THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

The Role of Government Policy in Indonesian Small and Medium Enterprise Development, 1966 - 2006

Greta Christine Seibel

Supervisors: Janet Hunter (LSE) & Anne Booth (SOAS)

A thesis submitted to the Department of Economic History of the London School of Economics and Political Science for the degree of Doctor of Philosophy

London, February 2020

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Statement of inclusion of previous work

Some of the comparative work with South Korea and Taiwan builds on the ideas developed in my Master thesis, submitted to the London School of Economics and Political Science in 2012.

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Abstract

This dissertation analyses how the policies of Suharto's New Order government (1966-98) and post-Asian Financial Crisis reforms shaped Indonesian SME development. Indonesia featured as one of the high-growth Tiger Economies in the World Bank's (1993) *East Asian Miracle* report. One of the features of the East Asian model is the 'principle of shared growth', implemented through various reforms, including SME-targeted support policies. Suharto restructured the Indonesian economy along similar lines, yet it is commonly argued that Indonesia suffered from a 'missing middle' - a gap in firm-size distribution due to small firms staying small and large firms being born already relatively large. This perceived inability of indigenous firms to grow is subject to recurrent heated public debate. Chapter 2 places indigenous entrepreneurship in historical context, showing that attempts to foster it during the late colonial and early post-independence period largely failed. Chapter 3 explores the question of the missing middle in the manufacturing sector despite the New Order government's objective to strengthen small enterprises. Using Economic Census data on number of firms, workers and value added by firm-size category reveals that as the Indonesian economy grew a missing middle emerged and persisted. A comparison with South Korea and Taiwan shows that this could not be explained by Indonesia's stage of economic development and is indicative of a dual economy. Chapter 4 focuses on access to credit, a main constraint to SME development. Using Bank Indonesia data and statistical yearbooks, I analyse the various small business credit schemes introduced since the early 1970s. These generally showed – at best – mixed results. I identify a turning point when the approach shifted from subsidised targeted government credit programmes to market-led financial intermediation by commercial and local rural banks with market interest rates on savings and loans. However, the vast majority of SMEs remained self-financed and access to credit continued to be a pervasive issue for Indonesian SMEs during the New Order period and beyond.

To Raoul and Lena,

who taught me to find and follow my own path.

To my father,

whose legacy and love are my inspiration.

Acknowledgements

The initial idea for a PhD dissertation on Indonesian SME development first came when I worked on my Master thesis. Under the guidance and mentorship of my then-Master's (now PhD) supervisor Janet Hunter I was working on a comparative study of the role of government policy in South Korean and Taiwanese SME development. When I started thinking about doing a PhD I knew I wanted to work on a country in which the story was less clear cut and the potential lessons learned of which would have wider applicability for developing countries today than the cases of South Korea and Taiwan. And, having been confined to English-speaking sources during my Master's dissertation I wanted to pick a country for my PhD which would allow me to utilise my comparative advantage. The decision to work on Indonesia was therefore the only natural conclusion and with that my thereto rather shambolic CV came together as if mapped out with a red thread running through leading to this PhD project: having partially grown up in Indonesia and later returned to work and re-learn Bahasa, the choice to learn Dutch during my undergraduate degree in Maastricht, my wider interest in South East Asian and East Asian economic development and my research on the developmental state and its relationship with the private sector, all of which flowed into my PhD proposal.

But I wasn't ready just yet to move onto a PhD straight from my Master's degree at the LSE. So I left London to work in India for two years. But the realisation soon came that while I found working in international development a life-changing experience, my passion was in research. While completing my two-year contract in New Delhi I took a course in SME Finance at the Frankfurt School of Finance & Management to prepare for my PhD project. I reached out to Janet, who helped me refine my ideas and develop a proper PhD proposal. I knew I definitely wanted to come back to the LSE and work with Janet – alma mater and my mentor who previously introduced me to new ideas and pushed and challenged me in a way that led me to produce research I had thought far beyond my abilities.

It was Janet who introduced me to Anne Booth. The joint supervision was quickly agreed to. I knew that with these two powerhouses I was well set-up to embark on my PhD journey, which I have now just come out the other side of. Janet and Anne have been patient and supportive throughout this journey, pushed and challenged me exactly when I needed it; without their mentorship and guidance I could have not written this PhD dissertation. The English 'PhD supervisors' don't do justice to either, the German '*Doktormütter*' much more aptly captures what I owe to both Janet and Anne.

I wish to warmly thank my examiners Tobias Axelsson and Thomas Lindblad for reading my work and their insightful comments. The viva was the perfect culmination of my PhD journey. I thoroughly enjoyed our conversation which gave me much food for thought for my future research trajectory. Their feedback has helped me sharpen the thesis and I am greatly indebted to both. Any errors that remain herein are mine alone.

The foundation of this PhD lies in the data and archival sources I collected during a four-month research visit in Jakarta in late 2015. Again, this would have been impossible to set up without Anne's network and introductions, first to LIPI (the Indonesian Institute of Sciences) to set up an institutional affiliation and later to a long list of key contacts to interview and meet in Jakarta. The research visit to LIPI's Centre for Economic Research (P2E-LIPI) would have not been possible without the help and introductions made by Siwage Dharma Negara. Wage was extraordinarily generous with his time and advice despite commuting back and forth between LIPI and Singapore, where Wage had just started as a Senior Fellow at the ISEAS Yusof Ishak Institute. Thanks to the generous welcome of Pak Maxensius Sambodo to P2E-LIPI I benefitted greatly from the exchanges with my fellow researchers and from being able to present my research at the weekly seminar at P2E-LIPI. The comments, suggestions and feedback I received in personal meetings and during my presentation have played an important role in refining my research questions and sharpening my hypotheses. I have also greatly benefited from my meeting with Prof. Tulus Tambunan at the University of Trisakti. Professor Tambunan is one of the leading experts on Indonesian SME development and Director of the University's Center for Industry and Small and Medium Enterprise Studies.

I would have not been able to collect all my data at all these different archives without the generous support of my colleagues at P2E-LIPI. Too many of the junior researchers at P2E-LIPI to name took time away from their own work to take me to ANRI (National Archives of the Republic of Indonesia), BAPPENAS (the Indonesian National Development Planning Agency), Bank Indonesia (the Indonesian Central Bank) and BPS (the Indonesian Central Board of Statistics). I would like to thank Ibu Untari, Pak Ari and Pak Bintang in particular, without their guidance I would have been hopelessly lost in Jakarta and the depth of the archives. I also recommend David Henley's *Economic History Archival Guide* for Jakarta for anybody contemplating archival research in Jakarta; it shaved weeks off my research time at the Indonesian National Archives.

Apart from LIPI I spent the vast majority of my time in Jakarta at BPS, where I collected the Indonesian Economic and Industrial Census data. Ibu Stefanie Intan Christienova at BPS was always approachable and helped me navigate the many volumes there are to the Economic Census data and allowed me to see and photograph the more fragile Industrial Censuses. At BPS I also met with Pak Hady Suryono (Head of Statistics Consultation) and his team to discuss the methods of data collection for the Economic Censuses and resulting limitations of the data. The interview left me confident in the reliability of the data I had spent so many weeks and months collecting.

Ibu Untari also accompanied me to BAPPENAS, where I collected Repelitas I-VI (Indonesia's five-year development plans). At BAPPENAS we met with Dr. Leonardo Sambodo (Head of Sub-Directorate for SME Support & System), who kindly took the time to explain how SME support by the Indonesian government and different ministries developed since the 2000s. This interview helped me connect my historical research to developments of the present. At the National Archives I collected policy documents and official exchanges regarding the nationalization of Dutch enterprises in the late 1950s, which was only made possible by the endless patience of the ANRI staff helping me navigate the 20+ volume catalogue to locate my sources.

I spent the final month of my time in Jakarta in the archives of Bank Indonesia, where I collected all Annual Reports of Bank Indonesia for 1953 to 2006 and the Annual Reports of its predecessor, the Java Bank. Towards the end of my bank archive visit I had luckily become part of the office furniture, so that the staff of the Bank Indonesia Archives granted me access despite being officially closed for refurbishment. I owe being able to finish my archival research at Bank Indonesia to this favour and the patience of the staff helping me find the materials that were moved for relocation.

Much of the work on my credit chapter was only made possible by Pak Agus Rachmadi, Senior Vice President of Bank Rakyat Indonesia (BRI) and Director of BRI International Institute for Microfinance and Financial Inclusion Development. Over the course of my research visit and many meetings Pak Agus talked me through the history and reforms of BRI, the unit desas and how Kupedes was developed, from inception and the many lessons learned along the way and how it has changed since. Pak Agus also granted me access to the data on Kupedes and BRI's SME banking segments, which form an important part of the fourth chapter of this dissertation. I owe a mountain of gratitude to Pak Agus, his support, insights and patience.

This research visit was made possible by the financial support of the Royal Historical Society, the Economic History Society and the Radwan Travel Fund. The Radwan Travel Fund furthermore enabled my visit to the Leiden University Library (UBL) to consult the collection of the Royal Netherlands Institute of Southeast Asian and Caribbean Studies (KITLV).

I would have had to conduct many more archival research visits had it not been for the LSE Library Interlending Service. I would like to particularly thank Elizabeth Galloway from LSE Interlending, who patiently sorted through my very many, very long and often complicated requests. When I had to complement my Indonesian Economic Census data with provincial data (which meant every request consisted of 26 volumes), our emails changed from anonymous requests and official LSE Library confirmations to exchanges over my PhD topic and where in the world we could source my book requests from. Over the years Liz organised books from everywhere, including Australia, Singapore and the United States. When I began my comparative work she patiently worked through my requests for South Korean and Taiwanese census data, which often left both of us having to rely on Google Translate to browse through Mandarin and Korean book titles. I could not have added the in-depth regional analysis with Indonesia or taken the comparative approach with South Korea and Taiwan in my PhD had it not been for Liz and the LSE Interlending team locating and ordering my sources from all over the world.

This PhD has greatly benefited of the mentorship of the late Michael Marx. Growing up I knew Michael as a distant relative and colleague to both my parents. Half-way into my

PhD we caught up over some family gathering and realised that we had enough overlap in our interest in Indonesian development and distance in our areas of expertise that I had a lot to gain from this outsider perspective on my PhD. At first we discussed my research paths, where I struggled and where I needed advice to make the story that was clear to me, interesting and persuasive to my reader. Michael then read my chapters and highlighted where the story was clear and when the red thread was lost because I had ventured in one too many side avenue discussions. Finally, when I began feeling overwhelmed by the prospect of starting yet another chapter from scratch, Michael invited me to come back to Cologne for a writing retreat. For two weeks Michael and Fulvio set aside a desk in their office with one mission: writing the credit chapter. They made sure I stayed nourished over daily lunches and Turkish-Italian espressos and rewarded me with lavish home-cooked dinners. Every couple of days we reviewed my progress and whether I was sticking to my story line. Even after I returned to London Michael kept checking in on my progress, making sure I was keeping up with my own schedule, even during his own travels to Nigeria. This mentorship was crucial to breaking the wall between what I had in me and bringing my story onto paper.

I have presented my work at many conferences and workshops and would like to thank everyone along their way for their comments and feedback. However, I would like to mention one in particular. I experienced my personal breakthrough in my work at the '*Development Under Dictatorship? - Revisiting economic development under authoritarian regimes in the periphery'* session organised by Montserrat López Jerez, Cristián Ducoing Ruiz and Sara Torregrosa Hetland at the World Economic History Congress in Boston. I had just completely changed the framing of my paper and went to Boston to test it out for the first time. The positive response and constructive feedback I received reinvigorated my research spirit and my work started to fall into place quite naturally. I felt like Montse had taken me under her wing, inviting me along to a couple of South-East Asia workshops and conferences thereafter, following my research trajectory and helping me with career advice. With this I became part of a little South East Asia research community in which I felt right at home. I am looking forward to many more conferences, workshops and sessions together.

The LSE Economic History Department provides a uniquely intellectually stimulating environment. The weekly Economic History Seminar and Graduate Seminar series gave me the opportunity to expand my horizons far beyond the realm of Indonesian economic development. Equally important were the daily lunches with my colleagues, during which we discussed new research in our discipline, the future of Economic History as well as more concrete issues we had with our own research. The collegial atmosphere between the Economic History PhD students was the perfect antidote to the isolating nature of PhD dissertation writing.

When I embarked on my PhD journey with Young and Enrique we were incredibly intimated by the intellectual prowess that welcomed us in this department. Being one of the smallest PhD cohorts across the years, our topics could have not been more different from each other. Yet we have supported and pushed each other all the way across the PhD finish line. We celebrated our academic successes together as well as the milestones in our personal lives, including the births of Young's son 도준 and Kike's son Teo. We supported each other in times of struggle and insecurity. Together we have come out the other side of this journey still standing. These ties will bind us for the rest of our lives.

The LSE's Economic History PhD Programme entails a two-step review process. This process serves to formally upgrade from the first to the second year and then from MPhil to PhD student status and gives us students the luxury of having our entire work read in great detail by members of the department who are not our supervisors. I have greatly benefited from this process and the comments and suggestions of my readers Debin Ma, Chris Minns and Albrecht Ritschl have been important to refining my research.

I have met many people at the LSE Economic History Department who have grown into true friends. I would like to particularly thank Yuhua, Rebecca, Maxine and Sandra, who pushed me through my most challenging times and cheered me on all the way across the final finishing line. The Lunch Gang, you are wonderful in your light-hearted silliness and deep contemplations about the latest and sexiest econometric techniques. Enrique, together we have not just grown into better researchers but become more resilient and kinder at the same time. At your house I was never a stranger, Miriam and you made me feel like another family member (after all, even the Queen has German relatives). Alejandra, between drinks and meditative swims you made sure I always kept a cool head when I started to feel overwhelmed. Our Brexit rants which typically just ended in frustrated head-shaking and shoulder-shrugging were a much needed vent to dealing with the seemingly never-ending political insanity. Gerardo, behind the moody intellectual you are a beacon of sunshine. When you needed it I told you stories of an alternate life, in which you were pursuing your research amongst the cherry blossoms of the spring and autumn's wild colourings of maple leaves in the company of your playful red panda. When I needed reminding that there is a me after the final year writing-up bubble you brought the red panda and his clumsy antics back to life.

My LSE PhD experience would not be complete without my teaching at the Department of International Development. I owe my growth as a teacher to the mentorship of the late Dr. Mayling Birney. I taught seminars and mentored student project groups for the postgraduate module 'Development Management', which gave me the great opportunity to explore further how to best relate international development theory to practical examples in a way that is accessible and stimulating to students. I found the learning effect to be greatest when I drew from my own professional and research experiences to illustrate course concepts and theories, which encouraged students to share their own relevant experiences to the benefit of the group. I thereby grew as much from what I learned from my students as they did from taking the course. I was excited to be able to draw from my own professional past and connect my past to what I was doing now. I found teaching incredibly rewarding, especially teaching students with such diverse backgrounds. My growth experience as a teacher was shaped by our tight-knit teaching team over teaching lunches and drinks. Over the course of many DV431 Friday drinks all of us graduate teaching assistants and teaching fellows grew from colleagues to true friends.

Many other people have been part of this journey. Ilan, who knew that discussing Israeli politics, discovering theatres off the beaten track and escaping into dance (always until just before the witching hour threatened to turn our carriage back into a pumpkin) would be the perfect combination to maintain sanity. You have helped me to the end of my PhD journey, now you get to focus on yours – and I will be here for every step of it. Anna and Jonna, you come from very different past lives of mine and yet your friendships are both so important to me and helped me through this time. Months, if not years, can go by without speaking a word and yet when we do it is like no time at all has passed. Home for me is not a place, it is people, and for me it is my family and the two of you. You give me strength and support when I need it and tell me off when I need to get on with it and push forward.

Finally, my entire family has supported me through this journey, everyone in their own way. My mother and her unfaltering trust in my brilliance know no judgement, only love and support. My late brother and my beautifully brilliant sister, who have pushed me to find what excites me rather than live the life I think others want me to lead. Both have chased their own dreams and given me the confidence to find and live mine. Raoul, you live on in the lives we lead. Lena, you are a power woman and an inspiration. It is incredibly difficult to put into words how much of this thesis is owed to my father. He agreed to finance my PhD despite the initial conviction that it was too soon for me to leave field work. Working on a topic so close to my father's expertise was a challenge for us both as well as an opportunity to grow our bond beyond a father-daughter relationship. My work on Indonesian SMEs complements my father's legacy in Indonesian microfinance. We now seek each other's advice in our respective areas of expertise on an equal footing. This PhD project would not be the same without you and we would not be what we are today without the PhD.

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Acronyms and Abbreviations

BAPPENAS	Badan Perencanaan Pembangunan Nasional (Indonesian National Development Planning Agency)
BI	Bank Indonesia
BIMAS	Bimbingan Masal (Mass Guidance Programme)
BIPIK	Program Pembinaan dan Pengembanganan (Small Industries Development Programme)
BPR	Bank Perkreditan Rakyat (People's Credit Banks)
BPS	Badan Pusat Statistik, formerly Biro Pusat Statistik (Central Board of Statistics)
BRI	Bank Rakyat Indonesia
CEI	Changing Economy of Indonesia
GDP	Gross domestic product
HPAE	High-performing Asian economy
INPRES	Instruksi Presiden (Presidential Instruction)
KIK	Kredit Investasi Kecil (Small Investment Credit Programme)
KMKP	Kredit Modal Kerja Permanen (Working Capital Programme)
KITLV	Royal Netherlands Institute of Southeast Asian and Caribbean Studies
KPS	Kantor Pusat Statistik (Central Statistical Ofice)
KTA	Kredit Tanpa Agunan (Credit without collateral)
KUK	Kredit Usaha Kecil (Small Enterprises Credit Programme)
Kupedes	Kredit Umum Pedesaan (General Rural Credit), a loan product of BRI
LIK	Lingkungan Industri Kecil (Small Industry Estates Programme)
LIPI	Indonesian Institute of Sciences
MPR	Majelis Permusyawaratan (People's Consultative Assembly)
MSME	Micro, small and medium enterprise

NICA	Netherlands Indies Civilian Administration
NIE	Newly industrialising economy
NPL	Non-performing loan
PKI	Partai Komunis Indonesia (Indonesian Communist Party)
PUTERA	Pusat Tenaga Rakyat (Center of People's Power)
R&D	Research and development
Repelita	Rencana Pembangunan Lima Tahun (Five Year Development Plan)
RI	Republic of Indonesia
RIS	Republik Indonesia Serikat (Republic of the United States of Indonesia)
ROK	Republic of Korea
RISTEK	Indonesian Ministry of Research and Technology
RTC	Round Table Conference
Simpedes	Simpanan Pedesaan (Rural Savings), a savings product of BRI
SME	Small and medium enterprise
SOE	State-owned enterprise
UBL	Leiden University Library
UNCI	United Nations Commission for Indonesia
VA	Value added
VOC	Verenigde Oost-Indische Compagnie (Dutch East India Company)

Chapter 1: Introduction

The role of small and medium enterprises (SMEs) in the Indonesian economy has long been a topic of heated discourse. Early attempts to foster an indigenous entrepreneurial class during Dutch colonial rule and then by the first independent government largely failed. President Suharto's New Order Government introduced various policy initiatives to strengthen (indigenous) SMEs, motivated by welfare considerations as well as to address the idea of the weak indigenous enterprise in need of government support and protection, which it had inherited from previous governments. But only when the New Order Government began liberalising trade, deregulating the economy and promoting export-orientation in the 1980s did private business begin to flourish.[1] And yet, despite this private sector growth and SME support, there was a widespread public perception that only businesses owned by ethnic Chinese entrepreneurs managed to grow and flourish while indigenous SMEs were held back by an invisible glass ceiling and stayed small. This dissertation analyses Indonesian SME development and SME policies during the New Order period, the Asian Financial Crisis and its aftermath. The focus of this dissertation is on the New Order period (1966-98) and extends the timeframe to 2006 to take into account the restructuring and reforms that have been implemented in the immediate aftermath of the Asian Financial Crisis.[2]

Much research has been dedicated to explaining the importance of SMEs to national economies, which are seen to contribute to economic growth, create

[1] Although a number of business groups emerged in the early days of the New Order period, the private sector generally only indirectly benefited from the oil boom of the 1970s, as a result of increasingly restrictive policies towards FDI and the re-emergence of interventionist policies more generally; see Thee Kian Wie, 2006, 'Policies for Private Sector Development in Indonesia, *ADB Institute Discussion Paper, 46:* 1-46, pp. 10-11, 39.

[2] The immediate policy responses to the crisis were based on the fourth agreement with the IMF signed on 24 June 1998 (Second Supplementary Memorandum of Economic and Financial Policies, MEFP), which set out various policies and measures to implement fiscal and structural reforms, including improving access to credit for small-scale enterprises. In 2003 the Indonesian government decided to terminate the programme with the IMF and introduced a new economic policy package with the objective to maintain and strengthen macroeconomic stability, restructure and reform the financial sector, and increase investment, exports and employment (see INPRES 5/2003, Part I). Economic recovery was only achieved by 2004.

employment, foster innovation and entrepreneurship, and provide a source of successful future medium and large enterprises.[3] This raises a few questions: What factors influence the creation and success of SMEs? And how do those firms, in turn, affect the national business landscape? In particular, the apparent resilience of SMEs in the Tiger economies during the 1997/8 Asian Financial Crisis and their role in the economic recovery has sparked the interest of policymakers and academics alike, raising the question of how governments can contribute to the development of a dynamic and innovative SME sector.[4] This requires better understanding of how government policies have historically influenced SME development. Some national governments have actively shaped the structural composition of their industrial sector, e.g. Taiwan deliberately limited enterprise size in order to ensure political stability. Korea, in contrast, actively supported large business groups.[5] Indonesian policymakers, by comparison, had a long history of trying to foster the emergence of an indigenous entrepreneurial class, but have found limited success.

The Indonesian case deserves closer attention given that 90 per cent of firms are SMEs; yet, similar to Korea, its large firms are considered the drivers of innovation.[6] The East Asian Tiger economies have been subject to extensive research attempting to identify the pivotal factors in the 'East Asian miracle' (an economic growth of around 6

[3] Charles Harvie and Boon-Chye Lee, 2002a, 'East Asian SMEs: Contemporary Issues and Developments – An Overview', *in: The Role of SMEs in National Economies in East Asia* (pp. 1-20), Cheltenham: Edward Elgar Publishing Limited, p. 3.

[4] The World Bank's Miracle Report groups Indonesia, Malaysia and Thailand under the term "newly industrialising economies" (NIEs), which with the four Tiger economies (South Korea, Taiwan, Hong Kong and Singapore form the "high-performing Asian economies" (HPAEs) – for the purpose of this dissertation, the term NIEs is used interchangeably with Southeast Asian Tigers, while the second group is referred to as East Asian Tigers.

[5] The Korean government neglected its SMEs until the mid-1970s in its efforts to promote selected industries for which large enterprises had a competitive advantage. Only when Korea passed the transitional point from labour abundance towards labour scarcity in 1975 and thus shifted from promoting labour-intensive to capital-intensive industries did Korean *chaebols* begin relying on subcontracting labour-intensive production to SMEs. In response the Korean government slowly began to support SMEs from the mid-1970s onwards;

see Nakki Baek and Wonchan Ra, 2001, *Entrepreneurship in Korea: An Analysis of Factors Affecting SME Start-Up,* Seoul: Korea Institute for Industrial Economics and Trade (KIET), p. 42 and Makoto Abe and Momoko Kawakami, 1997, 'A Distributive Comparison of Enterprise Size in Korea and Taiwan', *The Developing Economies, 35(4)*: 382-400, pp. 391-392.

[6] Tulus Tambunan, 2007, 'SME Development in Indonesia with Reference to Networking, Innovativeness, Market Expansion and Government Policy', *in:* Hank Lim (Ed.), *SMEs in Asia and Globalization*, *ERIA Research Project Report 2007, No. 5* (Chapter 4), Jakarta: ERIA.

per cent per annum between 1960 and 1995).[7] The Tiger Cub or Southeast Asian Tiger economies (Malaysia, Thailand, Indonesia and the Philippines), have arguably followed the East Asian Tigers (Korea, Taiwan, Hong Kong and Singapore) in their export-driven path to industrialization.[8] However, they each differ in their natural and human capital endowments, ethnic heterogeneity and forms of government and thus should be studied individually in order to evaluate the causal factors behind these growth miracles. One key difference is their business structures, as reflected in the juxtaposition of the archetypical SME-based Taiwanese economy and the Korean *chaebols*-dominated economy.

While the case of Indonesia can shed light on the issue of SMEs, it is also an interesting case study from a development economics perspective, given that the lessons learned arguably have different applicability than the cases of Korea and Taiwan, which are smaller, ethnically homogeneous countries that had achieved food self-sufficiency and relatively strong income equality by the time they began industrialising in the 1960s. By contrast the ethnic heterogeneity, social issues, shortage of skilled labour and exchange rate volatility that have characterised Indonesia for the greater part of the twentieth century are issues many developing countries face today. Indonesia is argued to have been rich with natural resource endowments at the time the period of industrialization began and has thus natural advantages rather than having to actively develop their comparative advantage.[9] This argument requires closer inspection, especially because this would be an important distinguishing characteristic compared to the initial situation in Korea and Taiwan when both countries began to industrialise. Indonesia's geographical conditions allow for intra-country comparison of SME development as the islands have different experiences in terms of colonial pasts and industrial development. Finally, the development of the Indonesian SME sector

[7] The World Bank, 1993, *The East Asian miracle: economic growth and public policy (World Bank policy research reports)*, Washington, D.C.: The International Bank for Reconstruction and Development/The World Bank; William Cline, 1982, *Reciprocity – A New Approach to World Trade Policy?,* Washington, D.C.: Institute for International Economics; Robert Wade, 2004, *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization* (2nd Edition), Princeton University Press.

[8] With its leading position amongst the Southeast Asian Tigers Malaysia has attracted some attention, see for example: Shahid Yusuf and Kaoru Nabeshima, 2009, *Tiger Economies Under Threat: A Comparative Analysis of Malaysia's Industrial Prospects and Policy Options (Volume 566)*, Washington, DC: The World Bank.

[9] For a discussion of governments shaping their countries' comparative advantages see Alice Amsden, 1989, *Asia's Next Giant: South Korea and Late Industrialization,* New York: Oxford University Press, Part III and Robert Wade, 2004, *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization* (2nd Edition), Princeton University Press, pp. 355-356.

deserves more attention, as most studies have only focussed on selected case studies and failed to structurally analyse the long-term trends and developments of SMEs. Aswicahyono, Bird and Hill have found in their study of the Indonesian industrialisation process that industrial ownership patterns were formed by the "interplay of history, policy and industrial organization factors".[10] This dissertation analyses how these factors have shaped Indonesian SME development.

The Indonesian archipelago and its people are characterised by an incredible diversity: Indonesia is the world's fourth most populous country; the archipelago's population is dispersed amongst an estimated 6,000 inhabited islands out of a total of some 17,000 islands which fall into three distinct climate zones.[11] It thus comes to no surprise that human and economic development should differ considerably between Indonesia's regions. Some of these differences can be explained by differential policy treatment by colonial and subsequent independent national governments; conversely some of these differences explain why some policies are more effective in some areas than in others. Part of this links to factor endowments – policies can change some factor endowments (e.g. educational investments in selected regions will lead to differences in human capital), differences in factor endowment in turn mean that the same policy may have different effects in different regions (e.g. policies strengthening local entrepreneurship should have stronger effects in regions with higher education levels and where people have more business experience). This thesis takes a regional perspective to account for and analyse these differences. This variation helps disentangle the causes of SME development at the regional level.

The main data source used in this thesis is the under-utilised Economic Census data, collected from the archives of the Indonesian Central Statistics Office in Jakarta (details in section 1.4.4). The Economic Censuses cover all non-agricultural economic sectors and distinguish between number of establishments and workers by firm-size and province, as well as variables such as value added, exports, ownership, source of capital, constraints faced in developing the business and type of assistance received through

[10] Haryo Aswicahyono, Hal Hill and Dionisius Narjoko, 2011, 'Indonesian Industrialization: A Latecomer Adjusting to Crises', *UNU-WIDER, Working Paper No. 2011/53:* 1-32, p. 5.

[11] Masato Kawanishi, Benjamin Preston and Nadia Ridwan, 2016, 'Evaluation of National Adaptation Planning: A Case Study in Indonesia', *in:* Shinji Kaneko and Masato Kawanishi (Eds.), *Climate Change Policies and Challenges in Indonesia* (pp. 85-110), Osaka/Tokyo: Springer Japan, pp. 89-91.

SME-targeted support and credit programmes. Tracing these variables over time through a regional lens allows for an intra-country comparison and makes an original and important contribution to the literature on Indonesian economic development.

This thesis seeks to understand how government policies affected SME development in Indonesia from 1966 to 2006 through two overarching research questions: (1) What factors influenced the creation and success of SMEs? (2) How did SME development in turn affect the national business landscape? These research questions lead I turn to more specific issues that are addressed I chapters 3 and 4 as indicated below. The second chapter situates the narrative in historical context and explores the legacies that shaped the Indonesian business landscape (and perception thereof) when Suharto came to power. The third chapter analyses SME development to understand how the national business landscape and the role of SMEs changed. To understand what role SMEs played in the Indonesia economy the chapter-specific question asks whether a so called 'missing middle' really existed, what explained it and how productive SMEs were relative to micro and large enterprises. To identify crucial factors the chapter analyses which constraints SMEs regard the main barrier to their business development. Having identified access to credit as the crucial factor that prevented SMEs from growing in Chapter 3, the fourth chapter analyses the development of small business credit. The chapter traces the expansion of SME credit programmes and policies and identifies which types of firms were most likely to benefit from these schemes. This analysis explains why despite targeted SME-support policies we observe a bottleneck in the growth of small firms.

1.1 Indonesian Economic Development during the New Order Regime

New Order is the term commonly used to describe the Suharto Presidency (1966-1998). The New Order (*orde baru* in Bahasa Indonesia) brought many changes from the preceding Sukarno Presidency (1945-1967), aptly referred to as the Old Order (*orde lama)*. As the first independent national government the Old Order's main objective was to transform Indonesia from a colonial to a national economy. During this period, the government's approach shifted from a moderate stance influenced by social democratic ideals towards growing nationalism and socialism. The 1950s saw an increase in nationalist elements: in 1950 an Indonesian nationality requirement was attached to the eligibility criteria of some important licenses to strengthen indigenous entrepreneurship, and by 1958 the government's growing hostility towards private capitalism led the government to nationalise Dutch enterprises. On August 17, 1959 President Sukarno announced a new political manifesto in his Independence Day Address: the 'Guided Economy', which nationalised key sectors of production supplying basic needs. When Suharto came to power in 1966 he took over a country with a weak economy, plagued by high currency volatility, low overall education and mass malnourishment. Gunnar Myrdal wrote in *Asian Drama* that "as things look at the beginning of 1966, there seems to be little prospect of rapid economic growth in Indonesia".[12]

And yet under Suharto's leadership Indonesia developed from a mainly agricultural economy towards an industrialised economy. It was included as one of the high-performing Asian economies (HPAEs) featured in the World Bank's (1993) famous *East Asian Miracle* report which "grew more rapidly and more consistently than any other group of economies in the world from 1960 to 1990". Moreover, tracking the GDP growth rate of 119 economies between two periods, 1960-1970 and 1970-85, the report found Indonesia to have been "one of only three economies to move from the bottom to the top of the distribution of growth rates between the two periods".[13] The economic policies of the New Order regime were widely regarded as a success: rice production and rice per capita availability increased, GDP grew by over 7 per cent per annum until the early 1980s, and the terms of trade improved dramatically.[14]

The New Order was also a turning point for Indonesia's relationship with the West, abandoning Sukarno's anti-capitalist and anti-Western policies.[15] The government turned to a team of largely USA-trained economists teaching at the University of Indonesia in order to regain legitimacy with the international financial community, in

12 Gunnar Myrdal, 1969, *An Asian Drama: An Inquiry into the Poverty of Nations, Vol. I,* New York: Pantheon, p. 489.

13 The World Bank, 1993, *The East Asian miracle: economic growth and public policy (World Bank policy research reports)*, Washington, D.C.: The International Bank for Reconstruction and Development/The World Bank, pp. 28-29.

14 Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, pp. 76-7.

15 Thee Kian Wie, 2003, R*ecollections: The Indonesian Economy, 1950s-1990s,* Singapore: Institute of Southeast Asian Studies, p. 32.

particular because of the importance of foreign credit and aid to combat inflation and increase production whilst reducing government expenditure.[16] Suharto's efforts proved successful and foreign aid began flowing into Indonesia.

