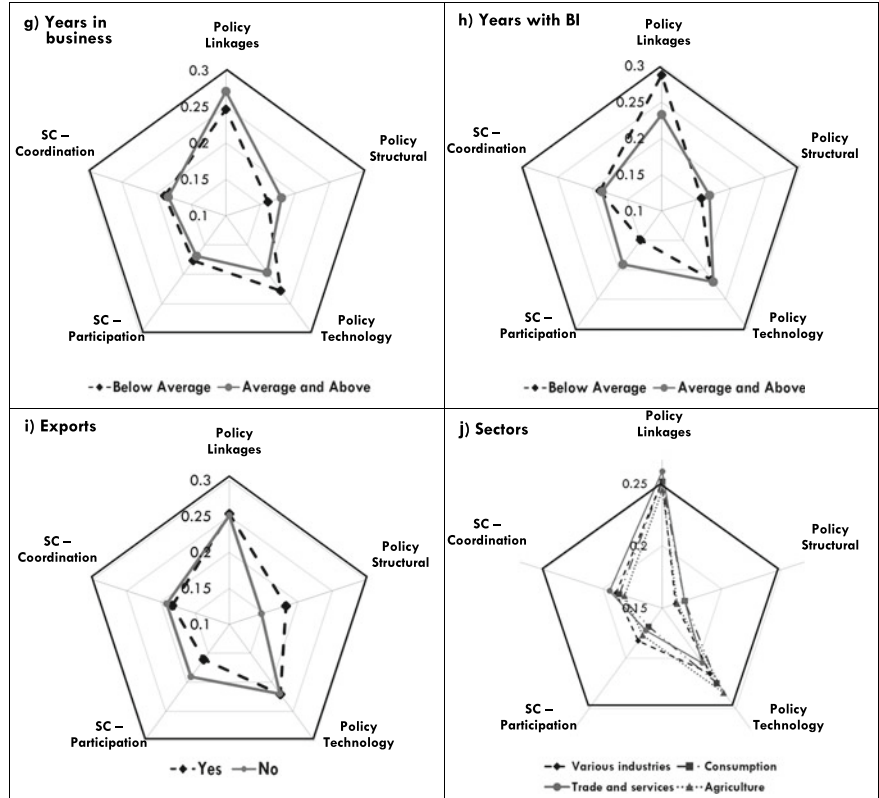


Fig. 4.7 (continued)

regions, MSEs with higher share that hold such a view are in Jawa, Sulawesi, Papua, Maluku and NTT. Figure 4.8a, b display the spatial/regional dimension of the ranking of policy and social capital categories.

Among different policies, both urban-based and rural-based MSEs prefer linkage policy, followed by technology policy. Between the two categories of social capital, the need for coordination is ranked slightly higher than for participation. By regions, MSEs in all provinces except Sumatera unanimously put the policy to strengthen linkages at the top and technology policy at the second. In the case of MSEs in Sumatera, the prioritization is reversed: technology policy at the top, followed by policy for linkages.

Next is the ranking of components. Within policy for linkages, majority MSE prefer measures to improve interactions between MSEs and larger firms. However, almost one third of all categories put policies to develop and strengthen supporting industries at the highest priority, followed by policies of linkages with larger firms. The need for supporting industries like packaging and logistics to help MSE cannot be overstated. During informal discussions with survey participants, this issue was raised

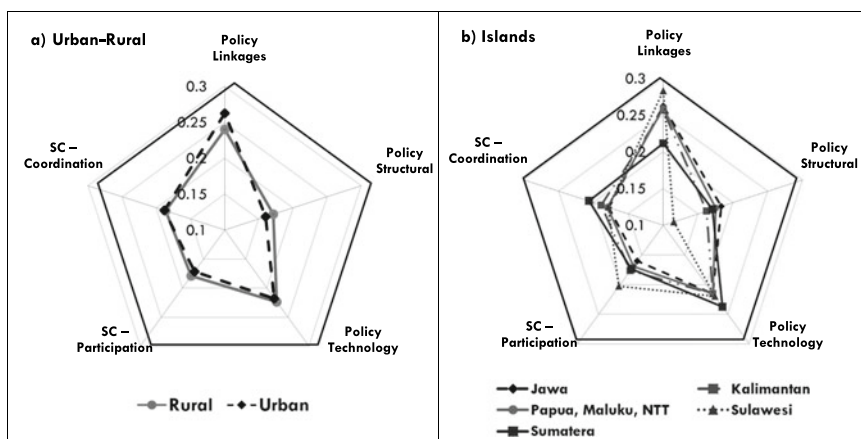


Fig. 4.8 Ranking of policy and social capital components: spatial/regional dimension. *Source* Compiled Survey results

repeatedly by them with some concrete examples. They emphasized the importance of such industries to secure and improve the supply chains, especially for MSEs operating in outside Jawa where transportation costs are expensive (see the testimony of MSE red chili in Lhokseumawe and MSE rendang in West Sumatera, in Appendix A.6).

Within structural policy, most MSEs clearly view promotion policy as the most important. Even those who do not rank it at the top, put it as the second priority. Among them are MSEs in rural areas, member of any cluster, located in Jawa, operating in the agricultural sector, and not using digital technology. For them, policies that are aimed at improving the product, process and design are more important than promotion; that is, improving quality is better than increasing quantity (sales).

In terms of technology policy, majority MSEs prefer measures to enable MSEs to use e-commerce for sales and improving access to inputs. Note that many of the respondents in our survey do not have/use digital technology. Lack of a reliable internet connection is one of the reasons. If utilization of digital technology is to be encouraged, some MSEs prefer to use it for payment purposes (e-payment). Even for that to happen, having a reliable internet connection is necessary. This was expressed particularly by MSEs with limited access to technology (no digital), those operating in trade and agricultural sector, and MSMEs located in Kalimantan and Sulawesi. A complete list of ranking of the components in each policy category for MSEs grouped according to the “structural variables” is displayed in Appendices A.3 and A.4.

Within the coordination category of social capital, the perceptions of majority MSEs lean towards transparent coordination in order to make cooperation and collective action effective. This is due to the fact that exchange of information among members are highly valued, which is also consistent with the results from the ranking of components within the participation category, where majority put searching for information at the top. For the second choice, the results vary between coordination

for business purposes and for social interactions (informal coordination), although most lean towards the latter. However, by regional dimension the difference of perceptions is quite stark. Urban-based MSEs believe that the most important kind of coordination is the business-oriented one, whereas their counterparts in rural area are of the opinion that the main purpose of coordination is to get information, hence transparency is valued the highest. Again, this is consistent with the ranking under the component of participation where searching for information is put at the top priority. By regions, the only MSEs that value business-oriented coordination as the most important are those in Kalimantan. Other MSEs in the rest of the country choose coordination for transparency and for social interactions. What is also very obvious is that, virtually all MSEs do not favor coordination mandated or conducted through government regulation.

The strong perceptions of most respondents towards transparency in coordination and searching for information are also expressed during the informal discussions after the survey. Many participants even made a request for BI to help organize zoom sessions like the one we had during the survey, in which MSEs operating in various sectors in different regions can communicate and interact with each other so that they are able to acquire information useful for their operations.

Having revealed their perceptions regarding the degree of importance of all components under policy and social capital, as well as the interplay between the two, respondents are eventually asked to rank the types of cluster deemed most relevant for cooperation and collective action to improve their performance. It turns out the preferred choice of most MSE remains the same as in the previous benefit/cost framework, i.e., a cluster for strictly business purposes. The exceptions are MSEs run by younger individuals, having relatively large number of employee, currently not a member of any cluster, and operating in handicrafts, handbags, woven fabric or tenun, furniture, perfumes, etc. These MSEs put government-mandated cluster at a highest rank. All in all, most MSEs under study are of the opinion that given the pre-conditions and interplay of policies and social capital, joining a cluster for a strictly business interest would be most fitting for improving competitiveness.

Sensitivity Analysis

The robustness of the survey results described above is tested by a series of sensitivity analysis discussed in this section. The way we conduct the analysis is by changing (mostly raising) the weight of each element in the component in every level of the hierarchy and check whether or not the final ranking of the elements in the final component at the bottom of the hierarchy change. The charts showing the full results are displayed in Appendix A.5.

In the benefits hierarchy, the ranking of the results is not sensitive to the existing location of MSE (the first level of the hierarchy in Fig. 4.2). On the other hand, the type of benefits, monetary or non-monetary, matters. If we focus only on the monetary benefits, the final ranking of perceptions shows the government-mandated cluster

being the most preferred choice. As the weight of monetary benefits gets bigger, however, the new ranking replaces the government-mandated with business-oriented cluster at the top. This is somehow expected; when the focus of MSEs strictly on monetary revenues or profits, they also tend to emphasize only the business side of joining a cluster. The reverse outcome, however, applies to non-monetary benefits. The more the MSEs feel that such benefits are more important than monetary benefits, the more they prefer to join the government-mandated than business-oriented cluster since such a cluster is expected to offer other benefits through government-assisted programs beyond just pure business benefits. What about the sensitivity of each element under those two types of benefits? Checking the final ranking of all scenarios after assigning greater weights to all elements (one at a time), we found no change in the ranking whatsoever, implying that the results from the benefits hierarchy are robust.

On the cost side, the sensitivity of operational costs and transaction costs is extremely small. Raising the weight of each does not alter the outcome that a cluster for social purposes is viewed by the MSEs to be the costliest. Even if we augment the weight of every single element under those costs, and also under the location component at the third level of the hierarchy, such a conclusion remains intact. The only exception is when the weight of closer to inputs location (“what if” type, rather than the actual location) is raised to maximum, in which case a diversification of product becomes the costliest for them, presumably due to market uncertainty surrounding the diversified products.

The robust results under the benefits and costs hierarchies above make the final ranking of the benefits/costs ratio remains the same as in the survey results, i.e., joining a business-oriented cluster being the most preferred choice.

Next is the sensitivity analysis for the survey results based on the systemic framework that involves a network. Note that since a network is designed to capture the feedback effects, there is no such thing as the “bottom level” as in a hierarchy; it essentially reflects a system where “everything depends on everything,” and hence the ultimate target to look at in conducting the sensitivity analysis depends on the specific goal that we are interested in. The analysis presented in the preceding section has made it clear that the specific goal being adopted is the type of cluster (the top part of Fig. 4.4). Looking at all the runs from augmenting the weight of each component in every category, there is no single case showing that the ranking of cluster type is altered; the business-oriented cluster remains the most preferred choice. The results of the systemic survey are therefore very robust.

Yet, more information can be acquired from the sensitivity analysis of a network system. Take the case of technology policy for e-finance. Even though business-oriented cluster continues to be at the top ranking when we raise the weight (or the importance) of e-finance, the size of the weight actually declines from 0.440 to 0.406, whereas the weight of government-mandated cluster increases from 0.319 to 0.389 (the weight of social-oriented cluster declines, i.e., from 0.241 to 0.205); see Appendix A.5 for the details. Given the fact that the analysis in the preceding chapter has shown that e-finance policy is viewed by majority of MSEs to be less important compared to the other types of technology, this suggests that intensified efforts to

boost the use of e-finance among MSEs requires a strong support and assistance from the government, for which government-mandated clusters are seen to be more appropriate to have. It is difficult to expect MSEs' shifting to e-finance technology without government's assistance, more so than their shifting towards e-commerce.

On the other hand, in the case of policies to create linkages with other MSEs, the analysis in the preceding chapter has shown that most MSEs see the importance of such policies. Yet, the sensitivity analysis also shows that raising the weight of those policies will make government-mandated cluster to take over business-oriented cluster as the most-preferred choice. Cognizant of the fact that an important message from the analysis is for policy makers to understand the perceptions and aspirations of MSEs as part of understanding the prevailing social capital, this suggests that government's assistance and supports are needed to foster closer linkages among MSEs.

References

- Anglingkusumo, R., Werdaningtyas, H., Rakhman, R. N., & Munandar, H. (2014). *Integrasi Internal Perekonomian Indonesia: Sebuah Kajian Awal*, unpublished paper. DKEM Bank Indonesia.
- LD-FEB-UI. (2018). *GOJEK's Impact on the Indonesian Economy in 2018*. Lembaga Demografi-FEB-UI.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.



Chapter 5

Case-Based Evidence and Local Custom



Abstract How do institutional arrangements and social capital work, and do cases on the ground corroborate what has been conceptualized? Some case-based evidence of MSMEs in different regions provide clues to that question. The role of trust and local solution to achieve a particular goal, including fostering environmental-friendly activities, is highlighted. The evidence also helps permeate the practical and moral thinking of the issues related to MSME operations influenced by local customs and customary laws.

Keywords Case evidence • Local solution • Circular economy • Local custom • Customary law



Conversation

A: *“Small businesses must follow government policy to SHARE responsibility in the community.”*

B: *“Treating them as equal partners and HEAR their views would have worked better for the community.”*

A: *“Small businesses are too WEAK to find a solution to their problems.”*

B: *“Given proper environment, they could WAKE up to the challenge and come up with a solution of their own.”*

A: *“When land conflict associated with customary law arises, it is difficult to deal with indigenous communities as their VOICES RANT ON.”*

B: *“There is nothing better than listening to them and putting ourselves in their shoes in order to resolve the conflict through honest CONVERSATION.”*

Thus far, we have shown the analysis of how interactions of policies, institution, and social capital affect MSME performance. The survey discussed in the preceding chapter is intended to validate the framework developed in Chap. 3. Yet, the actual relationship between policy making, institution, and MSME performance is admittedly more complex than what is conceptualized through the scientific approach. The spillover is various and, to some extent, unforeseeable. To the extent the application of scientific approach demonstrated through the survey is our generalization endeavor of using data and people perceptions as a piece of evidence, it is only natural to ask: “how do institutional arrangements and social capital actually work to affect small businesses operations?” More specifically, “do cases on the ground corroborate what has been conceptualized?”.

Enter the case-based evidence

This is what this chapter is intended to discuss. It basically presents some examples of cases throughout different regions in Indonesia. Like any case studies, case-based evidence is often regarded too soft a piece of proof for scientific inquiry. It has a lack of generalizing power and provides only limited justification to scientific hypotheses. Yet, as an epistemic strategy in social science, case-based evidence can help permeate practical and moral thinking. Presented below, the apparent simplicity of historical narratives and life experience of micro and small enterprises (MSEs) are revealing and instructive. The role of trust, social bonding, compatibility of local values, norms, and the power of local solutions come to the fore. Hence, these examples complement what has been discussed in the preceding chapters.

The Section ‘[Example of Cases](#)’ is drawing the case-based examples of MSE situations from different regions. The narratives consist of ‘stories lived and told’ involving real characters (albeit with abbreviated names), dispute resolutions and challenges within the existing institutional arrangement. They also reflect the prevailing social capital. The Section ‘[Customary Law and Social Capital](#)’ discusses the effect of local customs and customary law on MSE operations by using selected examples from MSEs operating in communities that uphold indigenous customs. Insofar around 1000 ethnic groups exist across Indonesia’s 17,000 islands, where 50–70 million people are considered members of indigenous communities (*masyarakat adat*), it is essential to explore the extent to which customs (*adat*) and customary laws (*hukum adat*) affect MSEs operations.

Example of Cases

Inflation Control Through Trust and Local Norms: Rice Farmers in Manggarai Barat, East Nusa Tenggara

In an attempt to control inflation and keep the rice price stable, in 1968 the Indonesian government established a special agency called Bulog. The agency was tasked to manage the nation-wide set of local agency and warehouses at the district level (Dologs). During a surplus season, they are expected to buy rice from farmers’ cooperative and private traders in order to avoid prices falling below the floor level. During a dry season, they are tasked to ensure that rice prices do not exceed the pre-determined ceiling level. This is done by unloading and selling rice in the market. The policy was intended to protect farmers when price is low and shelter consumers when price is high. Obviously, the effectiveness of it depends on the supply of rice that Dologs have in their storage. The problem is, since the offered price is lower than the market price, farmers are not motivated to sell rice to Dologs, and this can constrain their operation, hampering the efforts to keep the inflation low (rice price has the largest weight in the consumer price index). More seriously, it can disrupt peoples’ access to affordable basic food, especially in regions that often experienced fluctuations in rice production.

A case in point is in Manggarai Barat district, East Nusa Tenggara. Given that the policy requiring farmers to sell rice to Dologs often failed to meet the target, an individual hired by BI (let’s just call him Mr. Y) with a long history and knowledge about local culture came up with an innovative idea. Having understood well the characters of local farmers, he used an approach that he labeled ‘a community-based program of inflation control’ (*gerakan inflasi berbasis masyarakat*). At first, he made

some personal contacts and established close communications with the rice farmers who were members of MSE clusters in such a way that they gradually developed trust towards him. This was done by treating the farmers as equal partners rather than as rice sellers. This trust building—an important component of social capital—was critical in ensuring that any proposed solution would be accepted by the MSE members. From the subsequent discussions, it was found that farmers actually had surplus and capacity to sell some of the rice to Dologs, albeit with a consequence of receiving lower margin, even after considering various risks of harvest failure (due to drought, flood, pest, or other diseases). It became clear that a lack of communication and mutual trust was the key factor that caused the past efforts failed.