However, at the same time the regime was plagued by widespread corruption, nepotism and political repression (in particular of perceived Communists). Thus in the latter years of the New Order era the view spread amongst Indonesians that its economic policies and practices had led to great income inequalities (despite a relatively stable Gini coefficient), particularly between the indigenous (*pribumi)* and non-indigenous population, many of whom were Sino-Indonesians. After the beginning of the Asian Financial Crisis in 1997 anti-government demonstrations broke out. Tensions led to many brutal anti-Chinese riots in Indonesia.[17]

The military leadership found itself unable to resolve the growing dissent and control the protests and Suharto finally resigned in May 1998, his vice president B.J. Habibie becoming president.[18] The instability and uprisings continued and Habibie's government gave in to reformist demands for early free elections rather than finishing Suharto's term. On 19 October 1999, Abdurrahman Wahid became the first freely elected president of the Republic of Indonesia.[19] Wahid suffered from lack of political support by the parliament and was finally dismissed by the People's Consultative Assembly (*Majelis Permusyawaratan Rakyat*, MPR) in July 2001 and succeeded by Megawati Sukarnoputri (2001-2004).[20]

1.2 Indonesia in the Asian Development Model

The East Asian industrialisation model is characterised by state-led industrialisation that moved from import substitution towards export-oriented growth, employing several

[16] Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, p. 74.

[17] Thee Kian Wie, 2003, R*ecollections: The Indonesian Economy, 1950s-1990s,* Singapore: Institute of Southeast Asian Studies, pp. 30, 32.

[18] Harold Crouch, 2007, *The Army and Politics in Indonesia, Singapore:* Equinox Publishing, pp. 19-20.

[19] Leo Suryadinata, 2002, *Elections and Politics in Indonesia*, Singapore: Institute of Southeast Asian Studies, pp. 51-2, 58-9, 67, 162.

[20] Harold Crouch, 2007, *The Army and Politics in Indonesia, Singapore:* Equinox Publishing, pp. 30-2.

policy tools, most prominently promoting selected industries through infant industry protection. Rapid economic growth was accompanied by increased income equality, as well as the building of a business-friendly environment. Indonesia being a Southeast Asian Tiger we expect (a) a move from import-substitution towards export orientation and, arguably, (b) a stronger role of SMEs. All the Tiger economies (with the exception of Hong Kong) moved from import-substituting policies towards export-orientation. The Southeast Asian Tigers are argued to have used different policy instruments, in particular focussing on more general reductions of import protection and providing export credit rather than the 'highly selective interventions' that characterised the East Asian Tiger economies' approaches. Yet this shift from import-substitution towards export orientation has still been observed in the policies of the Southeast Asian Tigers in the late twentieth century.[21] The second part of the hypothesis is based on the assumptions that in the East Asian growth model rapid economic growth was accompanied by increased income equality as well building a business-friendly environment.[22]

According to the World Bank's (1993) *East Asian Miracle* report, one of the features of the East Asian model was the 'principle of shared growth' – wealth was shared with the middle and poor classes through land or other agricultural reforms, but also by encouraging SME development through targeted support-policies.[23] Suharto and his authoritarian New Order government restructured the economy along similar lines, reflected in economic growth targets and industrial policy goals set out in five-year development plans - which also included strengthening small businesses to promote income equality. While the rise of business conglomerates, similar to Korea, and the strength of state-owned enterprises, resembling Taiwan, both became key features of the Indonesian economy, it is unclear how these changes affected the overall business landscape and the SME sector.

[21] The World Bank, 1993, *The East Asian miracle: economic growth and public policy (World Bank policy research reports)*, Washington, D.C.: The International Bank for Reconstruction and Development/The World Bank, pp. 12-13.

[22] The World Bank, 1993, *The East Asian miracle: economic growth and public policy (World Bank policy research reports)*, Washington, D.C.: The International Bank for Reconstruction and Development/The World Bank, pp. 2-4, 14.

[23] The World Bank, 1993, *The East Asian miracle: economic growth and public policy (World Bank policy research reports)*, Washington, D.C.: The International Bank for Reconstruction and Development/The World Bank, pp. 13-14.

Wade, Rodrik and Amsden have made important contributions to analysis of the role of the government in the industrialization of Taiwan and Korea. Wade argues that both governments altered the price structure in order to create environments conducive to industrial investment and, through capital controls and credit rationing, actively formed a class of industrial capitalists.[24] Amsden similarly argued that both states deliberately manipulated relative prices to create investment opportunities and that their success was based on "getting the control mechanisms right".[25] Wade comes to the conclusion that the government "led" the private market to invest in specific industrial sectors.[26] Rodrik et. al. expand on the argument, claiming that the coordination and encouragement of investment helped remove coordination failures.[27] Wade explains the difference in firms sizes through a mixture of economic differences (lower saving rates in Korea meant higher foreign borrowing, leaving less credit for non-priority sectors), timing (Korea entered heavy and chemical industries rather late, and had to build them up much faster), and political reasons.[28] The primary aim of the transplanted Nationalist regime in Taiwan was "to promote economic stability and prevent the overconcentration of capital". This led the Taiwanese government to restrict scale and concentration of business groups.[29] Korea, facing different political conditions, had no inhibitions in promoting large industries. Fields identifies the state as the key factor shaping the environment of these enterprises.[30] Taiwan deliberately limited enterprise size in order to ensure political stability. Korea, in contrast, actively supported large business groups.

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24 Robert Wade, 2004, *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization* (2nd Edition), Princeton University Press, pp. 301-303, 306-307.

25 Alice Amsden, 1989, *Asia's Next Giant: South Korea and Late Industrialization*, New York: Oxford University Press, pp. 13-14; Alice Amsden, 2001, *The Rise of "the Rest": Challenges to the West from Late-Industrializing Economies*, New York: Oxford University Press, p. 11.

26 Robert Wade, 2004, *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization* (2nd Edition), Princeton University Press, p. 303.

27 Dani Rodrik, Gene Grossman and Victor Norman, 1995, 'Getting Interventions Right: How South Korea and Taiwan Grew Rich', *Economic Policy, 10(20):* 53-107, p. 97.

28 Robert Wade, 2004, *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization* (2nd Edition), Princeton University Press, pp. 321-322.

29 Karl Fields, 1995, *Enterprise and the State in Korea and Taiwan*, Ithaca, NY: Cornell University Press, p. 240.

30 Karl Fields, 1995, *Enterprise and the State in Korea and Taiwan*, Ithaca, NY: Cornell University Press, p. 239.

A comparison of Indonesia with South Korea and Taiwan requires a number of qualifications. The most obvious is addressing the disparities in economic growth. In Chapter 3, which embarks on a systematic comparison between Indonesia, South Korea and Taiwan this is resolved through using a 15 year gap in data comparisons. This gap was calculated based on a comparison of GDP per capita as well as their industrial policy histories (see Chapter 3, Section 3.3.4). Second, South Korea and Taiwan not only followed similar export-led paths of industrialization, but both featured high economic growth rates along with an equalization of income distribution, and shifted from labour-intensive to capital- and technology-intensive industries. [31] The relative income equality achieved in Korea and Taiwan in the 1950s, when they embarked on their paths of state-led industrialisation, stands in stark contrast to the uneven economic growth and human development that characterised Indonesia at the end of the Old Order period. Jomo argues that "the World Bank's generalization about income inequality reduction is erroneous", because unlike South Korea and Taiwan, Indonesia, Malaysia and Thailand started with higher income inequality and had greater fluctuations during their period of rapid economic growth.[32] Jomo further argues that the extent of the difference in income inequality between Indonesia on the one hand and South Korea and Taiwan on the other is obscured by the fact that most Indonesian Gini coefficients were based on consumption rather than income data.[33]

This high initial income equality in South Korea and Taiwan is linked to land reforms both countries implemented from 1948 to the mid-1950s, which led to a substantial redistribution of income and wealth.[34] This was very different to the Indonesian experience. In Indonesia legislation introducing redistributive land reforms was passed in 1960. Booth identifies three main reasons why these reforms largely failed: first, it was based on the mistaken assumption that the majority of rural poor cultivated land and vice versa that tenant farmers were generally part of the poorer classes; second, the reforms did not account for the constraints posed by land scarcity;

[31] Tamio Hattori and Yukihito Satō, 1997, 'A Comparative Study of Development Mechanisms in Korea and Taiwan', *The Developing Economies, 35(4)*: 341-357, pp. 341-3.

[32] Jomo K.S., 2006, 'Growth with Equity in East Asia?', *UN Department of Economic and Social Affairs (DESA) Working Papers, No. 33*: 1-52, p. 40.

[33] Jomo K.S., 2006, 'Growth with Equity in East Asia?', *UN Department of Economic and Social Affairs (DESA) Working Papers, No. 33*: 1-52, pp. 39-40.

[34] Jong-sung You, 2014, 'Land Reform, Inequality, and Corruption: A Comparative Historical Study of Korea, Taiwan, and the Philippines', *The Korean Journal of International Studies, 12(1):*191-224, pp. 203, 217.

and finally, Muslim landowners in Java and elsewhere constituted a powerful special interest group that strongly opposed these reforms.[35] Subsequent agricultural policies after Suharto came to power aimed at dealing with the issue of overpopulation but not redistribution *per se*.[36] Comparing the trajectories of these different experiences with land reforms Palacio and Axelsson found that "Indonesia has not succeeded in creating these egalitarian preconditions for sustained growth [which characterise the East Asian development model]".[37]

Hendra Esmara analysed Indonesia's regional income disparities between 1968 and 1972 and found a sharp increase in regional income inequality during the early days of the New Order period and traced the rise to increased timber and oil production.[38] Akita found that Indonesia's coefficient of variation of GRDP in 1972 was comparable with the Philippines, but dropping the three richest provinces (Riau, Central and East Kalimantan) from the equation, would have put Indonesia at par with France and Japan.[39] After this initial increase in equality Indonesia's provinces converged until the mid-1980s, after which disparities continued to grow.

Indonesia's development must be further contextualised in comparative perspective to disentangle global trends and understand where Indonesia lags behind and where its achievements lie. In **Table 1** Indonesia's achievements in education, health and GDP per capita during the New Order period are compared to the development of its Southeast Asian neighbours, other large developing countries as well as the averages of low income and OECD countries respectively. The results show a

[35] Anne Booth, 2012, 'The Performance of the Indonesian Agricultural Sector: Twelve Questions and Some Tentative Answers' *in:* Anne Booth, Chris Manning and The Kian Wie (Eds.), *Land, Livelihood, the Economy and the Environment in Indonesia: Essays in the Honour of Joan Hardjono* (pp. 51- 84), Jakarta: Yayasan Pustaka Obor Indonesia, p. 77.

[36] Anne Booth, 2012, 'The Performance of the Indonesian Agricultural Sector: Twelve Questions and Some Tentative Answers' *in:* Anne Booth, Chris Manning and The Kian Wie (Eds.), *Land, Livelihood, the Economy and the Environment in Indonesia: Essays in the Honour of Joan Hardjono* (pp. 51- 84), Jakarta: Yayasan Pustaka Obor Indonesia, pp. 77-78.

[37] Andrés Palacio and Tobias Axelsson, 2018, 'Transforming Indonesia: Structural Change in a Regional Perspective, 1968-2010', *in:* Vincente Pinilla and Henry Willebald (Eds.), *Agricultural Development in the World Periphery: A Global Economic History Approach* (pp. 281-305), Cham: Palgrave Macmillan, p. 299.

[38] Hendra Esmara, 1975, 'Regional Income Disparities', *Bulletin of Indonesian Economic Studies, 11(1)*:41-57, pp. 52-53.

[39] Takahiro Akita, 1988, 'Regional Development and Income Disparities', *Asian Economic Journal, 2(2):* 165-191, p. 171; Hendra Esmara, 1975, 'Regional Income Disparities', *Bulletin of Indonesian Economic Studies, 11(1)*:41-57, pp. 52-53.

mixed picture of Indonesia's achievements in primary school enrolment; in regional comparison it consistently lagged behind Malaysia and Thailand. While still slightly behind the OECD average, however, Indonesia performed far above the low income country group. Its achievements in secondary school enrolment are considerably weaker, despite the New Order government's 1989 policy to increase mandatory years of schooling to nine. Indonesia was overtaken by China in 2000 and Thailand in 2006 in terms of secondary school enrolment rate, the only country it consistently outperforms is India. Overall trends in health development measured through the infant mortality rate (IMR) are promising: there is clear convergence overall. However, Indonesia is the second worst performer of the ten countries listed – outperforming, again, only India. GDP per capita at purchasing power parity (PPP) has also converged between the ten countries. In regional comparison Indonesia was consistently in the middle, behind Malaysia and Thailand but before the Philippines and Vietnam. Noteworthy is that the Asian Financial Crisis, which originated in Thailand and rapidly spread through the region in 1997 did not alter the relative performance of the countries in the region.

Indonesia's weak performance on health and education indicators corresponds to low public expenditure on these health sectors compared to other countries in the region. Measured as share of GDP Indonesia's spending has been amongst the bottom two countries throughout the entire period (see **Table 2**). Indonesia's position within this ranking is similar when measuring public education expenditure as share of government expenditure.[40] However, Francisco Javier Arze del Granado et al argue that direct comparisons of education expenditure as shares of GDP or government expenditure are of limited use, as they do not take the size of the public sector or the economy, amongst many other factors into account. They found that when controlling for population size and density, GDP per capita, degree of fiscal decentralisation and budget balance, Indonesia's education spending - relative to national budget – is close to the optimal level.[41] However, considering Indonesia as a Tiger economy, its educational spending is low compared to the other Southeast Asian Tigers. Spending less than

[40] Francisco Javier Arze del Granado, Wolfgang Fengler, Andy Ragatz and Elif Yavuz, 2007, 'Investing in Indonesia's Education: Allocation, Equity, and Efficiency of Public Expenditure', *World Bank Policy Research Working Paper, 4329*: 1-43, p. 5.

[41] Francisco Javier Arze del Granado, Wolfgang Fengler, Andy Ragatz and Elif Yavuz, 2007, 'Investing in Indonesia's Education: Allocation, Equity, and Efficiency of Public Expenditure', *World Bank Policy Research Working Paper, 4329*: 1-43, pp. 5-6.

Malaysia can be explained by smaller size of government, but against Thailand, which has a smaller government but spends more on education, this argument does not hold.

Indonesia also ranks at the bottom for public expenditure on health, as share of GDP as well as share of public expenditure (see **Table 2**). Here Indonesia's expenditure lie far below the optimal level, even when considering the other factors discussed in the context of education expenditure.[42] Already in 1985 the World Bank found Indonesia to be spending roughly half of what would have been expected based on the spending levels and performances of neighbouring countries.[43] In 2006 the World Bank still found Indonesia's health spending too low, in particular given Indonesia's still relatively high IMR. They concluded that 'Indonesia is not yet prioritizing health spending'.[44]

[42] Francisco Javier Arze del Granado, Wolfgang Fengler, Andy Ragatz and Elif Yavuz, 2007, 'Investing in Indonesia's Education: Allocation, Equity, and Efficiency of Public Expenditure', *World Bank Policy Research Working Paper, 4329*: 1-43, p. 6.

[43] The World Bank, 1991, *Indonesia: Health Planning and Budgeting,* Washington D.C.: World Bank, p. 14.

[44] The World Bank, 2008, *Spending for Development: Making the Most of Indonesia's New Opportunities*, Washington, DC: World Bank, p. 57.

Table 1: Education, Health and GDP in Comparative Perspective, 1971-2006

	Primary School Enrolment Rate					Secondary School Enrolment Rate		
	1971	**1981**	**1991**	**2001**	**2006**	**1990**	**2000**	**2006**
Indonesia	70.07	90.13	95.37	91.96	91.60	46.59	55.10	62.59
Malaysia	83.89	n/a	n/a	97.04	96.62	54.66	66.16	67.97
Philippines	n/a	93.17	n/a	89.50	86.86	71.99	n/a	81.24
Thailand	n/a	n/a	n/a	n/a	94.10	28.50	n/a	71.76
Vietnam	n/a	93.85	n/a	95.53	91.29	34.82	n/a	n/a
China	n/a	n/a	97.13	n/a	n/a	37.32	61.03	68.45
India	61.32	n/a	n/a	79.63	n/a	n/a	45.06	55.08
Japan	99.91	99.96	99.96	99.97	99.98	95.62	101.83	100.98
Korea	96.52	99.94	99.40	99.77	n/a	92.62	98.39	97.30
Brazil	n/a	n/a	n/a	98.03	n/a	n/a	n/a	n/a
Low Income Countries	n/a	49.61	46.87	56.62	71.81	20.11	23.08	30.77
OECD Countries	90.13	94.84	97.20	97.45	96.45	85.51	94.82	97.50

	IMR (per 1,000 live births)					GDP per capita, PPP (constant 2011, international USD)		
	1970	**1980**	**1990**	**2000**	**2006**	**1990**	**2000**	**2006**
Indonesia	113.10	85.40	62.20	41.10	32.10	4,477	5,806	7,120
Malaysia	43.50	25.40	14.30	8.70	6.90	10,451	16,146	19,164
Philippines	55.40	53.20	40.80	29.90	26.90	4,010	4,227	4,954
Thailand	71.80	47.00	30.30	19.10	14.60	6,651	9,228	11,961
Vietnam	56.40	46.80	36.60	26.10	22.00	1,501	2,650	3,687
China	80.40	48.00	42.10	30.20	18.70	1,526	3,701	6,411
India	142.80	114.30	88.30	66.40	53.90	1,773	2,521	3,457
Japan	13.40	7.40	4.60	3.30	2.70	30,447	33,872	36,142
Korea	41.40	12.30	6.10	5.20	4.50	12,087	20,757	26,734
Brazil	102.50	75.90	50.90	28.10	18.20	10,246	11,308	12,533
Low Income Countries	151.30	134.80	113.00	92.30	73.20	1,147	1,085	1,206
OECD Countries	38.68	26.57	17.04	10.71	8.26	26,925	32,758	36,159

Data source: The World Bank, 2017, *World Development Indicators*, Washington, D.C.: The World Bank, http://data.worldbank.org/data-catalog/world-development-indicators.

Notes: The (net) primary school enrolment rate is the ratio of children of official school age who are enrolled in school to the population of the corresponding official school age;

The (gross) secondary school enrolment rate is the ratio of total enrolment, regardless of age, to the population of the age group that officially corresponds to the level of education shown;

The infant mortality rate is the number of infants dying before reaching one year of age, per 1,000 live births in a given year;

GDP per capita is here converted to international dollars in constant 2011 prices using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

Table 2: Government Expenditure on Health and Education in Comparative Perspective, 1972-2007

	Public education expenditure (% of GDP)					Public health expenditure (% of GDP)			Public health expenditure (% of government expenditure)		
	1972	1989	1995	2001	2007	1995	2001	2006	1995	2001	2006
Indonesia	2.64	0.83	1.00	2.46	3.04	0.71	0.96	0.91	4.93	4.54	4.54
Malaysia	n/a	n/a	4.34	7.48	4.37	1.67	1.99	2.01	5.23	5.37	5.88
Philippines	n/a	n/a	3.04	3.03	2.60	1.36	1.32	1.45	7.42	7.21	8.72
Thailand	3.03	2.50	3.17	4.82	3.60	1.97	2.29	3.90	11.75	11.08	19.81
Vietnam	n/a	n/a	n/a	n/a	n/a	1.76	1.63	1.94	7.91	7.21	7.46
China	1.63	n/a	1.85	n/a	n/a	1.78	1.62	1.84	15.95	9.29	9.94
India	n/a	n/a	n/a	n/a	n/a	1.05	1.08	1.11	4.52	4.25	4.40
Japan	4.08	5.47	3.51	3.57	3.46	5.45	6.30	6.60	14.99	16.21	18.35
Korea	3.08	3.04	2.97	3.90	3.95	1.38	2.63	3.15	6.27	9.95	10.45
Brazil	n/a	n/a	4.47	3.84	4.98	2.80	3.04	3.49	8.36	4.75	5.17
Low Income Countries	n/a	n/a	n/a	3.27	n/a	1.53	2.03	2.69	n/a	n/a	n/a
OECD Countries	n/a	4.75	4.86	5.11	n/a	5.84	6.08	6.65	13.37	15.40	16.72

Data source: The World Bank, 2017, *World Development Indicators*, Washington, D.C.: The World Bank, http://data.worldbank.org/data-catalog/world-development-indicators.

Notes: Public education expenditure (current, capital, and transfers) includes expenditure funded by transfers from international sources to government. General government usually refers to local, regional and central governments;

Public health expenditure consists of recurrent and capital spending from government (central and local) budgets, external borrowings and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds.

This comparison shows that while Indonesia implemented similar industrial policies as the East Asian Tiger economies, there were important differences both at the point of departure to its industrial transformation as well as during its period of rapid economic growth. These qualifications will be borne in mind when comparing Indonesia to South Korea and Taiwan.

1.3 Literature Survey

There is an extensive debate about whether SMEs contribute to increased income equality and poverty alleviation. Proponents of SMEs argue for their labour-intensity and hence employment creation.[45] David Birch's seminal work *The Job Creation Process* demonstrated that it was smaller (and younger) firms that created the majority of jobs in a case study of the U.S between 1969 and 1976, a finding which has been later replicated for other countries.[46] Counter arguments question these findings (after unsuccessful attempts to replicate the results using the same data set) as well as their significance, arguing that employment in larger firms tends to offer better working conditions and more stability.[47] Further advantages ascribed to large firms include their ability to produce at economies of scale and their inherent advantage in bearing fixed

[45] Dennis Anderson, 1982, 'Small Industry in Developing Countries: A Discussion of Issues', *World Development, 10(11):* 913-948; Charles Harvie and Boon-Chye Lee, 2002, 'East Asian SMEs: Contemporary Issues and Developments – An Overview', *in: The Role of SMEs in National Economies in East Asia* (pp. 1-20), Cheltenham: Edward Elgar Publishing Limited, p. 3; Chris Hall, 2002, *Profile of SMEs and SME Issues in APEC, 1990-2000*, for the APEC Small and Medium Enterprises Working Group in cooperation with PECC (Pacific Economic Cooperation; Council), Singapore: World Scientific Publishing (on behalf of the APEC Secretariat), p. 1.

[46] David Birch, 1979, *The Job Generation Process*, Cambridge, MA: MIT Program on Neighborhood and Regional Change; Michael Daly, Martin Campbell, Geoffrey Robson and Colin C. Gallagher, 1991, 'Job Creation 1987−89: The Contributions of Small and Large Firms', *Employment Gazette 99(11):* 589−596; Colin Gallagher, Michael Daly and Jeremy Thomason, 1990, 'The Growth of UK Companies 1985−87 and their Contribution to Job Creation' *Small Business Economics, 3(4):* 269−286; Neumark et al test Birch's hypothesis with a different dataset, the National Establishment Time Series for 1992-2004 and found that the effect was smaller, but still significant and robust and confirmed that smaller firms create more jobs: David Neumark, Brandon Wall and Junfu Zhang, 2011, 'Do Small Businesses Create More Jobs? New Evidence for the United States from the National Establishment Time Series', *The Review of Economics and Statistics, 93(1):* 16-29.

[47] For the unsuccessful replication of Birch's results see: Catherine Armington and Marjorie Odle, 1982, 'Small Business – How Many Jobs?', *Brookings Review, 1(2):* 14−17; On better working conditions in larger firms see: Charles Brown, James Hamilton and James Medoff, 1990, *Employers Large and Small*, Cambridge: Harvard University Press.

costs for research and development.[48] Another strand of argument points to differences in factors that shape comparative advantages, such as natural resource or human capital endowments, which determine optimal firm size (distribution) as some products are better produced by large firms (e.g. heavy industry) and others by smaller firms (e.g. artisan and handicraft industries).[49]

One of the most important roles for SMEs in their contribution to economic development is to form the starting point for future successful larger firms. To fulfil this role, however, they often require support.[50] This support can take the form of the facilitation of access to credit and finance, vocational training, encouragement of knowledge and technical spillovers through subnetworks, setting up industrial clusters and supporting a conducive *ease of doing business* framework, including appropriate regulation and the facilitation of registration procedures. In Indonesia, SMEs have historically been "a clear and consistently enunciated . . . government priority".[51] There are many reasons offered why they should be. The post-Asian Financial Crisis literature highlights their crisis resilience. Others advocate SME support based on their employment creation potential, contribution to economic growth, fostering of innovation and entrepreneurship.

In Indonesia the motivation behind government support for SMEs can be traced to social factors. One way in which the Indonesian government sought to address the ethnic tensions it perceived as a "deterrent to development" was to promote SMEs to encourage "asset redistribution along ethnic lines".[52] In contrast to

[48] Ian Little, Dipak Mazumdar and John Page, 1987, *Small Manufacturing Enterprises: A Comparative Analysis of India and Other Economies.* New York: Oxford University Press for the World Bank, p. 10; Patrizio Pagano and Fabiano Schivardi, 2003, 'Firm Size Distribution and Growth', *The Scandinavian Journal of Economics, 105(2):* 255-274.

[49] Richard Caves, 1998, 'Industrial Organization and New Findings on the Turnover and Mobility of Firms', *Journal of Economic Literature, 36:* 1947–1982; Kristin Hallberg, 2000, *A Market-Oriented Strategy for Small and Medium Scale Enterprises, IFD40*, Washington, D.C.: The World Bank; Jong-Il You, 1995, 'Small Firms in Economic Theory', *Cambridge Journal of Economics 19:* 441–462; Krishna Kumar, Raghuram Rajan, and Luigi Zingales, 2001, 'What Determines Firms Size?', *University of Chicago, CRSP Working Paper No. 496*.

[50] Alex Coad and Jagannadha Tamvada, 2008, 'The Growth and Decline of Small firms in Developing Countries', *Papers on Economics and Evolution, 2008(#0808):* 1-33, pp. 2-4.

[51] Hal Hill, 2001, 'Small and Medium Enterprises in Indonesia: Old Policy Challenges for a New Administration', *Asian Survey, 41(2):* 248-270, p. 248.

[52]Hal Hill, 2001, 'Small and Medium Enterprises in Indonesia: Old Policy Challenges for a New Administration', *Asian Survey, 41(2):* 248-270, pp. 248-249.

the East Asian Tiger economies (Korea, Taiwan, Hong Kong and Singapore), Indonesia, as noted earlier, is a heterogeneous society. The more than 250 million citizens who identify themselves as Indonesians also identify with one of the country's 200-plus ethnic groups.[53] These social goals, however, stand in contrast to the economic efficiency goals of government officials. Thus, the gap between official discourse and policy implementation regarding SMEs has been wider in Indonesia than anywhere else in East Asia.[54] This leads to the question of how far government policy has in fact influenced the development of SMEs.

In Indonesian case, the country developed from a mainly agricultural economy towards an industrialised economy during the New Order period. We would expect a change in the role of SMEs and a shift in firm-size distribution and mechanisation from traditional cottage industries towards modern SMEs, consistent with the Staley and Morse thesis.[55] These authors made the first important contribution to the analysis of SMEs in developing countries.[56] They describe how the SME sector (using a definition of firms with up to 99 workers) changes as a country develops, emphasizing that SMEs remain important, but change by moving away from traditional household industries to modern factory SMEs with more complex production lines. They argue that artisans will still have a role to play, albeit a different one. Rather than working independently, artisans will supplement and collaborate with factories, through providing product design or individualising the final product, as well as providing maintenance and repair services.[57] Staley and Morse disparage household industries as constituting barriers 'to improvements in production technology and managerial practices'; their only role is

53 Robert Cribb, 1999, 'Nation: Making Indonesia', *in:* Donald K. Emmerson (Ed.), *Indonesia beyond Suharto: Polity, Economy, Society, Transition (pp. 3-38),* Armonk, NY: East Gate Book, p. 3.

54 Hal Hill, 2001, 'Small and Medium Enterprises in Indonesia: Old Policy Challenges for a New Administration', *Asian Survey, 41(2):* 248-270, p. 249.

55 Eugene Staley and Richard Morse, 1965, *Modern Small Industry for Developing Countries,* New York: McGraw-Hill, p. 16.

56 Tulus Tambunan, 2000, *Development of Small-Scale Industries during the New Order Government in Indonesia,* Aldershot, UK/Brookfield, USA: Ashgate, p. 2; Donald R. Snodgrass and Tyler Biggs, 1996, *Industrialization and the Small Firm: Patterns and Policies,* San Francisco: International Centre for Economic Growth and the Harvard Institute for International Development, p. 17.

57 Eugene Staley and Richard Morse, 1965, *Modern Small Industry for Developing Countries,* New York: McGraw-Hill, pp. 2-3, 14-25, 47.

seen to integrate socially marginalised groups into the economies (e.g. people with disabilities or ethnic minorities).[58]

Ian Little found that for most industries worldwide, capital productivity and total factor productivity is highest in medium-sized enterprises (with 50-500 employees).[59] Yet protectionist measures, investment incentives, state control of credit and selecting industries for promotion usually favour larger firms, which also tend to have economies of scale in export marketing.[60] In this context, Little discusses the apparent contradiction between the widespread existence of SME promotion policies and the "relative decline of small-scale enterprises in most developing countries". This is highly relevant for a case study of Indonesia and its large dichotomy between official policy discourse and implementation. Little accuses the majority of developing country governments of only having "cosmetic" SME policies, if any. He attributes this to the inherent bias which most industrial policies have towards larger firms. He points to trade regulation that favours larger firms because they are in a better position to obtain import permits and tariff rebates; and investment incentive laws that either restrict tax concessions to firms of a minimum size (an example of direct discrimination) or which smaller firms are unable to take advantage of because of weaker administrative capacities (an example of indirect discrimination).[61] Similarly the effect of Indonesia's SME policies has been described as marginal at best and harmful at worst.[62]

58 Eugene Staley and Richard Morse, 1965, *Modern Small Industry for Developing Countries,* New York: McGraw-Hill, p. 23.

59 Ian M.D. Little, 1987, 'Small manufacturing enterprises in developing countries', *World Bank Economic Review, 1(2):* 203-235, pp. 215.

60Ian M.D. Little, 1987, 'Small manufacturing enterprises in developing countries', *World Bank Economic Review, 1(2):* 203-235, p. 230; the same point is made in Charles Harvie and Boon-Chye Lee, 2005, 'Introduction: the role of small and medium-sized enterprises in achieving and sustaining growth and performance', *in: Sustaining Growth and Performance in East Asia: The Role of Small and Medium Sized Enterprises* (pp. 3-27), Cheltenham: Edward Elgar Publishing Limited, p. 7.

61 Ian M.D. Little, 1987, 'Small manufacturing enterprises in developing countries', *World Bank Economic Review, 1(2):* 203-235, pp. 206, 230.

62 Studies describing Indonesia's SME policies as marginal: Albert Berry, Edgard Rodriguez and Henry Sandee, 2001, 'Small and Medium Enterprise Dynamics in Indonesia', *Bulletin of Indonesian Economic Studies, 37(3):* 363-384,p. 378;

Studies describing Indonesia's SME policies as marginal at best and harmful at worst: Hal Hill, 2001, 'Small and Medium Enterprises in Indonesia: Old Policy Challenges for a New Administration', *Asian Survey, 41(2):* 248-270, pp. 252-4; Thee Kian Wie, 2006, 'Policies for Private Sector Development in Indonesia, *ADB Institute Discussion Paper, 46:* 1-46, pp. 28-34.

Snodgrass and Biggs show that SMEs foster entrepreneurship, at least during early stages of economic development. They believe that with increased economic development average firm size increases and potential entrepreneurs have to make a decision between starting their own business and working as managers in large enterprises.[63] They argue that it is only those SMEs owned or managed by someone with strong managerial and entrepreneurial abilities that succeed in growing larger. As average manufacturing firm size grows, small firms growing into larger firms make up only a minor contribution. Snodgrass and Biggs find that the main reason average firm size in manufacturing increases tends to be displacement: small firms churn, while more medium enterprises enter the market and grow into large enterprises. In addition more firms entering the market start out large, in line with the Schumpeterian principle of creative destruction.[64] However, one way in which SMEs are found to be able to overcome the competitive advantage of large enterprises in economies of scale and exploit their own distinct advantage is through niche markets.[65]

Looking at SMEs, one has to distinguish between small enterprises which stay small, and those which might evolve into medium enterprises. The distinction is important because some authors have observed a "missing middle" in the firm size distribution of developing countries, where small firms remain small and large firms grow larger.[66] James Tybout has looked at the missing middle in more detail. He finds that this drop-off in the middle is uncommon in industrialized countries. According to Tybout, "it never pays to be *just* large enough to attract enforcement", particularly in

[63] Donald R. Snodgrass and Tyler Biggs, 1996, *Industrialization and the Small Firm: Patterns and Policies,* San Francisco: International Centre for Economic Growth and the Harvard Institute for International Development, p. 60.