It was at this stage that the awareness and understanding of local culture play a critical role. Realizing the importance of telling stories for the local people to speak up and reveal their frank opinions, Mr. Y used precisely such an approach and steered the narratives towards engaging them to show their social responsibility by helping others. He also understood that timing was important. Therefore, he tried to execute the plan during the Muslim fasting month (*Ramadhan* period), when the spirit of giving and sharing is usually high. Indeed, religion can be an important source of social capital in some communities, as it provides a framework for morality and serves as the general principles of behavior. In essence, what Mr. Y tried to do was to match the community's norms and social capital with the inflation policy.

Having done all the right things, however, the real challenge was in the implementation. Since Bulog and Dologs are parts of the government apparatus, administrative bureaucracy in dealing with them is at times challenging. To overcome this perennial problem, members of MSE themselves initiated a solution, i.e., organize a meeting with all the relevant stakeholders, including the local government, in order to get supports and approvals from them. Long story short, the farmers finally sold some of the rice to Dologs, supporting Dologs' operation to keep the local inflation low. A combination of Mr. Y's approach to acknowledge local wisdom and to adopt local peoples' own-initiative helped make the inflation control policy more effective. From the regional development perspective, price stability is one of the conditions for improving peoples' standard of living, and lower local inflation also contributes to lower national inflation.



Transporting rice in Manggarai Barat, East Nusa Tenggara

Meeting Challenges with Trust and Own Solution: Breadfruit Business in Manokwari, Papua, and Coffee Business in Aceh

Breadfruit is one of the superior local products in Papua. Although not a major staple, it is an important supplementary crop for food security and variation in diets. Long recognized for its potential to alleviate hunger in tropical climates, this underutilized Oceanic staple crop is widespread in Papua, grown readily in lowland alluvial plains and fans below altitudes of 1500 m (with rainfall above 1500 mm annually).¹

In Manokwari, West Papua, a working group led by a woman entrepreneur, Mrs. IP, formed an MSE specializing in breadfruit chips (*keripik sukun*) by mixing it with locally grown taro leaves. Employing 15 women, the group was part of a church's woman organization or '*persekutuan wanita gereja*.' They produced the breadfruit

¹ Some of breadfruit plants are wild, others are cultivated. When it is dried, its nutrients are concentrated, making it a high-protein flour alternative. They can also be used for medicine, timber, fuel-wood, canoe construction, clothing, rope, wrapping and adhesive. Different countries use breadfruit to produce different products, e.g., chips in Costa Rica, French fries in Puerto Rico, and tostones (fried green plantains) in the Caribbean.

chip in a workshop located in a site provided by the church pastor with whom they had a good relation. BI supported the training components (for processing, marketing, and book-keeping), and provided subsidy for equipment and to cover the costs of packaging (which is all done in Jawa). The MSE performed well, able to sell their products not only within the region but also outside the region, and it served as a source of income for local women.

But things changed dramatically when their relationship with the newly appointed pastor went sour. They were told that they could no longer use the workshop site. The well-known Papua creed, *tak kenal maka tak sayang* (“don’t know thus don’t like” or “out of sight, out of mind”) explains why such an unfortunate situation can arise. Upon the initiative of the group leader, along with the newly recruited women some members decided to form a new group/cluster. BI supported the group by providing a production house. Receiving trust from the existing and new members, the leader and other initiators found no obstacles in recruiting members for the new cluster.

Yet, the group failed to find a synergy, and productivity was below the capacity. One of the main reasons for low productivity was too few workers attended the workshop in the production house (high absentee rate). A lack of skill among new members was another factor, although they gradually solved this problem through training supported by BI. But it was the low attendance that soon became the most serious obstacle, especially when they received a large order from inside and outside the region. Many of the women had to stay home to attend children and family’s need. In some cases, they did not get the permission from their husband to leave home. Clearly, this was a case of MSE failing to perform well not because of classical problems such as a lack of financing, high input costs, difficulty in marketing, or inadequate technology. Instead, it was a time-management issue.

After a long series of discussions, the MSE members themselves came up with a solution. They decided to adopt a pre-scheduled working time system, where members have the option to come to work only during certain pre-scheduled hours/days per week, and payments are made according to the time they spent in the production house. With such a relatively simple solution, absenteeism fell, productivity improved, and the production house became fully utilized.

This case demonstrates that, given the prevailing local norms, i.e., family custom and local creed, when the MSE had to face an unexpected challenge they themselves could find the solution. The external party, in this case BI, only helped by facilitating the process to ensure that the system would work. It is also important to note that the establishment of the new cluster was made possible due to the trust towards the leader and among members.

In some cases, however, an own solution also emerged out of frustration. Together with other MSEs in Aceh, a relatively successful small coffee business run by Mr B had been trying to convince the local authority to help facilitate with a packaging machine. The reason was simple, many MSEs could not compete because there was no good packaging facility available in the region. Most of them had to send their products to Jawa, or they had to buy the materials from Jawa for the packaging. As a

result, the additional and high transport costs made their products less competitive. Only after many attempts were made that a packaging machine was finally purchased by the local authority. It turned out, however, the machine was unsuitable for the kind of packaging required by most MSEs. The authority purchased a wrong machine without consulting with the MSEs. Out of frustration, Mr. B solved his problem by selling the products directly through various stores after packaging in Jawa, and subsequently made a plan to relocate the main part of his business to Jawa and manufacture the products there (at the time of this writing, the plan is temporarily postponed due to the Covid-19 pandemic). This is only one of so many examples demonstrating how the incompatibility of policy with real conditions/problems faced by MSEs made the well-intended policy ineffective, if not wasteful, and how the MSEs had to manage to find the solution by their own. At the end, the power of agglomeration forces in attracting activities to move to the developed region (Jawa) proved its strength.



Women entrepreneurs promoting their breadfruit chips in Manokwari, Papua



Quality control of the coffee made by a local SME in Aceh

Replication Through Trust, Local Solution, and Policy Announcement: Cattle Growers in Kupang, East Nusa Tenggara

Among farming communities throughout Indonesia, welfare progress is often measured by indicators such as how many agricultural produce they plant, harvest, and sell, or how many animals and livestock they own/raised for their meat, fibre, milk, eggs, or other products. Efforts to help MSEs in such communities used this as an entry point. In a cattle-growing community, government programs often took the form of giving calves or cattle. In many cases, the program failed because it overlooked the importance of feeding capacity as a precondition. Either the productivity deteriorated due to low quality of cattle and other products, or they ceased the cattle-growing business altogether by selling the cattle. Only in cases where an integrated approach was used or made by the government as a precondition for receiving assistance that the productivity could improve.

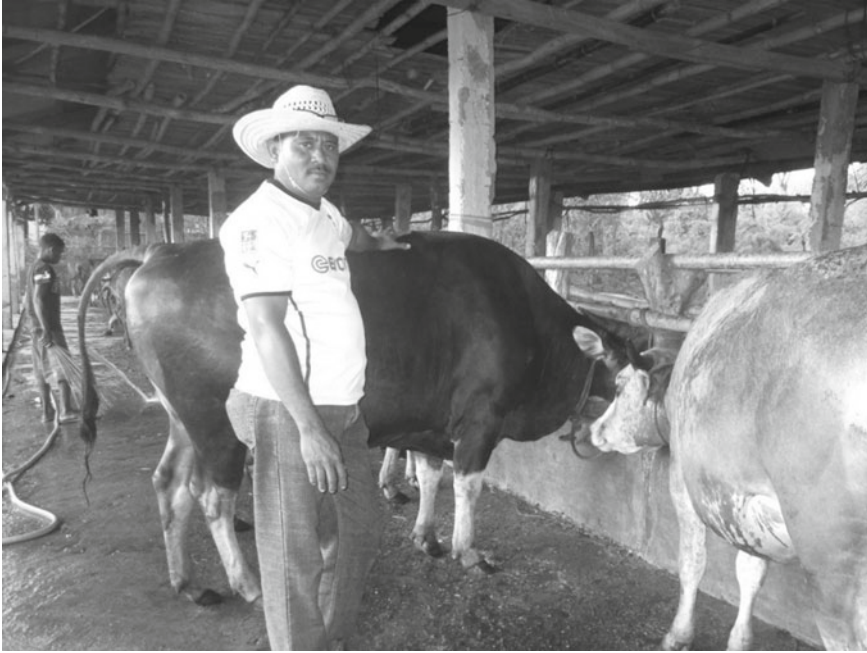
Two important issues are notable. First is on sustainability. One of the method's most important features of circular economy is the integrated production of animal and crop where nutrients from agriculture produce are recycled from animal feed to animal proteins to manure to soils and back to animal feed. The circular nature of the process is featured by nutrients added to the farm when animals, feed and fertilizer are used/purchased, offsetting nutrients leaving the farm (as meat and milk). The key is how to exploit the interaction. The second important issue is with regards to replicability. Past experience has shown that replication of even a good practice is not an easy task, since it involves changing people's mindset.

Through the skill and ability of its leader, Mr. DA, a cattle growing cluster in Kupang, East Nusa Tenggara, implemented a circular economy and tried to persuade other cattle growers to replicate it. After trying several approaches to no avail, an initiative came up from the cluster members themselves. They decided to conduct sales and cattle trading inside the farm and invite general public to attend. Expecting to have an impact, the result turned out quite impressive: some farmers in and outside Kupang were motivated to go into cattle growing business by replicating/adopting the circular economy method. This example once again shows that local communities themselves, not outside experts, are capable of finding an innovative solution.

The way to advocate a new thing also matters. Providing a concrete evidence that the new method will give the biggest benefit to the locals around the farm can be effective. This has been shown by the organic horticulture farm owned by Mr. GS (also in Kupang). His persistence to make the farm thrive and educate farmers inside and outside the region about organic farming has been working well, for which he won the 2018 'Young Agripreneur Ambassador' award.

Similarly, the way a new policy is announced can make a different impact. For example, in regions where communities are relatively poor and not too accustomed with the concept of cluster, announcing 50 ha minimum land required for cattle growing without informing the possibility of doing it through a cluster tends to receive a cold shoulder. None of the local farmers can afford to meet the set limit individually, and not all of them have a full understanding about why 50 ha is required. The risk is therefore real that the well-intended policy can be dead on arrival. Clearly, a policy becomes ineffective if it is announced without understanding the local conditions and constraints.²

² In some cases, advocacy in communities that still rely on faith and superstition also requires drawing the cultural traits of such communities. A notable example is in announcing the risks of natural disaster. The late Mr. Sutopo Nugroho, widely respected spokesman for Indonesia's disaster management agency, could not express it better when asked to reveal the secret of his credibility in educating the public about such risks: "cultural approach works better than just science and technology ... if people think that it is punishment from God, it makes it easier for them to recover".



Cattle grower in East Nusa Tenggara

***Circular Economy, Policy Asymmetry, and Vicious Circle
Problem: Rice Farm Cluster in Ngawi, East Jawa, and Banana
Chip Producer in Banten, West Jawa***

For a country that produces food waste of up to 300 kg/person annually (2016 data), and the amount of organic waste in the capital city Jakarta is second highest in the world (3233 m³, mostly from the agri-food industry), Indonesia can gain enormous benefits from applying a circular economy farming. Converting the waste into economic value and lowering the greenhouse gas emissions from food waste are among the key benefits. Yet, these potential benefits failed to persuade a large number of farmers to shift to a more sustainable farming. The lure of short-term profits, the asymmetry of policy measures, and a lack of information are all acting as hindrances.

Led by Mr. A, a community of rice farmers in Ngawi, East Jawa, formed a cluster to adopt a circular economy method.³ Their products are organic, as no chemical and toxic residue applied to the soil and plants, and the process produces zero wastes

³ The field research based upon which the narratives are presented here was conducted by one of our research team members, the details of which can be found in Rishanty (2021)

where one-third of the waste is used for cattle feed and two-third for fertilizer. In addition to implementing an environmentally sound method, the productivity of the farm is around 6 tonnes per hectare, higher than the national average and greater than the productivity of government-mandated rice clusters that did not apply a circular economy method.

Numerous obstacles, however, continue to stand in the way of their desire to grow and make progress. The application of the method also fails to spread to other farmers despite various efforts made by the leaders and members of the cluster. The total rice production based on an environmentally sound method throughout the region continues to be low. This has created a vicious circle. The fact that the production is low causes a stigma against promoting it, especially that rice is considered important not only economically but also politically (for food security). Indeed, government supports to the cluster and generally to any efforts to shift towards sustainable farming have been limited. In addition, the development of major infrastructure has resulted in dwindling area of fertile land especially in Jawa, and the provision of subsidy for chemical fertilizer creates an unfair price competition to the circular economy farms. The government assistance to provide irrigation machine to rice clusters in the area also creates a negative effect. Allocating only one unit machine in a cluster with a relatively large number of farmers causes frequent disputes among members—hence the weakening of social capital—over who has the right to use the machine. The design of the policy clearly overlooks the local conditions and reality on the ground.

Efforts to spread the concept of circular economy were also tried by the cluster members through enhancing the skill and knowledge on practical application of circular economy. They distribute the waste to, and share inputs with, other farmers, to strengthen the social bonding. Yet, the progress has been rather disappointing. Given the fact that the whole process of circular economy involves a rather long supply chain, any efforts to spread the method requires an expanded network of collaboration with all stakeholders, including with consumers and public at large.

While breaking a fixed mindset and adopting alternative policies that embrace new development paradigm take time and effort, convincing farmers who has been using traditional method for years and feel that their products can be threatened (cannibalized) by the new method is equally challenging. It requires a cultural approach and the trust from other farmers.⁴

A rather contrasting situation is experienced by a traditional banana chip maker in Banten, West Jawa. Run by Mrs. AS, a mother of two children, the business is typical of rural small business facing a vicious circle problem. She encounters a combination of challenges. Culturally, she prefers not to borrow money, although given the circumstances the only way to continue the business and support the family is to get an additional capital. On the other hand, she also knows that getting loan is difficult due to limited collateral and she does not have the necessary license

⁴ The role of culture and social capital in linking process and performance of circular economy is evident in other countries as well. Revealed in Subramanian et al. (2019), the implementation of circular economy in China has been strongly influenced by the coexistence of Confucian and Taoist values among workers.

(known as P-IRT). All these put her in a dilemmatic situation. It is her strong sense of survival to gain self-realization and the desire to send her children to a higher education program that finally forced her to take a bank loan, albeit only of a small amount.

But a series of obstacles continue to block her business progress, ranging from a lack of proper equipment to raise production capacity and improve the quality, limited market and low purchasing power, to a lack of knowledge for using different means of sales including using internet-based e-commerce. The money from the loan was far from adequate to overcome these obstacles and to keep the business afloat, especially during the pandemic. In such a situation, concerns over environmental considerations are off the table. Instead, she had to do cost cutting by using cheap plastic for packaging. With no government support, no steady income, while refusing to default loan, at the end she had to forgo her desire to send the children to school.

It is hard to imagine what solution is available for her when the response to the original problem (the need for capital to expand business) creates new problems of loan repayment and forgone children education, which aggravate the original problem. She had tried all kinds of initiatives to break the vicious circle, but to no avail. This is clearly a case where policy intervention and external assistance are required.



Preparing for transporting products of the community of rice farmers in Ngawi, East Jawa



Drying process in the traditional banana chip makers in Banten, West Jawa

Customary Law and Social Capital

People invest in social capital within their communities by building a network. So do members of MSEs when they form a cluster. They invest in social capital to enable and strengthen collective actions, and to resolve any potential conflicts. In a community with deep-rooted and long history of customs and tradition, as in the case of many indigenous ethnic groups throughout Indonesia that still hold indigenous customs and follow customary law, disputes are settled without invoking the court that relies on local/state law.

A number of studies exploring the link between laws, customs, and social capital reveal that business operations in communities with high levels of social capital tend to comply with a variety of simple legal mandates (Ramseyer, 2015). Obeying traffic rules, participating in neighborhood safety, and paying monthly due for specific needs are few examples of simple legal mandates. Such businesses and communities are less likely to breach or default on their promises. They also tend not to sue when a dispute ensues, and in the case of MSE borrowing money, the creditors less often petition courts for enforcement orders. Debtors in high social capital communities

also less often file in court for bankruptcy protection. On the other hand, members of communities and business operations with low levels of social capital are more likely to default on their contracts, and to litigate and petition a court.