[64] Joseph Schumpeter, 1975 (originally published in 1942), *Capitalism, Socialism and Democracy*, New York: Harper & Row, p. 83;

It should be noted that Snodgrass and Biggs point to the scarcity of systematic empirical evidence for this phenomenon – see Donald R. Snodgrass and Tyler Biggs, 1996, *Industrialization and the Small Firm: Patterns and Policies,* San Francisco: International Centre for Economic Growth and the Harvard Institute for International Development, pp. 31-32, 59-60.

[65] Donald R. Snodgrass and Tyler Biggs, 1996, *Industrialization and the Small Firm: Patterns and Policies,* San Francisco: International Centre for Economic Growth and the Harvard Institute for International Development, pp. 59. 65-66.

[66] Alex Coad and Jagannadha P. Tamvada, 2008, 'The Growth and Decline of Small firms in Developing Countries', *Papers on Economics and Evolution, 2008(#0808):*1-33, pp. 2-3; James R. Tybout, 2000, 'Manufacturing Firms in Developing Countries: How Well Do They Do, and Why?', *Journal of Economic Literature, 38(1)*:11-44, pp. 15-17; Leo Sleuwaegen and Micheline Goedhuys, 2002, 'Growth of firms in developing countries: evidence from Côte d'Ivoire', *Journal of Developing Economies, 68(1):* 117-135, p. 118.

heavily regulated countries.[67] Reasons why SMEs in developing economies stay small can be their lack of access to credit and suitable management resources, high transport costs, and poor infrastructure, acting as barriers, as well as the ability to avoid taxes whilst being part of the informal sector.[68]

Howard and Hine analyse why small firms (need to) grow bigger and consider ways in which governments can support those small enterprises, which have positive net effects for the economy as a whole. They explain the concept of the population of organisations' life cycle as follows: When a firm enters a new market, exploiting a niche, there is little to no competition. However, being the first to enter a niche also means that a firm cannot benefit from the experience of others, thus there are no "lessons learnt" to draw from. As the market develops, firms need to grow in size and increase productivity. As the profitability increases, new firms enter the niche. They now have the advantage that they can draw from the organisational learning and models of the first innovative firms, but they also bring in new approaches and knowledge. However, with increasing competition the niche approaches maturity: the market size and investments decrease and inputs become scarce. To remain competitive, costs have to be cut, so economies of scale become more important. At this point small firms either have to grow to exploit the economies of scale or move on to a new niche.[69]

Howard and Hine not only distinguish between the different effects of government support to SMEs depending on type, but also the stage of the organisation life cycle. At the beginning, when a niche just starts to develop, firms can be assisted through supporting organisational learning in the form of good practices in production and marketing. This improves the utilisation of resources and thereby makes entering the niche more attractive to other firms, which creates job opportunities for existing firms and new entrants in the market. Supporting existing firms or the start-up of new

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[67] James R. Tybout, 2000, 'Manufacturing Firms in Developing Countries: How Well Do They Do, and Why?', *Journal of Economic Literature, 38(1)*:11-44, pp. 15-7 [Italics added].

[68] Coad and Tamvada, 2008, p. 3; See the study on Cameroon on the subject where an inverted U-shape relation between size and tax exemption and evasion in Cameroon was found, with small business being "relative likely" to evade taxes and large business to receive tax exemptions, thus leaving medium-sized enterprises with the highest tax burden (relative to their sales); by Bernard Gauthier and Mark Gersovitz, 1997, 'Revenue erosion through exemption and evasion on Cameroon', 1993, *Journal of Public Economics, 64(1):* 407-424, pp. 410-411; 416-417.

[69] Dennis Howard and Damian Hine, 1997, 'The Population of Organisations Life Cycle (POLC): Implications for Small Business Assistance Progams', *International Small Business Journal, 15(3):* 30-41, pp. 34, 37.

firms as the niche grows will only create jobs within these supported firms, as the competition for resources is increasing and thus entering the market will become increasingly unattractive to firms without support. However, the same type of support at the point of niche maturity could have the effect of net job losses, as firms without support may become unable to compete and will therefore have to downsize or dissolve.[70]

Given the assumption that SMEs are labour intensive and geographically dispersed, it is presumed that they contribute to increasing income equality by employing people who would otherwise remain in less productive agricultural activities. It is difficult to imagine increased (regional) income equality in Indonesia without a stronger role for SMEs given the geographical dispersion of the population and hence the remoteness of large parts of the country.

1.4 Methodology

1.4.1 Defining SMEs

The focus of this dissertation is on non-agricultural SMEs. One of the key issues is the definition of SMEs employed, given the lack of an international standard and inconsistent definitions used by various Indonesian government agencies and banks. Most commonly defined by the number of employees, other frequently used indicators include capital, assets, and turnover.[71] Some definitions of small enterprises include microenterprises (or cottage industries).[72] As observed by Hall: "The only really common characteristic of SMEs is that they are 'not large'".[73]

[70] Dennis Howard and Damian Hine, 1997, 'The Population of Organisations Life Cycle (POLC): Implications for Small Business Assistance Progams', *International Small Business Journal, 15(3):* 30-41, pp. 34, 37.

[71] Charles Harvie and Boon-Chye Lee (Eds.), 2005, *Sustaining growth and performance in East Asia: the role of small and medium sized enterprises*, Cheltenham: Edward Elgar Publishing Limited, p. 2.

[72] Cottage industries (household industries) are "run as a full or part time occupation mainly with the help of family members", they are typically labour-intensive and use local resources and techniques; from: B.L. Mathur, 2001, *Towards Economic Development*, New Delhi: Discovery Publishing House, pp. 224-225.

[73] Chris Hall, 2002, 'Profile of SMEs and SME Issues in East Asia', *in:* Charles Harvie and Boon-Chye Lee (Eds.), *The Role of SMEs in National Economies in East Asia* (pp. 21-49), Cheltenham: Edward Elgar Publishing Limited, p. 22.

In Indonesia, different government agencies employ different definitions: The Indonesian Ministry of Cooperatives and SMEs defines SMEs as enterprises owned by an individual or business entity that carry out productive economic activities and are not controlled, owned or part of large businesses, applying the asset and turnover criteria shown in **Table 3**. These bracket categories are also applied for taxation of small firms (micro and small) and medium firms.[74] Financial criteria are also employed by the Ministry of Industry and Trade, the Ministry of Finance and Bank Indonesia.[75] The Indonesian Central Board of Statistics (BPS) distinguished between categories not just on the basis of number of workers but also on whether they used power-driven machinery. However, since the *1974-75 Industrial Census* it has based its definitions solely on size, irrespective of other factors such as use of machine power or financial criteria (see **Table 4**).[76]

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[74] Annabelle Mourougane, 2012, 'Promoting SME Development in Indonesia', *OECD Economics Department kers 995(ECO/WKP(2012)72)*:1-38, p. 6.

[75] Tulus Tambunan, 2000, *Development of Small-Scale Industries during the New Order Government in Indonesia,* Aldershot, UK/Brookfield, USA: Ashgate, p. 29.

[76] Badan Pusat Statistik (BPS) / Central Bureau of Statistics (CBS), 1998, *Statistik Indonesia 1998/Statistical Yearbook of Indonesia 1998*, Jakarta: Badan Pusat Statistik, p. 245.

Table 3: Current Definition of SMEs employed by the Ministry of Cooperatives and SMEs (in IDR)

Type of enterprise	Criteria	
	Assets	Turnover
Micro	≤ 50 Million	≤ 300 Million
Small	> 50-500 Million	> 300 Million – 2.5 Billion
Medium	> 500 Million – 10 Billion	> 2.5 Billion – 50 Billion

Sources: Kementerian Koperasi dan Usaha Kecil dan Menengah Republik Indonesia (Indonesian Ministry of Cooperatives and SMEs), 2008, *Kriteria Usaha Mikro, Kecil dan Menengah Menurut UU No. 20 Tahun 2008 Tentank UMKM* (Criteria for Micro, Small and Medium Enterprises by Act No 20 Year 2008 on MSMEs), Retrieved October 24 2014 from: http://www.depkop.go.id/index.php?option=com_content&view=article&id=129

Table 4: Definitions of Enterprise Categories employed by the Central Board of Statistics (BPS)

Type of enterprise	Before 1974-75 Industrial Census		Since 1974-75 Industrial Census
	Number of workers		Number of workers
	with power	without power	
Household (micro/cottage)	Enterprises without paid workers		1-4
Small	1-4	1-9	5-19
Medium	5-49	10-99	20-99
Large	≥50	≥100	≥100

Sources: Chris Hall, 2002, '*Profile of SMEs and SME Issues',* for APEC, 1990-2000, for the APEC Small and Medium Enterprises Working Group in cooperation with PECC (Pacific Economic Cooperation Council), Singapore: World Scientific Publishing (on behalf of the APEC Secretariat), pp. 7-8; Peter McCawley, 1981, 'The Growth of the Industrial Sector', *in:* Anne Booth and Peter McCawley (Eds.), *The Indonesian Economy During the Soeharto Era* (pp. 62-101), Kuala Lumpur: Oxford University Press, p. 97.

This dissertation will try to ascertain in comparisons if the underlying data are based on different definitions of SMEs and discuss how this may bias the results. The focus here is on small and medium enterprises. But given the blurred lines in many data sets between household industries/cottage industries/micro and small enterprises as well as between medium and large enterprises, the analysis will also have to include these categories. This dissertation will interpret the results as far as possible in terms of their implications for SMEs. Whenever the data permits the focus will be on enterprises with 5-99 employees in line with the definition of SMEs employed by the BPS.

SME development will be based on a number of variables. The first is absolute and relative changes in firm size distribution within the SME category as well as SMEs relative to microenterprises and large enterprises. This is not just important to understand relative changes in firm size distribution but ideally indicates the origins of SMEs, i.e. whether they develop from household enterprises, and whether they manage to grow and eventually develop into large enterprises. This also requires an understanding in terms of share of number of firms, employment, value added and total exports made up by SMEs according to sector.

1.4.2 Working Definition of Indonesia's Regions

There are fluid definitions of what constitutes Indonesia's regions, varying by scale (e.g. island groupings, the provincial level) and geographical groupings (e.g. Java versus the rest of Indonesia or what encompasses Eastern Indonesia, often referred to as the 'Outer Islands'). The concept of the 'Outer Islands' originates from the Dutch colonial government's administrative separation of Indonesia into Java and Madura on the one hand, and '*Buitenbezittingen*', the Outer Islands, on the other.[77] The concept has since broadened to allow for looser geographical interpretations, such as the occasional grouping of Java with Bali based on population density, but generally it continues to be used to emphasize the political, economic, social and/or cultural distinctiveness of Java.[78]

But socio-economic differences did not just exist between Java and all outer islands. Chris Manning has made an attempt to group the provinces of Indonesia's outer islands (with the exception of Bali) according to five characteristics that are indicative of differences in labour market structures: (i) resource abundant provinces: Aceh and Riau (Sumatra), East and Central Kalimantan, Papua and Maluku (Eastern Indonesia); (ii) major transmigration destinations: South Sumatra, Jambi, Bengkulu and Lampung (Sumatra); (iii) areas with major out-migration: provinces of North and West Sumatra; (iv) land-abundant provinces largely depending on agriculture: West and South Kalimantan, Central and Southeast Sulawesi; and (v) densely populated/poor provinces: North and South Sulawesi, West and East Nusa Tenggara, and East Timor (Eastern

[77] Oei Tjong Bo, 1948, *Niederländisch-Indien: Eine Wirtschaftsstudie* [The Dutch East Indies: An Economic Study], Zurich: Orell Füssli Verlag, p. IV.

[78] Francisco Javier Arze del Granado, 2009, 'Spatial considerations on decentralization and economies of concentration in Indonesia', *in:* Yukon Huang and Alessandro Bochhi (Eds.), *Reshaping Economic Geography in East Asia* (pp. 135-155), Washington, DC: The World Bank, pp. 142-143;

Iem Brown, 2009, *The Territories of Indonesia*, London: Routledge, p. 52.

Indonesia).[79] Manning himself acknowledged an extent of arbitrariness behind this grouping. Some of these groupings changed over time, Aceh for example saw a drastic change to its economy through the huge influx of foreign aid after a tsunami devastated the region in December 2004. Similarly the destinations of large-scale transmigration changed over time. Lampung was initially a major in-migration destination, in particular due to government attempts to alleviate population pressures in Java. However, in the early 1980s the government stopped transmigration programmes into Lampung. This cut to in-migration was paired with an increase in out-migration, towards nearby urban areas facilitated by a new road connecting Lampung to Bengkulu. The key point here, however, is that an analysis of regional differences in Indonesia must go beyond comparing Java (or Java-Bali) to the Outer Islands.

Table 5: Key Regional Geographical Statistics, 2010

	Area in km²	**Percentage of total land area**	**Number of islands**	**Number of people per km²**
Java	129,438	6.77%	1,086	1,055.41
Sumatra	480,793	25.16%	5,277	105.31
Sulawesi	188,522	9.87%	2,500	92.15
Kalimantan	544,150	28.48%	1,061	25.34
Bali	5,780	0.30%	85	673.13
Eastern Indonesia	562,247	29.42%	7,495	27.30
INDONESIA TOTAL	**1,910,931**	**100.00%**	**17,504**	**124.36**

Sources: Area and number of islands: BPS, 2010, *Statistical Yearbook of Indonesia 2010,* Jakarta: BPS; Population figures calculated from: BPS, *Population Census 2010,* Jakarta: BPS.

The main geographical break down in this thesis is made according to province and summarised at island-level for the five most populated islands: Java, Sumatra, Sulawesi, Kalimantan and Bali. East and West Nusa Tenggara, Maluku and Papua have been grouped here into 'Eastern Indonesia', Indonesia's remotest and poorest region (see population share by island group in **Figure 1**).[80] Given the diversity not just between

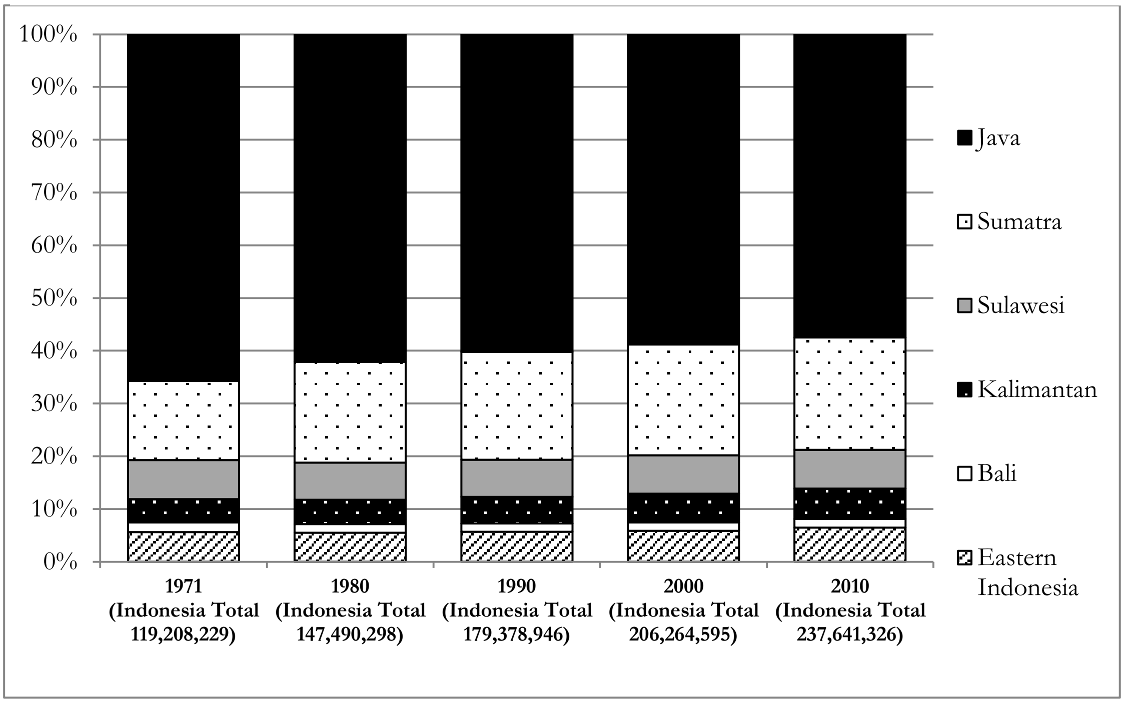
[79] Chris Manning, 1998, *Indonesian Labour in Transition: And East Asian Success Story?*, Cambridge University Press, p. 156;

Where not self-evident the respective island has been added in brackets for clarification.

[80] Eastern Indonesia is used as a fluid grouping in the literature, here it includes East and West Nusa Tenggara, Maluku and Papua, as used in: Hal Hill, Budy Resosudarmo and Yogi Vidyattama, 2009,

but also within islands this thesis compares islands as the main unit and provinces as sub-units that reflect the differences within islands/island groups.

Figure 1: Regional Shares of Total Population, 1971-2010 (in per cent)



Sources: Calculated from BPS, *Population Census (1971, 1980, 1990, 2000, 2010)*, Jakarta: BPS.

Notes: Eastern Indonesia here includes East and West Nusa Tenggara, Maluku and Papua and until 1996 East Timor, which gained independence in 1999.

To ensure comparability over time the country and provincial provinces have been standardised in the use and representation of the data in this thesis as visualised in **Figure 2**. There was only one change to the country borders during this period, which was East Timor. [81] East Timor was occupied by Indonesia in 1975 and formally annexed in 1976, it left in 1999 and gained its formal independence in 2000. The data here generally leave out East Timor, and in the few cases where the datasets do not allow for

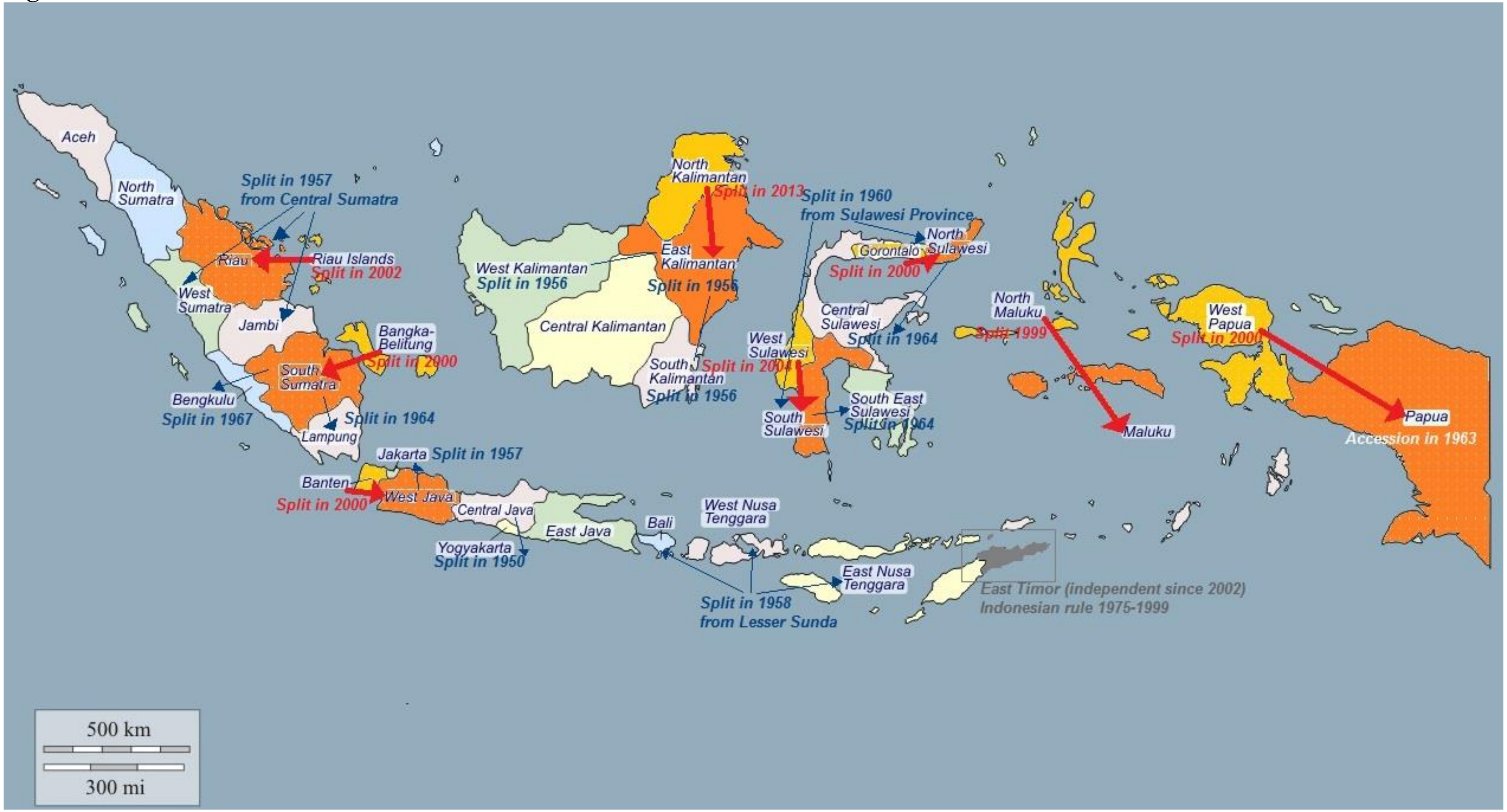
'Economic geography of Indonesia: location, connectivity, and resources', *in:* Yukon Huang and Alessandro Bochhi (Eds.), *Reshaping Economic Geography in East Asia* (pp. 115-134), Washington, DC: The World Bank, pp. 117-8 as well as Arianto Patunru and Erman Rahman, 2014, 'Local governance and development outcomes', *in:* Hal Hill (Ed.), *Regional Dynamics in a Decentralized Indonesia* (pp. 156-186), Singapore: Institute of Southeast Asian Studies, p. 161.

[81] Note that Papua became part of the national territory in 1963 (prior to first *Industrial Census*), then called Irian Barat, was renamed in 1973 as Irian Jaya and in 2000 as Papua. In this thesis the province is referred to only as Papua.

separation (e.g. summaries by industrial code rather than by province in the SME chapter), this is clearly indicated. However, while this was the only change to Indonesia's national borders, provincial borders have changed over time as shown in **Figure 2**.

In this thesis the provinces are standardised throughout to the provincial borders between 1976 and 1998 (25 provinces, excluding East Timor). **Figure 2** shows the provincial boundaries used in this thesis: the blue arrows indicate which provinces were joint territory before 1976 and when they split and the red arrows indicate which provinces have split after 1998. For the harmonisation of economic census data in this dissertation this means that the only adjustment to the provincial borders in the *1975/75 Industrial Census*, *1986 Economic Census* and *1996 Economic Census* was the exclusion of East Timor. However, there were a number of changes in the *2006 Economic Census*. In the previous censuses Banten was included in the West Java figures, North Maluku in the Maluku figures, West Papua in Irian Jaya figures (listed here as Papua), Gorontalo in the North Sulawesi figures, West Sulawesi in the South Sulawesi figures, Kepulauan Riau was included in the Riau figures, Bangka Belitung Islands were included in the South Sumatra figures. The *2006 Economic Cemsus* reported these provinces separately; in this dissertation the data has been recalculated and these provinces merged to facilitate comparison.

Figure 2: Standardisation of Indonesian Provinces



Source of underlying base map: D-Maps, n.d., *Indonesia: outline, provinces,* Retrieved March 20 2017 from http://d-maps.com/carte.php?num_car=15298&lang=en
Notes: Blue arrows indicate changes prior to 1976 and point towards newly created provinces; red arrows indicate changes after 1998 and point towards home provinces the newly created province split away from. The grey shaded area shows East Timor.

1.4.3 The Collection of Economic Statistics in Indonesia

When Suharto came to power, new support was lent to the work of the Indonesian Central Statistics Office (Biro Pusat Statistik, BPS). The BPS was initially founded in 1960 to conduct population censuses and censuses required for the economic planning underlying the Guided Economy. However, during the Old Order Period the BPS was severely underfunded and hence unable to process all the data it collected. [82] Under the new regime, a wave of regional expansion commenced so that by 1968 the provincial statistical offices were formally established as *Kantor Sensus dan Statistik*, covering all regions. Between 1972 and 1995 the improvement and expansion of statistical reporting were reflected in a growth from 4,334 to 12,415 in number of personnel. Important censuses conducted by the BPS were the population censuses in 1971, 1980 and 1990, the agricultural censuses in 1973, 1983 and 1993 and the economic censuses of 1986 and 1996. The economic censuses cover all economic sectors except agriculture and cover all non-agricultural formal and informal businesses. However, since the 1960s the BPS has become less open about its methods of data collection, complicating an assessment of the quality of data.[83]

1.4.4 Data

The main data sources for this dissertation are the Indonesian Industrial Censuses conducted in 1964 and in 1974/1975 as well as the Indonesian Economic Census, which has been conducted every ten years since 1986 (1986, 1996 and 2006) which combined the former Industrial Census and Construction Census. The census data was collected during an archival research visit to the Indonesian Central Statistics Office in Jakarta in 2015 (details below). The vast majority of existing work on Indonesian business development relies on the Large and Medium-scale Manufacturing Survey, which only enumerates manufacturing firms with more than 20 employees. However,

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[82] Pierre van der Eng, 1996, 'Historical Economic Statistics in Indonesia: Continuity and Change', *Newsletter of the Asian Historical Statistics Project, 3*:12-15; BPS, 1995, *Statistik dalam 50 Tahun Indonesia Merdeka: Peranan dan Aktivitas*, Jakarta: Biro Pusat Statistik.

[83] Pierre van der Eng, 1996, 'Historical Economic Statistics in Indonesia: Continuity and Change', *Newsletter of the Asian Historical Statistics Project, 3*:12-15.

little analysis exists of the much more comprehensive Economic Census, which covers all non-agricultural economic sectors and all firms, including firms with 1-20 workers. Making use of this previously largely unused data is therefore one of the key contributions of this thesis.

The primary data was mostly collected during a four-month research visit in Indonesia in 2015 as a visiting researcher at the Economic Research Center of the Indonesian Institute of Sciences (LIPI).[84] With the support of the institute I was able to conduct archival research at the National Archives (*Arsip Nasional Republik Indonesia,* ANRI*)*, Indonesian Central Board of Statistics (*Badan Pusat Statistik*, BPS), the Indonesian National Development Planning Agency (*Badan Perencanaan Pembangunan Nasional*, Bappenas), and Bank Indonesia. With the support of LIPI in Jakarta and thanks to the financial support from the Economic History Society, the Royal Historical Society and the LSE's Radwan Travel and Discovery Fund I was able:

- To visit the Central Bureau of Statistics (*Badan Pusat Statistik*, BPS) and access the 1964 and 1974/1975 Industrial Censuses and the Indonesian Economic Censuses from 1986, 1996 and 2006. I also interviewed BPS officials about the methods of data collection for the economic censuses and discussed resulting limitations of the data.
- To visit the Indonesian National Archives (*Arsip Nasional Republik Indonesia*) where I collected policy documents and official exchanges regarding the nationalisation of Dutch enterprises in the late 1950s.
- To visit the central bank archives of Bank Indonesia and review Annual Reports of Bank Indonesia from 1953 to 2006 on credit policy, lending and interest rates.
- To visit the Ministry of National Development Planning (BAPPENAS) to collect information from the six five-year economic development plans (*Repelita I-VI*, 1969 – 1999) on industrial development policies in general and SMEs and entrepreneurship support in specific. At BAPPENAS I also met with Dr. Leonardo Sambodo, Head of Sub-Directorate for SME Support & System.

After returning from the research visit to Indonesia, I transcribed, matched and cleaned the industrial and economic census data. The three economic censuses collected for this

[84] Foreign Research Permit No 417/SIP/FRP/E5/Dit.KI/X/2015 (19/10/2015 – 18/1/2016).

thesis consist of provincial as well as thematic volumes (i.e. manufacturing, which was in itself subdivided into medium- and large-scale manufacturing, and small-scale manufacturing). I matched the provincial economic census results with the results summarised at thematic level in order to expand the dataset, in particular to include value added data by region and firm-size category. Part of the contribution of this PhD dissertation is building the first regional database measuring value added per worker for the New Order period.

The Economic Censuses cover all non-agricultural economic sectors and distinguish between number of establishments and workers by firm-size and province, as well as variables such as value added, exports, ownership, source of capital, constraints faced in developing the business and type of assistance received through SME-targeted support and credit programmes. Tracing these variables over time through a regional lens allows for an intra-country comparison and makes an original and important contribution to the literature on Indonesian economic development.

The Industrial Census covered the following sectors:[85]

1. Large manufacturing establishments (engaging 100 persons and over);
2. Medium manufacturing establishments (engaging 20 to 99 persons);
3. Small manufacturing establishments (engaging 5 to 19 persons);
4. Household and cottage industries (engaging less than 5 persons);
5. Organised mining of petroleum and other minerals;
6. Unorganised mining & quarrying of gravel, sand, lime, salt-pans, etc.;
7. Generation and distribution of electricity;
8. Production and distribution of gas;
9. Waterworks.

The Economic Census provides data on businesses in all economic sectors except agriculture, as agricultural businesses are covered by the Agricultural Census.

The 1986 Economic Census was conducted with the following targets:[86]

a. Obtaining statistical data on forestry, mining and quarrying, manufacturing, electricity, gas and water supply, construction, trade, transportation and communication, banking and other financial institution and service.

[85] BPS, 1976, *'Sensus Industri 1974 / 1975: Industri / Kerajinan Rumah Tangga, Jilid I / 1974 / 1975 Industrial Census: Household and Cottage Industries, Volume I',* Jakarta: Biro Pusat Statistik, pp. xi-xii.

[86] BPS, 1987, *Sensus Ekonomi 1986: Statistik Pertambangan Non Minyak dan Gas Bumi 1985 / Economic Census 1986: Mining Statistics Excluding Petroleum and Natural Gas, 1985, Seri: B22*, Jakarta: Biro Pusat Statistik, p. xxv.

b. Obtaining more detailed data on company operations: legal status, ownership, number of employees, wages and salaries, operational cost, capital formation, marketing, production and others.
c. Compiling a directory of legally incorporated establishments.
d. Getting an overview of all non-agricultural establishments engaged in the economy to develop a complete sampling frame for various surveys.
e. Obtaining more detailed data on village potential and cooperatives.

The 1996 Economic Census set the following objectives:[87]

a. To compute the number of establishments and employees of all non-agricultural sectors at the national level and by region
b. To obtain information about the structure and size of all non-agricultural establishments at the national level and by region
c. To construct an integrated establishment directory of medium and large enterprises with legal business status to form the basis of a sampling frame and other establishment surveys
d. To provide detailed economic data on business activities and inform economic indicators

The 2006 Economic Census pursued the following specific purposes:[88]

a. To provide information on the number of establishments, broken down by industrial sector/category, activity, business scale, and region.
b. To provide basic information on various business issues, broken down by industrial sector/category, business scale, and region.
c. To disseminate basic statistics related to non-agricultural economic activities nation-wide as well as at district, regency and municipality level.
d. To compile complete and integrated maps and directories of establishments in each district/regency/municipality.
e. To develop a complete sampling frame that will be used in surveys especially surveys relating to economic issues.

The industrial category coverage of the 1996 and 2006 Economic Censuses differs from the 1986 coverage in so far as they exclude forestry, but the scope is sufficiently similar to allow for meaningful comparison of the census data.[89]

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[87] BPS, 1998, *Sensus Ekonomi 1996: Hasil Pencacahan Lengkap / 1996 Economic Census: Complete Count Result Indonesia,* Jakarta: Biro Pusat Statistik, p.xxvii.

[88] BPS, 2008, *'The Indonesian 2006 Economic Census'*, Paper presented at the 12th East Asian Statistical Conference (13-15 November 2008) in Tokyo, pp. 1-2.

[89] BPS, 1996, *'Sensus Ekonomi 1996, Buku 23: Pedoman Pencacahan Perusahaan/usaha Non Direktori dan Usaha Rumahtangga'* [Economic Census 1996, Book 23: Enumeration Guidelines for Non-listed Companies/Businesses and Household Enterprises], Jakarta: Biro Pusat Statistik, p. 2; BPS, 2008, *'The Indonesian 2006 Economic Census'*, Paper presented at the 12th East Asian Statistical Conference (13-15 November 2008) in Tokyo, p. 4.

In the economic censuses, the number of establishments is broken down by business scale, region, range of employees, range of assets and sales. The censuses include establishments with and without fixed locations as well as registered businesses and businesses without legal status. Large and medium-sized establishments are captured in complete enumeration, whereas micro and small establishments are captured in a census sample. For the *2006 Economic Census* the BPS estimates that five per cent of micro and small enterprises were sampled.[90] The business register was compiled through the door to door method and the snowball method. With the door to door method, every building and establishment with and without fixed locations was visited. For the snowball method a neighbourhood chief administrator was chosen as a resource person, with the help of whom all businesses were listed and subsequently visited by the enumerator. In each case the key information collected included the name and address of the establishment, its main activity, the number of employees/workers, the year of start of operation, the amount of sales and assets.[91]

The *1996 Economic Census* was carried out in complete enumeration in all urban areas. In rural areas the census was conducted as a complete enumeration with one exception: businesses were enumerated on a sample basis in sparsely populated areas in which fewer than 50 per cent of physical buildings were used for business activities and there was no business activity centre that served at least 50 firms.[92] What share of the businesses in those remote areas were actually sampled remains unclear. The *1986 Economic Census* also captured medium and large enterprises in full enumeration. Small manufacturing enterprises were captured in full with the exception of six provinces: Jakarta, Central Java, East Java, North Sumatra, South Sumatra and Maluku. In these six provinces 50 per cent of small scale industry was selected as a sample.[93] Microenterprises were selected on a sample basis, however official publications provide little information as to how large that sample was and how it was constructed beyond the assurance that "they were selected systematically" and proportional to the total number of microenterprises in each district.[94] The *1974/75 Industrial Census* enumerated

[90] BPS, 2008, '*The Indonesian 2006 Economic Census*', Paper presented at the 12th East Asian Statistical Conference (13-15 November 2008) in Tokyo, p. 12.

[91] BPS, 2008, '*The Indonesian 2006 Economic Census*', Paper presented at the 12th East Asian Statistical Conference (13-15 November 2008) in Tokyo, pp. 5-10.

[92] BPS, *1996 Economic Census Complete Count Result: Indonesia*, Jakarta, BPS, p. xxix.

[93] BPS, *1986 Economic Census Small-Scale Manufacturing Industry Statistics*, Jakarta: BPS, pp. xxiv-xxv.

[94] BPS, *1986 Economic Census: Home Industry Statistics*, Jakarta: BPS, p. 13

all small, medium and large industrial establishments. Microenterprises were enumerated on a sample basis covering 8 per cent of microenterprises in all urban and rural census blocks respectively. However, microenterprises in the following provinces were excluded and not enumerated at all: East Kalimantan, Central Kalimantan, Central Sulawesi, Southeast Sulawesi, Maluku, Papua and East and West Nusa Tenggara.[95]

In a review of the 2006 Economic Census, BPS hinted at the existence of problematic issues collecting data in remote geographical areas.[96] This problem also surfaced in a review of the data collection for a different census, the 2010 Population Census.[97] Given that these problems were still an issue in 2006, despite the improvements that have been made in infrastructure and transportation as well as the expansion of BPS Regional Offices, it is only reasonable to assume that they were even larger constraints for the census enumerators in 1974/75, 1986 and 1996. This assumption is further supported by the fact that the *1974/75 Industrial Census* excluded some remote provinces entirely from its enumeration of microenterprises. Despite these limitations the Economic Censuses still offer the most comprehensive geographical coverage of any firm-based survey conducted in Indonesia during the New Order period.

The interviews conducted in Jakarta with BPS regarding the development of Economic Censuses and those with BAPPENAS about the evolution of SME/industrial policy were useful to get a better understanding of current events and recent developments. However, at both BPS as well as BAPPENAS the main constraint was the issue of institutional memory. It was generally difficult to retrace developments from the early days of the New Order regime to today. The interviews with BPS indicated that there is little knowledge about whether the data collection or interpretation has improved between the different Economic Censuses, which makes it very difficult to assess the extent to which there are limitations when it comes to comparing the data from different censuses. Unfortunately this limits the certainty with which analyses of the development can be made between the 1986, 1996 and 2006 Economic Censuses.

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[95] BPS, *1974/75 Industrial Census: Household and Cottage Industries I,* Jakarta: BPS, pp. xii-xiv

[96] BPS, 2011, '*Economic Census: Indonesia's Experience*', Presentation given at the Regional Seminar on International Trade Statistics (24-26 October 2011) in Beijing, p. 13.

[97] Terrence Hull, 2010, '*Communication Surprises in the 2010 Indonesian Population Census*', Washington, DC: Population Reference Bureau, Retrieved September 1 2019 from: https://www.prb.org/indonesiacensus/

However, the Head of Statistics Consultation Hady Suryono and the vast majority of his team were involved in the preparation of the 2006 Economic Census. This Census has impressive coverage, however the Statistics Consultation Division of BPS did report issues with ensuring participation. Medium and large enterprises were covered in complete enumeration. In contrast, micro and small enterprises were captured by a sample, which was estimated to constitute 5 per cent of all micro and small enterprises in Indonesia. It was in particular in interviewing micro and small entrepreneurs that BPS enumerators faced issues with some entrepreneurs being hesitant to participate. When this occurred the most common method of avoidance was that the entrepreneurs pretended to be absent from the premises.

The reluctance of some entrepreneurs to participate in the Economic Census survey was mostly related to fear that the information collected could be used for tax purposes or would be lacking in confidentiality. This concern is not uncommon in census enumerations generally.[98] Legally, respondents were only obliged to provide basic statistics, based on Article 26(1) and Article 27 of Statistics Act Number 16 issued in 1997. However, in practice it was difficult for enumerators to enforce participation when a potential respondent refused. Another, closely related, issue pertained to the acquisition of information about the sales and assets of firms.[99] To address these issues BPS conducted awareness campaigns during the first phase of field operation in 2006 to promote participation and inform entrepreneurs about data confidentiality as well as the purpose of conducting the Economic Census.[100]

1.5 Thesis Outline

This introductory chapter has laid out a brief overview of Indonesian economic development during the New Order period, which is the key to understanding how the

[98] For a discussion of widespread concerns about misuse of census data for taxation purposes elsewhere, for example in the context of Ghana, see: Gerardo Serra, 2018, '"Hail the Census Night": Trust and Political Imagination in the 1960 Population Census of Ghana', *Comparative Studies in Society and History, 60(3)*: 659-687, p. 668

[99] BPS, 2011, '*Economic Census: Indonesia's Experience*', Presentation given at the Regional Seminar on International Trade Statistics (24-26 October 2011) in Beijing, p. 13.

[100] For more detailed information on the sequence and timing of the different Economic Census Activities as well as a discussion of the awareness raising campaigns see BPS, 2008, '*The Indonesian 2006 Economic Census*', Paper presented at the 12th East Asian Statistical Conference (13-15 November 2008) in Tokyo, pp. 2-3, 21-22.

role of SMEs and SME-policy making changed. I then discussed the literature addressing the key arguments for why SMEs matter in a national economy, how their roles differ between developed and developing countries and changes as a country industrialises, as well as the key arguments for government support for SMEs. The chapter-specific literatures, i.e. on the historical background of Dutch colonialism and Japanese occupation, on Sino-Indonesian entrepreneurship, the missing middle debate and access to credit are reviewed within the respective chapters. Finally, this introduction has discussed the data collection and data quality of the economic censuses, which form the foundation of this entire dissertation.

The second chapter analyses Indonesian entrepreneurship in historical perspective to inform the context and legacies which the New Order government inherited when Suharto came to power. Understanding the colonial legacy and the Sukarno heritage is fundamental to the understanding of the New Order. This historical background chapter forms the basis of the analysis of how government policies affected the development of small and medium enterprises in Indonesia from 1966 to 2006. Building on this chapter the thesis establishes the role of path dependence in the formation of the occupational structure in the private sector and in SME policies.

Given the focus of the Dutch colonial state on Java until the end of the 19th century, it can be assumed that the colonial legacy of the Dutch had a very different impact on Java compared to the Outer Islands, which had hitherto been only loosely integrated.[101] Under Japanese rule (1942-45), Java was developed as the main production centre for shipbuilding and other key sectors, while the 'Outer Islands' "reverted to a subsistence mode of production". Much of the progress in terms of economic development made under Dutch rule was reversed under Japanese occupation.[102] Finally, this chapter traces the origins of the special role of Sino-Indonesian entrepreneurs in the Indonesian economy to the – often conflicting – relationship they had with the Dutch colonial authorities, the Japanese during Indonesia's occupation as well as with the first independent government.

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101 Howard W. Dick, 2002, 'Introduction', *in:* Howard W. Dick, Vincent J.H. Houben, J. Thomas Lindblad, and Thee Kian Wie(Eds.), *The Emergence of a National Economy: The Economic History of Indonesia, 1800-2000 (pp. 1-8)*, Honolulu: University of Hawaii Press, pp. 2-3.

102 Howard W. Dick, 2002, 'Formation of the nation-state, 1930s-1966', *in:* Howard W. Dick, Vincent J.H. Houben, J. Thomas Lindblad and Thee Kian Wie(Eds.), *The Emergence of a National Economy: The Economic History of Indonesia, 1800-2000 (pp. 153-193)*, Honolulu: University of Hawaii Press, pp. 162, 165-166.

Chapter two shows that there were a few Sino-Indonesian SMEs that grew into some of the largest conglomerates of the 1990s, but the share of people with ethnic Chinese origins in Indonesia is small. Therefore instead of focussing on Sino-Indonesian entrepreneurs, the following chapter takes their supposed advantages as a starting point to analyse whether Indonesian SMEs were really constrained by an invisible glass ceiling that prevented them from growing. The factors that have been identified for the success of Sino-Indonesian entrepreneurship, such as better education, access to business network as well as credit motivate this research, which looks into the apparent missing middle in wider Indonesian manufacturing SME development as well as the issue of access to credit for SMEs.

The third chapter takes a regional approach to analyse SME development and the role government policy played during the New Order period. The main research question is whether the Indonesian manufacturing business landscape is indeed characterised by a missing middle, how firm-size distribution and the role of SMEs has developed, and what were the main barriers to growth faced by small firms and how they have been addressed by the government. This chapter addresses the question of how SMEs developed in Indonesia between 1966 and 2006 and what were the crucial factors in this development, particularly in light of any gaps between policy implementation and official statements. Answering this question will give insight into the issues holding small firms back from growing, and the possible existence of a ceiling that keeps even reasonably successful businesses from growing. This issue is also relevant from a comparative perspective, as in this respect Indonesia seems to stand in contrast to Taiwan, where SMEs flourished and grew and were the dynamic firms behind the Taiwanese growth miracle. Secondly, it establishes that there is considerable regional diversity. But this diversity and variation is much more complex than the expected divide between Java and the Outer Islands, given the better support from the government, easier access to finance and markets for SMEs in Java and the dominance of state-owned enterprises (SOEs) in the Outer Islands.

To measure SME trends, I have collected data on numbers of manufacturing firms, workers and value added by firm-size category and province from the Industrial Census 1974/75 and decadal Economic Censuses (1986-2006). The constructed database on value added per worker is the first that compares manufacturing value added over the New Order period by region. For this exercise, I constructed a database on value added per employee according to firm-size categories for 1974/75 to 2006 by province from Economic Census data, supplemented by provincial medium and large enterprise manufacturing statistics and provincial annual yearbooks. This is the first database that constructs a provincial or even regional comparison of manufacturing value added over the New Order period. Using these data, I distinguish how distinct policy episodes shaped the role of SMEs. The regional approach enables a detailed study of the variations in SME development and inclusiveness of the economic development process in Indonesia. Indonesia is then compared with South Korea and Taiwan, two Tiger economies pursuing similar industrial developmental models to Indonesia with distinct firm-size distributions.

Considering both formal and informal enterprises allows deeper analysis of an issue summarised by Tybout: "it never pays to be *just* large enough to attract enforcement".[103] Many enterprises do not officially register to obtain a business permit, despite meeting the official criteria. The process is complicated, slow and expensive; it is plagued by lack of transparency, inefficiency and high corruption in the process of obtaining a business license.[104] The potential benefits thus need to outweigh the investments necessary for registration. The question is whether the level at which these investments are beneficial is visible in a size cut-off between firms that are registered and those that remain informal, or whether there are other distinguishable characteristics that are likely to determine whether a firm opts to formally register.

The chapter shows that in Indonesia the missing middle existed and persisted throughout the New Order. There was a shift in firm-size distribution, as expected, but that shift was mainly from microenterprises to small enterprises, while there has been a persistent gap in medium-sized firms. The comparison with South Korea and Taiwan at similar levels of GDP per capita shows that this missing middle cannot be explained by Indonesia's stage of economic development. The low value-added per worker in microenterprises and small firms is indicative of a dual economy model.

The fourth chapter analyses the crucially important issue of the development of access to credit, lack of which has been identified as one of the key deterrents to the

103 [Italics added], James R. Tybout, 2000, 'Manufacturing Firms in Developing Countries: How Well Do They Do, and Why?', *Journal of Economic Literature, 38(1)*:11-44, p. 17.

104 The Asia Foundation, 2007, *Making Sense of Business Licensing in Indonesia: A Review of Business Licensing Policy and Survey of One Stop Shop Survey Centers*, Jakarta: The Asia Foundation, pp. 5, 14-5.

growth and development of SMEs. Indonesia provides a particularly interesting case study in this regard, given the early foundations of an indigenous credit system laid by the Dutch colonial government and then the evolution of the various SME credit schemes introduced after the early 1970s as well as the BRI's microcredit programme that transformed village credit disbursement units to self-sustaining microbanking units that mobilised savings and lent to small borrowers from 1984. The periodisation also makes it possible to take account of other post-crisis developments, such as the restructuring of Bank Rakyat Indonesia in 2000 and its partial privatization in 2003 and the Asian Development Bank's Industrial Competitiveness and Small and Medium Enterprise Development Program that closed in 2004.

One sub-question is which elements of the popular credit system developed by the colonial government at the turn of the twentieth century as part of the Ethical Policy persisted or evolved and remained relevant to SME finance during the New Order period. The main source to track developments of state pawnshops are Bank Indonesia's *Annual Reports*, which note development on activities such as number of offices, total loans extended, loans redeemed and loans outstanding as well as repayment period and interest rates. This chapter shows that state pawnshops expanded during the twentieth century in terms of geographical coverage and loan volume, and that they continued to play an important role in financing small-scale businesses.

The various schemes introduced by the New Order government which specifically targeted SMEs, such as the Small Enterprise Development Programme KIK (*Kredit Investasi Kecil*) / KMKP (*Kredit Modal Kerja Permanen*) and the Small Enterprises Credit Programme KUK *(Kredit Usaha Kecil*) have been widely criticised in the literature on Indonesian SME development as ineffective. However, what appears to be missing is an actual assessment of loans dispersed and who benefited from them. Bank Indonesia's *Annual Reports* provide the baseline data, including number of applications approved, value of loans approved and outstanding loans. Using the Economic Census data it is possible to identify the number of small firms by province and industry code which have received assistance from the respective SME credit programmes as well as the microcredit loan product *Kupedes*. This chapter analyses the incentive structure of the rural loan product Kupedes that made the system so successful and its role relative to small credit schemes in Indonesia. One aspect that seems to have been overlooked is the question of complementarity between different schemes. Do entrepreneurs that start with small loans under the *Kupedes* scheme stay with the units or do they access other loan products available at the branch level as their SMEs grow? This chapter also discusses the new credit scheme KTA (*Kredit Tanpa Agunan*) that has been introduced in response to the Asian financial crisis, which foregoes collateral requirements but is restricted to formally registered SMEs from all sectors.[105]

Data on loans provided by district banks, village banks, village paddy banks (*lumbung desa*) and state pawnshops during the late colonial period are collected in the *Changing Economy in Indonesia* (CEI) series, which presents a selection of statistical source material on the Dutch East Indies between the early nineteenth century and 1940. The data on SME lending was collected from the archives of Bank Indonesia. From the 1986 and 1996 Economic Censuses I can identify how many small firms received assistance under the various credit programmes. The chapter looks at various schemes specifically targeting SMEs, such as the Small Enterprise Development Programme KIK (*Kredit Investasi Kecil*) / KMKP (*Kredit Modal Kerja Permanen*), which provided investment and working capital respectively between 1971 and 1990; its 1990 successor the Small Enterprises Credit Programme KUK *(Kredit Usaha Kecil*), which required all commercial banks to extend 20 per cent of their total loans to SMEs as investment and working capital until it was suspended during the Asian Financial Crisis; and the new credit scheme KTA (*Kredit Tanpa Agunan*) introduced after the crisis, which forewent collateral requirements but was restricted to formally registered SMEs from all sectors. In addition to the SME-targeted credit schemes this chapter focuses on the market-based general rural credit loan product (Kupedes), which had a remarkable repayment rate and overall self-sustaining success. The analysis of Kupedes was made possible through interviews conducted during the research visit in Jakarta with officials from Bank Rakyat Indonesia (BRI) and data generously provided by BRI.

The conclusion links SME development to the current debate on crisis resilience and draws wider conclusions through regional comparative analysis. Discussing the resilience Indonesian SMEs demonstrated during the Asian Financial Crisis will link the dissertation to the debate on the strength of SMEs and the rationale to provide targeted policy support. Lessons will be drawn from the Indonesian experience for future wider SME policies.

105 Tulus Tambunan, 2000, *Development of Small-Scale Industries during the New Order Government in Indonesia,* Aldershot, UK/Brookfield, USA: Ashgate, p. 186.

The perceived resilience of SMEs during the 1997/98 crisis resulted in a new interest in strengthening SMEs and their contribution to economic stability and development. Many authors pointed to the strength the Taiwanese SME-based economy displayed relative to the hit taken by the *chaebols*-dominated Korean economy.[106] Similarly Indonesian SMEs have also been found to have fared better during the crisis than their larger counterparts.[107] However, this general assessment obscures the actual experience of SMEs during the crisis, which varied considerably between locations, industries and other factors.

During the crisis, Indonesian SMEs are said to have had the advantage of being less reliant on formal markets for credit and were thus less dependent on the increasing cost of credit.[108] Similarly sourcing mostly local inputs, rather than foreign inputs, SMEs were able to take advantage of the devaluation of the rupiah.[109] A general argument for their crisis resilience is their flexibility to move into new niche markets as well as in adapting their production and processing lines. However, in reality, it was only some SMEs in some sectors that had an advantage over their larger counterparts during the crisis. SMEs geared towards the export market fared better than those who produced primarily for the domestic market. Javanese SMEs were hit more severely than in the rest of Indonesia and urban SMEs were more affected than those in rural areas.[110] However, these results are of little surprise, given that these trends held true for all types of businesses.[111] The effects of the crisis offer an opportunity for closer analysis of the characteristics of sectors that were particularly affected (e.g. the construction sector)

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106 Gary Gregory, 2002, 'Promoting SMEs in Korea: Government Response to the Asian Financial Crisis', *in:* Charles Harvie and Boon-Chye Lee (Eds.), *The Role of SMEs in National Economies in East Asia* (pp. 238-268), Cheltenham: Edward Elgar Publishing Limited, pp. 247-8; Matt Ngui, 2002, 'Government Policies and Programs for Small and Medium Enterprises in Taiwan', *in:* Charles Harvie and Boon-Chye Lee (Eds.), *The Role of SMEs in National Economies in East Asia* (pp. 269-297), Cheltenham: Edward Elgar Publishing Limited, p. 269.

107 Lisa Cameron, 1999, 'Survey of Recent Developments', *Bulletin of Indonesian Economic Studies, 35(1):*3-40, p. 17.

108 Lisa Cameron, 1999, 'Survey of Recent Developments', *Bulletin of Indonesian Economic Studies, 35(1):*3-40, p. 17.

109 Thee, 2006, 'Policies for Private Sector Development in Indonesia, *ADB Institute Discussion Paper, 46:* 1-46, p. 27.

110 Berry, Albert, Edgard Rodriguez and Henry Sandee, 2002, 'Firm and Group Dynamics in the Small and Medium Enterprise Sector in Indonesia', *Small Business Economics, 18:* 141-161, pp. 150-2; Thee, 2006, 'Policies for Private Sector Development in Indonesia, *ADB Institute Discussion Paper, 46:* 1-46, p. 35; Tambunan, 2000, p. 163.

111 Sudarno Sumarto, Anna Wetterberg and Lant Pritchett, 1999, 'The social impact of the crisis in Indonesia: results from a nationwide Kecamatan survey', *East Asia Environment and Social Development Unit (EASES) Discussion Paper Series*, *21249*: 1-18, Washington, DC: World Bank, p. 4.

and industries that survived relatively unscathed, as case studies have shown for the small-scale furniture industry, pointing to factors such as the usage of domestic inputs and clusters with strong interlinkages.[112]

[112] Berry, Albert, Edgard Rodriguez and Henry Sandee, 2002, 'Firm and Group Dynamics in the Small and Medium Enterprise Sector in Indonesia', *Small Business Economics, 18:* 141-161, p. 153.

Chapter 2: Indonesian Entrepreneurship in Historical Perspective

The late Dutch colonial period and the Japanese occupation are crucial to understanding Indonesia's indigenous business landscape. Both shaped the characteristics of Indonesia's entrepreneurial class and the challenges the first Indonesian independent government inherited when it gained independence in 1945. This chapter focuses on the impact of Dutch colonial policies, arguing both for path dependence as well as the failure of the Indonesian national government in fostering indigenous entrepreneurship and providing a business environment conducive to SME growth. This chapter lays the foundation which chapters three and four build upon, by highlighting in particular the ways in which not only the colonial period but also the period of Japanese rule and the Old Order established the frameworks for entrepreneurship.

An important issue within these developments is the role of Sino-Indonesian entrepreneurship. Sino-Indonesian-owned SMEs played a different role during the colonial period and were of considerable importance later amongst the leading business conglomerates, which had largely grown from smaller firms. Moreover, discontent about the perceived success of Sino-Indonesian SMEs and Sino-Indonesian entrepreneurs in general has repeatedly escalated in Indonesia. This chapter shows that Sino-Indonesians were in fact only a very small minority in Indonesia and hence only a very small share of SMEs in Indonesia were owned by Sino-Indonesians. While this dissertation as a whole therefore focuses on SMEs in general, rather than controlling for ethnicity, building an understanding the role and perception of Sino-Indonesian entrepreneurs in the Indonesian economy is necessary to understand the focus on indigenous entrepreneurship in Indonesian policy-making in the twentieth century.

The long time frame and political regime changes that equated with distinctly different policy regimes also allows an emphasis on the role of path dependence in the formation of the occupational structure in the private sector. Understanding its own past is important for informing policy-making in any country today, as Douglas North wrote: 'Path dependence is the key to an analytical understanding of long-run economic change. … The source of incremental change is the gains to be obtained by organizations and their entrepreneurs from acquiring skills, knowledge, and information that will enhance their objectives. … Reversals of paths (from stagnation to growth or vice versa) may come from … path alteration, but will typically occur through changes in the polity'.[113] Anne Booth analysed the path dependence of the Indonesian economy formed by the Dutch colonial state.[114] However, looking at the formation of business structures in Indonesia, this chapter argues that while the Dutch colonial legacy did shape the initial trajectory, path dependence was strongly reinforced during the post-independence era under the Sukarno government.

2.1 Historical Legacies of the Late Dutch Colonial Period

Howard Dick claims that by the 1940s the Dutch colonial state had built institutional advantages, which, if they had not been interrupted by the Japanese invasion, could have possibly led to the beginning of the "sustained industrial expansion that eventually occurred in the 1970s". These foundations included moving protection from light consumer goods industries to heavy industries (upstream industries).[115] This stands in line with Anne Booth's observation that "by the early twentieth century, several colonial powers in Asia had begun to adopt policies which were much more overtly 'developmental' in their aims", in particular to improve living standards in their colonies. Booth further argues that the most dramatic impact of this could be observed in Indonesia during the last 40 years of Dutch rule.[116] As will be discussed in greater detail in the chapter on access to credit, the colonial Dutch government played an

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[113] Douglass C. North, 1990, *Institutions, Institutional Change and Economic Performance,* Cambridge University Press, p. 112.

[114] Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, p. 12.

[115] Howard W. Dick, 2002, 'Formation of the nation-state, 1930s-1966', *in:* Howard W. Dick, Vincent J.H. Houben, J. Thomas Lindblad and Thee Kian Wie(Eds.), *The Emergence of a National Economy: The Economic History of Indonesia, 1800-2000 (pp. 153-193)*, Honolulu: University of Hawaii Press, p. 162.

[116] Anne Booth, 1995, 'The State and the Economy in Indonesia in the Nineteenth and Twentieth Centuries', *in*: John Harris, Janet Hunter, and Colin M. Lewis (Eds.), *The New Institutional Economic and Third World Development (pp. 283-305),* London: Routledge, pp. 285-6.

important role in laying the foundations to the development of a credit system for the indigenous population.

In 1830 Governor-General van den Bosch introduced the culture system (*Cultuurstelsel)*, which required farmers to dedicate a fifth of their fields to plant crops particularly profitable in Europe.[117] This diversion of land and labour led to shortfalls in rice production, as well as to spikes in rice prices and famines in the 1840s and 1850s. With the spread of political liberalism in the Netherlands, colonial policy in Indonesia increasingly became the subject of criticism. As a result the culture system was finally abandoned in 1870 with the introduction of an Agrarian Law that prohibited the sale of indigenous land to foreigners and a Sugar Law that restricted government intervention to cane production. The Liberal Period between 1870 and 1900 saw the spread of private Dutch enterprise and capital in Indonesia. However, it was the Ethical Policy announced in 1901 that brought genuine radical change to political thinking, aiming to promote education for the native population, develop a popular credit system to protect Indonesians from moneylenders and promote (limited) indigenous political representation.[118]

In terms of geographical parameters, the Dutch colonial state was "virtually confined to Java", the most populous Indonesian island, until the end of the 19th century. In 1930, 69 per cent of the total population of Indonesia lived in Java.[119] What then constituted the 'Outer Islands' (*Buitenbezittingen*) were only loosely integrated into the Netherlands Indies. Many previously independent parts of the archipelago were brought under colonial control between 1870 and the beginning of the 20th century.[120] In Aceh, Sumatra, the Dutch colonial government declared war in 1873 and the contestation of power led to a bitter struggle that lasted over 30 years; the kingdoms of South Bali and Bone were conquered only in 1906.[121] The borders of the Dutch East

117 Oei Tjong Bo (Huang Tsung Mo),1948, *Niederländisch-Indien: Eine Wirtschaftsstudie,* Zurich: Orell Füssli Verlag, pp. 38-41, 48-51.

118 Robert J. van Leeuwen, 1970, 'Indonesia', *in:* W. Arthur Lewis (Ed.), *Tropical Development 1880-1913* (pp. 250-282), London: George Allen & Unwin Ltd, pp. 253-5.

119 Dutch East Indies, 1936, *Volkstelling 1930, Deel VIII, Overzicht voor Nederlandsch-Indië/Census of 1930 in the Netherlands Indies, Volume VIII, Summary of the Volumes I-VIII,* Batavia: Landsdrukkerij/Department van Economische Zaken, Tables 1, 3 and 4.

120 R. E. Elson, 2008, *The Idea of Indonesia: A History*, Cambridge University Press, p. 4.

121 Howard W. Dick, 2002, 'Introduction', *in:* Howard W. Dick, Vincent J.H. Houben, J. Thomas Lindblad, and Thee Kian Wie(Eds.), *The Emergence of a National Economy: The Economic History of Indonesia, 1800-2000 (pp. 1-8)*, Honolulu: University of Hawaii Press, pp. 2-3.

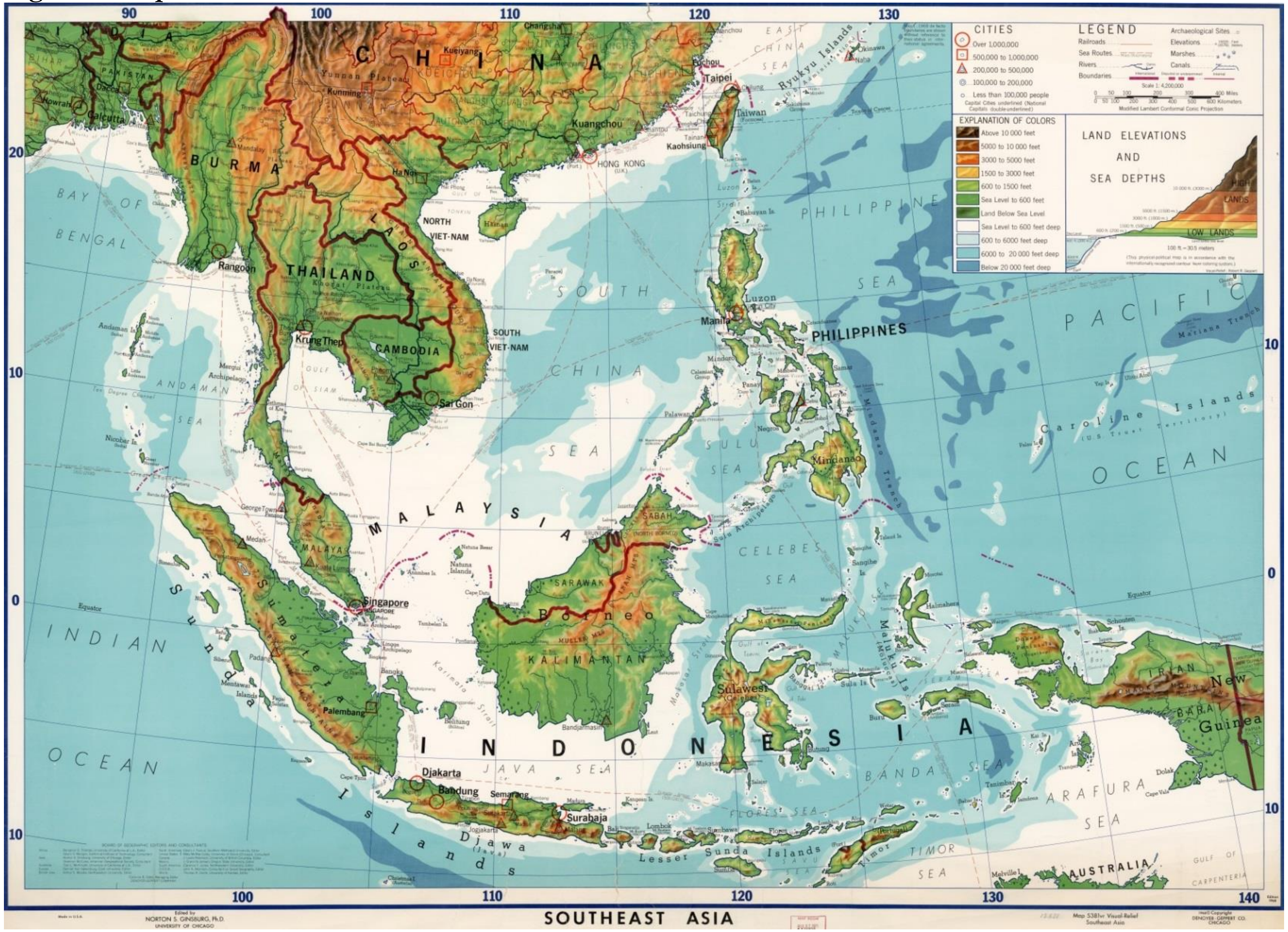
Indies (see **Figure 3**) became the borders of modern-day Indonesia in 1969 (see **Figure 4**), after the Dutch part of New Guinea was relinquished in 1962 and a referendum ceded the province of Papua (former Irian Jaya) to Indonesia.[122]

[122] Frits van Oostrom, 2008, *The Netherlands in a Nutshell: Highlights from Dutch History and Culture*, Amsterdam University Press, p. 90.

Figure 3: Map of the Dutch East Indies

Source: G.W. Colton, 1886, 'Colton's East Indies', *in: Golton's General Atlas Of The World*, New York: G. W & C. B. Colton & Co., No. 182 (edited).

Figure 4: Map of Modern Southeast Asia



Source: Norton Ginsburg, 1968, *Southeast Asia*, Chicago: Denoyer-Geppert Company / UC Berkley, Geography Department.