For any business activities, large, medium, small and micro alike, rules and laws are very important as they are closely tied to the customs and tradition that prevail in a community. They do not exist in a vacuum. In assigning punishment for the basis for obedience, laws require the support of custom in order to be compatible with the need of communities. On the other hand, customs that are required to produce social accord need the support of rules and laws for members of the community to observe the practice without hurting the interest of others. The question is, when disputes arise in a community that holds strong customs and customary laws, which one to abide to, the state law or the customary law?

The type of court where disputes are heard has a profound influence on the approach to proving or ascertaining customary law. In many situations, if a case is unresolved, they bring it to a higher forum, e.g., from hamlet to village level. If it is still unresolved, they may take it to an even higher level where local/state law is applied. In case it becomes apparent that customary law should be used, however, there is a possibility that the judicial officers in higher level court are either not familiar with the customary law's provisions (in which case a special statutory provision may be made), or they unilaterally impose sanctions that violate customary law. Either way, it could give rise to disharmonious relationship or even conflict, which is obviously unfavorable for social activities or any business to operate.

To avoid such a scenario, some regions decided to formally incorporate key components of the customary law into local/state law. Rejang Lebong district in Bengkulu province is an example. The MSEs we interviewed in that district did not find serious problems related to this matter because local government had issued a regulation (PERDA No 4, 2017) to acknowledge and protect the indigenous communities and their customary law where trial was developed based on the spirit to achieve agreement and trust, and to be conducted in a transparent way (open to public). Even the execution is determined by the agreement of the parties involved. When the decision has been made, the conflicting parties forgive each other, and the execution is done in a ritual session through a joint prayer.

Another clause in PERDA No. 4 that is highly relevant for MSE operations especially in the farm-based activities is on land rights. The regulation explicitly recognizes custom-derived land rights (*ulayat*) of the indigenous communities, consistent with what is stipulated in Rejang's customary law.⁵ The rights, known as 'taneak tanaialadalah,' is a traditional type of land tenure that reflects communal rights based on community's custom or tradition. For two decades since the promulgation of Law

⁵ The area governed by Rejang's customary law where communities adhered to a system of rules from leaders who emerged from within the community is called *petulai* (Siddik, 1980). Historically, it was the area where the tribe known as *suku sembilan* settled in groups before Bengkulu area came under the control of the Majapahit Kingdom, and it was then the Rejang's customary law began to be known. Some speculate that a major change in Rejang's customary laws occurred when after losing a dispute at court, four 'princes' (*pangeran*) of Majapahit fled to the hinterland in search of territory to rule.

No. 5/1979, the indigenous communities lost their customary rights and controls over their land and other assets. Following the decentralization policy in early 2000s, particularly after the issuance of Law No. 22/1999 on regional government (later renewed by Law No. 32/2004), local governments had the opportunity to restore the rights of indigenous communities. Since then, many district governments saw themselves confronted with claims related to such rights. The response, however, varied. Some, including Rejang Lebong, opted to formally integrate customary law with local law, while others did not.

What matters, however, is the implementation. Even in regions where two types of law are integrated, when a choice has to be made the enforcement tends to side with local/state law. Consequently, MSE activities relying on land-use and related resources have to face uncertainty. Such cases often arise when big plantation or mining activities take the land area that is part of the traditionally owned territories of indigenous peoples. Mining, forest and land use management is always tightly close to local custom and law. For indigenous peoples, land is the main source of traditional means of subsistence, and for those running small commercial activities it is the only supporting asset they had. More often than not, disputes over land ended up being resolved by undermining the customary law. The indigenous peoples' rights are respected only to the extent that the state law has formally recognized such rights (normally done by the issuance of formal title).

Yet, the indigenous customs and tradition are generally more favorable from the environmental impact perspective. The case in Kalimantan is a notable example. For generations, Dayak tribes have lived in harmony with nature and used the forest in a sustainable way. Having intimate connection to nature, they have developed a farming system that prevents forests from being destroyed by following the guidance in customary laws before opening forest lands for farming. They plant diverse rather than single crop, and grow tall trees as forest canopies in order to secure plant and wildlife habitat and to cycle necessary nutrients.

Similarly in Rejang Lebong, where forest covers about 75 percent of the entire area, and most members in 65 villages abutting *Sumatera's Kerinci Seblat National Park* are farmers.⁶ After the government established a national park which also covered the indigenous community land without consulting them in 1999, local farmers changed their polyculture farming to monoculture type (e.g., coffee). Only in recent years the indigenous Rejang rediscovered their heritage by relearning polycultural agriculture practiced by their ancestors. Multiple crops are now grown interspersing coffee bushes with other plants such as kabau and jengkol bean trees (traditionally used in curries and chili sauce), allowing farmers to make money year-round

⁶ The Park boasts caves, peaks and crater lake (largest in Southeast Asia) where some 370 bird species are found. It is also one of the last homes of the endangered Sumatran tiger (*Panthera tigris sumatrae*).

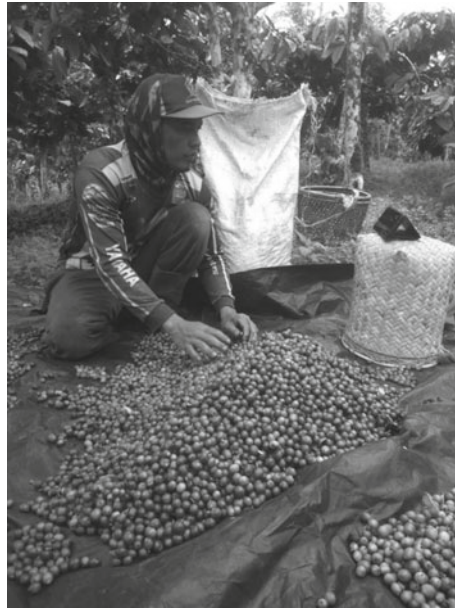
instead of one-time shot during the coffee harvest.⁷ By rediscovering the old tradition, local communities gain not only from higher earnings but also from reduced damages caused by the environmental destruction.

For some MSEs not operating in farm activities, however, they may find the relevance of customary law in contemporary context more limited. Even when the business requires inputs from farm products (e.g., processing), the perceptions towards indigenous customs including the effect of customary law on their operations are no longer strong. This often occurs in communities where the relevance of customary law in contemporary contexts has been increasingly questioned. Younger generation, members of communities who had interactions with outside world, and those with formal education, are usually more inclined to accept new norms and customs. They tend to raise new ideas, and stage criticisms of local customs as they view them impractical.⁸

Most MSEs who are busy and more concerned with their day-to-day activities also feel that indigenous customs have only little effects on their business operations. This is evidenced from the results of our additional survey using a questionnaire designed specifically to include the role of customary law. Respondents in Rejang Lebong believe that other factors are more important to consider than concerns over the effect of local customs or customary law. An MSE producing palm sugar, led by Mr. SA, expresses their opinion that following the state law is affecting their business more than abiding to the customary law especially when the non-monetary benefits are considered. A business-oriented cluster is most preferred for them. On the other hand, an MSE operating in coffee production, led by Mr. S, perceives that state and customary laws are both contributing positively to their business operation. In terms of cluster type, after considering the benefits and the costs, they prefer to have a government-mandated cluster. Insofar the two types of law in Rejang Lebong have been integrated, abiding to state law and joining a government-mandated cluster are not in contradiction with following the customary law.

⁷ For example, as reported in Hendry (2017, each of 600 families in Tik Sirong village planted 10–15 of such trees in the coffee groves. Some also planted petai beans, durian, and bamboo. The latter, ubiquitous in the past but disappearing in recent years, has multiple home uses and commercial benefits. It can also shore up soil that might otherwise erode and cause flood (the region suffered from regular floods since 1995).

⁸ Indeed, customs are not static. As unwritten rules that people follow in a particular culture or society, customs evolved and changed overtime. The way they changed, however, should be put in the historical context of the respective society. As remarked by Siddik (1980), to appreciate the evolution of Rejang customs and customary laws, one needs to understand the history of Rejang tribe.



A small coffee producer in Rejang Lebong, Bengkulu, who sees the importance of both the customary and the state laws in his business operations



A small palm sugar producer in Rejang Lebong, Bengkulu, who are not too affected by the customary law

A similar finding is revealed from our survey in Umi Jaya village, in Sintang district of West Kalimantan. Organized and led by Ms. AA, Ms P, and Ms. S, members of a cluster specializing in traditional woven fabric and cloth are of the opinion that following the state and customary laws is most beneficial to their operations. Despite the fact that members of Dayak community where the MSE operates continue to hold

their traditional customs and tradition, the effect of customary law on their operation is rather limited. They use the Dayak motifs for their cloth, and they employ local women from the Dayak community. Interestingly, from the cost questionnaire they generally perceive that it would be costly (ranked second costliest) to just strictly abide to customary law. After combining the benefits and the costs, their preferred cluster is one that is strictly for business, not the government mandated type.

The above result is not surprising. MSEs producing woven cloth in this area represent a typical small business operation plagued by classical problems. Their location is remote, far from major urban centers, the infrastructure is poor with limited access to outside information (let alone technology), and the workers' level of education is low. When trying to work on some administrative matters, they have to struggle with bureaucratic hurdles that cost them time and money. Ironically, they usually experience this when trying to participate in a government's offered program. It is difficult to expect their business to grow in such circumstances. While the product of this MSE represents a genuine local value of Dayak customs and tradition, hence unique and rare, their business is paradoxically stagnant. As sales are limited, and the price is unreasonably low despite the fact that we found their products are sold in the international market by a third party at a much higher price, workers are unable to secure steady income. This category of MSEs needs a magic wand that can help to expand the market network of their products.



A woman weaving in a cluster of Dayak woven fabric makers, Umi Jaya village, Sintang, West Kalimantan. They strictly use the Dayak motif for their products and employ women members from the Dayak community

Protecting indigenous local customs in a system with formalized rules, regulations, and legal systems can also be incompatible in a different way: i.e., the latter is not supporting the former. Take the case of MSEs operating in culture-related activities. To the extent culture and cultural heritage are important components of social capital, preserving them cannot be separated from securing the social capital. Indeed, preserving cultural heritage has myriad impacts on social capital. For one thing, it provides space of encounters for social integration and inclusion. But it can also function as a source of identity and local pride, from which members of community may cooperate and engage in collective actions.

An example is the artisan-weaving group pioneered and led by a local woman (Ms. AH) in Nita village of Sikka Regency in Flores island-East Nusa Tenggara. Run all by women, the self-managed group wanted to protect the ancient organic art of ikat weaving, which is a valuable heirloom and part of the region's cultural identity. It exemplifies the rich cultural heritages of the community. In addition to keeping the ancient motifs rich of philosophical values, they also adopt the ancient technique and all materials they use are natural, e.g., the natural colors for dyeing are made from tea barks, leaves, fruits and roots. While the activities provide income for the local women, the emphasis of their work has been on the social, cultural, and philosophical value to preserve the local heritage. Hence, what they produce cannot be considered as a handicraft; the weavers are not craftswomen or handicraft workers, instead they are called *seniwati* (women artist). This may explain why they hardly receive any assistance from local government, as the official policy and assistance outside farm activities are traditionally reserved for MSEs producing handicraft.

Yet, protecting cultural heritage, which is exactly what this cooperation has been trying to do, is an important part of securing social capital. This kind of work by small cooperation or enterprises produces multiple advantages beyond just economic benefits. They deserve attention and assistance beyond those mandated by the customary and commercial laws for MSEs. At the very least, the products of small enterprises of this type need to be protected by the intellectual property law (HAKI or Hak Kekayaan Intelektual).



A woman leader of a self-run artisan-weaving group in the village of Nita, Flores, East Nusa Tenggara, who emphasizes the need to protect the local cultural heritage

References

- Hendry, D. (adapted by Melati Kaye). (2017). A return to mixed roots in a Sumatran forest. In *Mongabay Series: Global Forests, Indonesia's Forest Guardians, Indonesian Forests*.
- Ramseyer, J. M. (2015). Social capital and the formal legal system: evidence from prefecture-level data in Japan. *Journal of Legal Analysis*, 7(2), 421–466.
- Rishanty, A. (2021). *A Study of Transition Towards Circular Economy in Developing Countries at the Firm Level*. Ph.D. thesis. University of Liverpool.
- Siddik, A. (1980). *Hukum Adat Rejang*. Balai Pustaka.
- Subramanian, N., Gunasekaran, A., Wu, L. & Shen, T. (2019). Role of traditional Chinese philosophies and new product development under circular economy in private manufacturing enterprise performance. *International Journal of Production Research*, 57(23), 7219–7234. <https://doi.org/10.1080/00207543.2018.1530467>.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.



Chapter 6

Summary



Abstract Counterbalancing the endogenous forces of agglomeration by addressing any institutional bottlenecks, and incorporating a set of design principles to ensure that any proposed policies are compatible with the prevailing institutions are key to resolving dualism and inequalities. In many cases, they are more important than finding the right policies. Alas, reforming policies is far more difficult than reforming institution. Be that as it may, listening and understanding the perceptions of local people and MSME is a necessary starting point.

Keyword Structure of relations · Decentralization · Mental bandwidth · Behavioral insights · Policy design

The role of dualism in shaping income distribution is well known. So is the role of spatial dualism in shaping inequality between regions within countries (interregional inequality). The persistence of such inequality is a major policy concern confronting social planners in rich and poor countries alike. Indonesia is no exception. Given its size and archipelagic nature, by international standard the country has a large inequality between regions.

Inequality also exists in business activities, indicated by the performance gap between micro-small-medium enterprises (MSMEs) and large businesses. While across the globe the number of business establishment and unit is dominated by MSME, the figure in Indonesia is roughly more-than 99% and over 96%, respectively. It certainly accounts for the largest share of employment. It is no surprise that a statement like “MSMEs are the backbone of our economy” has been popular and frequently raised by policy makers such that it has become a bit of a cliché. With the outbreak of the Covid-19 that brought the country into recession, the expression goes even further, i.e., “MSME is the source of economic recovery.” Official statements and documents to support MSMEs have also been made repeatedly.

There is no deficit of publications and research reports on the issues of interregional inequality and challenges faced by MSMEs. On interregional inequality, a typical analysis focuses on the unequal allocation of investment between regions and the lack of regional capacity in utilizing the greater autonomy especially under a decentralized system. On MSME, many studies spend much time on pounding how inefficient, unproductive and uncompetitive MSMEs are. They typically show

a long list of problems faced by MSME, from the issues of financing gap, a lack of management skills, poor information, marketing difficulty, to the problem of limited access to technology. The list is usually followed by the suggested policy measures.

While some of the analysis on investment allocation and the limited capacity of the regions are true, and some of the statements and recommendations about MSME are valid, many are more myth than reality.

The focus of this book, is different. I avoid reinventing the wheel. On interregional inequality, the analysis is more on the role of endogenous forces of agglomeration and the structure of economic relations between regions as part of the prevailing institution. On MSME, it emphasizes their perceptions towards social capital and various policies, as well as the interactions between the two. My primary goal is to raise awareness about the importance of interplay between policies and institution, and to improve the understanding about the elements and mechanisms of their interactions. To the extent the highlighted issues are more institutional in nature, most policy interventions discussed throughout the book are justified because of institutional failure, more than market failure. To fulfil the stated goal, two tasks are performed: diagnose the causes underlying interregional inequality, and delve into problems faced by MSMEs that put constraints on the effectiveness of various policies.

The evidence of interregional inequality and the persistent challenges faced by MSMEs, including the performance gap between small and large businesses in Indonesia are discussed in Chap. 2. Given the fact that numerous policies have been implemented, it is argued that there is indeed a deviation between policies and outcome. The bulk of Chaps. 3 and 4 is devoted to the analysis about why such a gap. While dualistic characteristics of an economy in a large and diverse country like Indonesia may have been expected, persisting inequality poses risks of growing discontent and deepened political divides. It could also weaken the country's growth prospect. Contrary to the classical economic thinking, based on recent empirical evidence the contemporary economic thinking confirm that greater inequality tends to worsen growth.

The fundamental thinking behind the analysis is synopsisized in Fig. 6.1. The lure of external economies of agglomeration is too strong of a "pull" factor for policy interventions to counter and reduce the divergence between core and periphery. Yet, the contribution of another factor is no less-substantial, i.e., non-compatibility of policies with the prevailing institution. Policies, rules and regulations (formal institution) at the national and regional levels may have been in place to soften the agglomeration forces and mitigate their effects on inequality. But due to weak enforcement (part of informal institution), they are deemed ineffective. More importantly, other informal institutions are also at work, significantly influence the way the public respond to policies. They could range from bureaucratic and legislative norms, clientelism, paternalism, patrimonialism, habits, traditions, and codes of conduct, all may interact with the prevailing social capital (left part of Fig. 6.1). It is subsequently shown through the institutional model of decentralization in Chap. 3 that the quality of local leaders also matters.