2.2 Indonesian Entrepreneurship under Japanese Occupation (1942-45)

Important for the discussion of formation of indigenous entrepreneurship and business structure is also the shift that occurred under Japanese rule. There were new business opportunities to work with and in Japanese companies. Furthermore the Japanese actively encouraged cooperation between Sino-Indonesians and indigenous entrepreneurs in *kumiais* (business cooperatives producing, selling and controlling prices for agricultural and manufactured products).[123] While the system may have led to wide scale abuses (e.g. the creation of Ali Baba companies, in which Indonesian quasi straw men formally managed companies for Chinese businessmen), it also created further opportunities for indigenous entrepreneurs to learn from more experienced Sino-Indonesian businessmen and benefit from knowledge spillovers. Thus this section looks at the question of how Japanese rule formed the business structure and environment in Indonesia and thus established institutional factors crucial to SME development.

In 1942 the Japanese invaded Indonesia with little resistance from the indigenous population, in some cases Indonesians even turned against the Dutch themselves. The Japanese invasion of Indonesia began on 10 January 1942. By 8 March 1942 the Dutch surrendered Java to the Japanese.[124] However, local resistance movements against the Japanese in the Outer Islands, such as an uprising in Aceh, Sumatra in November 1942, and conspiracies in South and West Kalimantan, were met with military force and large-scale arrests.[125] With little resistance from the Dutch forces much of the infrastructure remained largely intact with few exceptions such as petroleum installations.[126] The initial policy was to secure the supply of strategic

[123] Peter Post, 1996, 'The formation of the pribumi business élite in Indonesia, 1930s-1940s', *Bijdragen tot de Taal-, Land- en Volkenkunde, 152(4):* 609-632, p. 626.

[124] M.C. Ricklefs, 2008, *A History of Modern Indonesia since c. 1200*, Basingstoke & New York: Palgrave Macmillan, p. 232.

[125] M.C. Ricklefs, 2008, *A History of Modern Indonesia since c. 1200*, Basingstoke & New York: Palgrave Macmillan, pp. 239-240.

[126] Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, pp. 47, 49.

products needed for the war effort, such as oil, rubber and quinine, by supporting the producing regions with imports of food and basic needs products.

Peter Post makes an important argument building upon the work of Peck-Yang Twang that appears to have remained understudied. He argues that under Japanese rule, indigenous entrepreneurs were given new business opportunities previously closed off to them during the Dutch colonial period. (However, it should be noted that under Japanese military rule, large pre-war indigenous trading companies were pushed out of trade and instead 'relegated to an economic intermediary position'.[127]) Indigenous entrepreneurs did not just benefit from new business opportunities, but also from declining competition as some Sino-Indonesian firms that had previously worked with Dutch trading firms and banks found it difficult to survive without this support.[128] The Japanese also attempted to encourage Chinese and Indonesian entrepreneurial cooperation in order to form *kumiai*.[129] In some types of *kumiai* leadership was reserved for Indonesians while members had to form equal shares of Indonesian and Chinese descents. It should be noted, however, that these arrangements also produced so-called 'Ali Baba' companies.[130] In the area of foreign trade, Indonesian entrepreneurs were exposed to knowledge and skills transfers during Japanese rule.[131] Furthermore the Japanese actively invested into developing the entrepreneurial skillset of the indigenous population by setting up a commercial school in 1943 and an economic training centre in 1945.[132] Thomas Lindblad found that some of the firms established by Indonesian entrepreneurs during Japanese occupation performed remarkably well in the early independence period. But bar few exceptions (such as Bakrie & Brothers, who were still

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[127] Peter Post, 2009, '*Indonesianisasi* and Japanization: The Japanese and the shifting fortunes of *pribumi* entrepreneurship', *in:* J. Thomas Lindblad (Ed.), *Indonesian economic decolonization in regional and international perspective* (pp. 61-86), Leiden: KITLV Press, pp. 63, 69-71, 83.

[128] Peter Post, 1996, 'The formation of the pribumi business élite in Indonesia, 1930s-1940s', *Bijdragen tot de Taal-, Land- en Volkenkunde, 152(4):* 609-632, p. 625.

[129] Peter Post, 1996, 'The formation of the pribumi business élite in Indonesia, 1930s-1940s', *Bijdragen tot de Taal-, Land- en Volkenkunde, 152(4):* 609-632, p. 626.

[130] These practices continued to flourish when the Indonesian national government introduced its *Benteng* programme in the 1950s, see discussion in the next section;

Peck-Yang Twang, 1987, *Indonesian Chinese business communities in transformation, 1940-50* (PhD Thesis), Canberra: Australian National University, pp. 57-8, 60.

[131] Peter Post, 1996, 'The formation of the pribumi business élite in Indonesia, 1930s-1940s', *Bijdragen tot de Taal-, Land- en Volkenkunde, 152(4):* 609-632, p. 629.

[132] Peck-Yang Twang, 1987, *Indonesian Chinese business communities in transformation, 1940-50* (PhD Thesis), Canberra: Australian National University, p. 59.

amongst the top ten largest conglomerates in Indonesia in 2016), most of these companies' performances began to wane with the subsequent regime change.[133]

However, the initial policy to secure the supply of strategic products by supporting the producing regions was soon abandoned when a shipping shortage in 1943 caused a reorientation in Japanese policy towards the promotion of regional self-sufficiency in food and manufactured goods to reduce the dependence on imports. Java was chosen to become the main production centre for shipbuilding and other key sectors, while the 'Outer Islands' "reverted to a subsistence mode of production".[134] Japan applied its own economic model of a controlled economy to Indonesia and organized industries into guilds.[135] Restrictions on private rice trade and imports as well as forced labour (more than ten per cent of the Javanese working population in late 1944) led to falling rice production, which with the high procurements by the authorities caused acute shortages and widespread hunger.[136] To focus production on the needs of the war effort tea estates in Java were closed, sugar factories were converted to produce alcohol, butanol or to serve other purposes and the strategic industries subjected to strict regulation.[137]

In August 1945 Japan surrendered and Indonesia's first president Sukarno and his vice president Mohammad Hatto proclaimed Indonesia's independence on 17 August 1945. A violent struggle for independence ensued between the Netherlands Indies Civilian Administration (NICA) and the nationalist movement and with the Renville Agreement reached in January 1948 the country was partitioned into zones

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133 J. Thomas Lindblad, 2007, 'Conglomerates in Indonesia: The road to power and beyond', *in:* Fernandez Jilberto A.E. (Ed.), *Big business and economic development: Conglomerates and economic groups in developing countries and transition economies under globalisation* (pp. 65-85), London/New York: Routledge, p. 67;

The 2016 top ten listing of conglomerates referred to here is measured in terms of market capitalization, see: Indonesia-Investments (2016), 'Corporate Rulers: What are Indonesia's Biggest Conglomerates?', Retrieved September 5 2018 from: https://www.indonesia-investments.com/news/todays-headlines/corporate-rulers-what-are-indonesia-s-biggest-conglomerates/item7085?.

134 Howard W. Dick, 2002, 'Formation of the nation-state, 1930s-1966', *in:* Howard W. Dick, Vincent J.H. Houben, J. Thomas Lindblad and Thee Kian Wie(Eds.), *The Emergence of a National Economy: The Economic History of Indonesia, 1800-2000 (pp. 153-193)*, Honolulu: University of Hawaii Press, pp. 165-166.

135 Howard W. Dick, 2002, 'Formation of the nation-state, 1930s-1966', *in:* Howard W. Dick, Vincent J.H. Houben, J. Thomas Lindblad and Thee Kian Wie(Eds.), *The Emergence of a National Economy: The Economic History of Indonesia, 1800-2000 (pp. 153-193)*, Honolulu: University of Hawaii Press, p. 164.

136 Shigeru Sato, 1994, *War, Nationalism, and Peasants: Java under the Japanese Occupation*, *1942–1945*, Sydney: Allen & Unwin, pp. 135, 154, 156-158.

137 Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, p. 49.

under Dutch control and zones under control of the nationalist movement, with most of the Outer Islands under Dutch control. On 27 December 1949 Queen Juliana of the Netherlands transferred sovereignty over the former Dutch East Indies to Indonesia with the exception of West New Guinea.

An important factor for understanding why Indonesia did not return to the Dutch colonial empire after the end of Japanese rule is the politicisation of the wider indigenous population that had taken place.[138] The Japanese systematically invested into the mass mobilisation of Indonesians to advance the interest of the war effort, which included establishing schools for training officials and teachers, neighbourhood associations, a semi-military youth corps, a vigilance corps for young men and auxiliary forces in which youths received basic Japanese military training. This approach closely mirrored the policies that were pursued in Japan itself.[139] In order to gain popular support the Japanese worked with Sjahrir and Hatta, who had been leading figures in the pre-war nationalist movement. In July 1942 they were joined in Jakarta by Sukarno. In March 1943 the Japanese formed the political organisation PUTERA (*Pusat Tenaga Rakyat*, Center of People's Power), headed by Sukarno, Hatta, Ki Hadjar Dewantra, who had pioneered education for indigenous Indonesians during the Dutch colonial period, and Islamic leader Kyai Haji Mas Mansur.[140] While the organisation was set up by the Japanese authorities in order to promote its war effort, its leaders saw it as an opportunity to set up an organised nationalist front.[141]

At independence, Indonesia was characterised by an abundance of labour but lack of skilled labour, traceable to insufficient investments in education during the colonial period. Even the better-off indigenous families often remained unsuccessful in enrolling their children in the few and expensive Dutch schools, due to a fear of developing an indigenous 'intellectual proletariat' on the part of the Dutch colonial authorities. Only from the 20th century onwards did the government start investing in the expansion of

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138 Howard W. Dick, 2002, 'Formation of the nation-state, 1930s-1966', *in:* Howard W. Dick, Vincent J.H. Houben, J. Thomas Lindblad and Thee Kian Wie(Eds.), *The Emergence of a National Economy: The Economic History of Indonesia, 1800-2000 (pp. 153-193)*, Honolulu: University of Hawaii Press, p. 167.

139 Simon Partner, 2007, 'Daily Life of Civilians in Wartime Japan, 1937-1945', *in:* Stuart Lone (Ed.), *Daily Lives of Civilians in Wartime Asia: From the Taiping Rebellion to the* Vietnam War (pp. 127-158), Westport, CT: Greenwood Press, pp. 135-136, 145-148.

140 M.C. Ricklefs, 2008, *A History of Modern Indonesia since c. 1200*, Basingstoke & New York: Palgrave Macmillan, pp. 236-241.

141 Mavis Rose, 2010, *Indonesia Free: A Political Biography of Mohammad Hatta,* Singapore: Equinox Publishing/Cornell Southeast Asia Program, pp. 163-4.

vernacular language primary schools and village schools (3 years teaching elementary literacy and numeracy).[142] However, the colonial authorities retained a clear division between vernacular language and prestigious Dutch schools. Enrolment rose with the expansion of vernacular language and village schools, but remained low overall and dropout rates high, which has been traced to high fees for tuition and board.[143] Illiteracy at independence was widespread; estimates indicate that 67 per cent of the population was still illiterate in 1947.[144] Not only were the investments made into education insufficient, little continued to be done in terms of providing opportunities for even educated Indonesians, who were rarely given supervisory responsibilities in Dutch firms. Even after 1948, when in preparation for the transfer of national sovereignty it became clear that it was necessary to train and advance Indonesians for leading positions, little was actually done in practice.[145] Along with shortcomings in the Dutch colonial government's efforts to provide schooling, it was unable to foster the emergence of a strong indigenous entrepreneurial class despite the investments into developing a popular credit system.[146]

2.3 Indigenous Entrepreneurship under the Old Order (1949-65)

Sovereignty was only achieved through compromise, mediated by the United Nations Commission for Indonesia (UNCI) and finally reached at the Round Table Conference (RTC) in The Hague. The major concessions included four key issues: First, sovereignty was not transferred to the Indonesian Republic but to the United States of Indonesia (*Republik Indonesia Serikat*, RIS). The RIS comprised the Republic as well as 15 Dutch puppet states, which soon after dissolved themselves and on 17 August 1950 the unitary

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142 Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, pp. 268-74.

143 Anne Booth, 2006, *Economic Change in Modern Indonesia: Colonial and Post-colonial* Comparisons, Cambridge University Press, pp. 55-56.

144 Hoesein Djajadiningrat (new spelling: Husein Jayadiningrat) in S.L. van der Wal, 1961, *Some information on education in Indonesia up to 1942: with a bibliography*, Amsterdam: Netherlands Universities Foundation for International Co-operation, p. 7.

145 Jasper van de Kerkhof, 2009, '"Colonial" enterprise and the indigenization of management in independent Indonesia and Malaysia', *in:* J. Thomas Lindblad (Ed.), *Indonesian economic decolonization in regional and international perspective* (pp. 175-196), Leiden: KITLV Press, pp. 178-9.

146 Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, p. 329.

state of the Republic of Indonesia was born. Second, West New Guinea remained under Dutch control as a result of the Dutch arguing Papuans to be racially, culturally and linguistically different.[147] It was only returned to Indonesia in 31 May 1963. The issue of West New Guinea remained a contested issue and finally led to the breakdown of all relations between the two countries in 1958. [148] Third, Indonesia guaranteed that Dutch businesses could operate in Indonesia without hindrances, including the unrestricted transfers of profits and dividends. Finally, Indonesia took over all pre-war debts of the Dutch colonial administration, comprising 1 billion guilder domestic debt and 3.3 billion guilders external debt, after Indonesia had successfully refused to shoulder an additional 2 billion guilders post-war debt incurred by the NICA. This meant that for the greater part of the 1950s, Indonesia had achieved political, but not economic independence. Most modern sectors were under Dutch ownership and control, many senior officials were Dutch, as was a large part of the Board of Directors of the Java Bank and other important institutions.[149] Thus economic decolonisation was only achieved in 1959 with the nationalisation of Dutch enterprises.[150]

The main objectives for the new government were to transition from a 'colonial economy to a national economy' and the rehabilitation of the physical and industrial infrastructure that had been destroyed during the Japanese occupation and the independence struggle.[151] The policy-makers of the early independence period were influenced by social democratic ideas.[152] Within the first years a shift occurred in 1953 from a pragmatic moderate approach towards ultranationalism, culminating in the transition to Sukarno's 'Guided Economy' and 'socialism à la Indonesia' in 1959, which

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147 Thee Kian Wie, 2003, R*ecollections: The Indonesian Economy, 1950s-1990s,* Singapore: Institute of Southeast Asian Studies, pp. 5-6.

148 Howard W. Dick, 2002, 'Formation of the nation-state, 1930s-1966', *in:* Howard W. Dick, Vincent J.H. Houben, J. Thomas Lindblad and Thee Kian Wie(Eds.), *The Emergence of a National Economy: The Economic History of Indonesia, 1800-2000 (pp. 153-193)*, Honolulu: University of Hawaii Press, pp. 168-171.

149 Thee Kian Wie, 2003, R*ecollections: The Indonesian Economy, 1950s-1990s,* Singapore: Institute of Southeast Asian Studies, pp. 7-8.

150 J. Thomas Lindblad and Peter Post, 2009, 'Indonesian economic decolonization in regional and international perspective', *in:* J. Thomas Lindblad (Ed.), *Indonesian economic decolonization in regional and international perspective* (pp. 1-16), Leiden: KITLV Press, p. 2.

151 Sujono Hadinoto, 1949, *Ekonomi Indonesia: Dari ekonomi kolonial ke ekonomi nasional* [The Indonesian Economy: From a colonial economy to a national economy], Jakarta: Jajasan Pembangunan [Development Association].

152 J. Thomas Lindblad and Peter Post, 2009, 'Indonesian economic decolonization in regional and international perspective', *in:* J. Thomas Lindblad (Ed.), *Indonesian economic decolonization in regional and international perspective* (pp. 1-16), Leiden: KITLV Press, p. 3.

nationalised key sectors of production supplying basic needs.[153] A key term coined by John O. Sutter to describe the growing nationalism was *Indonesianisasi*. *Indonesianisasi* referred to the 'conscious effort to increase the participation and elevate the role of the Indonesian – and more particularly the 'indigenous Indonesian – in the more complex sectors of the economy'.[154] In order to foster indigenous entrepreneurship, the government introduced the *Benteng* (Fortress) Programme in April 1950. The programme restricted import licenses for certain commodities to indigenous legally registered importers. Official eligibility requirements were: working capital of at least IDR 100,000, of which 70 per cent had to be in indigenous Indonesian hands and an office space large enough for several employees who had previous working experience.[155] While the programme did not technically exclude Sino-Indonesians, its objective has been said to limit the power of Dutch as well as Chinese economic interests.[156]

The *Benteng* programme has generally been criticised for its widespread corruption and ineffectiveness, given that foreign importers worked through so called "briefcase importers" or "Ali Baba companies", indigenous entrepreneurs that only formally acted for Dutch and Chinese entrepreneurs in order to circumvent the nationality requirement.[157] Furthermore licenses were also distributed to people who lacked the necessary business experience and thus had to turn to Chinese traders for assistance. Rather than fostering an indigenous business class, the programme had strengthened "a group of socially unproductive rent-seekers" by the time it was

153 John O. Sutter, 1959, *Indonesianisasi: A historical survey of the role of politics in the institutions of a changing economy from the Second World War to the eve of the general election, 1940-1955* (PhD Thesis), Ithaca, N.Y.: Cornell University, p. 1190.

154 Sutter, 1959, *Indonesianisasi: A historical survey of the role of politics in the institutions of a changing economy from the Second World War to the eve of the general election, 1940-1955* (PhD Thesis), Ithaca, N.Y.: Cornell University, p. 2.

155 Thee Kian Wie, 2006, 'The Indonesian Government's Economic Policies towards the Ethnic Chinese: Beyond Economic Nationalism?', *in:* Leo Suryadinata (Ed.), *Southeast Asia's Chinese Businesses in an Era of Globalization: Coping with the Rise of China* (pp. 76-101), Singapore: Institute of Southeast Asian Studies, p. 81 .

156 Thee Kian Wie, 2003, R*ecollections: The Indonesian Economy, 1950s-1990s,* Singapore: Institute of Southeast Asian Studies, p. 12.

157 Jan Luiten van Zanden and Daan Marks, 2012, *An Economic History of Indonesia, 1800-2010,* Abingdon: Routledge, p. 146; Note that it has been speculated, that these Ali Baba companies have originated in the period of Japanese military rule, when ethnicity requirements for *kumiais* have led to strategic business cooperation between official Indonesian managers and Chinese businessmen - see: Peck-Yang Twang, 1987, *Indonesian Chinese business communities in transformation, 1940-50* (PhD Thesis), Canberra: Australian National University, pp. 58, 60.

abandoned in the late 1950s.[158] Yet Lindblad showed that during the 1950s many new indigenous business firms were founded in the shadow or even despite the Benteng policy.[159]

It has been argued that the attempt to limit the economic power of foreigners by strengthening indigenous entrepreneurship was abandoned with the nationalisation of Dutch enterprises after 1958. The ensuing move towards a 'guided economy' was accompanied by a hostile view of private capitalism, leaving indigenous entrepreneurs facing an unconducive business environment.[160] Lindblad found that with this shift, private enterprises grew increasingly dependent on political connections.[161] In the context of *Benteng*, this shift particularly disadvantaged small-scale traders, who tended to lack these important political connections. [162] By the mid-1960s inflation was rising, output was stagnating and incomes declining except for a small group of rent-seekers. At the same time hunger and malnutrition spread due to growing population pressure and falling rice production per capita.[163]

On 30 September 1965 an alleged coup by the Indonesian Communist Party (*Partai Kommunis Indonesia*, PKI) was suppressed by the military. The bloody power struggle that ensued between the army and the PKI led to the effective dissolution of the party and compromised the power of President Sukarno while consolidating the power of General Suharto. Suharto, who was the Commander of the Army Strategic Reserve Command at the time, took over power from Sukarno in March 1966.[164] This rise of power can only be understood by looking at the role of the military in Indonesian society: the military had played an increasing role in entrepreneurial activities

158 Thee Kian Wie, 2003, R*ecollections: The Indonesian Economy, 1950s-1990s,* Singapore: Institute of Southeast Asian Studies, pp. 12-3; Thee Kian Wie, 2012, *Indonesia's Economy since Independence,* Singapore: Institute of Southeast Asian Studies, pp. 32, 34.

159 J. Thomas Lindblad, 2010, 'Economic Growth and Decolonisation in Indonesia', *Itnerario, 34(Special Issue 1):* 97-112, p. 106.

160 Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, p. 315.

161 J. Thomas Lindblad, 2007, 'Conglomerates in Indonesia: The road to power and beyond', *in:* Fernandez Jilberto A.E. (Ed.), *Big business and economic development: Conglomerates and economic groups in developing countries and transition economies under globalisation* (pp. 65-85), London/New York: Routledge, p. 70.

162 Richard Robison, 1986, *Indonesia: The Rise of Capital*, Singapore: Equinox Publishing, pp. 44-46.

163 Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, p. 71; M.C. Ricklefs, 2008, *A History of Modern Indonesia since c. 1200*, Basingstoke & New York: Palgrave Macmillan, pp. 273-4.

164 Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, pp. 72-3.

since 1945 so that by the late 1950s 'conducting business and being in the military had become two sides of the same coin' and the army had become part of the ruling elite.[165]

2.4 Educational Expansion in Post-Independence Indonesia

Given the critical assessment that one of major shortcomings of the Dutch authorities was the insufficient investment into education for Indonesians, it is important to reflect on the educational expansion of Indonesia post-Independence. Increasing school enrolment became a priority in newly independent Indonesia as a means to strengthen its people but also to promote unity under the nationalist agenda. The 1945 Indonesian Constitution enshrined the right to education as well as introduced mandatory basic education, putting the onus of funding on the government.[166] Law 12/1954 defined how this new educational policy was to be implemented. In the preamble of Law 12/1954, the Indonesian legislator emphasized that this educational policy was to be completely different from the educational system established by the Dutch, which they felt was "not rooted in Indonesian society" and had largely excluded the average Indonesian, and should instead be based on Indonesian culture and national character.[167] Accordingly the 1950s saw a rapid expansion in educational infrastructure.[168]

With the change in government in the late 1960s came considerable progress in the expansion of education.[169] Key policies by the Suharto regime include the 1974 Presidential Instruction that decreed 'a primary school [should be built] in every village' (*SD INPRES Program*), which led to the construction of 60,000 primary school just

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165 J. Thomas Lindblad and Peter Post, 2009, 'Indonesian economic decolonization in regional and international perspective', *in:* J. Thomas Lindblad (Ed.), *Indonesian economic decolonization in regional and international perspective* (pp. 1-16), Leiden: KITLV Press, p. 5; Harold Crouch, 2007, *The Army and Politics in Indonesia, Singapore:* Equinox Publishing, p. 23.

166 *Undang-Undang Dasar Negara Republik Indonesia Tahun 1945*, Bab XIII, Pasal 31 (The 1945 Constitution of the Republic of Indonesia, Chapter 8, Article 31).

167 Translated from Law No 12/1954, Preamble, Paragraphs 3, 7 and 8.

168 Tatang Suratno, 2014, 'Le système éducatif indonésien à l'heure d'importants changements', *Revue internationale d'éducation de Sèvres, colloque: L'éducation en Asie en 2014: Quels enjeux mondiaux ?,* Retrieved April 20 2019 from: http://journals.openedition.org/ries/3821, p. 1.

169 Hal Hill, 1997, *Indonesia's Industrial Transformation*, Singapore: Institute of Southeast Asian Studies, p. 217; Anne Booth, 1992, 'Introduction' *in: The Oil Boom and After: Indonesian Economic Policy and Performance in the Soeharto Era* (pp. 1-38), New York: Oxford University Press, p. 30.

between 1973-8, and making primary education (six years) compulsory in 1984, which was extended to nine years with the 1989 National Education System Law.[170] Both policies were targeted at children who had not been enrolled in school, hence the SD INPRES programme listed how many schools were to be built in each district proportional to the 1972 number of school-aged children not yet enrolled (see **Table 6**).[171]

[170] Chris Manning and Sudarno Sumarto, 2011, 'Employment, Living Standards and Poverty: Trends, Policies and Interactions', in *Employment, Living Standards and Poverty in Contemporary Indonesia* (pp. 1-22), Singapore: Institute of Southeast Asian Studies, p. 12; Suharti, 2013, 'Trends in Education in Indonesia', in Daniel Suryadarma and Gavin W. Jones (Eds.), *Education in Indonesia* (pp. 15-52), Singapore: Institute of Southeast Asian Studies, p. 15; UNESCO IBE, 2011, *World Data on Education, 7th Edition, 2010/11: Indonesia*.

[171] Esther Duflo, 2001, 'Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment', *The American Economic Review, 91(4)*: 795-813, p. 797.

Table 6: Primary Schools built under the SD INPRES Programme, 1973-76

Province	Phase I (1973-4)	Phase II (1974-5)	Phase III (1975-6)	Share of total (1973-6)	Schools built per 1,000 population (1973-6)
JAVA	**3,910**	**3,837**	**5,880**	**61.94%**	**0.17**
DKI Jakarta	200	78	200	2.17%	0.10
DI Yogyakarta	85	85	150	1.45%	0.13
East Java	1,415	1,438	1,925	21.72%	0.18
Central Java	1,050	1,063	1,845	17.99%	0.18
West Java	1,160	1,173	1,760	18.60%	0.18
SUMATRA	**865**	**872**	**2,000**	**16.99%**	**0.17**
DI Aceh	135	135	190	2.09%	0.22
Bengkulu	50	50	45	0.66%	0.25
Jambi	50	50	130	1.05%	0.21
Lampung	130	130	255	2.34%	0.16
Riau	80	80	170	1.50%	0.19
North Sumatra	180	187	790	5.26%	0.17
South Sumatra	150	150	210	2.32%	0.14
West Sumatra	90	90	210	1.77%	0.13
SULAWESI	**420**	**420**	**660**	**6.82%**	**0.17**
North Sulawesi	85	85	130	1.36%	0.17
Central Sulawesi	65	65	80	0.95%	0.21
Southeast Sulawesi	50	50	70	0.77%	0.22
South Sulawesi	220	220	380	3.73%	0.15
KALIMANTAN	**375**	**375**	**675**	**6.48%**	**0.26**
East Kalimantan	75	75	60	0.95%	0.25
Central Kalimantan	85	85	95	1.20%	0.35
South Kalimantan	95	95	280	2.14%	0.27
West Kalimantan	120	120	240	2.18%	0.23
BALI	**90**	**90**	**230**	1.86%	**0.19**
EASTERN INDONESIA	**340**	**406**	**555**	**5.91%**	**0.19**
East Nusa Tenggara	105	105	115	1.48%	0.14
West Nusa Tenggara	130	130	305	2.57%	0.24
Maluku	55	55	60	0.77%	0.15
Papua	50	116	75	1.10%	0.25
INDONESIA	**6,000**	**6,000**	**10,000**	**100.00%**	**0.18**

Sources: Data on number of primary schools built from Hussin, 1978, *Indonesia: Innovation in the Management of Primary School Construction – a Case Study* (Educational Building Report 8), Bangkok: UNESCO Regional Office for Education in Asia and Oceania, Table 11; Population figures from BPS, Population Census (1971, 1980).

Notes: Per capita figures calculated with population for 1973 extrapolated with 1971 and 1980 population.

These investments are visible in the overall improvements in highest educational attainments, as reflected in Figure 5. By 1988 Indonesia is said to have achieved nearly universal primary school enrolment.[172] The World Bank called the INPRES primary

[172] Daniel Suryadarma, 2011, 'The Quality of Education: International Standing and Attempts at Improvement', in: Chris Manning and Sudarno Sumarto (Eds.), *Employment, Living Standards and Poverty in Contemporary Indonesia* (pp. 161-182), Singapore: Institute of Southeast Asian Studies, p. 161.

school construction programme 'one of the most successful cases of large-scale school expansion on record.'[173]

On the methodological side it has to be noted that the implication of focusing on the age group of 20 to 40 year-olds is that the effects of policy changes can only be observed 13 years later, e.g. the primary school expansion from 1973 is only reflected in the 1990 census data, as compulsory primary school enrolment age in Indonesia was age seven until 2003 when it was lowered to age six with Law on the National Education System No. 20/2003. Primary schooling was six years and lower and higher secondary school took three years of schooling respectively. The share of 20 to 40 year-olds with no formal schooling or less than six years continuously falls from 1980 onwards and the share of people with secondary or higher educational qualifications rose over the same period, both at the Indonesian average as well as island group level (see Figure 5). Yet while the New Order government has managed to improve the quantity of schooling, quality of schooling continues to lag behind that of neighbouring countries.[174]

The results at the island level show that Java is closest to the Indonesian average for every year, which is unsurprising given that it is home to close to two thirds of the Indonesian population and hence drives the overall results in Figure 5. At the other end, Eastern Indonesia stands out as the worst performer 1980-2010. These results are strongly driven by Papua, which is also the only island that moves away from the national average more starkly with each census through the entire period. However, strong variation is not only observable between islands but at the provincial level the differences vary equally within islands (see Figure 6). Generally the average length of education increases for most provinces throughout the entire period; the only exceptions are East Nusa Tenggara, Maluku and Papua, all of which manage to return

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173 The World Bank, 1990, *Indonesia: Strategy for a Sustained Reduction in Poverty (A World Bank Country Study)*, Washington, DC: The World Bank, p. 79.

174 Thee Kian Wie, 2006, 'Policies Affecting Indonesia's Industrial Technology', *ASEAN Economic Bulletin, 23(3):* 341-59, p. 350;

For an example Daniel Suryadarma's study comparing test results in an international standardised mathematics test between 1999 and 2007 of Indonesia to Malaysia, Singapore and Thailand: Daniel Suryadarma, 2011, 'The Quality of Education: International Standing and Attempts at Improvement', in: Chris Manning and Sudarno Sumarto (Eds.), *Employment, Living Standards and Poverty in Contemporary Indonesia* (pp. 161-182), Singapore: Institute of Southeast Asian Studies, pp. 164-165;

See also Sameer Al-Samarrai and Pedro Cerdan-Infantes, for similar results comparing results of the Programme for International Student Assessment (PISA): Sameer Al-Samarrai and Pedro Cerdan-Infantes, 2013, 'Where Did all the Money Go? Financing Basic Education in Indonesia' in Daniel Suryadarma and Gavin W. Jones (Eds.), *Education in Indonesia* (pp. 109-138), Singapore: Institute of Southeast Asian Studies, pp. 118-120.

to their high averages of 1976 (in which they are among the four leading provinces) only by 2005. This initial drop in average years of schooling between 1976 and 1985 (capturing people who would have attended school between the early 1940s and around 1965) corresponds to an increase in the share of 20 to 40 year-olds with no schooling between 1971 and 1980 in all three provinces. The Ministry of Education and Culture ascribed low enrolment and high dropout rates in Eastern Indonesia to lacking school facilities and high teacher absenteeism in remote areas or areas plagued by political difficulties, but this fails to explain why these provinces still fared relatively well in 1976.[175]

Jones, using data from the 1971 census, found that in the early years under the New Order some regional differences could be accounted for by colonial legacies, in particular the strength of Maluku and North Sulawesi on the one hand and the lagging performances of Central and East Java, Bali and South Sulawesi on the other.[176] Looking at the percentage of population with completed primary education ranked by age group and province in 1971, Maluku and North Sulawesi ranked highest for all age groups over 50 and amongst the top four for all younger age groups. Conversely the lagging performers ranked at the bottom for all age groups in 1971 for general population and proportion of females with completed primary education.[177] He ascribes the early success of Maluku and North Sulawesi to well established Christian missions with a strong interest in education as well as a high ratio of government schools to population.[178] Jones offers a number of reasons for the high ratio of government schools, but the most relevant here is that both regions were under direct rule of the colonial government. This also explains the relative weakness of Java (see its performance in 1971 in Figure 5), where the Dutch ruled indirectly through local rulers.[179] South Sulawesi also had a high proportion of Christians, but conversion had been relatively late with a large wave during the 1950s and 1960s and hence it did not have the same degree of longstanding investment into education by missionaries as did other Christian-dominated areas. Turning to the last weak performer, Bali's low literacy

[175] Ministry of Education and Culture (MOEC), 2013, *Overview of the Education Sector in Indonesia: Achievement and Challenges,* Jakarta: MOEC, p. 43.