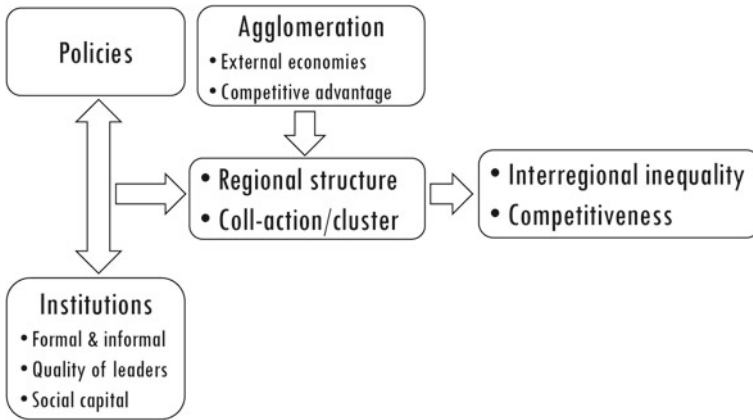


Fig. 6.1 Synopsized framework of analysis. *Source* Author's own creation

While all these elements of institution play a significant role in determining whether or not certain policies can be effective, incorporating them into some quantitative measures is a daunting task, let alone isolating the precise scale of its effect from other factors including the agglomeration forces. To the extent the working of institution is embedded in the regions' socio-economic structure, intra and inter-regional multipliers are used to uncover the direct and indirect effects of policy on interregional inequality. By comparing two scenarios of increased spending, one in core and another in periphery, asymmetry is revealed; i.e., if increased spending is made in regions outside Jawa (periphery), the cross-regions benefits accrued to Jawa (core) are much larger than those received by non-Jawa had the increased spending been made in Jawa.

Thus, if policy measures ignore the agglomeration forces and the prevailing institution reflected in the regional structure, both of which are encapsulated in the inter-regional multipliers, resolving spatial dualism by simply investing in outside Jawa does not guarantee that it will reduce the interregional inequality. The agglomeration forces simply offset the forces of dispersion. While improvements in infrastructure such as transportation can concomitantly support both the dispersion and agglomeration or concentration forces, the accessibility that core regions can have to a wider distribution system (e.g., through intermodal facility such as port, rail terminal or airport) may compensate the savings from lower transportation costs for the periphery to reach a larger market at core regions.

Interactions between policies and institution are also key in the efforts to improve MSME performance, in which high transaction costs (aside from operating costs) are at the center of the problems. They constitute not only the official expenses incurred in business activities (transportation, bureaucracy, network) but also the unofficial payments and other personalized transactions especially for permit-related matters. These costs are too burdensome and most of the time cannot be avoided,

forcing many MSMEs to remain informal and small. As a result, low productivity and competitiveness continue to plague their operations.

Potential countervailing forces, however, can be created to offset—albeit not avoid entirely—such high costs. Insofar spatially concentrated activities have the potential to benefit from agglomeration economies, MSMEs can also gain similar economies if they cooperate and act collectively in clusters. The connection between spatial concentration and firm's competitiveness has been also firmly established in Porter's model of competitive advantage.

Whether the benefits of operating in a cluster can exceed the transaction costs depends on the characteristics of cluster operation. These characteristics are determined by the quality of MSME participation and coordination in cooperation, and the effectiveness of collective actions among members. The quality of these participation and coordination reflects the prevailing social capital, which is an important element of institution. The mechanisms explaining how institution including social capital work jointly with policies to affect MSME performance are captured in a framework developed in Chap. 3. Based on that framework, a set of hierarchy and a network of interrelations among policies, social capital, and types of cluster are constructed, and used to compose questionnaires for the survey discussed in Chap. 4. The main purpose of the survey involving 121+ micro and small enterprises throughout Indonesia (only 1 'medium' enterprise included in the survey) is to capture their perceptions towards various problems they face that may have caused the disconnect between policies and the outcome.

The reason we rely on perceptions is because they are the ultimate lens through which MSME respondents view reality and operate with versions of that reality. What they operate is what matters here. Even if there is a gap between perception and reality ("wrong" perceptions), that is the way human operates. What MSMEs perceive is not necessarily what their eyes and ears tell them, but it is what their brain makes them see and hear, based upon which they make decisions to produce, diversify, use digital and green technology, export, cooperate, join a cluster, etc. It is because of relying on perceptions that a specific approach of pairwise comparisons and the measure of inconsistency are used to authenticate the answers to the questionnaires.

The hierarchy framework is designed to distill MSMEs' current conditions and their experience or aspirations for cooperation in a cluster, while the network is constructed to delineate the role of—and the interplay between—policies and social capital to determine the type of cluster deemed most relevant for cooperation and collective actions. Insofar the goal is to help improve MSMEs' competitiveness, three policy categories are tested, linkage policy, structural policy, and technology policy. The social capital consists of participation and coordination intended to make the cooperation for collective actions works more effectively.

Given the location, it is revealed from the hierarchy-based survey that monetary benefits especially from sales are viewed by most MSMEs to be greater than the non-monetary benefits, based upon which the business-oriented type of cluster is most preferred. Among the non-monetary benefits, majority MSMEs feel that acquiring information is most important, indicating their desire to learn and improve. From the cost side, operating cost is considered most burdensome, and the costliest type

of cluster is one intended mainly for social interactions. Comparing the benefit and the cost results, the preference towards business-oriented cluster remains at the top.

Interestingly, although a government-mandated type of cluster is perceived highly beneficial, for some MSMEs especially those operating in trade and using digital technology, such an option is viewed as allowing government controls and intervention that could hinder their business operations. Hence, it is perceived as very costly. As a result, the resulting benefit/cost ratio of the option is relatively small. This underpins the importance of measuring both the upside and the downside associated with people's perceptions.

More central to our hypothesis is the network-based survey to evaluate the interplay between policies and social capital in determining the cluster type. Over half of MSMEs confirm that policy is not what matters the most to make the cooperation for collective action effective; the role of social capital is critical. Majority of rural-based MSMEs and those that have received assistance from BI for a longer-than-average period have the same view. Even among those who put a higher weight to policy cannot dismiss the importance of social capital.

Although the results vary depending on the characteristics and spatial dimension of MSMEs, linkage policy is perceived as the most important as it is expected to strengthen the linkages between MSMEs and larger firms, among MSMEs themselves, and to enable MSMEs to benefit from the products and services of supporting industries. On the latter, a lack of packaging industries has been frequently expressed by many respondents outside Jawa as among the most serious bottlenecks. Within social capital, consistent with the results from the hierarchy-based survey, active participation especially for acquiring information through transparent and informal coordination is ranked the highest. This is expressed particularly strongly by MSMEs operating in the rural area. Those located in Jawa, Sulawesi, Papua, Maluku and NTT, and those that have received assistance from BI for a longer-than-average period also share a similar view.

It is discernible that the costs of undermining the forces of agglomeration and ignoring the role of social capital based on the prevailing institution can be enormous. Investing in periphery without considering the structure and interactions between regions could paradoxically widen the interregional inequality, and assisting MSMEs by simply allocating more money without considering local characteristics could lead to problems and waste while generating only limited improvements. Direct provision of credit and other non-financial assistance may fail to deal with the underlying causes of the problems faced by MSMEs. They may substitute for the undeveloped or missing markets but cannot overcome the institutional failure. Where regions thrived and MSME succeeded, they might have achieved it in spite of, not because of, government assistance.

To complement the analysis and to corroborate what has been conceptualized, some case-based evidence highlights the importance of understanding local wisdom, mutual trust, and listening directly to the MSMEs about their problems and constraints, before making and announcing new measures. In some cases, external interventions are not needed. They could be even undesirable in cases where MSMEs themselves know how to solve but unable to do so due to a myriad of tasks they have

to deal with day by day. What external parties could do is to facilitate a condition under which own-solution is encouraged and could be implemented. Only when the MSMEs face a vicious-circle problem—where the response to the original problem creates new problems which aggravate the original one—that an external assistance is needed.

The evidence of success from working together and solving problem among themselves also suggests that external parties should avoid giving a cliché advice such as “adopt new technology” or “work harder” etc. Those advices maybe suitable under certain conditions but too difficult to execute because of a lack of supporting means (for adopting new technology) or due to behavioral insights that reflect the mental bandwidth of those we intend to help (for working harder). Many MSMEs are perfectly aware that working harder will boost productivity and competitiveness, but due to other tasks they are unable to exert self-control or ‘pay attention’ on working as hard as they themselves would like to; they can do all the tasks including working harder at once only if those tasks are not demanding and relatively easy to do. After all, exerting self-control is not physiologically effortless. It requires an allocation of attention to the effortful mental activities similar to ‘slow thinking’ or ‘System 2’ which are often associated with the subjective experience of agency, choice and concentration (Kahneman, 2011). Enticing members to “work through hard things together” would be more helpful as it could better counter most adverse conditions.

Considering local wisdom also implies respecting local customs and tradition that prevail in a community where MSMEs operate. That includes respecting the community’s customary laws when such laws exist. In a country like Indonesia, where millions of people are considered members of indigenous communities and many of them have their own customary laws, MSMEs operating in those communities should be able to do their business with legal certainty. When the customary laws are not entirely in sync with the state laws, or when the disputes related to the rights of indigenous communities arises, e.g., over the forest and land use, absent of such a certainty could jeopardize their operations. Yet, for some MSMEs and indigenous peoples, land could be their only source of income from running small commercial activities or even their only means of subsistence. Incorporating important clauses of the customary laws into the state laws and harmonizing the two, as was done in several regions throughout the country, is the first step in a right direction.

In sum, counterbalancing the endogenous forces of agglomeration and incorporating a set of design principles into policies to ensure their compatibility with the prevailing institutions are a lot more important than just allocating budget to periphery regions and providing financial assistance to small businesses. To reduce dualism, it is imperative to understand the structure of interregional interactions and institutional arrangements, and to delve into the internal problems of MSMEs by digging up their perceptions. Those perceptions reflect the prevailing social capital. Any efforts to help MSMEs should take those perceptions into account. Just listen to them, so we will understand better about why they choose as they do and what motivates their decisions and actions.

Finding the right policies is crucial and must continue, but without considering the agglomeration forces and the behavioral insights of MSMEs, those policies are

likely to have limited reach and effectiveness. The importance of design principles in policy that matches the prevailing institutions and public perception is second to none.

Reference

Kahneman, D. (2011). *Thinking, Fast and Slow*. Farrar, Straus and Giroux.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.



Appendix

A.1 Ratios Scales in a Hierarchy (AHP Approach)

AHP uses the ratio scales (relative measurements) derived from paired comparisons. Ratio scale is a fundamental kind of number amenable to performing basic arithmetic operations of addition and subtraction within the same scale, multiplication and division of different scales, and combining the two operations by meaningfully weighting and adding different scales to obtain a unidimensional scale. They are particularly useful to capture people's perceptions (Azis, 1990; Azis & Isard, 1996).

Let $A_1, A_2, A_3, \dots, A_n$ be n elements in a matrix within a hierarchy. The pairwise comparisons on pairs of elements (A_i, A_j) are represented by an n -by- n matrix $A = (a_{ij})$, where $i, j = 1, 2, 3, \dots, n$. Define a set of numerical weights $w_1, w_2, w_3, \dots, w_n$ to reflect the recorded comparisons based on the inputs from the respondents. We can write:

$$A = \begin{matrix} & \begin{matrix} A_1 & A_2 & & & A_n \end{matrix} \\ \begin{matrix} A_1 \\ \\ \\ A_n \end{matrix} & \begin{bmatrix} w_1/w_1 & w_1/w_2 & \dots & \dots & w_1/w_n \\ \\ \ddots & \ddots & \ddots & \ddots & \ddots \\ w_n/w_1 & w_n/w_2 & \dots & \dots & w_n/w_n \end{bmatrix} \end{matrix}$$

The scales used in the pairwise comparisons in AHP are based on Saaty's scaling system (Saaty, 1994), i.e., from 1 to 9. Since every row is a constant multiple of the first row, A has a unit rank. By multiplying A with the vector of weights w ,

$$Aw = nw \tag{A1}$$

To recover the scale from the matrix, the following system ought to be solved:

$$(\mathbf{A} - n\mathbf{I})\mathbf{w} = 0 \quad (\text{A2})$$

from which nontrivial solution is obtained if and only if $\det(\mathbf{A} - n\mathbf{I})$ vanishes, i.e., the *characteristic equation* of \mathbf{A} . Hence, n is the *eigenvalue* and \mathbf{w} is the *eigenvector* of \mathbf{A} . Given that \mathbf{A} has a unit rank, all its eigenvalues except one are zero, and the *trace* of \mathbf{A} is equal to n .

If each entry in \mathbf{A} is denoted by a_{ij} , then $a_{ij} = 1/a_{ji}$ holds (reciprocal property), so does $a_{jk} = a_{ik}/a_{ij}$ (consistency property). By definition, $a_{ii} = a_{jj} = 1$ (comparing two same elements). Therefore, if we are to rank n number of elements, i.e., \mathbf{A} is of the size n -by- n , the required number of inputs (from the paired comparison) is less than n^2 ; it is equal to only the number of entries of the sub-diagonal part of \mathbf{A} . That is, if there are three elements in a particular level of a hierarchy, only three pairwise comparisons are required.

To the extent the precise value of w_i/w_j is hardly known because the pairwise comparisons that we have is only an estimate (from respondents' perceptions), there are obviously perturbations involved. Note that the reciprocal property still holds but the consistency property does not. By taking the largest eigenvalue denoted by λ_{\max} ,

$$\mathbf{A}^p \mathbf{W}^p = \lambda_{\max} \cdot \mathbf{W}^p \quad (\text{A3})$$

where \mathbf{A}^p is the actual (or the given) matrix perturbed from matrix \mathbf{A} . Although (A1) and (A3) are not identical, if \mathbf{w}^p is obtained by solving (A3), the matrix whose entries are w_i/w_j is still a *consistent* matrix; it is a consistent estimate of \mathbf{A} , although \mathbf{A}^p itself does not need to be consistent. \mathbf{A}^p will be consistent if and only if $\lambda_{\max} = n$. As long as the precise value of w_j/w_i is not given, which is common in a real case situation due to human bias in expressing perceptions, λ_{\max} is always greater-than or equal-to n . Consequently, a measure of consistency can be derived based on the deviation of λ_{\max} from n .

When more than two elements are compared, the notion of consistency can be associated with *transitivity* condition: if $A_1 > A_2$ and $A_2 > A_3$, then $A_1 > A_3$. It should be clear that in solving for \mathbf{w} , the *transitivity* assumption is not strictly required; the inputted comparisons do not have to reflect full consistency. Yet, it is equally clear that the resulting matrix and the corresponding vector remain consistent. It is this consistent vector \mathbf{w} that reflects the priority ranking of the elements in each level of the hierarchy. Hence, the elements in each level are pairwise compared with respect to elements in the level above it, and the resulting vector for the bottom level reflects the final results.

References

- Azis, I. J. (1990). Analytic hierarchy process in the benefits/cost framework: A post evaluation of the Trans Sumatera Highway Project. *European Journal of Operational Research*, 48(1).
- Azis, I. J., & Isard, W. (1996). The use of the analytic hierarchy process in conflict analysis and an extension. *Peace Economics, Peace Science and Public Policy*, 3(3).
- Saaty, T. L. (1994). Decision making in economics political, social and technological environments with the analytic hierarchy process, vol. VII. RWS Publications.

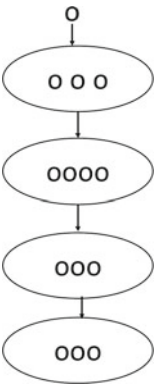


Fig. A.1 Linear hierarchy. *Source* Author’s own creation

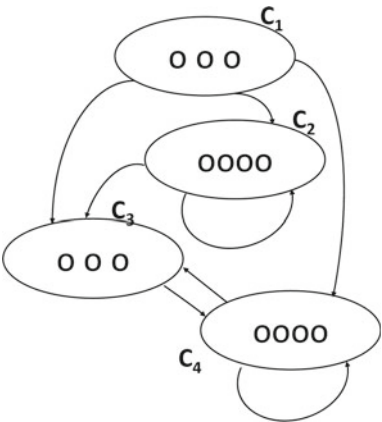


Fig. A.2 Feedback network. *Source* Author’s own creation

A.2 Ratios Scales in a Network (ANP Approach)

AHP does not recognize two-way dependence or feedback effects like in the influence diagram (statistical decision analysis based on Bayes theorem). Since in a feedback situation the elements in each level can depend on elements in other levels as well as on each other, the system forms a network rather than a hierarchy. When a solution is derived, they are more stable than the solution from a hierarchy because one can consider the influence on, and survival in, the face of other influences.

Figs. A.1 and A.2 show the difference between a hierarchy and a network. Note that to be consistent with the narratives in Chap. 4, the term ‘level’ we use in a hierarchy is substituted by the term ‘categories’ in a network (denoted by C₁, C₂, C₃, and C₄), and the contents of each category are called ‘components’ or ‘elements.’ In Fig. A.2, the components in the parent category C₁ and the components to be compared can be in different categories; e.g., a directed link appears from the parent category C₁

Fig. A.3 Supermatrix of a hierarchy

$$W = \begin{array}{c} \begin{array}{c} c_1 \\ \vdots \\ c_1 \\ \vdots \\ c_2 \\ \vdots \\ c_2 \\ \vdots \\ c_N \\ \vdots \\ c_N \\ \vdots \\ c_{Nh} \end{array} \begin{array}{c} c_1 \quad c_2 \quad \dots \quad c_{N-2} \quad c_{N-1} \quad c_N \\ e_{11} \dots e_{1n} e_{21} \dots e_{2n_2} \quad \dots \quad e_{(N-2)1} \dots e_{(N-2)n_{N-2}} \quad e_{(N-1)1} \dots e_{(N-1)n_{N-1}} \quad e_{N1} \dots e_{Nh} \end{array} \end{array} \left[\begin{array}{cccccc} 0 & 0 & \dots & 0 & 0 & 0 \\ W_{21} & 0 & \dots & 0 & 0 & 0 \\ 0 & W_{32} & \dots & 0 & 0 & 0 \\ \vdots & \vdots & \ddots & \vdots & \vdots & \vdots \\ 0 & 0 & \dots & W_{n-1, n-2} & 0 & 0 \\ 0 & 0 & \dots & 0 & W_{n, n-1} & I \end{array} \right]$$

Fig. A.4 Supermatrix of a holarchy

$$W = \begin{array}{c} \begin{array}{c} c_1 \\ \vdots \\ c_1 \\ \vdots \\ c_2 \\ \vdots \\ c_2 \\ \vdots \\ c_N \\ \vdots \\ c_N \\ \vdots \\ c_{Nh} \end{array} \begin{array}{c} c_1 \quad c_2 \quad \dots \quad c_{N-2} \quad c_{N-1} \quad c_N \\ e_{11} \dots e_{1n} e_{21} \dots e_{2n_2} \quad \dots \quad e_{(N-2)1} \dots e_{(N-2)n_{N-2}} \quad e_{(N-1)1} \dots e_{(N-1)n_{N-1}} \quad e_{N1} \dots e_{Nh} \end{array} \end{array} \left[\begin{array}{cccccc} 0 & 0 & \dots & 0 & 0 & W_{1,n} \\ W_{21} & 0 & \dots & 0 & 0 & 0 \\ 0 & W_{32} & \dots & 0 & 0 & 0 \\ \vdots & \vdots & \ddots & \vdots & \vdots & \vdots \\ 0 & 0 & \dots & W_{n-1, n-2} & 0 & 0 \\ 0 & 0 & \dots & 0 & W_{n, n-1} & 0 \end{array} \right]$$

to the other categories (C_2 and C_3). This is the case of “outer dependence.” In other cases, the components to be compared can be in the same category, in which case the category is linked to itself and a loop link appears. This is called “inner dependence.”

While in AHP a set of pairwise comparison matrices are used, in ANP we need a large matrix called the “supermatrix” that contains a set of sub-matrices. The “supermatrix” captures the influence of components in a network on other components in that network. Denoting a category by C_h , where $h = 1, \dots, m$, and assuming that it has n_h components $e_{h1}, e_{h2}, e_{h3}, \dots, e_{hnh}$, Fig. A.3 shows the corresponding supermatrix:

When the bottom level affects the top level of the hierarchy, a form of network known as *holarchy* is formed, the supermatrix of which looks like the one displayed in Fig. A.4.

Notice that the entry in the last row and column of the supermatrix in Fig. A.3 is the identity matrix I corresponding to a loop at the bottom level of the hierarchy. This is necessary when a hierarchy is viewed within the context of supermatrix. On the other hand, the entries in the first row and last column of a holarchy in Fig. A.4 are nonzero, indicating that the top level depends on the bottom level.

In general, when feedback influences are present as in Fig. A.2, the supermatrix is formed by laying out all the categories and all the components in each category both vertically on the left and horizontally at the top as in Fig. A.5. (Fig. A.6).

The typical entry of the above supermatrix is:

Fig. A.5 Supermatrix of a network

$$W = \begin{matrix} & \begin{matrix} C_1 & & C_2 & \dots & C_N \end{matrix} \\ \begin{matrix} C_1 \\ C_2 \\ \vdots \\ C_N \end{matrix} & \begin{bmatrix} e_{11}e_{12} \dots e_{1n_1} & e_{21}e_{22} \dots e_{2n_2} & \dots & e_{N1}e_{N2} \dots e_{Nn_N} \\ W_{11} & W_{12} & \dots & W_{1N} \\ W_{21} & W_{22} & \dots & W_{2N} \\ \vdots & \vdots & \ddots & \vdots \\ W_{N1} & W_{N2} & \dots & W_{NN} \end{bmatrix} \end{matrix}$$

Fig. A.6 Entry in the supermatrix of a network

$$W_{ij} = \begin{bmatrix} W_{i1}^{(j_1)} & W_{i1}^{(j_2)} & \dots & W_{i1}^{(j_{n_j})} \\ W_{i2}^{(j_1)} & W_{i2}^{(j_2)} & \dots & W_{i2}^{(j_{n_j})} \\ \vdots & \vdots & \ddots & \vdots \\ W_{in_i}^{(j_1)} & W_{in_i}^{(j_2)} & \dots & W_{in_i}^{(j_{n_j})} \end{bmatrix}$$

The entries of sub-matrices in W_{ij} are the ratio scales derived from paired comparisons performed on the components within the categories themselves according to their influence on each component in another category (outer dependence) or components in their own category (inner dependence). If the categories influence and be influenced by other categories, paired comparisons on the categories are to be made as well. Like in a hierarchy, in a network the judgments are also elicited, from which ratio scales are derived. The resulting *unweighted supermatrix* is then transformed into a matrix each of whose columns sums to unity to generate a stochastic supermatrix. The derived weights are used to weight the components of the corresponding column blocks (cluster) of the supermatrix, resulting in a *weighted supermatrix* which is also stochastic. The stochastic nature is required for the reasons described below.

Since a component can influence the second component directly and indirectly through its influence on some third component and then by the influence of the latter on the second, every such possibility of a third component must be considered. This is captured by squaring the weighted matrix. But the third component also influences the fourth, which in turn influences the second. These influences can be obtained from the cubic power of the weighted supermatrix. As the process is performed continuously, we will have an infinite sequence of influence matrices denoted by W^k , $k = 1, 2, \dots$. The question is, if we take the limit of the average of a sequence of N of these powers of the supermatrix, will the result converge, and, is the limit unique? It has been shown that such a limit exists given the stochastic nature of the weighted supermatrix (Saaty, 2001). There are 3 cases to consider in deriving W^k : (A1) $\lambda_{max} = 1$ is a simple root and there are no other roots of unity in which case

given the nonnegative matrix W is *primitive*, we have $\lim_{k \rightarrow \infty} W^k = we^T$, implying that it is sufficient to raise the primitive stochastic matrix W to large powers to yield the limit outcome; (A2) there are other roots of unity that cause cycling, in which case Cesaro sum is applied (Cesaro' Summability stipulates that if a sequence converges then the sequence of arithmetic means formed from that sequence also converges to the same limit as the sequence; see Saaty, 2001); and (A3) $\lambda_{max} = 1$ is a multiple root, in which case the Sylvester's formula with $\lambda_{max} = 1$ is applied.

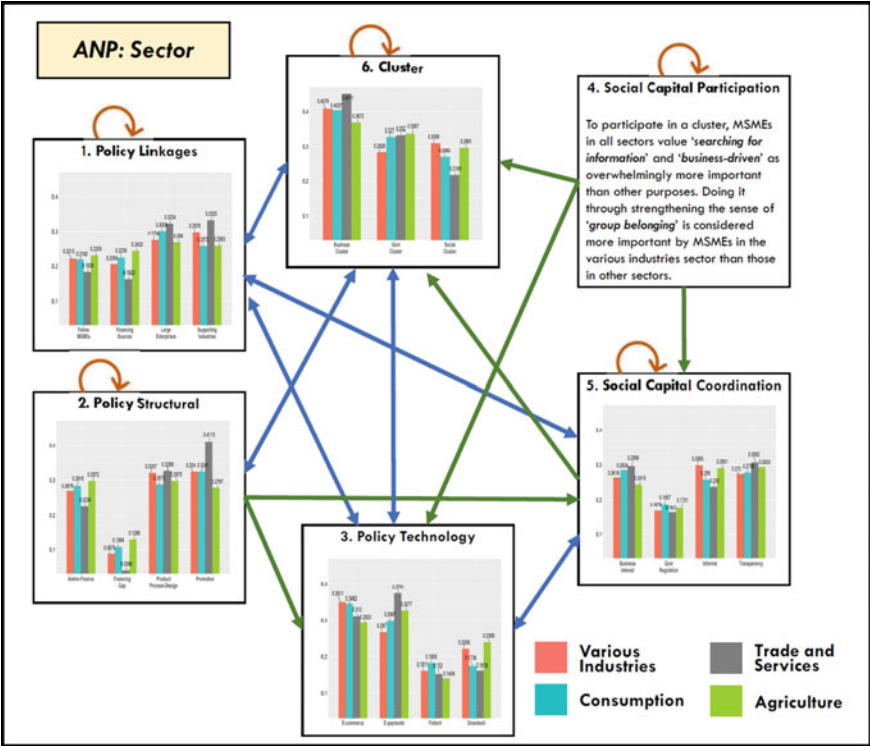
In practice, one simply needs to raise the stochastic supermatrix to large powers to read off the final priorities in which all the columns of the matrix are identical and each gives the relative priorities of the components from which the priorities of components in each category are normalized to one. The powers of the supermatrix do not converge unless it is stochastic, because only then its largest eigenvalue is one. When a convergence is not achieved (a cyclic case) the average of the successive matrices of the entire cycle gives the final priorities (Cesaro sum), in which the limit cycles in blocks and the different limits are summed and averaged and again normalized to one for each cluster. In other words, one has to compute the limit priorities of the stochastic supermatrix according to whether it is irreducible (primitive or imprimitive [cyclic]) or reducible with one being a simple or a multiple root and whether the system is cyclic or not. At any rate, raising the stochastic supermatrix to large powers gives what is known as the *limiting supermatrix*.

In sum, there are 3 supermatrices to generate: (1) the original *unweighted supermatrix* of column eigenvectors obtained from pairwise comparison matrices of components; (2) the *weighted supermatrix* in which each block of column eigenvectors belonging to a category is weighted by the priority of influence of that category, rendering the weighted supermatrix column stochastic; and (3) the *limiting supermatrix* obtained by raising the weighted supermatrix to large powers. We apply this approach to generate the ratio scales and the ranking of each components shown in Fig. 4.2.

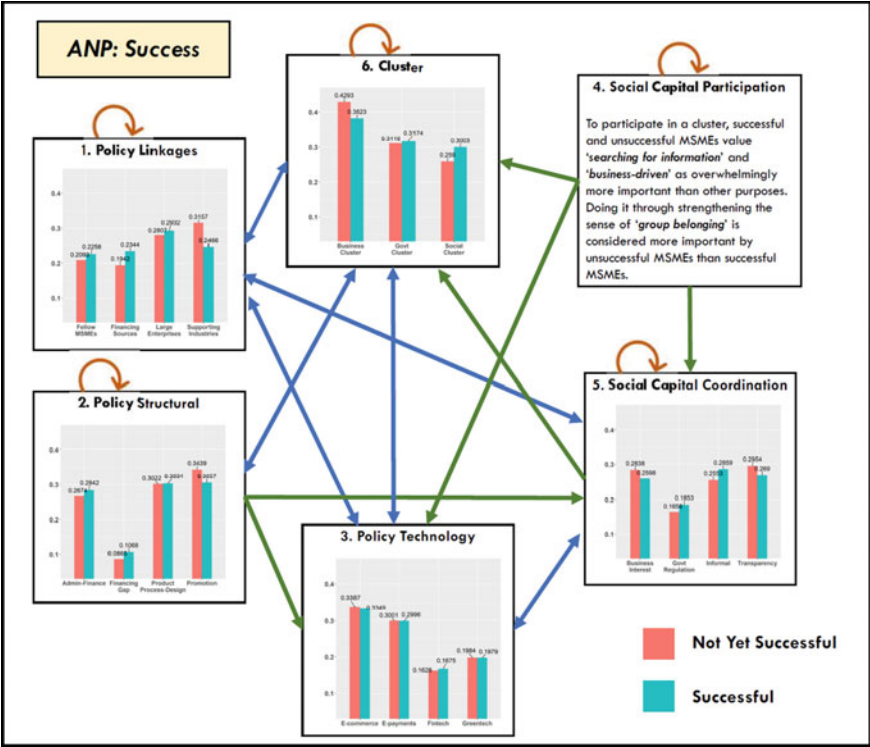
Reference

- Saaty, T. L. (2001). Decision making with dependence and feedback: The analytic network process. RWS Publication.

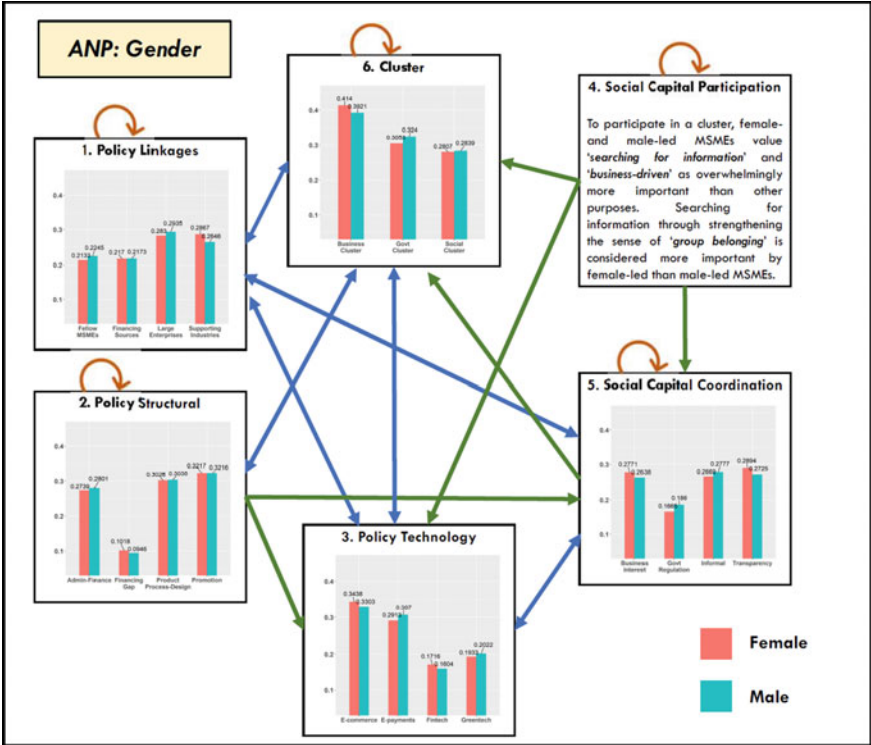
A.3 Systemic Survey Results: MSME Characteristics