[176] Gavin Jones, 1994, 'Labour force and education' in Hal Hill (Ed.), *Indonesia's New Order: The Dynamics of Socio-Economic Transformation* (pp. 145-178), St Leonards: Allen & Unwin, p. 161.

[177] Gavin Jones, 1976, 'Religion and Education', *Indonesia, 22*: 19-56, p. 51, Tables 6 and 7.

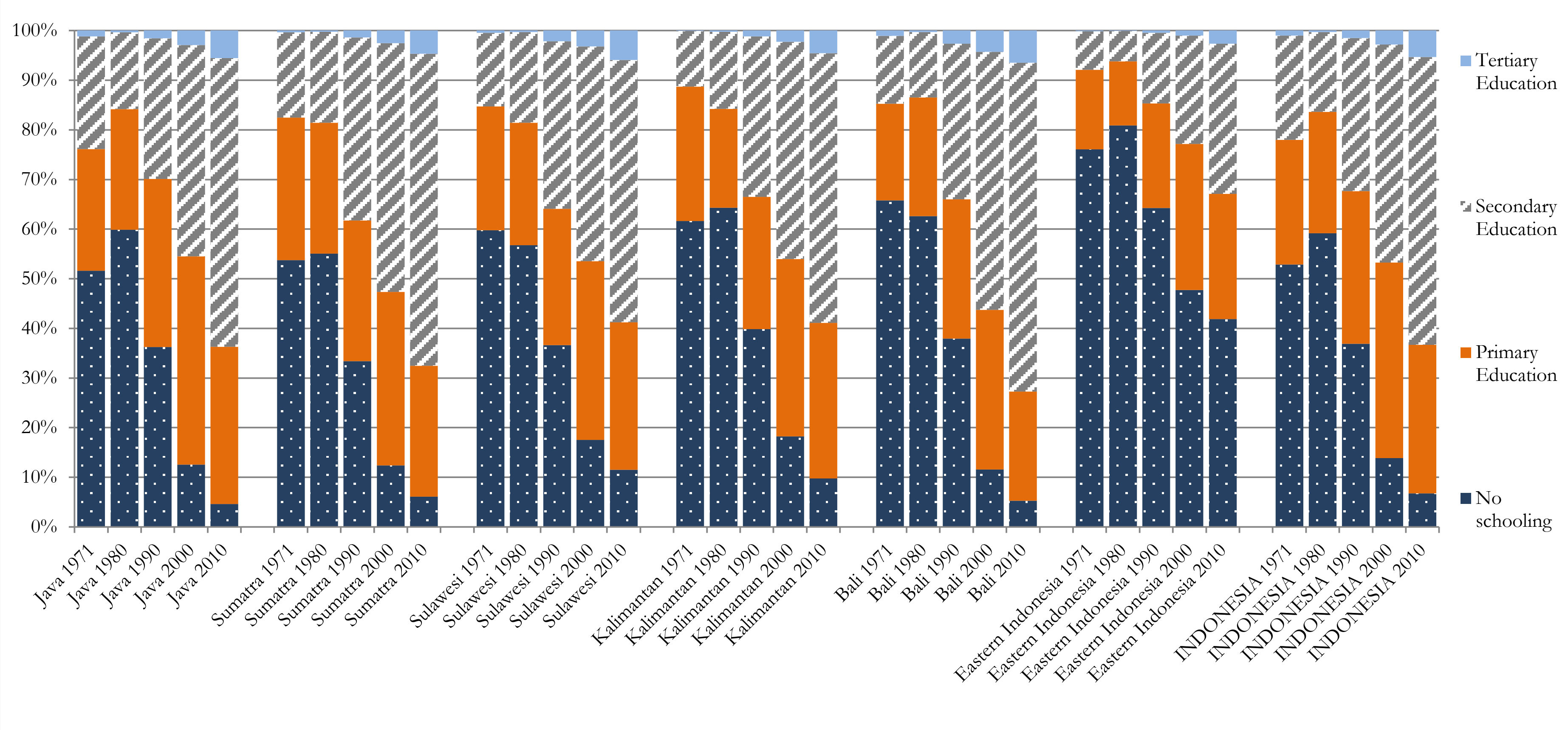
[178] Gavin Jones, 1976, 'Religion and Education', *Indonesia, 22*: 19-56, pp. 38-9.

[179] Gavin Jones, 1976, 'Religion and Education', *Indonesia, 22*: 19-56, p. 39.

rates during this period, he argues, could be ascribed to its feudal social structures that 'militated against the spread of popular education'.[180] But the trends at the provincial level further into the New Order period show not just catch-up but some significant changes.

[180] Gavin Jones, 1976, 'Religion and Education', *Indonesia, 22*: pp. 25, 35, 44.

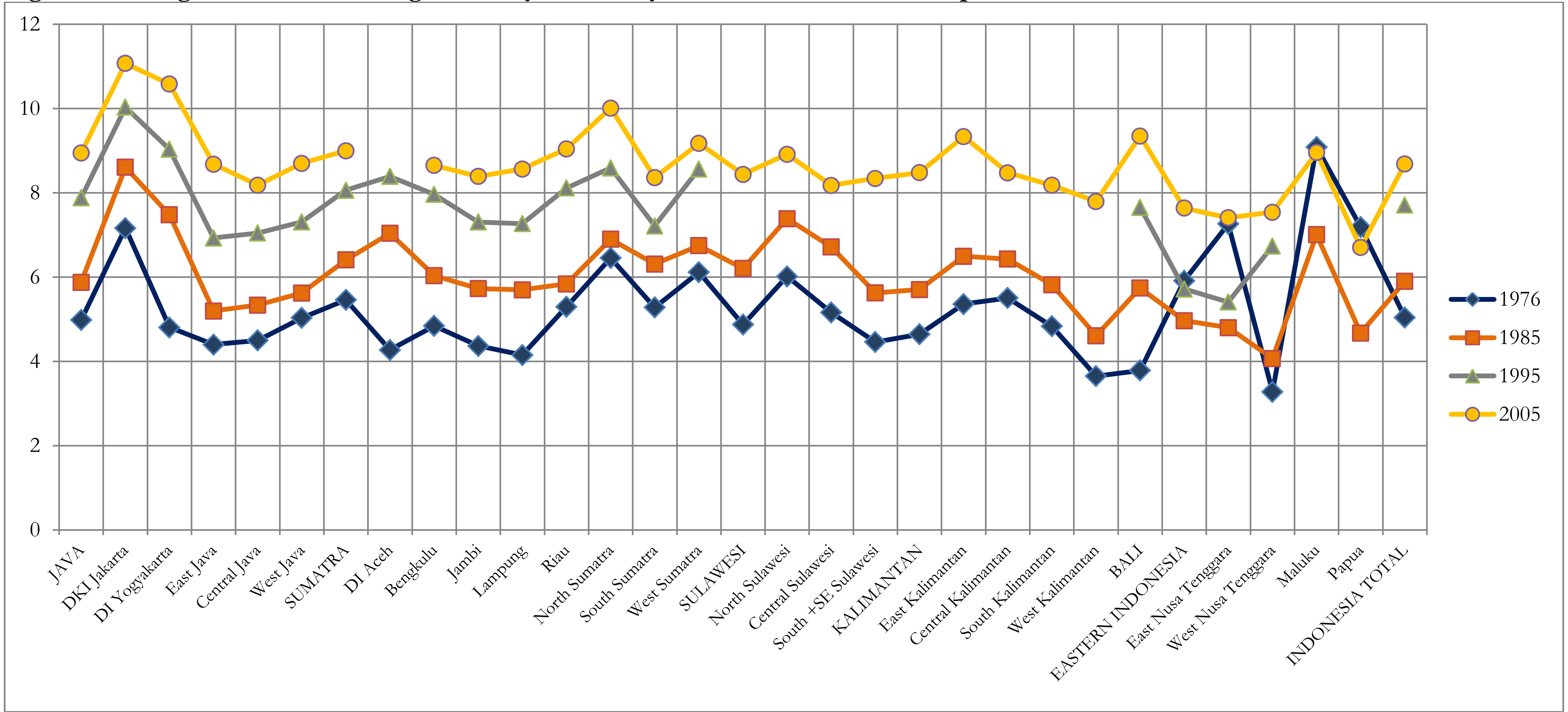
Figure 5: Shares of Highest Educational Attainment of 20-40 Year-olds by Island Group and for Indonesia Total, 1971-2010



Data source: BPS, Population Censuses (1971, 1980, 1990, 2000, 2010), Microdata from Census Subsamples obtained from Minnesota Population Center, 2015, *Integrated Public Use Microdata Series, International: Version 6.4 [Machine-readable database]*, Minneapolis: University of Minnesota.

Note: The figures here exclude all observations for which the highest educational attainment is unknown. 'No schooling' encompasses both, no formal schooling whatsoever as well those who have received some schooling but have not completed their primary education; 'primary education' here is 6 years; 'secondary education' encompasses lower secondary general and technical tracks, secondary general and technical tracks, post-secondary technical education and some college completed; 'tertiary education' only covers those who completed a university degree.

Figure 6: Average Years of Schooling of 20-40 year-olds by Province and Island Groups, 1976-2005



Source: BPS, Intercensal Population Surveys (SUPAS 1976, 1985, 1995, 2005), Microdata from Census Subsamples obtained from Minnesota Population Center, 2015, *Integrated Public Use Microdata Series, International: Version 6.4 [Machine-readable database]*, Minneapolis: University of Minnesota.

Note: Island Groups are in capital letters; no data reported in 1995 for Kalimantan, Maluku and Sulawesi and in 2005 for DI Aceh; using figures from the intercensal population survey instead of the population censuses as the microdata subsamples report no average years of schooling for 1971 and 2000.

Between 1990 and 2010 both South Sulawesi and Bali had higher shares of 20-40 year olds who completed tertiary education than either North Sulawesi or Maluku. By the late 20th century, South Sulawesi is listed as one of the 'major regional centres of higher education'.[181] The changes in tertiary education in the Outer Islands can be traced to the rise of provincial universities. Mackie dates the turning point to around 1958, up to which a few national universities dominated, in particular the University of Indonesia, which grew out of a medical institute founded in 1849 by the Dutch in Jakarta, and Gadjah Mada University, founded in 1949 in Yogyakarta.[182] Higher education expanded rapidly during the New Order, from 10 institutions in 1950 to 450 in 1970 and 900 in 1990 and even more rapidly in the post-Sukarno era counting 2,975 institutions by 2009. 97 per cent of higher education institutions in 2009 were private and covered 42.9 per cent of all students enrolled.[183]

Teacher qualifications remained an issue throughout the New Order period and thereafter.[184] During the Old Order only a teacher training programme in junior high school was required to become a teacher. In the 1970s this was changed to a senior high school degree for primary school teachers and a university degree for secondary school teachers.[185] Only with Law No. 14/2005 on Teachers and Lecturers were all teachers required to hold a Bachelor's degree. A joint study by the Indonesian government and the World Bank found that teacher quality actually declined during the New Order as a result of the sudden increase in demand for teachers that came with the rapid expansion of primary schools.[186] Esther Duflo studied the effects of the SD Inpres School Construction Programme 1973-1978 on education and wages of 23-45 year-old men in 1995. She found that while quality of education, in terms of quality of teaching, may

181 Hal Hill, 2000, *The Indonesian Economy (Second Edition),* Cambridge University Press, p. 234; Joel Kuipers, 2011, 'The Society and Its Environment' in William Frederick and Robert Worden (Eds.), *Indonesia: A Country Study (pp. 95-162),* Washington D.C.: Federal Research Division, Library of Congress, p. 156.

182 J.A.C. Mackie, 1980, 'Integrating and centrifugal factors in Indonesian politics since 1945' in *Indonesia: Australian Perspectives, Volume 3: The Making of a Nation* (pp.669-684), Canberra: Research School of Pacific Studies, Australian National University, p. 681.

183 Joel Kuipers, 2011, 'The Society and Its Environment' in William Frederick and Robert Worden (Eds.), *Indonesia: A Country Study (pp. 95-162),* Washington D.C.: Federal Research Division, Library of Congress, p. 154.

184 Ministry of Education and Culture (MOEC), 2013, *Overview of the Education Sector in Indonesia: Achievement and Challenges,* Jakarta: MOEC, p. 44.

185 Joel Kuipers, 2011, 'The Society and Its Environment' in William Frederick and Robert Worden (Eds.), *Indonesia: A Country Study (pp. 95-162),* Washington D.C.: Federal Research Division, Library of Congress, p. 152.

186 Fasli Jalal et al, 2009, *Teacher Certification in Indonesia: A Strategy for Teacher Quality Improvement*, Washington, DC: World Bank, pp. 10-12.

have suffered as a result of the government intervention, overall these losses did not offset the gains in quantity of education as it increased education levels as well as wages.[187]

Research suggests that regional differences in education decreased during the New Order period as a result of the government policies described above, which aimed at expanding the educational system.[188] Jones suggests that part of the catch up was in particular the result of more 'even-handed development' with considerable improvement in female educational attainment, which is in line with the World Bank's findings.[189] Gaps in illiteracy also narrowed between urban and rural areas as well as between the rich and the poor.[190] The World Bank found that between 1978 and 1987 the poorest 40 per cent of the population made improvements in all education levels, but particularly at secondary and even tertiary level given the already high levels of primary enrolment in 1978.[191] Duflo's study of the labour market consequences of the SD INPRES programme showed that educational advancements were higher in regions exposed to the programme and demonstrated that these improvements were causally linked to the programme. She also demonstrated that the regional selectivity of the programme was based on where enrolment was lowest prior to the programme. From this it follows that part of the catch up seen in this section can be attributed to the success of New Order government's policies aimed at expanding the education system.[192] However, while gaps have narrowed, differences in education remained, in particular relative to low performing Eastern Indonesia.

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187 Esther Duflo, 2001, 'Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment', *The American Economic Review, 91(4)*: 795-813, p. 812.

188 Hal Hill, 2000, *The Indonesian Economy (Second Edition),* Cambridge University Press, p. 234.

189 Gavin Jones, 1994, 'Labour force and education' in Hal Hill (Ed.), *Indonesia's New Order: The Dynamics of Socio-Economic Transformation* (pp. 145-178), St Leonards: Allen & Unwin, pp. 161-2; The World Bank, 1993, *Indonesia - Public expenditures, prices and the poor*, Washington, DC: World Bank, p. 15.

190 Suharti, 2013, 'Trends in Education in Indonesia', in Daniel Suryadarma and Gavin W. Jones (Eds.), *Education in Indonesia* (pp. 15-52), Singapore: Institute of Southeast Asian Studies, p. 21.

191 The World Bank, 1993, *Indonesia - Public expenditures, prices and the poor*, Washington, DC: World Bank, p. 15.

192 Esther Duflo, 2004, 'The medium run effects of educational expansion: evidence from a large school construction program in Indonesia', *Journal of Development Economics, 74:* 163-197, p. 166.

2.5 Sino-Indonesian Entrepreneurship

Sino-Indonesian entrepreneurs played a different role in the Indonesian economy than their indigenous Indonesia counterparts during the colonial period and were of considerable importance later amongst the leading business conglomerates, which had largely grown from smaller firms. Sino-Indonesian-owned SMEs seem to have developed more successfully than indigenous SMEs in terms of penetrating export markets and growing into successful larger enterprises. Some of the largest business conglomerates that were to emerge in the 1980s grew out of Sino-Indonesian SMEs. Indigenous SMEs not only rarely seem to have grown into successful conglomerates; so few enterprises managed to grow past an apparent ceiling that it has been suggested that there is a distinct 'missing middle' in the Indonesian business landscape, something that will be explored later in this thesis. The root causes for these different trajectories can, according to Glassburner, be found in the foundations laid by the Dutch colonial state.[193]

The colonial government strengthened the position of Sino-Indonesian SMEs by encouraging them to take over middlemen functions between Dutch trading companies and indigenous farmers, thereby managing the financial and trading network.[194] In comparison with indigenous Indonesians, Sino-Indonesians also generally occupied much higher positions in Dutch companies. Indonesians were largely limited to low-skilled positions providing manual labour.[195] Another important development under the Dutch colonial leadership was the advantage Sino-Indonesians gained in terms of education. Even better-off indigenous families often remained unsuccessful in enrolling their children in the few and expensive Dutch schools, due to a fear of developing an indigenous 'intellectual proletariat'. In response to this exclusion, the Chinese Association (Tiong Hoa Hwee Koan) set up schools modelled after the Japanese primary school system in 1901. As a result the colonial government, fearing loss of control over the education system, responded by establishing Dutch schools for

193 Bruce Glassburner, 2007, *The Economy of Indonesia: Selected Readings*, Singapore: Equinox Publishing, p. 9.

194 Bruce Glassburner, 2007, *The Economy of Indonesia: Selected Readings*, Singapore: Equinox Publishing, pp. 8-9.

195 Jasper van de Kerkhof, 2009, '"Colonial" enterprise and the indigenization of management in independent Indonesia and Malaysia', *in:* J. Thomas Lindblad (Ed.), *Indonesian economic decolonization in regional and international perspective* (pp. 175-196), Leiden: KITLV Press, p. 178.

Sino-Indonesians from 1907 onwards.[196] When Indonesia gained independence, the average educational level of Sino-Indonesians was considerably higher than that of the indigenous population.[197] This arguably contributed to the development of a skill premium for Sino-Indonesians.

When analysing the role of Sino-Indonesians, the common distinction between *Peranakan Tionghua*, Indonesians of Chinese descent more integrated in and assimilated to Indonesia, and *Totok,* Indonesians of Chinese descent still primarily oriented towards mainland China, has to be acknowledged.[198] The change of roles in the economy between these two groups occurred during Japanese occupation, when the businesses owned by integrated *Peranakan* Sino-Indonesians struggled.[199] Instead, businesses run by young Chinese men, predominantly Hokchia and Hokkien, began to flourish.[200] According to Glassburner, only half of Sino-Indonesians belong to the former, more integrated group. But in times of political tension even that distinction tends to be ignored.[201]

Until the 1970s, most Sino-Indonesian enterprises in Indonesia were SMEs. This has been linked to the constricting economic policies during the Dutch colonial era and then the unfavourable stance towards non-*pribumi* (indigeneous) businesses that characterised the 1950s and early 1960s.[202] Despite the difficulties for Chinese living in Indonesia (e.g. violent anti-Chinese movements in the 1960s) the Sino-Indonesian business community remained, or grew even stronger.[203] However, while the majority

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196 Leo Suryadinata, 1972, 'Indonesian Chinese Education: Past and Present', *Indonesia, 14:* 49-71, pp. 52-4.

197 Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, p. 274.

198 Jamie Mackie, 2003, 'Pre-1997 Sino-Indonesian conglomerates, compared with those of other ASEAN countries', *in:* Jomo K.S. and Brian C. Fold (Eds.), Ethnic Business: Chinese capitalism in Southeast Asia (pp. 105-128), London: Routledge, p. 109.

199 Peck-Yang Twang, 1987, *Indonesian Chinese business communities in transformation, 1940-50* (PhD Thesis), Canberra: Australian National University, p. 83.

200 Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, p. 313.

201 Bruce Glassburner, 2007, *The Economy of Indonesia: Selected Readings*, Singapore: Equinox Publishing, p. 9.

202 Jamie Mackie, 2003, 'Pre-1997 Sino-Indonesian conglomerates, compared with those of other ASEAN countries', *in:* Jomo K.S. and Brian C. Fold (Eds.), Ethnic Business: Chinese capitalism in Southeast Asia (pp. 105-128), London: Routledge, p. 109.

203 J. Thomas Lindblad, 2007, 'Conglomerates in Indonesia: The road to power and beyond', *in:* Fernandez Jilberto A.E. (Ed.), *Big business and economic development: Conglomerates and economic groups in developing countries and transition economies under globalisation* (pp. 65-85), London/New York: Routledge, p. 70; Jamie Mackie, 2003, 'Pre-1997 Sino-Indonesian conglomerates, compared with those of other ASEAN

continues to be engaged in SMEs, Sino-Indonesian entrepreneurs slowly began playing a more important role amongst large enterprises and in one year (1992) the top ten largest business conglomerates in Indonesia (measured in sales) had all been founded by Sino-Indonesians (see **Table 7**). However, while Sino-Indonesian conglomerates constituted the overwhelming majority, there were also important *pribumi*-owned companies, such as Bimantra, which was in the top 10 in 1993.[204] Almost all of these Sino-Indonesian conglomerates had developed out of SMEs, which leads to the question as to why Sino-Indonesian SMEs seem to have been able to grow past the ceiling that seems to have constrained *pribumi*-owned businesses.[205] Many point to access to finance as the main distinguishing factor, but the role of networks seems to play a role of at least equal importance. Closely tied with this issue is the observation that the majority of these Sino-Indonesian-owned business groups were in the hands of *Totok* Chinese (the distinction used to describe less integrated, first or second generation Sino-Indonesians, as noted above).[206]

countries', *in:* Jomo K.S. and Brian C. Fold (Eds.), Ethnic Business: Chinese capitalism in Southeast Asia (pp. 105-128), London: Routledge, p. 110.

[204] Hal Hill, 2000, *The Indonesian Economy (Second Edition),* Cambridge University Press, p. 113, Table 6.7.

[205] Jamie Mackie, 2003, 'Pre-1997 Sino-Indonesian conglomerates, compared with those of other ASEAN countries', *in:* Jomo K.S. and Brian C. Fold (Eds.), Ethnic Business: Chinese capitalism in Southeast Asia (pp. 105-128), London: Routledge, 2003, p. 110.

[206] Jamie Mackie, 2003, 'Pre-1997 Sino-Indonesian conglomerates, compared with those of other ASEAN countries', *in:* Jomo K.S. and Brian C. Fold (Eds.), Ethnic Business: Chinese capitalism in Southeast Asia (pp. 105-128), London: Routledge, 2003, p. 124.

Table 7: Top 10 Business Conglomerates in Indonesia, 1992

Ranking	Business Group	Principal activities	Founder (Chinese name)	Established	No of affiliated companies in 1990	Total sales (in billion IDR)	Share of sales of 100 largest business groups (%)
1	Salim	Cement, finance, automotives, agro-industry	Soedono Salim (Chinese name: Liem Sioe Liong)	Late 1950s	427	20,000	18.5
2	Sinar Mas	Agro-industry, pulp and paper, finance	Eka Tjiptu Widjaja (Chinese name: Oey Ek Tjhong)	1962	153	6,700	6.2
3	Astra	Automotives, estates	William Soeryadjaya (Chinese name: Tjia Kian Liong)	1957	285	6,564	6.1
4	Lippo	Finance	Mochtar Riady (Chinese name: Lee Mo Tie)	1950s	70	4,241	3.9
5	Gudang Garam	*Kretek* (clove) cigarettes	Rachman Halim (Chinese name: Tjoa To Hing)	1958	11	3,290	3.0
6	Djarum	*Kretek* cigarettes	Robert Budi Hartono (Chinese name: Oei Hwie Tjhong	1951	21	2,600	2.4
7	Dharmala	Agro-industry, real estate	Suhargo Gondokusumo (Chinese name: Go Ka Him)	1954	77	2,300	2.1
8	Bob Hasan	Timber, estates	Mohamad Hasan (Chinese name: The Kian Seng)	1970	25	2,196	2.0
9	Barito Pacific	Timber	Prajogo Pangestu (Chinese name: Phang Djung Phin)	1979	32	2,050	1.9
10	Argo Manunggal	Textiles	The Ning King	1977	50	2,040	1.9
Total						**51,981**	**48.2**

Sources: Table adapted from Yuri Sato, 1993, 'The Salim Group in Indonesia: The Development and Behavior of the Largest Conglomerate in Southeast Asia', *The Developing Economies, 31(4):* 408-441, p. 409, Table 1; principal activities from Hal Hill, 2000, *The Indonesian Economy (Second Edition),* Cambridge University Press, p. 113; data on date of establishment from Hainan Jinhai Pulp & Paper CO., LTD (n.d.), 'Group Introduction', Retrieved March 9 2015 from: http://www.appjh.com.cn/en/corp2.html; Indonesia-Investments (n.d.), 'Astra International', Retrieved March 9 2015 from: http://www.indonesia-investments.com/business/indonesian-companies/astra-international/item192; Lippo Securities Limited (n.d.), 'Lippo Group', Retrieved March 9 2015 from: http://www.lipposec.com/about-lippo/lippo-group; Indonesia-Investments (n.d.), 'Gudang Garam', Retrieved March 9 2015 from: http://www.indonesia-investments.com/business/indonesian-companies/gudang-garam/item198; PT Djarum (n.d.), 'World of Djarum: History of Djarum', Retrieved March 9 2015 from: http://www.djarum.com/world-of-djarum/history-of-djarum/; Christopher M. Barr, 1998, 'Bob Hasan, the Rise of Apkindo, and the Shifting Dynamics of Control in Indonesia's Timber Sector', *Indonesia, 65:* 1-36, p. 11; PT Barito Pacific (n.d.), 'About us: We Are Barito Pacific', Retrieved March 9 2015 from: http://www.barito.co.id/index.php/about/index/3; Argo Pantes Tbk (n.d.), 'Profile', Retrieved March 9 2015 from: http://argo.co.id/profile.html; Philippe Lasserre, 1992, 'The Coming of Age of Indonesian-Chinese Conglomerates: National, Regional or Global Players?', *Euro-Asia Centre Research Series, 13:*1-18, Fontainebleau Cedex: Euro-Asia Centre, INSEAD, pp. 4, 6.

To understand the role of the Chinese in the Indonesian economy, it is important to consider the share of the population they constituted. In 1800 the total number of Chinese living in Indonesia was estimated to have been around 100,000 and to have changed little until 1850.[207] However, **Table 8** shows the sudden growth that occurred during the late Dutch colonial period, so that between 1860 and 1930 the ethnic Chinese constituted the largest non-indigenous Ethnic group in Indonesia. By 1930, Sino-Indonesians constituted 1.4 per cent of the total population of Java and Madura. However, they constituted an even larger share (3.4%) of the population of the Outer Islands, particularly concentrating along the East Coast of Sumatra, West Borneo, Riau and Bangka, in the latter of which they made up almost 45%.[208]

[207] D.H. Burger, 1975, *Sociologisch-Economische Geschiedenis van Indonesia, deel II, Indonesia in de 20e eeuw* [The socio-economic history of Indonesia, Part II, Indonesia in the 20th century], Amsterdam: Koninklijk Instituut voor de Tropen, p. 4.

[208] Dutch East Indies, 1936, *Volkstelling 1930, Deel VIII, Overzicht voor Nederlandsch-Indië/Census of 1930 in the Netherlands Indies, Volume VIII, Summary of the Volumes I-VIII,* Batavia: Landsdrukkerij/Department van Economische Zaken, p. 37.

Table 8: Population Growth of Ethnic Groups in the Netherlands Indies, 1860-1930

	Indonesian (Indigenous)	European[a]	Chinese	Others	Total
Java & Madura					
1860	12,514,262	n/a	149,424	6,133[b]	
1880	19,540,813	n/a	206,931	10,506[b]	
1885	21,190,626	n/a	221,959	11,429[b]	
1890	23,609,312	54,511	242,111	14,293[b]	23,920,227
1895	25,370,545	61,299	256,055	16,238[b]	25,704,137
1900	28,386,121	71,893	277,265	18,051[b]	28,753,330
1905	29,978,558	72,919	295,193	19,148[b]	30,365,818
1920	34,428,711	133,743	383,614	31,022[c]	34,977,090
1930	40,891,093	192,571	582,431	52,269[d]	41,718,364
Outer Islands					
1860	n/a	n/a	72,014	2,446[b]	
1880	n/a	n/a	136,862	5,519[b]	
1885	n/a	n/a	159,793	5,821[b]	
1890	n/a	18,779	218,978	7,347[b]	
1895	n/a	19,994	213,469	8,172[b]	
1900	n/a	19,209	260,051	9,348[b]	
1905	n/a	21,178	268,256	10,440[b]	
1920	13,870,973	34,371	425,425	34,736[c]	14,365,505
1930	18,246,974	47,846	650,783	63,266[e]	19,008,869
Netherlands Indies (Total)					
1930	59,138,067	240,417	1,233,214	115,535	60,727,233

Notes: [a] 'Europeans' in the 1930 census includes Westerners, e.g. Americans and other foreigners considered "on a parity" with Europeans, e.g. Japanese, Egyptians (but not Chinese).[209] The figures presented here are thus an overestimation of actual European presence;
[b] Figure only includes Arabs
[c] Figure only includes Arabs and Indians;
[d] Out of this total, 41,730 people were of Arab and 5,536 people of Indian origin;
[e] Out of this total, 29,605 people were of Arab and 24,482 people of Indian origin.
Sources: Dutch East Indies, 1936, *Volkstelling 1930, Deel VIII, Overzicht voor Nederlandsch-Indië/Census of 1930 in the Netherlands Indies, Volume VIII, Summary of the Volumes I-VIII,* Batavia: Landsdrukkerij/Department van Economische Zaken, Tables 1, 3 and 4.

The only censuses to ask about ethnic background were the 1930 Population Census and then the 2000 and 2010 Population Censuses. It is difficult to estimate how many ethnic Chinese lived in post-colonial Indonesia. While official statistics are almost

[209] Dutch East Indies, 1933, *Volkstelling 1930, Deel VI, Europeanen in Nederlandsch-Indië/Census of 1930 in the Netherlands Indies, Volume VI, Europeans in Netherlands India,* Batavia: Landsdrukkerij/Department van Economische Zaken, p. 1.

certainly significantly underestimated, the ethnic Chinese remained only a small ethnic minority in Indonesia as the following estimates show. The 2000 Population Census asked about ethnicity but only reported the eight respective largest groups, which meant that the national statistics did not contain information on how many ethnic Chinese lived in Indonesia. In 11 Indonesian provinces the ethnic Chinese constituted one of the eight largest ethnic groups, Suryadinata et al have analysed provincial reports and estimated the share of ethnic Chinese in the remaining 19 provinces, coming to the conclusion that the census data indicated that 1.05 to 1.10 per cent of Indonesian citizens self-identified as ethnic Chinese, with an additional 0.05 per cent of foreigners in Indonesia identifying as Chinese.[210]

The main issue with this data is that it relies on self-identification. Relying on self-identification is difficult given the incentives to deny Chinese origins, best illustrated by the violent outbreaks against the Chinese during Indonesia's struggle for independence, during the anti-Communist purges between 1965-66 and the anti-Chinese riots of May 1998, as well as persistent widespread anti-Chinese sentiments. It is particularly important to note that the 1998 riots happened only two years before the 2000 Population Census enumeration. The other issue is that the question posed by enumerators only allowed respondents to provide one ethnicity, posing a challenge to all Indonesian nationals with mixed ethnic heritage. Suryadinata et al estimate that when adjusting for under-reporting in self-identification the true share of ethnic Chinese in the Indonesian population in 2000 was somewhere between 1.45 and 2.04 per cent.[211] Mackie discusses Suryadinata et al's estimates and the 2000 Population Census data collection, acknowledging Suryadinata et al's contribution Mackie points to a number of overlooked reasons which further bias against self-identifying as Chinese. Mackie also emphasizes issues in relying on census data, given that assumptions for the remaining 19 provinces could only be made using 11 provinces where the Chinese were part of the eight largest ethnic groups.[212] Mackie concludes it would be delusional to assume "that

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210 Leo Suryadinata, Evi Nurvidya Arifin and Aris Ananta, 2003, *Indonesia's Population: Ethnicity and Religion in a Changing Political Landscape*, Singapore: Institute of Southeast Asian Studies, pp. 75-77.

211 Leo Suryadinata, Evi Nurvidya Arifin and Aris Ananta, 2003, *Indonesia's Population: Ethnicity and Religion in a Changing Political Landscape*, Singapore: Institute of Southeast Asian Studies, p. 78.

212 Jamie Mackie, 2005, 'How many Chinese Indonesians?', *Bulletin of Indonesian Economic Studies, 41(1)*:97-101, pp. 98, 100.

figures of this kind can ever be much more than well-informed guesses" and suggests a rough working estimate of 2.5 to 3 per cent.[213]

2.6 Conclusion

The general industrial and specific SME policies of the political regimes governing Indonesia through the 20th century were distinctly different across time. The late colonial regime (1900-1945) saw the need to strengthen the indigenous entrepreneurial class but provided little opportunity for Indonesians to gain business experience within Dutch firms, in which they rarely occupied managerial positions. Despite the investments into developing a popular credit system from 1901 onwards, the Dutch colonial government was unable to foster the emergence of a strong indigenous entrepreneurial class.