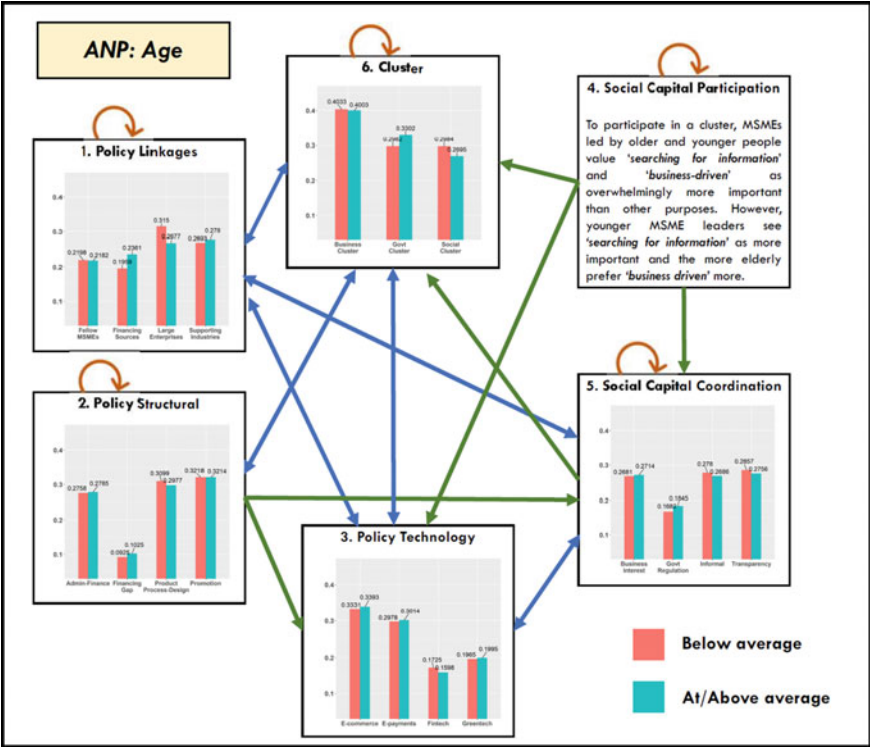


Source Compiled Survey results

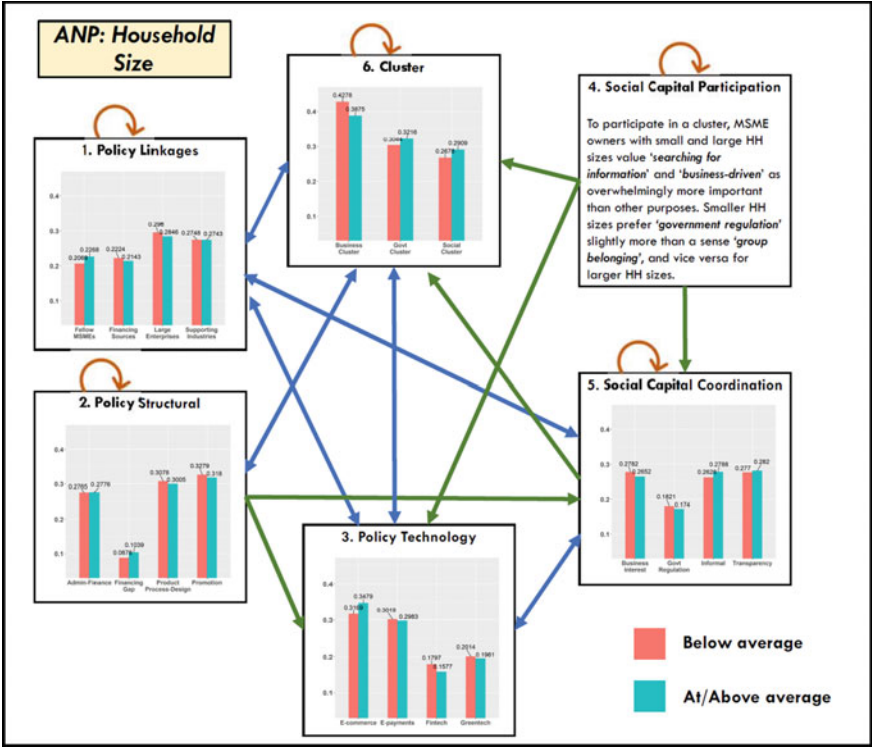


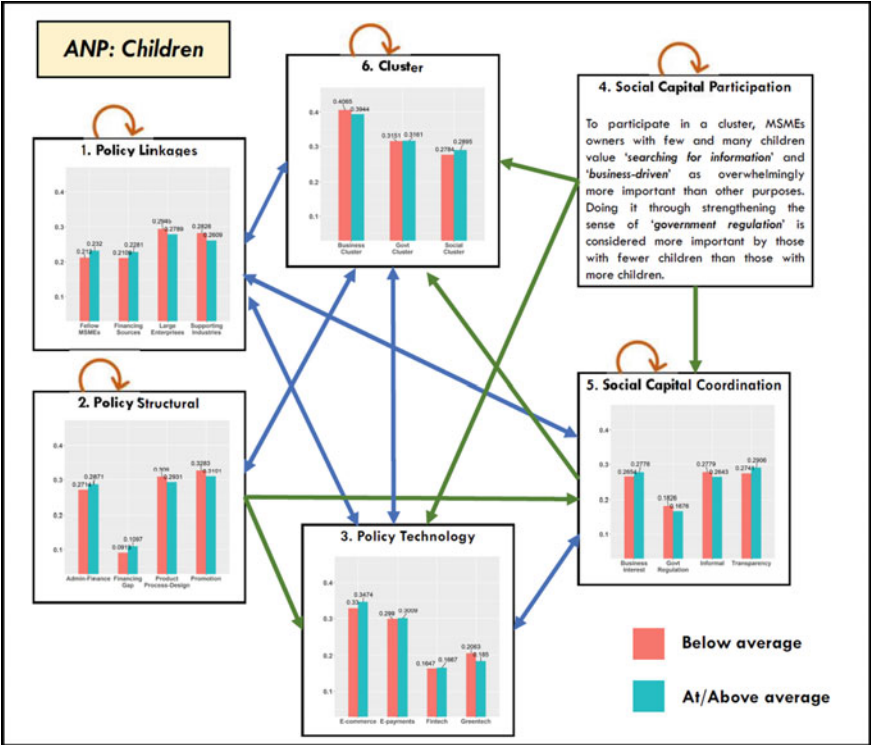
Source Compiled Survey results

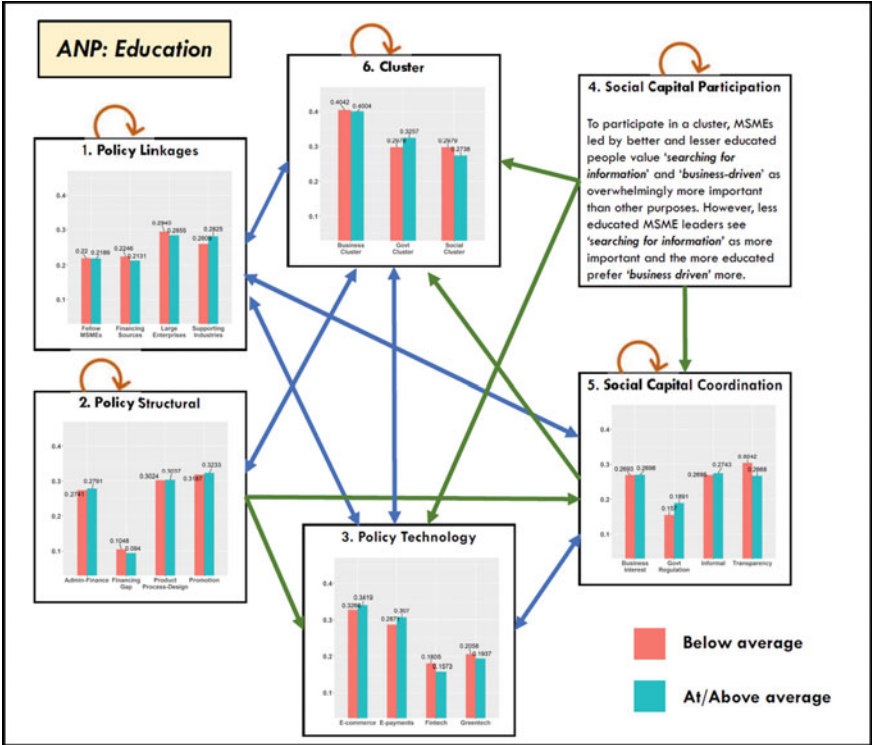


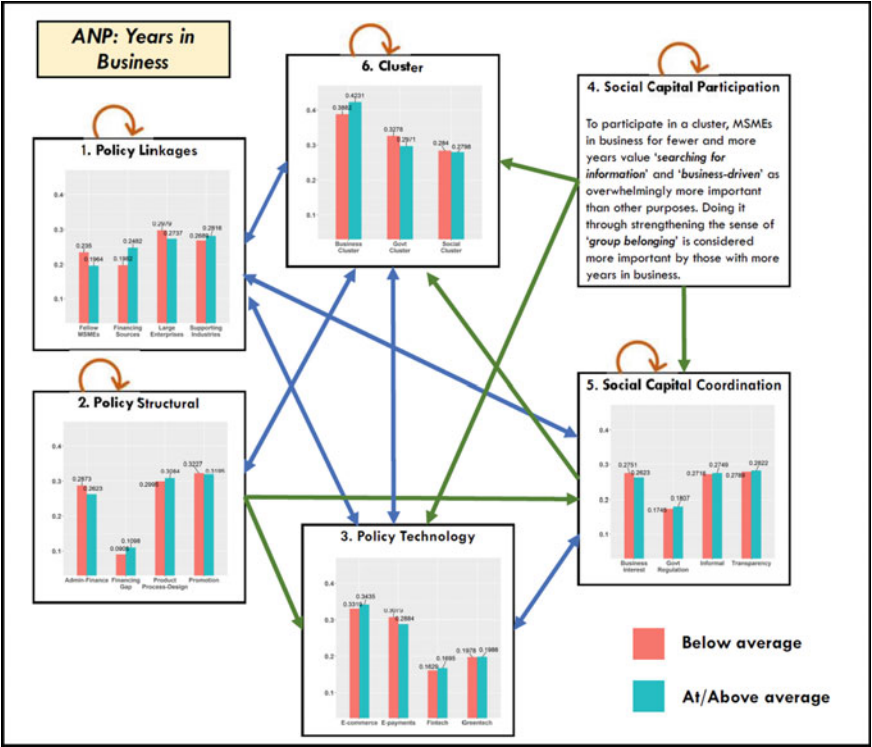


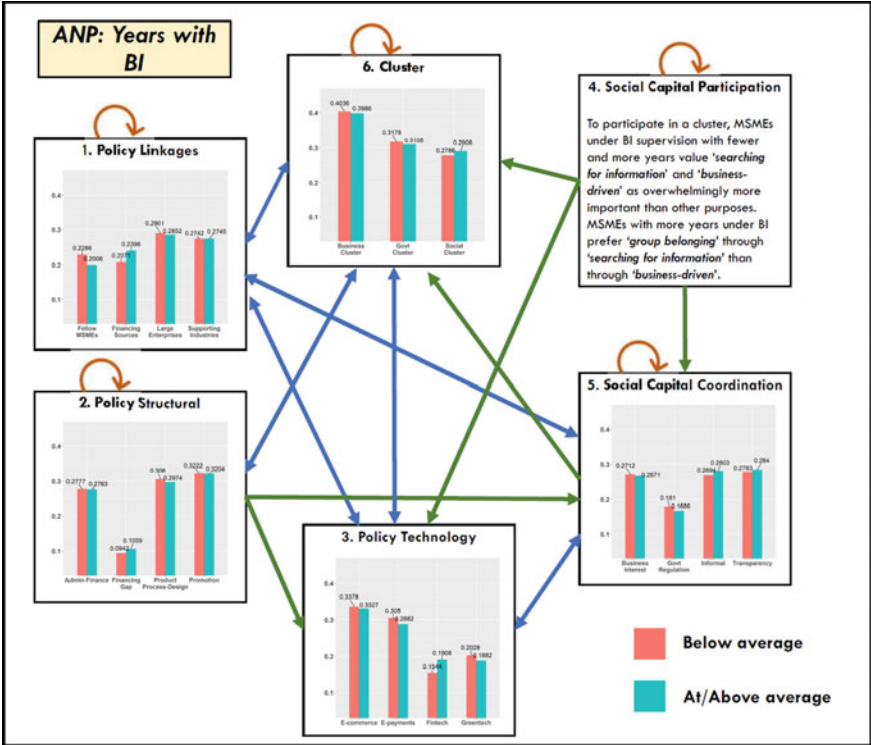
Source Compiled Survey results

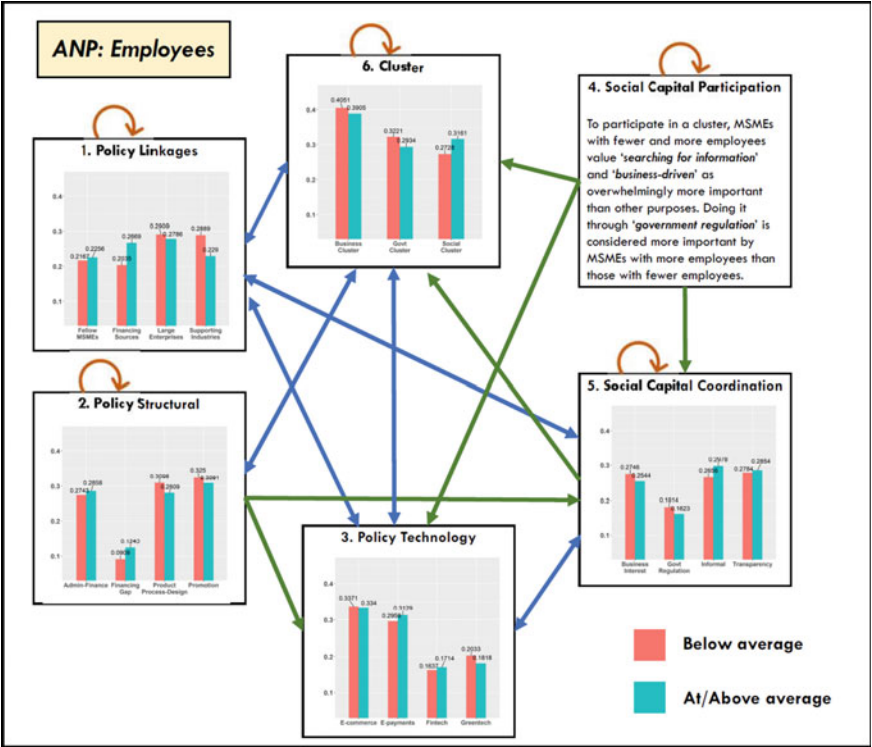


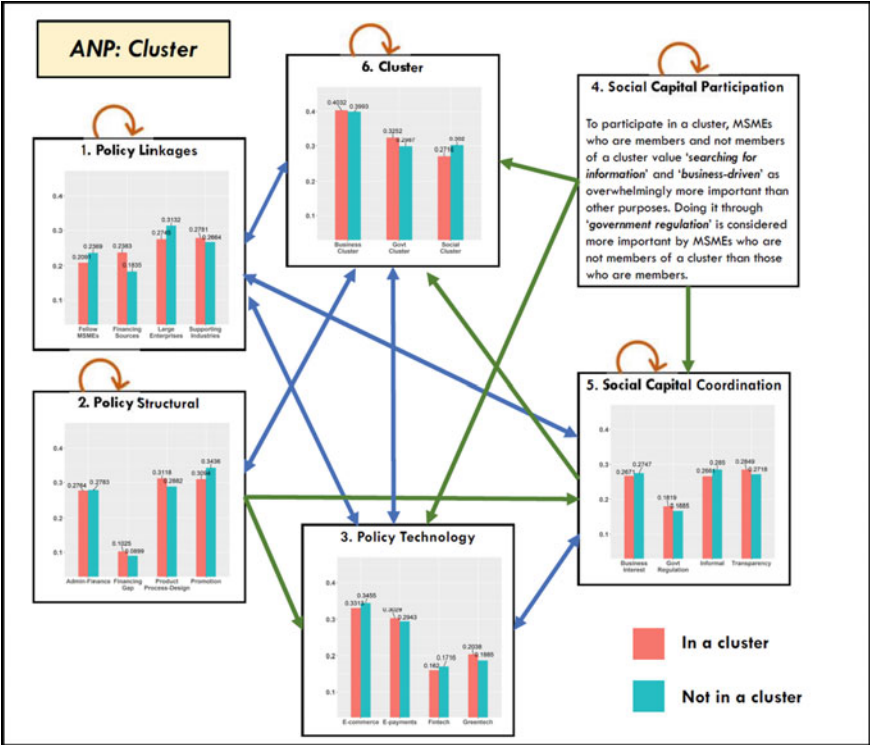


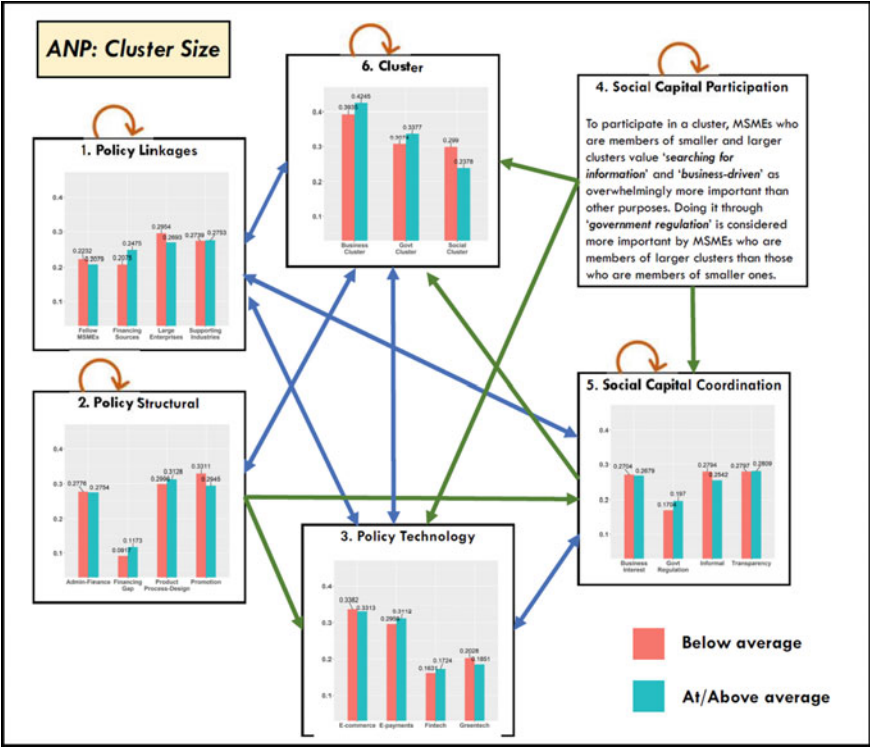


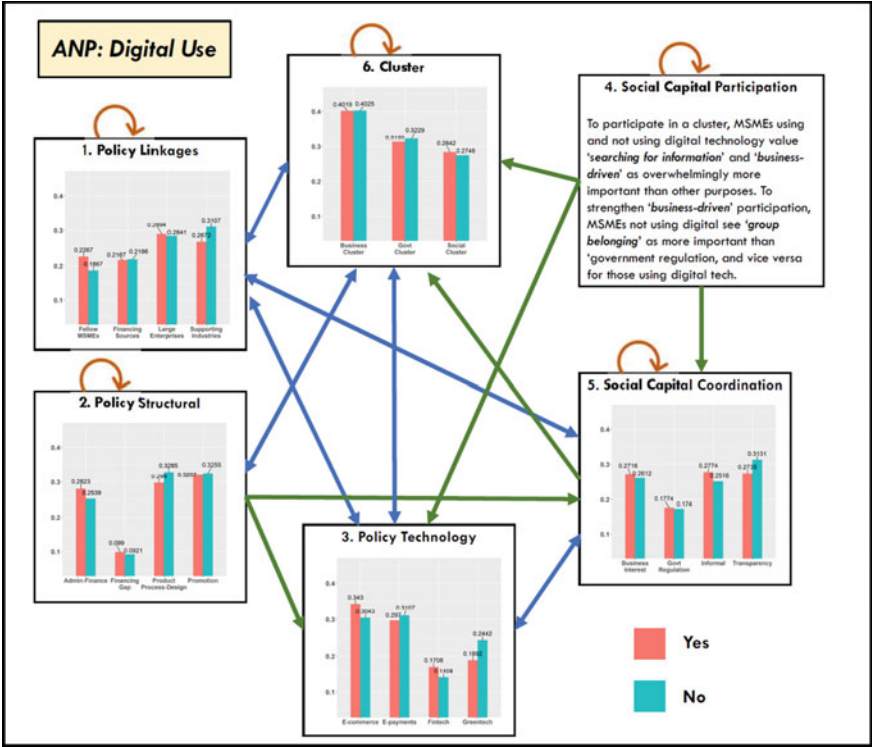


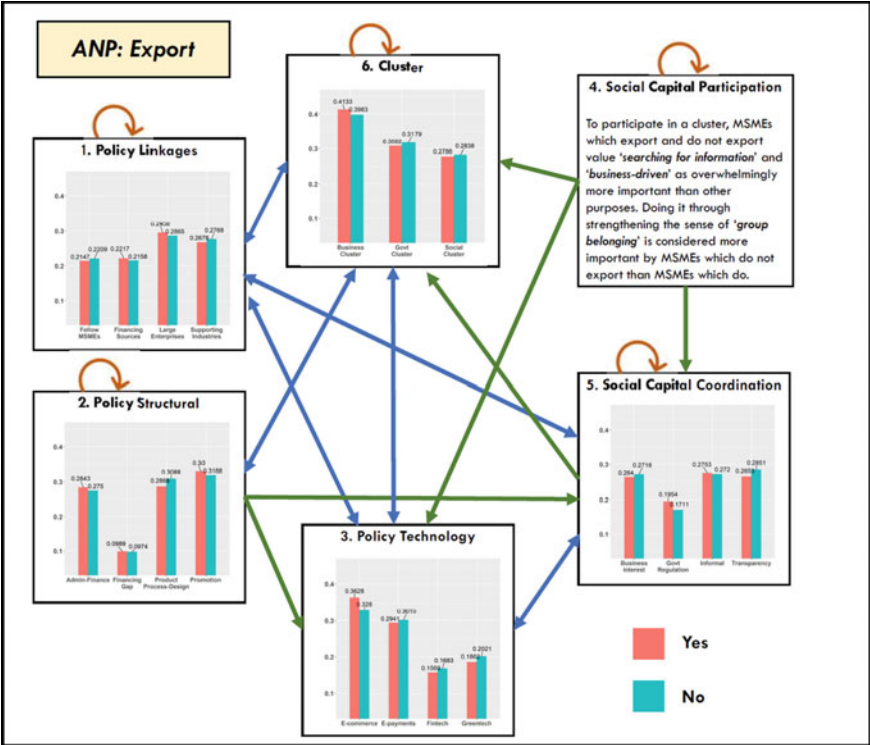




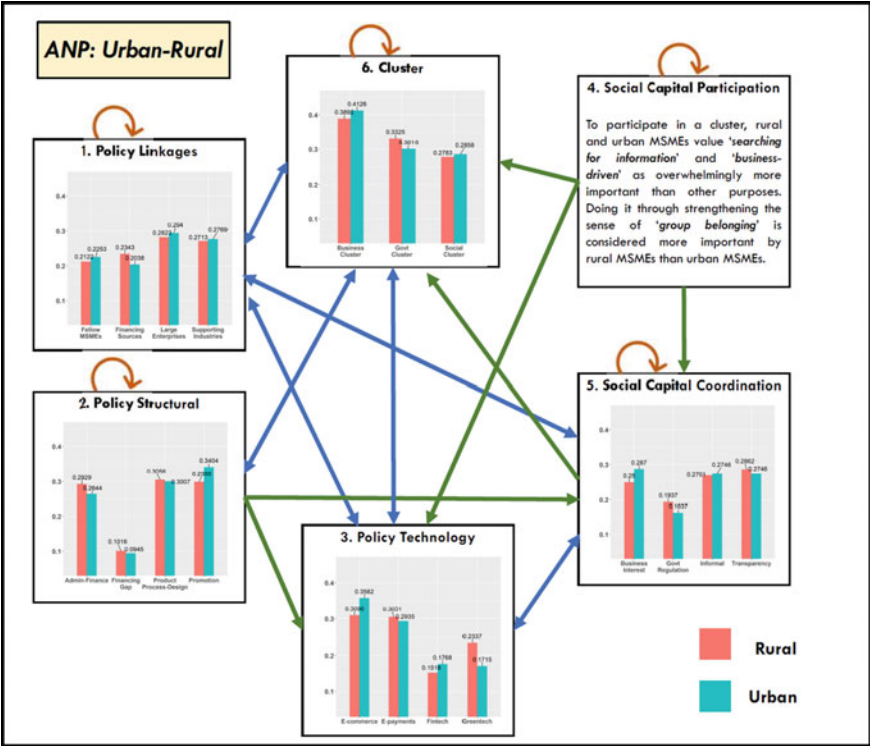


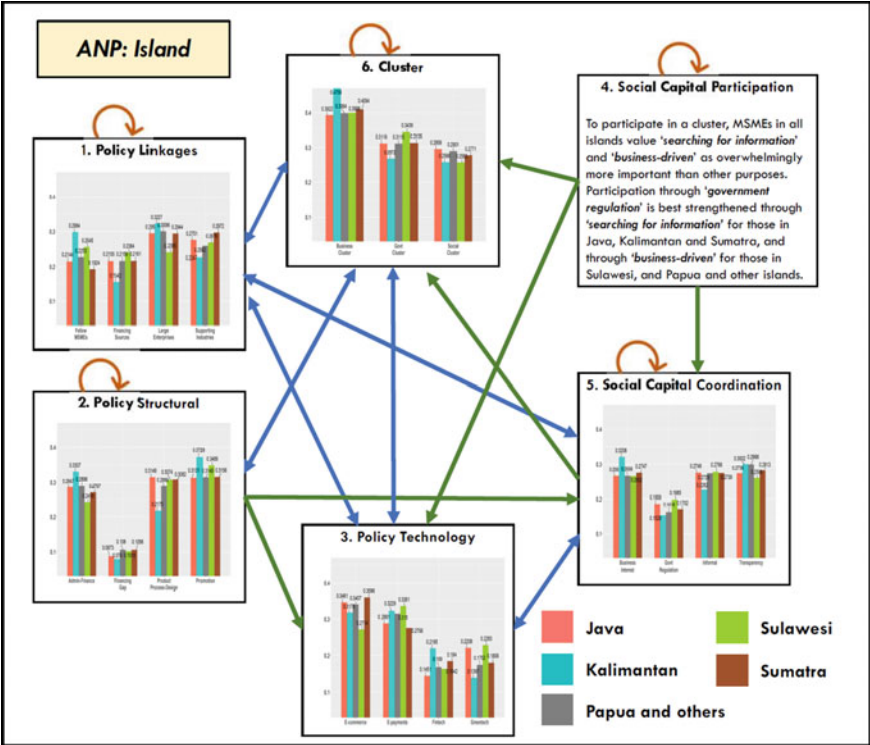






A.4 Systemic Survey Results: Spatial/Regional Dimension

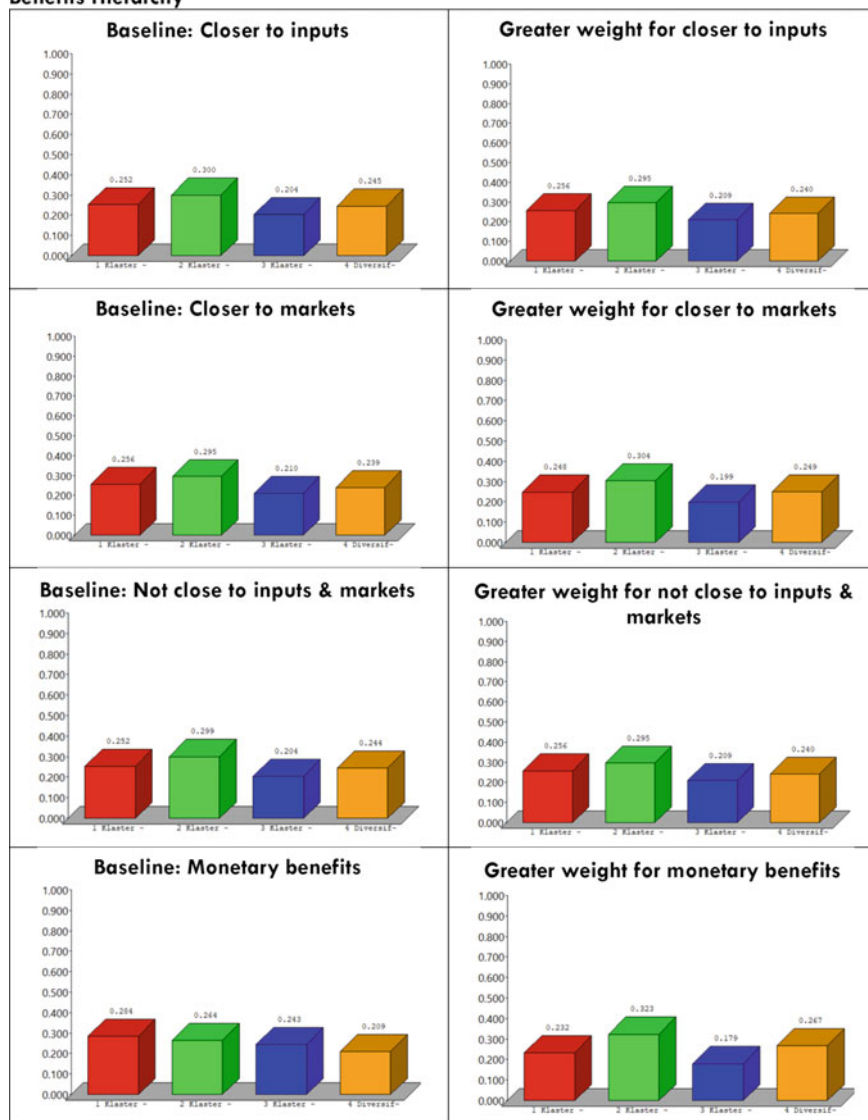




Source Compiled Survey results

A.5 Results of Sensitivity Analysis

Benefits Hierarchy



A.6 Samples of Live Interviews with Selected Respondents (Unabridged)

MSME #1: Lhokseumawe

[MSME #1] We happen to be among the largest red chili farmers in our area, and the guidance we receive from Bank Indonesia is wonderful. What I'd like to ask is that, during this pandemic period, all necessities such as medicines and fertilizers for farming have doubled in their prices. As a result, we are all constrained in terms of capital because of soaring costs. Second, in terms of marketing, we sell our products quite far, with the nearest market being Medan, going all the way to Pekanbaru, Jambi, Batam and Padang. The daily yield here is 100 tons during the harvest season. How do we respond to the need for transportation? We need help from related government agencies to address the needs of farmers here.

[Azis] We've encountered many similar cases—so that issue occurs not only in your place—and farmers end up selling their products to middlemen. But the problem is always a matter of price, because middlemen are usually more capable of determining prices. It is recommended that farmers join into a kind of cluster or farmer group in order to strengthen their bargaining position, and maybe even eliminate the need to bargain.

[MSME #1] We have planned that here. This year, we will open an auction market. From around the 200 households in our village, many are chili farmers. Starting this year, we are embracing them in order to hold sales in one place. We have received assistance from Bank Indonesia in the form of the warehouse which we will use to hold those auctions. The problem is that, in our area there are a lot of collecting agents who become pawns of agents or middlemen in the city. We need the local Trade Agency to do something about this. Maybe you or Bank Indonesia and others can inform them about this.

[Azis] The most that we can do is to inform Bank Indonesia of this, because we are not in the position to make policies. However, we will most assuredly inform them. Thank you very much for your input.

MSME #2: West Sumatra

[MSME #2] My business is rendang. Since our inception in 2018, we were fostered by Bank Indonesia. Although rendang is already well-known as an authentic Indonesian food, CNN has covered it (CNN, 2017), and Chef Gordon Ramsay and National Geographic have visited (National Geographic, 2020), the first challenge is in the production. It must be competitive. It is closely related to the survey we are having today; we feel that cooperation between SMEs is very important. Government regulations or directives are also quite important. In fact, our products have high export demand, most of which come from Saudi Arabia, not for their residents but for Indonesians visiting for Hajj or Umrah. Helped by Bank Indonesia last September, we finally got a buyer. But the hurdles are similar to those mentioned by the other