While the investments made under Japanese rule to strengthen and create opportunities for indigenous entrepreneurs may have been insufficient or of too short duration to develop a flourishing indigenous entrepreneurial class, little has been done to actually understand the impact of Japanese rule in this area. More research is required in the contribution of the Japanese to indigenous entrepreneurship as well as to structural changes in sectoral employment and the general business landscape. One of the few exceptions is the work of Lindblad, who linked some firms which flourished during the Sukarno period to the business opportunities they managed to take advantage of during Japanese occupation.[214]

The Sukarno regime sought to promote indigenous entrepreneurship to limit the economic power wielded by foreigners, in particular the Dutch and the Chinese, through measures requiring shares of capital or seats on the managerial boards of firms in selected industries to be in the hands of indigenous Indonesians. In reality however these measures remained largely ineffective, were plagued by corruption, and rather

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213 Jamie Mackie, 2005, 'How many Chinese Indonesians?', *Bulletin of Indonesian Economic Studies, 41(1)*:97-101, p. 101.

214 J. Thomas Lindblad, 2007, 'Conglomerates in Indonesia: The road to power and beyond', *in:* Fernandez Jilberto A.E. (Ed.), *Big business and economic development: Conglomerates and economic groups in developing countries and transition economies under globalisation* (pp. 65-85), London/New York: Routledge, p. 67.

than strengthening the Indonesian entrepreneurial class fostered the growth of a small group of rent-seekers. By 1958 the regime therefore abandoned its attempts to strengthen indigenous entrepreneurs and instead focussed on nationalising foreign enterprises and bringing key sectors under the control of state-owned enterprises, thereby creating an unfavourable environment for private business. A small indigenous business elite did emerge during the 1950s, but largely depended on political and military connections.[215] During the Sukarno period the main limitation for private enterprises and industrial development in general was not just access to finance or the limited opportunities for technology transfers, but the inability to take advantage of technology transfer or knowledge spillover programmes designed to develop indigenous entrepreneurship offered (e.g. the *Benteng* programme) because of the shortcomings in education and vocational training.

SMEs owned by Sino-Indonesian entrepreneurs have been argued to have fared comparatively better than indigenous firms.[216] It may be suggested that the opportunities for knowledge spillovers, or for constructing backward and forward linkages, were very different for Sino-Indonesians and indigenous Indonesians. The underlying importance is reflected in the role these concepts have played in the East Asian industrialisation model in general, as well as in SME development in particular (e.g. see the vertical and horizontal subcontracting system in Taiwan that encouraged coordinated technical spillovers that resulted in highly competitive SMEs).[217] The supposed success of Sino-Indonesian entrepreneurship has motivated this research.

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215 J. Thomas Lindblad, 2011, 'Emerging Business Elites in Newly Independent Indonesia', *in:* Jost Dülffer and Marc Frey (Eds.), *Elites and Decolonization in the Twentieth Century* (pp. 74-93), Basingstoke & New York: Palgrave Macmillan, pp. 80-81, 85, 91.

216 Jamie Mackie, 2003, 'Pre-1997 Sino-Indonesian conglomerates, compared with those of other ASEAN countries', *in:* Jomo K.S. and Brian C. Fold (Eds.), Ethnic Business: Chinese capitalism in Southeast Asia (pp. 105-128), London: Routledge, 2003, p. 110.

217 Yeo Lin, 2003, 'Industrial Structure, Technical Change, and the Role of Government in Development of the Electronics and Information Industry in Taipei, China', *ERD Working Paper No. 41,* Manila: Asian Development Bank, p. 7.

Chapter 3: A New Order of the Indonesian Business Landscape? Finding and Understanding the Missing Middle, 1966-1998

Indonesia is counted as one of the Southeast Asian Tigers, yet its similarities and distinguishing characteristics relative to the Tiger economies remain understudied. In the World Bank's *East Asian Miracle Report* Indonesia was grouped together with Malaysia and Thailand into the 'Southeast Asian Tiger economies' club for having followed similar industrialisation strategies as the East Asian Tiger economies.[218] The East Asian industrialisation model is characterised by state-led industrialisation that moves from import substitution towards export oriented growth, employing a number of policy tools, most prominently the promotion of selected industries by providing infant industry protection. In the case of Indonesia, Suharto and his New Order government began to restructure the economy after he came to power in 1966. The government's development objectives were published in a series of five-year economic development plans since 1969, which included setting out economic growth targets and industrial policy goals.[219] While the rise of business conglomerates, similar to Korea, and the strength of state-owned enterprises, similar to Taiwan, have both become key features of the Indonesian business landscape, it is less clear how these changes have affected the overall business landscape. Addressing the questions of how firm size distribution changed, how the role of SMEs developed and the role government policies played in these processes helps to understand the wider structural changes that the Indonesian economy underwent during the New Order period and its interventionist policies.

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[218] The World Bank, 1993, *The East Asian Miracle: Economic Growth and Public Policy,* New York: Oxford University Press, p. 1; The Philippines have since often been added to that grouping; see Shahid Yusuf and Kaoru Nabeshima, 2009, *Tiger Economies Under Threat: A Comparative Analysis of Malaysia's Industrial Prospects and Policy Options (Volume 566)*, Washington, DC: The World Bank, pp. 2-3.

[219] Widjojo Nitisastro, 2011, The Indonesia Development Experience: A Collection of Writings and Speeches of Widjojo Nitisastro, Singapore: Institute of Southeast Asian Studies, pp. 105, 108.

This chapter looks at the developments within the New Order period (1966-1998), during which Indonesia underwent rapid industrial transformation. The value added by industry outgrew the value added of agriculture in 1975 and continued its relative increase thereafter, reflecting the rapid rise of the industrial sector and the slow decline of agriculture (see **Table 9**). Industrial policy under the New Order regime can be grouped into three episodes: (1) The first phase of import substitution from 1967 until the mid-1970s, during which the import of consumer goods was discouraged with the help of non-tariff barriers and replaced with domestic goods. (2) The second phase of import substitution from the late 1970s until the end of the oil boom in 1982, during which the government focussed on providing infant industry protection to selected basic capital-intensive upstream industries, thus placing "the burden of industrialization" on the government. (3) The fall of oil prices in 1982 severely limited government revenues; in response the policy regime transitioned from import-substitution to export-oriented industrialisation and introduced tax reforms, trade liberalisation and financial sector deregulation.[220] Until this point the government's strategy was to drive industrialisation by promoting state-owned enterprises and providing subsidized targeted credit, but with the cuts in government revenue the government began to promote a competitive private sector. Prominently, the 1980s saw the rise of large business conglomerates. However, it is less clear how overall firm size distribution was affected.

Table 9: Value Added by Economic Sector (share of GDP)

	1966	1975	1986	1996	2006
Agriculture	50.8	30.2	24.2	16.7	13.0
Industry (Manufacturing)	11.9 (9.3)	33.5 (9.8)	33.7 (16.7)	43.5 (25.6)	46.9 (27.5)
Services	37.3	36.3	42.0	39.9	40.1

Source: The World Bank, 2017, *World Development Indicators*, Washington, D.C.: The World Bank, http://data.worldbank.org/data-catalog/world-development-indicators

It is commonly argued that Indonesia's small firms stay small and large firms are born large.[221] Such a gap in firm-size distribution is generally referred to as a 'missing

220 Thee Kian Wie, 2012, *Indonesia's Economy since Independence,* Singapore: Institute of Southeast Asian Studies, pp. 149-158.

221 Thee Kian Wie, 1994, 'Indonesia', *in:* Saha Dhevan Meyanathan (Ed), *Industrial Structures and the Development of Small and Medium Enterprise Linkages: Examples from East Asia* (pp. 95-122), Washington D.C.: The World Bank (Economic Development Institute of the World Bank Seminar Series), pp. 98-99; Albert

middle'.[222] Indonesia's 'missing middle' and the perceived inability of indigenous Indonesian-owned firms to grow, especially vis-à-vis Sino-Indonesian businesses, has been highly politicised and subject to recurring heated public discourse since the Dutch colonial period and is still an issue today. The narrative of Sino-Indonesian owned firms being able to grow, surpassing a glass ceiling that limits the growth and potential of indigenous Indonesian-owned firms, is seemingly supported by the dominance of Sino-Indonesian ownership among Indonesia's largest conglomerates which evolved during the New Order period. However, in reality the ethnic Chinese only constituted a very small share of the Indonesian population, far too small for it to be statistically possible that all successful enterprises were under ethnic Chinese ownership.[223]

How did the overall firm-size distribution and role of SMEs in the Indonesian manufacturing sector really evolve during the industrial transformation Indonesia underwent during the New Order period? To address this larger question this chapter is broken down into four research questions. The first question is whether the Indonesian manufacturing sector really suffered from a missing middle during the New Order period. To empirically establish the existence of a missing middle this chapter uses provincial data on number of manufacturing firms and workers by firm-size category from the Industrial Census 1974/75 and decadal Economic Censuses (1986-2006). I then compare Indonesia with South Korea and Taiwan, two economies pursuing similar industrial developmental models to Indonesia with distinct firm-size distributions. The second research question is what role SMEs played in the Indonesian economy, how it changed during the New Order period and how it varied between regions by looking at value-added per worker, share of exports and industrial subsectors. Using the same

Berry and Brian Levy, 1999, 'Technical, Marketing and Financial Support for Indonesia's Small and Medium Industrial Exporters', *in:* Levy, Berry and Nugent (Eds.), *Fulfilling the Export Potential of Small and Medium Firms* (pp. 31-72), New York: Springer Science+Business Media, p. 31; OECD, 2012, *OECD Economic Surveys: Indonesia 2012,* Paris: OECD Publishing, pp. 81-82; Chris Hall, 2002, *Profile of SMEs and SME Issues in APEC, 1990-2000*, for the APEC Small and Medium Enterprises Working Group in cooperation with PECC (Pacific Economic Cooperation; Council), Singapore: World Scientific Publishing (on behalf of the APEC Secretariat), p. 33.

222 Alex Coad and Jagannadha Tamvada, 2008, 'The Growth and Decline of Small firms in Developing Countries', *Papers on Economics and Evolution, 2008(#0808):*1-33, pp. 2-3; James Tybout, 2000, Manufacturing Firms in Developing Countries: How Well Do They Do, and Why?, *Journal of Economic Literature, 38(1)*:11-44, pp. 15-17; Leo Sleuwaegen and Micheline Goedhuys, 2002, Growth of firms in developing countries, evidence from Côte d'Ivoire, *Journal of Developing Economies, 68(1):* 117-135, p. 118.

223 For a discussion of issues with official census figures and the reasoning behind this estimate see: Jamie Mackie, 2005, 'How many Chinese Indonesians?', *Bulletin of Indonesian Economic Studies, 41(1)*:97-101, p. 101.

census data I constructed the first regional database measuring value added per worker for the New Order period. This step takes the supposed advantages attributed to Chinese entrepreneurship in Indonesia, able to form dynamic SMEs which grow past an apparent glass ceiling, as a starting point to analyse the role of SMEs more broadly. The third research question identifies the main barriers to growth and looks at how government schemes have addressed these. Finally, the fourth research question looks at the impact of the Asian financial crisis. The perceived resilience of SMEs during the 1997/8 crisis resulted in a new interest in strengthening SMEs and their contribution to economic stability and development. Many authors pointed to the strength the Taiwanese SME-based economy displayed relative to the hit taken by the chaebols-dominated Korean economy.[224] Similarly Indonesian SMEs have also been found to have fared better during the crisis than their larger counterparts.[225] However, this general assessment obscures the actual experience of SMEs during the crisis, which varied considerably between locations, industries and other factors. By using the 2006 census, this chapter looks at the crisis resilience of SMEs and identifies groups that have fared well and others that have suffered.

A case study of the manufacturing sector suggests itself for two reasons. The industrial transformation Indonesia underwent under Suharto's leadership may be assumed to have led to large-scale structural changes in the business landscape of manufacturing firms. The second reason is of a more practical nature: for the New Order period the data on the non-agricultural economy is best for the manufacturing sector: the Economic Censuses have been conducted every ten years since 1986 and were preceded by the Industrial Census (1964 and 1975/5). The Economic Censuses have been surprisingly underutilised in existing work on Indonesian SMEs or other firm-size groupings, in particular their potential for a regionally disaggregated analysis has barely been exploited. Most research instead uses the annually published Industrial Statistics (*Statistik Industri*), which only provide information on medium and large

224 Gary Gregory, 2002, 'Promoting SMEs in Korea: Government Response to the Asian Financial Crisis', *in:* Charles Harvie and Boon-Chye Lee (Eds.), *The Role of SMEs in National Economies in East Asia* (pp. 238-268), Cheltenham: Edward Elgar Publishing Limited, pp. 247-8; Matt Ngui, 2002, 'Government Policies and Programs for Small and Medium Enterprises in Taiwan', *in:* Charles Harvie and Boon-Chye Lee (Eds.), *The Role of SMEs in National Economies in East Asia* (pp. 269-297), Cheltenham: Edward Elgar Publishing Limited, p. 269.

225 Lisa Cameron, 1999, 'Survey of Recent Developments', *Bulletin of Indonesian Economic Studies, 35(1):*3-40, p. 17.

enterprises. Furthermore, the manufacturing sector was the only sector for which the definition of firm size did not change between censuses, but was based on number of employees throughout the period 1974-2006 (small enterprises were defined as establishments with 5-19 employees and medium enterprises as establishments with 20-99 employees). The 1986 Economic Census provides information on number of establishments according to firm-size category for the manufacturing sector; for the other non-agricultural sectors the number of establishments is neither disaggregated by firm-size measured by number of workers or annual turnover (both of which are available for all sectors in the 1996 census). This means that a meaningful country-level analysis of changes in firm-size distribution during the New Order is only possible for the manufacturing sector.

This study contributes to the larger debate on the missing middle in firm-size distribution, which was sparked by Tybout's seminal work on the missing middle in developing countries. Tybout found that many developing countries' manufacturing sectors exhibit a missing middle, with many informal microenterprises and cottage industries on the one end and the strength of a few large modern firms on the other.[226] Hsieh and Olken subsequently wrote about the missing "missing middle", calling Tybout's findings into question and instead observing a missing top.[227] A missing top describes a firm-size distribution skewed towards very many very small firms. Underlying this debate are both different working definitions of the missing middle as well as differences in measuring firm-size distribution. Here the case of Indonesia is of particular interest, given that it is widely acknowledged that the vast majority of its manufacturing firms are microenterprises and cottage industries. Yet this chapter shows that medium and large firms contribute the vast majority of the manufacturing sector's value added during the New Order period. The tension in the current debate is between studies that find a missing middle and those that argue that developing countries, including Indonesia, suffer from a missing top.[228] To contextualise the

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[226] James Tybout, 2000, Manufacturing Firms in Developing Countries: How Well Do They Do, and Why?, *Journal of Economic Literature, 38(1)*:11-44, p. 15.

[227] Chang-Tai Hsieh and Benjamin Olken, 2014, 'The Missing "Missing Middle"', *Journal of Economic Perspectives, 28(3):* 89-108.

[228] Studies of Indonesian SMEs that find a missing middle: Thee Kian Wie, 1994, 'Indonesia', *in:* Saha Dhevan Meyanathan (Ed), *Industrial Structures and the Development of Small and Medium Enterprise Linkages: Examples from East Asia* (pp. 95-122), Washington D.C.: The World Bank (Economic Development Institute of the World Bank Seminar Series), pp. 98-99, Albert Berry and Brian Levy, 1999, 'Technical,

Indonesian data, this dissertation compares Indonesia to South Korea and Taiwan, two developed countries which, while pursing similar industrialisation strategies, represent two archetypes in terms of the structural composition of industry: Korea has been dominated by large business conglomerates (chaebols), whereas Taiwan's economy has been SME-based.

3.1 Industrial Policy under the New Order

If we accept that Indonesia is a Southeast Asian Tiger we would expect a move from import-substitution towards export orientation, increased income equality and therefore, arguably, a stronger role of SMEs. All the Tiger economies, with the exception of Hong Kong, moved from import-substituting policies towards export-orientation. The Southeast Asian Tigers used different policy instruments and focused on more general reductions of import protection and providing export credit rather than the 'highly selective interventions' that characterised the East Asian Tiger economies' approaches. Yet the general shift from import-substitution towards export orientation was still observable in the policies of the Southeast Asian Tigers in the late twentieth century. In the East Asian growth model rapid economic growth was accompanied by increased income equality as well as building a business-friendly environment.[229] According to the World Bank's East Asian Miracle report, one of the features of the East Asian growth model was the 'principle of shared growth'. Wealth was shared with the middle and poor classes through land or other agricultural reforms, but also by encouraging SME development through targeted support-policies.

Marketing and Financial Support for Indonesia's Small and Medium Industrial Exporters', *in:* Levy, Berry and Nugent (Eds.), *Fulfilling the Export Potential of Small and Medium Firms* (pp. 31-72), New York: Springer Science+Business Media, p. 31; OECD, 2012, *OECD Economic Surveys: Indonesia 2012,* Paris: OECD Publishing, pp. 81-82; Chris Hall, 2002, *Profile of SMEs and SME Issues in APEC, 1990-2000*, for the APEC Small and Medium Enterprises Working Group in cooperation with PECC (Pacific Economic Cooperation; Council), Singapore: World Scientific Publishing (on behalf of the APEC Secretariat), p. 33.

Studies arguing for a missing missing middle: (using post-New Order period data) Alexander Rothenberg, Arya Gaduh, Nicholas Burger, Charina Chazali, Indrasari Tjandraningsih, Rini Radikun, Cole Sutera and Sarah Weilant, 2016, 'Rethinking Indonesia's Informal Sector', *World Development, 80:* 96-113.

[229] The World Bank, 1993, *The East Asian Miracle: Economic Growth and Public Policy,* New York: Oxford University Press, pp. 2-4, 12-14.

The New Order government's policies fall into several policy sub-periods, the different industrial policy regimes go hand in hand with the evolution of Indonesia's regional development policies. In his first years of power (1966-1969) Suharto focussed on rehabilitation and stabilisation; during this period regional development objectives were catered to only in so far as they strengthened national unity. The period from the 1970s to the end of the second oil boom in 1982 were marked by import substitution in terms of industrial strategy, which was accompanied by an increase in regulation and the emergence of the strong developmental state. This translated into regional development policies which aimed at promoting income equality and equitable distribution of welfare gains as well as the increase of presidential instructions to expand regional development programmes to ensure access to basic education and healthcare for all. The fall in oil prices in the early 1980s severely limited Indonesian government revenues, to which the government responded with trade liberalisation, deregulation and export orientation to encourage private business growth. This cut in government revenues was reflected in spending on regional development programmes and a shift in economic development goals towards achieving self-reliance, in terms of financing and resource needs, and reducing the country's dependence on oil. From the fourth economic development plan onwards (Repelita IV, 1984-89) investments into health and education were linked to the goal of increasing human capital to have a skilled and more productive workforce.[230]

3.2 Government Support for SMEs

Most governments provide policy support to SMEs based on the perception that they are important economic actors, who can further harness their potential to contribute to economic development through targeted support, highlighting efficiency considerations. By contrast, many observers argue that Indonesian SME policy was instead motivated

[230] Republik Indonesia, 1984, *Rencana Pembangunan Lima Tahun Keempat 1984/85 – 1988/89* [Fourth Five-Year Development Plan], Jakarta: Republik Indonesia, Buku I (Book 1), Bab 1 (Chapter 1), p. 62; Republik Indonesia, 1989, *Rencana Pembangunan Lima Tahun Kelima 1989/90 – 1993/94* [Fifth Five-Year Development Plan], Jakarta: Republik Indonesia, Book 1, Chapter 1, p. 30; Republik Indonesia, 1994, *Rencana Pembangunan Lima Tahun Keenam 1994/90 – 1998/99* [Sixth Five-Year Development Plan], Jakarta: Republik Indonesia, Book 1, Chapter 3, pp. 128-9.

by welfare and equity considerations.[231] Strengthening SMEs, it is argued, fosters indigenous entrepreneurship, which has been a continuing concern ever since independence.[232] This was based on the assumption that specifically small enterprises were owned by economically weak Indonesians and supporting this sector would weaken the economic dominance of foreigners, including and in particular the strength of Sino-Indonesians.[233]

The New Order regime was much friendlier towards private business development than its predecessors. It had inherited some tough challenges from its predecessors, such as a weak economy, high currency volatility, low overall education and mass malnourishment - and its view was that indigenous entrepreneurship and MSMEs should be strengthened based on welfare and equity.[234] This stance was in part a product of its past and thus part of its institutional path dependence. It was also sought as a means to address inequality in income and opportunities and create employment in a country that was characterised by large socio-economic disparities and faced increasing population pressure.

The first policy initiatives of the New Order aimed at small-scale businesses were made in the early 1970s, after the first years of the regime had focused on rehabilitation and securing economic, social and political stability with a strong sectoral focus on agriculture.[235] SME policies throughout the New Order period were clearly motivated by welfare considerations and their employment creation potential, the latter being a general concern, in particular in light of the rising population pressure in some

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231 Thee Kian Wie, 2006, 'Policies for Private Sector Development in Indonesia, *ADB Institute Discussion Paper, 46:* 1-46, p. 27; Hal Hill, 2001, 'Small and Medium Enterprises in Indonesia: Old Policy Challenges for a New Administration', *Asian Survey, 41(2):* 248-270, pp. 248-9; Berry et al, 2001, pp. 377-8.

232 Peter McCawley, 1981, 'The Growth of the Industrial Sector', *in:* Anne Booth and Peter McCawley (Eds.), *The Indonesian Economy During the Soeharto Era* (pp. 62-101), Kuala Lumpur: Oxford University Press, p. 91.

233 Thee Kian Wie, 2006, 'Policies for Private Sector Development in Indonesia, *ADB Institute Discussion Paper, 46:* 1-46, p. 27; Booth, 1998, p. 315.

234 Thee Kian Wie, 2006, 'Policies for Private Sector Development in Indonesia, *ADB Institute Discussion Paper, 46:* 1-46, p. 27; Hal Hill, 2001, 'Small and Medium Enterprises in Indonesia: Old Policy Challenges for a New Administration', *Asian Survey, 41(2):* 248-270, pp. 248-9; Albert Berry, Edgard Rodriguez and Henry Sandee, 2001, 'Small and Medium Enterprise Dynamics in Indonesia', *Bulletin of Indonesian Economic Studies, 37(3):* 363-384, pp. 377-8.

235 Republik Indonesia, 1968, *Rentjana Pembangunan Lima Tahun 1969/70 – 1973/74* [Five-Year Development Plan], Jakarta: Departemen Penerangan R.I. [Ministry of Information, Republic of Indonesia], Book 1, Chapter 1, pp. 11-13, 15.

areas (Java and Bali in particular) and uneven regional development, which meant lack of opportunities in many remote areas. A further key motive behind the Indonesian government's SME support was to support indigenous entrepreneurship. The idea of the weak indigenous enterprise in need of government support had already motivated the Old Order government to introduce the (largely unsuccessful) *Benteng* (Fortress) Programme in 1950, which restricted import licenses for certain commodities to legally registered indigenous importers. "Indigenous enterprise" and "indigenous entrepreneurship" is used in Indonesian policy discourse to draw an implicit distinction with other private Indonesian enterprises and entrepreneurship, in particular those owned by Indonesians of Chinese descent, a historically small but economically active minority in Indonesia.

The narrative of the weak indigenous enterprise resurfaced in the New Order's second five-year development plan (Repelita II, 1974/75-1978/79) and remained a recurring theme in the New Order's subsequent development plans. In these five-year development plans support for SMEs was justified as a measure to aid weak economic groups, in particular indigenous groups. Repelita III (1979-84) for example foresaw the introduction of lending programmes for small businesses in government banks, which are to 'actively seek and nurture small businesses owned by economically weak groups.[236] The rapid expansion in volume and number of these programmes is summarised in **Appendix Table 45**, the most important of which are analysed in detail in Chapter 4. The third five-year development plan argued for the support of small business because of their labour intensive nature; strengthening small businesses was expected to contribute to regional development.[237] Repelita IV (1984-89) was the first five-year development plan that proposed measures to improve the processing capability of small businesses to increase the role of indigenous Indonesians through skill development and thereby increase the value added of small businesses. Repelita IV also introduced measures to encourage subcontracting between small, medium and large enterprises.[238] Repelita V (1989-94) announced that the Indonesian economy had

236 Republik Indonesia, 1979, *Rencana Pembangunan Lima Tahun Ketiga 1979/80 – 1983/84* [Third Five-Year Development Plan], Jakarta: Republik Indonesia, Book 1, Chapter 6, p. 256.

237 Republik Indonesia, 1979, *Rencana Pembangunan Lima Tahun Ketiga 1979/80 – 1983/84* [Third Five-Year Development Plan], Jakarta: Republik Indonesia, Book 1, Chapter 6, p. 249.

238 Republik Indonesia, 1984, *Rencana Pembangunan Lima Tahun Keempat 1984/85 – 1988/89* [Fourth Five-Year Development Plan], Jakarta: Republik Indonesia, Book 1, Chapter 7, pp. 326-7.

arrived at the last stage before take-off; for this the development plan foresaw the need to invest into skill development of the Indonesian labour force to meet the economy's need for a highly- and semi-skilled labour force.[239] To strengthen small businesses the government announced increased cooperation between state-owned enterprises and small businesses. Repelita VI (1994-1999) focused on measures to encourage a more productive labour force. SMEs were to be strengthened, in part to address the persistent issue of un- and underemployment.[240]

These motives stand in stark contrast to efficiency goals often cited as reasons why governments should support SMEs. The motivation behind SME support policies matters in so far as it had direct implications for the target groups defined by the policies. SME promotion can intend to foster a dynamic and innovative SME sector, but then the target group rarely includes cottage and household industries and programmes often screen for SMEs with growth potential. However, in the case of Indonesia policies were in effect aimed to support entrepreneurs selected on grounds of hardship and welfare rather than on promise of entrepreneurial success.

There is a rich history of the various government schemes that have been introduced in Indonesia to support SMEs. Credit schemes such as the Small Enterprise Development Programmes KIK/KMKP provided investment and working capital respectively between 1971 and 1990, as did the Small Enterprises Credit Programme KUK, which replaced the previous programme in 1990 and required all commercial banks to extend 20 per cent of their total loans to SMEs as investment and working capital. The specific aim of all three programmes to strengthen indigenous entrepreneurship was reflected in the eligibility requirement that either 75 per cent of the firm's capital should be owned by *pribumi* Indonesians or that they should hold 50 per cent of the seats on the management board.[241] The Department of Industry's Small Industries Development Programme BIPIK (*Program Pembinaan dan Pengembanganan*) was set up in 1980 to provide extension services to SMEs. In the Small Industry Estates Programme LIK *(Lingkungan Industri Kecil)* small enterprise clusters were supported

[239] Republik Indonesia, 1989, *Rencana Pembangunan Lima Tahun Kelima 1989/90 – 1993/94* [Fifth Five-Year Development Plan], Jakarta: Republik Indonesia*,* Book 1, Chapter 1, pp. 19-22.

[240] Republik Indonesia, 1989, *Rencana Pembangunan Lima Tahun Kelima 1989/90 – 1993/94* [Fifth Five-Year Development Plan], Jakarta: Republik Indonesia*,* Book 1, Chapter 1, pp. 45-46, 85.

[241] United Nations Industrial Development Organisation (UNIDO), 1997, *Industrial Development Global Report 1997*, Oxford University Press, p. 97.

through education and training from the late 1970s. The various SME support schemes are generally found to have been ineffective, for various reasons, ranging from SMEs not taking advantage of the support offered, the reluctance or inability of banks to provide loans to SME owners solely for business purposes, or insufficient funding. However, it seems likely that these assessments require some qualification: one assessment of the KUK programme, for example, showed that 67 per cent of the SMEs that benefitted from the programme were located in Java (Java's share of the Indonesian population was roughly 60 per cent in 1990).[242]

One issue for the implementation of SME policies is the absence of a common definition of SMEs amongst different government bodies.[243] Thee Kian Wie highlights a number of issues that arise as a consequence: (a) the lack of a clear distinction between cottage/household enterprises, which usually have little growth potential and constitute the vast majority of enterprises in Indonesia, and small enterprises. Grouping these two together means that the target group becomes "unmanageably large" and prevents the ability to focus on the SME sector that is associated with economic potential; (b) by grouping cottage/household, small and medium enterprises, interventions are unable to meet the different specific requirements each of these groups has and (c) using different definitions means that agencies do not have the same target group, which complicates possible coordination of SME support programmes.[244]

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242 Thee, 2006, 'Policies for Private Sector Development in Indonesia, *ADB Institute Discussion Paper, 46:* 1-46, pp. 30-2; Biro Pusat Statistik (BPS), 1994, *Sensus penduduk Indonesia 1990/Indonesia's population census 1990*, Jakarta: Biro Pusat Statistik.

243 The Indonesian Ministry of Cooperatives and SMEs defines SMEs as enterprises owned by an individual or business entity that carry out productive economic activities and are not controlled, owned or part of large businesses, applying the asset and turnover criteria. These bracket categories are also applied for taxation of small firms (micro and small) and medium firms. Financial criteria are also employed by the Ministry of Industry and Trade, the Ministry of Finance and Bank Indonesia. The Indonesian Central Board of Statistics (BPS) based its definitions solely on size (5-19 workers in small enterprises and 20-99 workers in medium enterprises).

244 Thee Kian Wie, 2006, 'Policies for Private Sector Development in Indonesia, *ADB Institute Discussion Paper, 46:* 1-46, pp. 28-29.

Table 10: Indonesian SME Support Schemes

Type	Name & Duration	Description	Aim	Issue
Credit	Small Enterprise Development Programmes KIK/ KMKP (1971 - 1990)	Provided investment and working capital respectively (subsidised interest rate)	To strengthen indigenous entrepreneurship: eligibility requirement that either 75% of the firm's capital was owned or 50% of seats on the management board were held by indigenous Indonesians	Terminated because of its high default rate (over 27%)
	Small Enterprises Credit Programme KUK (Since 1990-1998)	Replaced KIK/ KMKP and required all commercial banks to extend 20% of their total loans to SMEs as investment and working capital (market interest rate)		Many loans given directly to SME owners (who used them for private purposes) rather than to small enterprises due to lack of collateral of SMEs
Extension Services	Small Industries Development Programme BIPIK (since 1980s)	Provide extension services to SMEs	Set up clusters of 50-100 small manufacturing establishments supported by technical service	Have been "virtually shelved"; low participation rates by SMEs; low productivity of participating SMEs: for LIK trainings and inputs have been determined by planners rather than by needs-based assessment
	Small Industry Estates Programme LIK (since late 1970s)	Support small enterprises clusters through education and training		

Source: Thee Kian Wie, 2006, 'Policies for Private Sector Development in Indonesia, *ADB Institute Discussion Paper, 46:* 1-46.

In South Korea and Taiwan the differences in firm size distribution can be largely attributed to government policy. Despite their facing similar historical, geopolitical and institutional contexts, there were several factors which may help explain first the divergence, and eventually a certain convergence in SME policy and development. Government policy played an important role in the development of SMEs in both countries. In its early industrialization the South Korean government discriminated against SMEs by restricting its industry promotion to *chaebols*. It was only in the late 1970s that it shifted towards a more SME-favourable approach, pursuing strong interventionist SME policies to offset the impact of earlier neglect. There had been no such bias against SMEs in Taiwan’s early stages of development as industry promotional measures were not restricted by firm size. During the 1970s its policy focused on helping SMEs to overcome their disadvantages in obtaining access to finance, overcoming information asymmetries, making investments in human resource development, and research and development (R&D). South Korea and Taiwan may be considered two different archetypes, but over time their SME policies have led to a trend of convergence in the share of their SMEs of the manufacturing industry in terms of numbers of firms, employment, value-added and exports.

3.3 Theoretical Framework and Existing Literature

This chapter complements existing studies on Indonesian firm-size distribution in three ways: first, by zoning in on the SME segment and attempting to disentangle its development from the smaller cottage industries and microenterprises on the one hand and large firms on the other. Second, by expanding the time frame to the entire New Order period (1966-1998); policy shifts that occurred in Indonesia within the New Order period are taken into account, both in terms of SME and private business policies. The third major contribution of this chapter to the existing literature is the in-depth analysis of these policies in relation to the regional differences in SME development. It thereby contributes to our understanding of the considerable regional variation in SME development as much as the SME and SME policy context. It is well established that the Indonesian economy moved from import-substitution towards export orientation during the New Order period. However, it is less clear which other traits of the Asian model it shares. According to the East Asian development model, we would expect increased income equality and therefore, arguably, a stronger role of SMEs. A core question behind this research is whether Indonesia shares these features of the model.