MSMEs earlier: licensing, such as BPOM. We were also invited to scale-up, but this is another challenge in itself. It is necessary to do some kind of research or special treatment for MSMEs. Because we hear stories from China, where MSMEs have sufficient raw material and packaging. When they receive orders, the government helps facilitate them. Here, we are not like that. This should become food for thought. Take our case. We got an export order. Since rendang is a high-risk food with meat ingredients, the standards are quite strict, especially as some countries do not allow Indonesian meat. So, we can't even go to Saudi Arabia using our own meat, the meat has to come from Australia. Then, the second challenge is about human resources. We can produce 3, 4 or 5 tons. But when orders for the hajj season suddenly come, for example for two menus such as tuna rendang and meat rendang, the orders reached 62.5 tons. So it is important to work with similar businesses as stated in today's survey questionnaire, because it is impossible for one SME alone to meet the export order of 62.5 tons. At our place, the existing machines cannot meet that order, unless we have the money to invest in a large equipment that can automatically make one ton of rendang a day. For SMEs this is not possible. To deal with human resources problems, we need clusters, so that MSMEs with similar businesses can have common standards and work collectively, and they can meet export needs. Then, the third challenge is the market, the market where we sell and the market where we buy raw materials. This is just as important. Because MSMEs are different from big businesses, we have to choose: developing products first means we leave market development for later, or vice versa. For example, we have already pocketed an order of approximately 150 tons, but production is experiencing problems, and this is related to the fourth problem, namely capital, just as other MSMEs have stated earlier. For us, because rendang is different from crafts, the COGS is almost 70% and only 30% of the price is profit. So if you want to produce 150 tons of rendang, the funds required are quite large, above 17 billion rupiah in capital. Hence, even if production is resolved, human resources can be fulfilled, the market is there, we face difficulties in capital. Even with the support from the National Economic Recovery Program and cooperation from one of the state banks that focuses on exports and trade, we are still constrained by collateral. Perhaps banks see the risk since exports are considered high risk, and there may be complications between countries. But we MSMEs are told to produce quality products for the world market. We have done all that and prepared the products and human resources. We have increased our product quality and qualified the human resources. Once we produced the product, we must find the market. We have found the market by ourselves, but then what? So, even if we get the order, don't leave MSMEs alone. We need the government to help us with the capital problem. Even though we already received purchase orders, buyers still ask for some requirements that are difficult to fulfill, and it takes a lot of capital to take care of them.

[Azis] Thank you for your valuable input. Just to make sure—and you must have filled out the questionnaire—from the aforementioned problems, marketing is not too problematic, and human resources can be resolved, right?

[MSME #2] No problem, sir, because no one in the world can make rendang better than West Sumatra. That's the first principle.

[Azis] That's right. So the problem now is production if there are so many orders. My question is, are there other MSMEs that produce rendang like you?

[MSME #2] We have a cluster.

[Azis] Is there enough?

[MSME #2] The amount is sufficient. However, to operationalize the cluster requires capital.

[Azis] The core problem is money, then?

[MSME #2] That's right. Collectively, we have orders of 150 tons a year, but we have difficulty in managing the cash flow. There's also this problem: in rendang industry, we are actually growing, and since 2017, we have a movement called "Indonesians Spicing the World". CNN called rendang the most delicious food in the world, but it turns out we lagged behind and did not follow up the world's recognition with real action. In 2018, I was motivated to make rendang better, because in that year I heard that Indonesians going on the Hajj pilgrimage were given rendang made in Thailand. We also have innovative products like the one used by Gordon Ramsay. He made scrambled eggs from rendang paste, so we are now creating rendang not just with meat. Rendang can also be included in dim sum, can be topped with tuna rendang, and rendang scrambled egg and steak. Yesterday, we took part in a webinar with several buyers, including those from the Netherlands. Due to the pandemic era, people's consumption patterns are starting to change. Usually B2B buyers go to big business, but now it has started to change and their sales are in small sachets. So housewives, small families, who are returning and staying at home are looking for food or ingredients that they can make at home. Apart from building bonding between families, this is also a practical solution.

[Azis] If I may ask, what about the packaging?

[MSME #2] We have no problem with packaging.

[Azis] You mean you package yourself?

[Rishanty] You import packaging from China, right?

[MSME #2] We import some packaging from China, usually plastic retorts. Indonesian plastics cannot be retorted. So the plastic retorts must come from China.

[Azis] For packaging from Indonesia, is it from West Sumatra or Java?

[MSME #2] All raw materials are from Sumatra, except meat. The packaging is imported, Prof.

[Azis] All imported packaging?

[MSME #2] Yes, you can buy small-scale retorts in Indonesia, but when you need 1 million pieces, you have to import.

[Azis] Where's the Indonesian packaging from?

[MSME #2] From Bandung.

[Azis] As I thought.

[MSME #2] Yes.

[Azis] Many MSME friends have really complained about this. I myself always hear Bandung as the answer.

[MSME #2] Because we are talking on a fairly large scale, friends with similar businesses recommend that if you build a factory please build it not in Jakarta. Make it in Central Java, or here, because human capital is also cheaper, and the distance to raw materials is also closer.

[Azis] Why do you need to order from China if in large amounts? Is there not enough supply from Indonesia?

[MSME #2] The issue is price, Prof. Here, we don't have a direct link to the supplier. If we shop in Bandung, one thousand to ten thousand pieces is still feasible. Above that, the price is too high. Our costs can be reduced if we go directly to China.

[Azis] Thank you very much for your input.

[Rishanty] Excuse me, can I ask? Regarding capital difficulties, have you tried fintech or crowdfunding?

[MSME #2] Not yet. That may be the last solution we will take if we really get stuck. We are looking for bigger investors.

[Rishanty] Thank you.

MSME #3: Central Java

[MSME #3] From the first survey to today's survey, I notice that all of the issues are related. And for our cluster, we synergize everything, from the social aspect to trade aspect. In relation to capital, online loans and fintech for MSMEs are very unlikely for us to make profit. So, if we may suggest, perhaps state-owned banks can provide such loans for us with special interest rates like KUR [Kredit Usaha Rakyat]. Here, we foster around 1500 rice farmers. With regards to marketing, there have so far been no significant obstacles, both locally and internationally. We export organic rice to America, Singapore, Malaysia and several other countries. The government policies surrounding us are linked with the Agricultural Agency. If we refer to the existing data and the land area that we observe, we find that in real, authentic terms, Indonesia has a food surplus, and Indonesia's ability to export rice is very good. But why do we import a lot of rice? This is a big question for me. We hope the government could understand better about the lower levels of society, so that they can reach and understand the problems of all farmers so that the government can

empower and advance the economic conditions of farmers and the community. The role of government is very important in the social issues.

[Azis] If I may know, where do you come from?

[MSME #3] I'm from Central Java.

[Azis] This is interesting. In your opinion, if fintech is made easier by using a lower interest rate, that will help?

[MSME #3] Yes, that's right. Because what we know is that private fintech is growing rapidly. But if we do the calculations, the interest from this fintech is very high. So it can't be balanced with what we have fought for. For MSMEs to grow and develop, it is impossible not to have loans from banks. Online loans such as fintech have not been significant for MSMEs, because currently fintech is only for individuals. If there is a special fintech from SOE banks, this might help, with a special interest rate for MSMEs like the KUR.

[Azis] Thank you for your input.

MSME #4: Maluku

[MSME #4] What is bureaucratic costs, Prof?

[Azis] Bureaucracy usually has to do with rules and regulations.

[MSME #4] What about unofficial rules? As in the case of costs that are not officially listed. Is that part of bureaucracy, Prof?

[Azis] That can be part of it. Or, for example, the government provides help to promote your product. Your business can participate in exhibitions, but to do so, you have to fill in many, many pages of forms and pay high administrative costs.

[MSME #4] Okay. Thank you, Prof.

[Azis] Do you sell the products in Maluku?

[MSME #4] Yes. I am native to Maluku but live in Jakarta. I actually have a story. We lost our woven cloths for a hundred years. I wasn't originally in the weaving business. But I felt the loss, and I looked again. With the help of Bank Indonesia, I finally found the original Maluku weaving instruments and motifs. Now, Bank Indonesia has built a weaving house in Maluku. Every month I come home to keep it up, because we are more concerned with preserving our culture, returning and reintroducing our lost cloth, and for the local people to return to weaving.

[Azis] Did you find it difficult? If it has been long that gone, it means that the original weavers are no longer there.

[MSME #4] Very, very difficult, Prof.

[Azis] So how to find new weavers?

[MSME #4] It's very difficult, Prof. But because I made a promise to do something for my birthplace, I didn't give up. Originally, we were only able to obtain black and white photos. That's all the traces left of it. I looked for it everywhere, including in Jakarta, to the fabric museum, to weaving experts, and everyone said nothing was left, Prof.

[Azis] Not even in the local university?

[MSME #4] Nothing, Prof. So everyone said there isn't anything, but I was sure that there must be something left, because in Maluku there was a big kingdom, and it's impossible that we didn't have our own cloths and fabrics. It's impossible. I happen to be part of the Sultanate family, so I come home for every traditional ceremony and always post about it and make writing competitions. In Jakarta, I held a bloggers competition and brought the bloggers to Maluku. So, from there, from the writings of the bloggers that I brought with me, it was finally discovered that we do have our own cloth. They posted photos of the ceremonies in Maluku—imagine, during our traditional ceremonies, people wear Javanese and Sumatran cloth. So I looked for cloths that used local weaving techniques, and there was none. What strengthened my will to rediscover them was our village elders. The first valid, actual data I got was from elders who were 80-85 years old, who testified that they had seen a weaving tool. So, I finally searched and found it.

[Azis] I was once invited by Khairun University to give a lecture, but I don't remember whether there was a cultural or history department at the university? Maybe those friends there know, or at least the lecturers can help.

[MSME #4] Yes, now everyone is helping. Recently, I found another motif, and I brand our cloth as a treasure. The branding is like that. So we have the old motifs and the one I just found came from a lecturer at Khairun University. So he sent data that there was this weaving tool during these years. He sent me photos, and I collected the data. Finally, he sent a photo of the motif. It was from the Leiden Museum. So we are now producing a new motif. Weaving is actually very difficult, especially for the young people in our village. At first, the youth didn't see it as a job, but as our responsibility to restore our lost culture. We can't use someone else's culture, we have to have our own. Isn't that right sir? At first, I was excited, but I struggled to use the weaving tools. If the comb was a little bit off, I didn't know what to do and whom to ask. In other regions, such as Lombok, you can go to a grandmother or grandfather who can look at the equipment. For us, we have nothing at all. So, if the thread breaks, the young people go home because it takes weeks to fix it. Really hard.

[Azis] But if it succeeds, it will be amazing.

[MSME #4] At first I had to ask a lot of questions because I started from zero. I had to ask what the system is. Lots of suggestions. People asked me to bring one cloth, and they would pay for it. Generally, that's the way it is in the cloth business. But it wasn't possible for us, because it can take months to make one cloth. Finally, I took the initiative. I have to pay first. So, I pay the weavers every month even before they

finish any final results. Luckily, my husband is very supportive. But after some time, it wasn't sustainable either on our finances. Finally, Bank Indonesia was really eager to help us. He said that our business is still a baby, and it is impossible for a baby to eat by itself. It must be helped and guided to grow up. From then on, we finally worked together with the schoolteachers of the young weavers. We studied in Jepara. So, we made a pact. Because we couldn't produce without assistance, the teachers finally helped to weave the cloths and to sell them in Maluku. The young weavers are paid a salary so they want to come to study. At first it didn't work, but thankfully it's now going more smoothly, even though the number of students decreased from 30 to only 6. But now they produce even more results. So it was like natural selection. Finally, we found young weavers who are able to produce cloth in a month. Although that speed is nothing compared to the case in other places, I am very proud. To me, these young weavers are warriors.

[Azis] I completely agree. This is similar to the case when I went to Flores to see women weaving. They also don't see it as a business but as a way to maintain their cultural values. That is priceless. It cannot be judged by money alone. In the research report, we will mention this, because there are still some who do not understand it. They only see whether the MSMEs are profitable or not. Only looking at the money.

[MSME #4] That's right. Wow, I'm really happy. There were times when I would tell this story to someone, but I get blamed because they said we didn't make it ourselves and we aren't in Maluku. But I tell them that I only have two choices: to keep doing it or let it die forever.

[Azis] We are now doing a survey to get answers based on a questionnaire. But later when we write the report, we will put the stories behind the survey responses, like your story.

[MSME #4] Yes. Yes. Thank you.

[Azis] No, we are the one who should thank to you.

[MSME #4] I really wanted to tell you, because there are so many sides to it.

MSME #5: East Nusa Tenggara

[MSME #5] In relations with the government, we need the local government to coordinate and collaborate better with all MSMEs. Currently they only work with MSMEs whose views are in line with the views of the local government and they do not work with MSMEs who are vocal and have different views from the local government. Since the establishment of our institutional business twenty years ago, Bank Indonesia has been helping us. So, for surveys related to the government, we need more help from the local government. Currently, the local government does not engage with us. We need them to provide real support for MSMEs that focuses on the interests and the needs of the community, and to simplify the bureaucracy. We don't have any problem with the central government.

[Azis] So the point is to suggest that the policies are divided into two: those by the local government and those by the central government

[MSME #5] Yes. Yes.

[Azis] For a case like yours, we will emphasize this issue. This is very important ma'am, especially since this research uses a regional approach.

Envoi

The notion that there can be no better alternative to the current state of dualism is more farfetched today than ever. Finding a better alternative should be more promising given the progress and development during the last few decades, including the rapid development in information and communication technology (ICT). The wisdom of learning from past failure is incontrovertible, albeit the attitudes and activities required to detect policy failures are often in short supply. It is my hope that what I expose in the book helps readers know more about the role of institution, where social capital is an important part of, in mitigating dualism. My main intention is to improve our knowledge and provoke public discussions about the link between policy, institution, and social capital in regional development and small businesses. I certainly would not claim that I have done so exhaustively. Others had taken the subject, and many more are necessary. But without constant reminders, we could easily slip back into old habits.

Bibliography

- Asian Development Bank Institute (2007). Industrial Development Planning: Cluster-Based Development Approach Policy Seminar. ADBI-Tokyo.
- Berry, A., Rodriguez, E., & Sandee, H. (2002). Firm and group dynamics in the small and medium enterprise sector in Indonesia. *Small Business Economics*, 18, 1–3 (ProQuestpg. 141).
- Frenken, K., & Boschma, R. A. (2007). A theoretical framework for evolutionary economic geography: Industrial dynamics and urban growth as a branching process. *Journal of Economic Geography*, 7, 635–649.
- Marsan, G. S., & Sabrina, L. M. (2020). *ASEAN MSMEs in a COVID-19 world: Innovation and Skills for the post-pandemic recovery, lessons from ERIA MSMEs Talks 6–10*. Economic Research Institute for ASEAN and East Asia (ERIA).
- Pramasty Ayu Kusdinar. (2016). *Hukum Adat Rejang: Catatan Riset Aksi Meniti Jalan Pengakuan Masyarakat Hukum Adat Rejang*. Akar Foundation, December.
- Satty, T. L. (2001). *Decision making with dependence and feedback: The analytic network process*. RWS Publication.
- Tambunan, T. (2000). Development strategy of rural small-scale industries with a cluster approach: A case of Indonesia. *Asia-Pacific Journal of Rural Development*, X, 1.

Index

A

Agglomeration, 2–6, 10, 35, 36, 38–43, 52, 57, 58, 62, 64, 65, 85, 101–106
Analytical Hierarchy Process (AHP), 54, 62, 66, 109, 111, 112

B

Behavioral insights, 10, 58, 106

C

Case evidence, 5, 6, 79, 80, 105
Circular economy, 87–89
Cluster, 2, 3, 5, 6, 32, 35, 41–43, 48–53, 58, 62–66, 68, 70, 74–77, 82, 84, 87–89, 91, 94–96, 104, 105, 113, 114, 132–135
Collective action, 6, 35, 45, 48–52, 58, 62, 66, 68, 74, 75, 91, 97, 104, 105
Cooperation, 37, 48–52, 62, 66–68, 70, 74, 75, 97, 104, 105, 132, 133
Customary law, 5, 79–81, 91–96, 106

D

Decentralization, 21, 22, 28, 36, 43–45, 93, 102

E

Equilibrium, 3, 19, 36–38, 40, 41, 47, 49, 50
External economies, 2, 3, 5, 36, 38–40, 42, 102

H

Hierarchy, 23, 54, 62–66, 75, 76, 104, 105, 109–113

I

Input-Output (I-O), 4, 59
Institution, 1–6, 10, 11, 13, 29, 32, 35–37, 42, 43, 45–47, 49–52, 66, 80, 101–107, 141
Interregional inequality, 2, 3, 5, 6, 10, 12, 15, 17, 26, 27, 32, 42, 47, 58, 59, 101–103, 105
Interregional multipliers, 4, 39, 40, 57–61, 103

L

Local capture, 36, 43–46
Local custom, 5, 79–81, 93, 94, 97, 106
Local government, 28, 82, 92, 97, 138, 139
Local solution, 79, 80, 86

M

Mental bandwidth, 106
Multiregional Input-Output (MRIO), 59–61

N

Network, 3, 29, 37, 38, 47, 48, 52, 54, 66, 67, 76, 89, 91, 96, 103–105, 111–113

P

Perceptions, 5, 52, 53, 57, 62, 65, 66, 71, 74, 75, 77, 80, 94, 101, 102, 104–107, 109, 110

Periphery, x, xi, xii, 1, 3, 5, 10, 12, 36, 59, 60, 102, 103, 105, 106

Policies, 2–6, 10–14, 21, 29–32, 35–40, 42–44, 46–48, 50–53, 57, 58, 60, 62, 66–71, 73–77, 80–82, 85–90, 93, 97, 101–107, 132, 135, 139, 141

Policy design, 29, 40, 43

Policy interplay, 3, 32, 35, 36, 53, 58, 67, 70, 75

Poverty, 10, 13, 14, 19–21, 45

Productivity, 1, 2, 22–24, 26–28, 38, 40–43, 47, 84, 86, 89, 104, 106

Q

Quality of leaders, 45, 102

S

Social capital, 2–6, 10, 13, 21, 35–38, 43, 45, 47–49, 51–53, 57, 58, 62, 66–71, 73–75, 77, 79–82, 89, 91, 92, 97, 102, 104–106, 141

Spatial distribution, 5

Structure of relations, 59, 102

Sustainability, ix, 87

Sustainable, 88, 89, 93, 138

W

Wealth distribution, 17