3.3.1 Defining SMEs

Given the absence of a universal definition of SMEs, a working definition is needed. For the purpose of this dissertation, the Indonesian Central Statistical Office's (BPS) definition of manufacturing firm-size groups used in the Indonesian Economic Censuses will be followed. Small enterprises are defined as establishments with 5 to 19 workers and medium enterprises as establishments with 20 to 99 workers. While there is no standard definition of SMEs and even categories employed vary (most commonly used are number of workers, assets and turnover), the Indonesian worker-based definition of SMEs was on the small side compared to its neighbours. To put this size category into perspective, **Table 11** provides an overview of some of the definitions used in the Tiger economies during this period. Similar to Indonesia, in many of these countries different government agencies and ministries use different definitions, but to maintain consistency the overview uses definitions from censuses wherever possible. This comparison illustrates that many of the enterprises falling into Indonesia's definition of medium enterprises would be small enterprises by other countries' definitions. This issue will be addressed in the analysis of Indonesian SME trends. For the purposes of comparing Indonesia to South Korea and Taiwan, this dissertation uses the Indonesian firm-size category of 5-99 workers for SMEs.

Table 11: Definitions of Manufacturing Firm-Size Groups across East and Southeast Asia

Country (Source)	Criterion	Micro enterprises	Small Enterprises	Medium Enterprises	Large Enterprises
Indonesia (1974/75 Industrial Census, 1986, 1996 and 2006 Economic Censuses)					
	Employment	1-4	5-19	20-99	≥100
Hong Kong (1994 Government Definition)					
					≥100
Malaysia (2005 Census of Establishments and Enterprises)					
	Employment	1-4	5-50	51-150	>150
	Annual turnover	<RM250,000	RM250,000-10 m	RM10-25 m	>RM25 m
Philippines (1991 Government Act)					
	Assets	≤P500,000	P500,001-5,000,000	P5,000,001-20,000,000	>P20 m
Singapore (2007 Government Act)					
	Assets				≥S$15 million
South Korea (1978 Manufacturing Census, 1983, 1988 and 1993 Industrial Censuses)					
	Employment	1-4	5-19	20-299	≥300
Taiwan (1991 Ministry of Economic Affairs Order)					
	Employment				≥300
	Capital				≥NT$40 m
	Assets				≥NT$120 m
Thailand (1997 Industrial Census)					
	Employment	1-9	10-49	50-199	≥200
Vietnam (2001 Government Decree)					
	Employment	1-199			≥300
	Equity capital	<VND10 bio			≥ VND10 bn

Sources: BPS, *Industrial Census* (1964, 1974/5), Jakarta: BPS; BPS, *Economic Census* (1986, 1996, 2006), Jakarta: BPS; Legislative Council of the Hong Kong Special Administrative Region, 2012), *Press Release: LCQ3: Measures to assist micro-enterprises and small and medium-sized enterprises (立法会三题：帮助微型企业和中小型企业的措施), May 30, 2012,* Hong Kong: GovHK; Department of Statistics Malaysia, 2007, *Banci pertubuhan dan enterpris, 2005: Profil enterpris kecil dan sederhana (Census of Establishments and Enterprises, 2005: Profile of Small and Medium Enterprise)*, Putrajaya: Jabatan Perangkaan Malaysia; Republic of the Philippines, 1991, Magna Carta for Small Enterprises, Republic Act No. 6977; Competition Commission of Singapore, 2007, Competition Act (CCS/100/210/06; AG/LEG/SL/50B/2005/8 Vol. 1); Republic of Korea (ROK), Economic Planning Board (EPB), 1978, *Report on Mining and Manufacturing Census,* Seoul; Republic of Korea (ROK), National Statistical Office (NSO), 1983, 1988, 1993, *Report on Industrial Census,* Seoul; Ministry of Economic Affairs, R.O.C., 1991*, Order Jing (80) Chi Tzu #059364 on November 25, 1991*; NSO Thailand, 1999, *Report of the 1997 Industrial Census*, Whole Kingdom, Bangkok: National Statistical Office; Socialist Republic of Vietnam, 2001, Decree on Support for Small- and Medium-sized Enterprises, 90/2001/ND-CP.

3.3.2 Data

The development of SMEs between 1966 and 2006 is traced using the 1974/1975 Industrial Census and the 1986, 1996 and 2006 Economic Censuses. The vast majority of work on Indonesian business development relies on the Large and Medium-scale Manufacturing Survey, however little analysis exists of the much more comprehensive Economic Census. Making use of this previously largely unused data is therefore a key contribution of this dissertation. In the economic censuses, the number of establishments is broken down by business scale, region, range of employees, range of assets and sales. By comparison, Taiwan began carrying out industrial censuses in 1954 and Korea in 1958. At first taken at irregular intervals, Korea conducted industrial censuses in five year intervals since 1968 and Taiwan since 1961.

It should be noted that there is a difference in basic units used: the Indonesian and South Korean censuses' enumeration unit is establishments (individual physical units engaging in industrial activities), whereas the Taiwanese censuses mainly use enterprises as the basic unit, which means that they can comprise multiple premises and economic activities.[245] However, for the census years analysed here, the Taiwanese censuses provide some data for both establishments and enterprises (but report fewer variables on establishments, hence the use of enterprise-based data here). **Table 12** compares shares by firm-size category when using enterprise instead of establishment-based data and shows that the difference is quite small. The difference in relative shares of firm-size categories is small enough to not impede comparison with the Indonesian and South Korean establishment-based data.

[245] The definition of establishment used by the National Statistics Office in the Indonesian censuses is as "an economic activity unit which provides goods or services in an identifiable location has administrative records and at least one person as risk taker", the definition of establishments used by the Economic Planning Board in the Korean censuses is "a physical unit engaging in industrial activities, such as a factory, workshop, office, or mine".

Table 12: Enterprise-based versus Establishment-based Data in Taiwanese Censuses by Firm-Size Category

Year & Firm-Size	Enterprise-based figures		Establishment-based figures	
	No of Basic Units	Shares	No of Basic Units	Shares
1961	**51,567**	**100.00%**	**51,909**	**100.00%**
1-3	34,695	67.28%	38,368	73.91%
4-19	14,208	27.55%	11,485	22.13%
20-99	2,277	4.42%	1,697	3.27%
≥100	387	0.75%	359	0.69%
1971	**42,636**	**100.00%**	**44,092**	**100.00%**
1-3	15,195	35.64%	15,495	35.14%
4-19	19,740	46.30%	20,511	46.52%
20-99	5,752	13.49%	6,011	13.63%
≥100	1,949	4.57%	2,075	4.71%
1981	**91,499**	**100.00%**	**94,546**	**100.00%**
1-4	44,631	48.78%	45,411	48.03%
5-19	30,527	33.36%	31,839	33.68%
20-99	12,620	13.79%	13,297	14.06%
≥100	3,721	4.07%	3,999	4.23%

Sources: Republic of China (ROC), Executive Yuan, 1962, *General Report 1961 Industry & Commerce Census of Taiwan, Republic of China (Volume III Manufacturing),* Taipei: Executive Group of the I.C.C.T., Tables 8 and 9; ROC, Executive Yuan, Directorate-General of Budget, Accounting and Statistics (DGBAS), 1973, *The 1971 Industrial & Commercial Censuses of Taiwan and Fukien Area, Volume III: Manufacturing (Taiwan Area),* Taipei: Executive Yuan, Tables 9 and 38; ROC, Executive Yuan, Directorate-General of Budget, Accounting and Statistics (DGBAS), 1983, *The 1981 Industrial & Commercial Censuses of Taiwan-Fukien Area, Volume III: Manufacturing,* Taipei: Executive Yuan, Tables 30 and 70.

The value added database constructed for this chapter forms a significant contribution to the literature on Indonesian economic development and the process of industrial transformation. This is the first database that constructs a provincial or even regional comparison of manufacturing value added over the New Order period. It is also the first database to break down the comparison of value added of different firm-size categories by province. This regional component permits an analysis of the great diversity within Indonesian industrial development and business landscapes, with the great differences in the role SMEs play in the different provinces. Most work on Indonesia either works with the country total or focuses exclusively on Java, which obscures these large regional differences.

The value added and number of workers figures were mainly calculated from the Economic Census data.[246] However, there were significant gaps in the medium and large manufacturing value added data in 1986 and 1996. For 1986 it was not possible to

[246] Number of workers here includes unpaid workers.

source the provincial economic census statistics for all provinces of Java, Sumatra with the exception of Aceh, Southeast and South Sulawesi, all of Kalimantan, Bali, Maluku and Papua. To bridge the gap I applied the provincial shares provided by the Indonesian Regional Science Association to the Indonesia medium and large enterprise value added total figure from the Indonesian Central Statistical Office's industrial statistics.[247] The 1996 Economic Census did not publish any data on value added and number of workers of medium and large manufacturing enterprises. These 1996 figures were taken from provincial statistical reports, except for West Java, Jambi, Lampung, Riau, North, South and West Sumatra, Central, Southeast and South Sulawesi, East, Central and West Kalimantan, West Nusa Tenggara, Maluku and Papua, for which provincial statistical reports covering 1996 were not available. Instead these remaining provinces were interpolated from Frederik Sjöholm's calculations of provincial shares based on unpublished data from the Indonesian Central Statistical Office used in conjunction with the Indonesia medium and large enterprise manufacturing value added and number of workers from Indonesia's Statistical Yearbook. The interpolation exercise also confirmed the figures for the provinces for which provincial statistical reports were available.[248] Finally, I converted the value added data series for the entire period into constant prices with the GDP deflator used throughout this dissertation.[249]

An aggregate analysis of Indonesia might return misleading results that obscure important regional differences. In order to account for these spatial differences the results are here summarised at island level for Indonesia's five main islands, while East Nusa Tenggara, West Nusa Tenggara, Maluku and Papua are grouped under 'Eastern Indonesia'. To ensure comparability over time the country and provincial boundaries have been standardised in the use and representation of the data. There was only one change to the country borders during this period (Papua became part of the national

[247] 1986 provincial shares in Budy Resosudarmo, Armida Alisjahbana and Bambang Brodjonegoro (Eds.), 2002, *Indonesia's Sustainable Development in a Decentralization Era,* Jakarta: Indonesian Regional Science Association, p. 353, Table 3; 1986 Indonesia total in BPS, Statistik Industri 1986, *Hasil Pengolahan Data Perusahaan Industri Besar Dan Sedang (Bagian I) / Industrial Statistics 1986: Survey of Manufacturing Industries Large and Medium (Volume I)*, Jakarta: BPS.

[248] Frederik Sjöholm, 2002, 'The challenge of combining FDI and regional development in Indonesia', *Journal of Contemporary Asia, 32(3):*381-393, Table 1 used in conjunction with the 1996 Indonesia medium and large enterprise manufacturing number of workers and value added total found in BPS, *1998 Statistik Indonesia / Statistical Yearbook*, Jakarta: BPS.

[249] Deflator used was calculated from the GDP deflator reported in The World Bank, 2017, *World Development Indicators*, Washington, D.C.: The World Bank, GDP deflator (base year varies by country) [Data file] Retrieved from https://data.worldbank.org/indicator/NY.GDP.DEFL.ZS?locations=ID

territory in 1963)[250]: East Timor, which was occupied by Indonesia in 1975, formally annexed in 1976, left Indonesia in 1999 and gained its formal independence in 2000. The data here generally leave out East Timor, and in the few cases where the datasets do not allow for separation (e.g. summaries by industrial code rather than by province), this is clearly indicated. However, while this was the only change to Indonesia's national borders, provincial borders have changed numerous times during the New Order Period. In this thesis the provinces are standardised throughout to the provincial borders between 1976 and 1998 (25 provinces, excluding East Timor). The economic census data is further disaggregated into the provincial level, thus provincial outliers will be discussed where applicable and of relevance.

3.3.3. Missing Middle or Missing Top?

Interestingly, despite the large body of literature discussing the 'missing middle' in the firm-size distribution of developing countries, there seems to be little clarity, much less consensus, on what it looks like, how to measure it and what the underlying causes are. Nowhere is this more evident than in Hsieh and Olken's (2014) refutation of Tybout's (2000) seminal article on the existence of a missing middle in developing countries on the basis that the firm-size distribution of developing countries exhibits a unimodal rather than bimodal pattern and Tybout's (2016) subsequent reply arguing that unimodality does not inherently reflect a missing middle given the assumptions about what a undistorted firm-size distribution looks like.[251] In this section we first dissect these three questions (what does a firm-size distribution with a missing middle look like; how to measure a missing middle; and what are the theories on the underlying causes of a missing middle), before establishing how this chapter complements existing studies on the missing middle in Indonesia.

In terms of measuring the missing middle, Hsieh and Olken proposed comparing firm-size categories, using number of firms rather than share of employment

[250] Note that Papua joined in 1963, then called Irian Barat, renamed in 1973 to Irian Jaya and 2000 Papua – it is referred to only as Papua in this thesis.

[251] Chang-Tai Hsieh and Benjamin Olken, 2014, 'The Missing "Missing Middle"', *Journal of Economic Perspectives, 28(3):* 89-108; James Tybout, 2000, 'Manufacturing Firms in Developing Countries: How Well Do They Do, and Why?', Journal of Economic Literature*, 38(1)*:11-44; James Tybout, 2014, 'Correspondence: The Missing Middle', *Journal of Economic Perspectives, 28(4):* 235–236.

to establish a crude empirical measure of the existence of a missing middle.[252] Here we look at both share of number of firms and share of employment in each category. The issue of comparison between countries is further aggravated by the absence of a common definition of firm-size categories – as noted earlier definitions of a medium-sized firm (if based on number of workers) vary widely, e.g. 20-99 workers in Indonesia and 20-299 workers in South Korea. The solution is to standardise the datasets by number of worker brackets (as done in Hsieh and Olken).

Equally a point of contention is what causes a missing middle, an important issue that requires clarification if one is to provide policy advice on how to bridge it. One major point of disagreement is whether it is really small firms that are generally disadvantaged in developing countries or larger firms. Hsieh and Olken argue that the issue is not a bimodal distribution but rather a missing middle and top as a result of "differential constraints faced by large firms".[253] Tybout links the missing middle in the firm-size distribution of developing countries to various factors: the tendency of industrial policies to favour large enterprises, easier access to credit for large enterprises and that they fare better under protectionist regimes. According to Tybout, "it never pays to be *just* large enough to attract enforcement", particularly in heavily regulated countries.[254] Coad and Tamvada found that reasons for firms in developing economies to stay small can be their lack of access to credit and suitable management resources, high transport costs, and poor infrastructure acting as barriers, as well as the ability to avoid taxes whilst being part of the informal sector.[255] Dasgupta finds that the missing middle disappears as a country develops and links this to the decline of the traditional

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252 Chang-Tai Hsieh and Benjamin A. Olken, 2014, 'The Missing "Missing Middle"', *Journal of Economic Perspectives, 28(3):* 89-108, p. 90.

253 Chang-Tai Hsieh and Benjamin A. Olken, 2014, 'The Missing "Missing Middle"', *Journal of Economic Perspectives, 28(3):* 89-108, pp. 89-91.

254 James Tybout, 2000, Manufacturing Firms in Developing Countries: How Well Do They Do, and Why?, *Journal of Economic Literature, 38(1)*:11-44, p. 12, 16-17 [Italics added].

255 Alex Coad and Jagannadha Tamvada, 2008, 'The Growth and Decline of Small firms in Developing Countries', *Papers on Economics and Evolution, 2008(#0808):*1-33, pp. 3-4;

See the study on Cameroon on the subject where an inverted U-shape relation between size and tax exemption and evasion in Cameroon was found, with small business being "relative likely" to evade taxes and large business to receive tax exemptions, thus leaving medium-sized enterprises with the highest tax burden (relative to their sales): Bernard Gauthier and Mark Gersovitz, 1997, Revenue erosion through exemption and evasion on Cameroon, 1993, *Journal of Public Economics, 64(1):* 407-424, pp. 410-411; 416-417.

sector.[256] Similarly Tybout found that this drop-off in the middle is uncommon in industrialized countries.[257]

Coming back to the question of what a missing middle looks like, this dissertation takes the same view as Tybout - a missing middle does not require bimodality. A unimodal firm-size distribution can exhibit a missing middle. Hsieh and Olken make a strong point that one needs to distinguish between a missing middle and a missing top. This chapter follows Tybout's argument that a missing middle occurs when "policies and market conditions [. . .] have discouraged production at mid-sized firms, as opposed to small or large firms", whereas in a missing top, as found by Hsieh and Olken, large firms are constrained and small firms stay small because growth would increase their marginal costs.[258]

Tybout points to the fact that developing countries can have predominantly small firms for reasons other than economic inefficiency, such as the Engel effect or low urbanisation, both of which can lead to local demand being best met by local cottage industry production. Instead, this chapter takes a comparative view, setting the analysis of Indonesian SME development and changes in wider firm-size distribution against the cases of Korea and Taiwan – the former known for the dominance of its chaebols and the latter for the strength of its SMEs. Korea and Taiwan represent two archetypical cases of firm-size distribution which pursued similar industrial developmental models to that of Indonesia. Most of the government initiatives introduced by the New Order to strengthen SMEs had already been implemented in Korea and/or Taiwan before (such as *Bapak Angka*, the Foster Parent Programme which linked large to smaller firms, industrial zones and various initiatives to encourage subcontracting and clustering). Therefore this comparison not only facilitates the empirical analysis of the existence of a missing middle, but also the analysis of the reasons for it, and government efforts to address these issues.

[256] Kunal Dasgupta, 2016, 'The missing middle in developing countries revisited', *Indian Growth and Development Review, 9(1):* 32-52.

[257] James Tybout, 2000, Manufacturing Firms in Developing Countries: How Well Do They Do, and Why?, *Journal of Economic Literature, 38(1)*:11-44, pp. 15-16.

[258] James Tybout, 2014, 'Correspondence: The Missing Middle', *Journal of Economic Perspectives, 28(4):* 235–236, p. 235; Chang-Tai Hsieh and Benjamin Olken, 2014, 'The Missing "Missing Middle"', *Journal of Economic Perspectives, 28(3):* 89-108, pp. 106-7.

The first step is to identify suitable benchmark years for comparison by lining up Indonesia's against Korea's and Taiwan's GDP using the Maddison data. The second step is to compare the firm-size distribution and establish whether the firm-size distribution of the Indonesian manufacturing sector exhibits a missing middle. The third step is to analyse the barriers to growth that Indonesian SMEs face and determine whether these are particular to the Indonesian case or can also be found in the Korean and Taiwanese cases.

3.3.4 Benchmark Years to compare Indonesia to South Korea and Taiwan

While Indonesia is one of the Southeast Asian Tiger economies, following some similar industrialisation strategies and patterns to the East Asian Tigers, there are also important differences, both in characteristics as well as timing. These differences in the Southeast Tigers compared to the East Asian Tigers included a stronger role of special interest groups and hence weaker developmental state, relative abundance of natural resources, weaker educational attainment as well as higher income inequality.[259] The implication of these differences will be discussed in detail within the analysis comparing Indonesia to Korea and Taiwan. Here we focus on the question of timing. In the Tiger economies literature there are varying indications of a lag of about twenty years in economic development between Indonesia versus South Korea and Taiwan. The World Bank's Miracle Report merely observed that the Southeast Asian Tigers achieved higher accelerated growth rates between 1975 and 1985 than between 1960 and 1970, whereas the East Asian Tigers were the highest performers during both periods.[260] Hal Hill

[259] For a discussion of the role of special interest groups in the SEA versus the EA Tigers see Andrew Macintyre, 1994, 'Business, Government and Development: Northeast Asian and Southeast Asian Comparisons' in: *Business and Government in Industrialising Asia*, Ithaca: Cornell University Press, p.10;

For a discussion of the relevance of the differences in availability of natural resources see Alice Amsden, 1989, *Asia's Next Giant: South Korea and Late Industrialization*, New York: Oxford University Press, p. 794;

On differences in education and inequality see Martin Andersson and Tobias Axelsson, 2016, 'Relative Economic Backwardness and Catching up: Lessons from History, Implications for Development Thinking', *in:* Martin Andersson and Tobias Axelsson (Eds.), *Diverse Development Paths and Structural Transformation in the Escape from Poverty* (pp. 267-276), Oxford University Press, p. 274.

[260] The World Bank's Miracle Report groups Indonesia, Malaysia and Thailand under the term "newly industrialising economies" (NIEs), which with the four Tiger economies (South Korea, Taiwan, Hong Kong and Singapore form the "high-performing Asian economies" (HPAEs) – for the purpose of this dissertation, the term NIEs is used interchangeably with Southeast Asian Tigers.

argues that Indonesia can only really be referred to as a Tiger economy from the late 1980s onwards, and Ha-Joon Chang dates this even later, to the early 1990s.[261] Some of this variation, in particular Hal Hill's periodisation, can be explained by the definition used – whereas the World Bank referred to GDP growth rates, Hal Hill focused on the shift towards export-orientation. It is heavily contested whether the East Asian Miracle is primarily characterised by state-led export orientation or whether the first period of import-substitution that allows building up selected industries under infant industry protection is also a key part to the story. In any case, to establish benchmark years for comparison between Indonesia and South Korea and Taiwan it is essential to compare stages of economic development.

Here the first step is to simply compare GDP per capita using the Maddison GDP data. **Figure 7** shows the GDP per capita comparison of Indonesia to South Korea and Taiwan. The Maddison data shows that the lag of Indonesian GDP per capita relative to South Korea and Taiwan grew during the New Order period. Indonesian GDP per capita was only about ten years behind Taiwan and South Korea in 1971. By 1980 the lag had grown to 15 years and by 1990 to 20 years – in 2006 Indonesian GDP per capita was about at the level South Korea and Taiwan were at in the mid-1970s. This growing lag is unsurprising, given that despite Indonesia having been "one of only three economies [out of 119 in total] to move from the bottom to the top of the distribution of growth rates between [1960-1970 and 1970-85]", South Korea and Taiwan were two of only 11 economies to achieve sustained high growth rates in both periods.[262] Unlike South Korea and Taiwan, Indonesia did not manage the transition from developing to developed country. The World Bank has classified South Korea as a high-income economy since 1995, and Taiwan since the beginning of the Bank's analytical history in 1987, whereas Indonesia only moved from being a low-income to a lower middle income country in 1993.[263]

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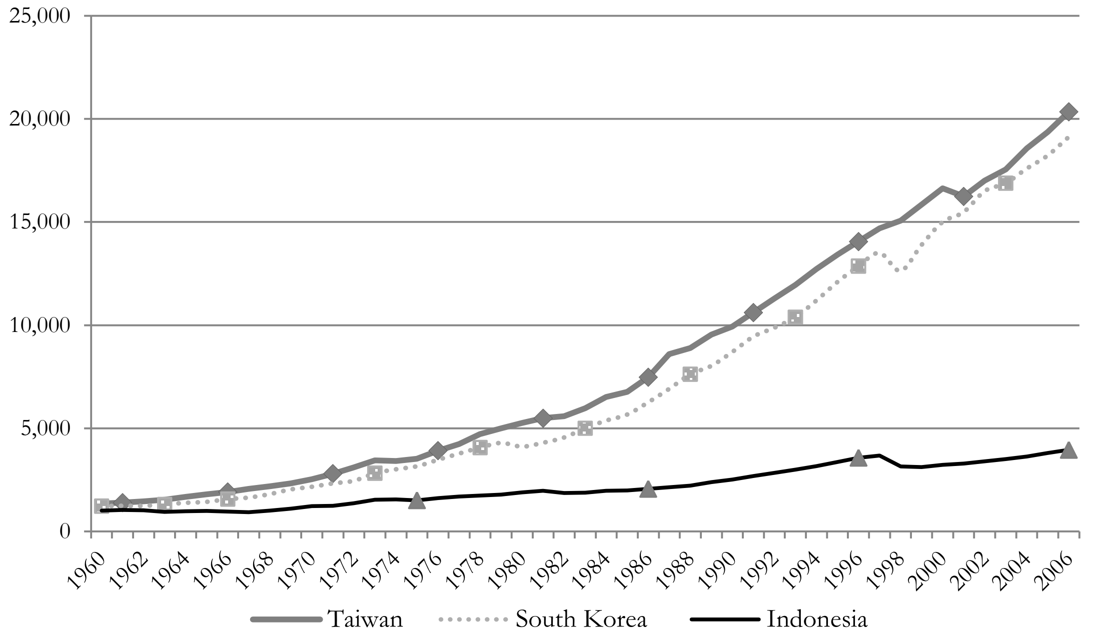
261 Hal Hill, 2000, *The Indonesian Economy (Second Edition),* Cambridge University Press, p.154; Ha-Joon Chang, 2003, 'Trade and Industrial Policy Issues', *in: 'Rethinking Development Economics'* (pp. 257-276), London: Anthem Press, p. 108.

262 World Bank, 1993, *The East Asian Miracle: Economic Growth and Public Policy,* New York: Oxford University Press, pp. 28-29.

263 The World Bank, n.d., *Historical classifications by income*, Retrieved June 19, 2018, from: http://databank.worldbank.org/data/download/site-content/OGHIST.xls

Figure 7: GDP per Capita of South Korea, Taiwan and Indonesia compared, 1960-2010 (Int. GK$)



Source: Data from Maddison Project Database (version 2013); Jutta Bolt and Jan Luiten van Zanden, 2014, 'The Maddison Project: collaborative research on historical national accounts', *The Economic History Review, 67 (3): 627–651.*

Notes: Markers show year and country for which SME data from economic and industrial censuses is available; underlying data in the Appendix (**Table 31**).

Given the increase in Indonesia's lag behind South Korea and Taiwan in GDP per capita, further analysis is needed to establish stronger benchmark years of comparison. The second step is to compare timing of industrial policy episodes. The focus of the South Korean government in the late 1950s was on rehabilitation and reconstruction after the Korean War; Taiwan had almost recovered from wartime destruction by 1955.[264] This compares to the Indonesian government's priority of rehabilitation and stabilisation in the early days of the New Order, completed by the early 1970s. The late 1950s saw the rise of import substitution policies and infant industry protection in South Korea and Taiwan, which Indonesia pursued in two stages from the early 1970s until the oil boom came to an abrupt end in 1982. South Korea and Taiwan shifted

[264] Note the military coup in May 1961, which brought South Korea under the leadership of General Park Chung Hee, see Lee-Jay Cho and Yoon Hyung Kim, 1991, 'Major Economic Policies of the Park Administration', *in:* Lee-Jay Cho and Yoon Hyung Kim (Eds.), *Economic Development in the Republic of Korea: a Policy Perspective* (pp. 15-40), Honolulu: East-West Center, pp. 15-16.

towards export promotion in the mid-1960s.[265] In Indonesia the shift towards export orientation happened much later as part of a general shift towards market-liberalisation and privatisation in the early 1980s after falling oil prices led to decreasing government revenues. In the 1970s the South Korean and, to a lesser extent, the Taiwanese governments began promoting heavy and chemical industries as part of industrial deepening strategies; similarly the fourth Indonesian Economic Development Plan (1984-1989) set the objective of expanding heavy and key chemical industries "to deepen and broaden the industrial structures".[266]

Bringing together the GDP per capita comparison of step one and the analysis of industrial policy episodes of step two, shows that for the purposes of this chapter Indonesia lags behind South Korea and Taiwan with something like a fifteen year lag. The discussion of step one showed that the lag in economic development measured in GDP per capita varied from ten years at the start of the Indonesian New Order period to 20 before the beginning of the Asian Financial Crisis and end of the New Order period. Given the focus on manufacturing firms, further analysis of the timing of industrial policy episodes helps to establish when the Indonesian manufacturing sector was in a comparable situation to South Korean and Taiwanese industry. When comparing Indonesia to South Korea and Taiwan the analysis will discuss trends of changes in firm-size distribution over time, but with a roughly fifteen year gap. However, the fifteen year gap cannot be maintained for comparison of the post-New Order period, given the different trajectory of economic development Indonesia went on after the Asian Financial Crisis. By 2006 the gap between Indonesia on the one side and South Korea and Taiwan on the other had grown to thirty years.

Table 13 provides an overview which censuses are used as benchmark years. The Indonesian *1974/75 Industrial Census* will be compared to the South Korean *1963 Mining and Manufacturing Census* and the Taiwanese *1961 Industrial and Commercial Census*. The Indonesian *1986 Economic Census* will be compared to the South Korean *1973 Mining and Manufacturing Census* and the Taiwanese *1971 Industrial and Commercial Census*.

265 Complementarity of ISI to EOI in South Korea and Taiwan – see Alice Amsden, 1989, *Asia's Next Giant: South Korea and Late Industrialization*, New York: Oxford University Press, p. 12 and Republic of Korea, 1971, Third Economic Development Plan 1972-1976 .

266 Percetakan Negara Republic of Indonesia, 1984, *Policies and Prospects for Sustained Development Under Challenging Conditions: REPELITV IV – The Fourth Five-Year Development Plan of Indonesia, 1984/85 – 1988/89 (A Summary),* Jakarta: National Development Planning Agency (Bappenas), p. 74.

The Indonesian *1996 Economic Census* will be compared to the South Korean *1983 Industrial Census* and the Taiwanese *1981 Industrial and Commercial Census*. By 2006 the gap in Indonesian economic development relative to South Korea and Taiwan had grown too large to compare to later censuses. In terms of stage of economic development, Indonesia at the time of its 2006 Economic Census is still comparable to the South Korean 1983 and Taiwanese 1981 figures. However, given the severe impact of the Asian Financial Crisis on all three countries, this last comparison has to be made with caution.

Table 13: Benchmark Census Years for Comparison

Indonesia	South Korea	Taiwan
1974/75	1963	1961
1986	1973	1971
1996	1983	1981
2006	-	-

3.4 Finding the Missing Middle

With industrialisation we would expect structural changes in the firm-size distribution of the manufacturing sector. First, we would expect a trend towards increasing firm size as the Indonesian economy grew. In developing countries, microenterprises typically dominate manufacturing business landscapes, but with economic development firm size distribution changes towards increasing firm size, bringing first the rise of small firms and then larger firms.[267] Snodgrass and Biggs found that the size of 'the average manufacturing establishment is two to three times as large in high-income countries as in low-income countries'.[268] Yet while there is a trend towards increasing firm-size with economic development, smaller firms do not disappear from the business landscape; instead their role changes. Snodgrass and Biggs found that as a country develops the

267 Dennis Anderson, 1982, 'Small Industry in Developing Countries: A Discussion of Issues', *World Development, 10(11):* 913-948, pp. 914-926; Eugene Staley and Richard Morse, 1965, *Modern Small Industry for Developing Countries,* New York: McGraw-Hill, p. 16; Ian M.D. Little, Dipak Mazumdar and John Page, 1987, *Small Manufacturing Enterprises: A Comparative Analysis of India and Other Economies.* New York: Oxford University Press for the World Bank, pp. 13-18.

268 Donald Snodgrass and Tyler Biggs, 1996, *Industrialization and the Small Firm: Patterns and Policies,* San Francisco: International Centre for Economic Growth and the Harvard Institute for International Development, p. 51.

typical manufacturing establishment changes from traditional household industry to a modern factory SME with more complex production lines.[269] The second expectation would therefore be to not only see a growth in average firm size but also evidence of industrial upgrading of SMEs. Industrial upgrading can be measured through factors such as increased use of electric power and higher value added. Furthermore, increased production linkages with other firms as well as having a higher share of exports would reflect a change in the role of SMEs within the economy, in particular a development toward a dynamic, innovative and more competitive SME sector.

As noted earlier, many of the enterprises defined as medium enterprises in Indonesia would have been small enterprises by its regional neighbours' definitions. Therefore, the question arises whether firm-size distribution in the Indonesian manufacturing sector was skewed towards microenterprises and small enterprises and thus was an indication of a 'missing middle' in the Indonesian manufacturing sector. Data on the evolution of firm size in Indonesia are shown in **Tables 14** and **15**. Looking at the evidence for Indonesia from the industrial and economic censuses confirms the first set of expectations: the share of microenterprises in manufacturing establishments and employment continuously declined during the New Order and post-Asian Financial Crisis periods. The overall trend of the declining share of microenterprises in number of establishments and employment was to be expected as the country industrialised and developed. But the data show that beyond this observation at the aggregate national level, there was considerable regional variation.

[269] Donald Snodgrass and Tyler Biggs, 1996, *Industrialization and the Small Firm: Patterns and Policies,* San Francisco: International Centre for Economic Growth and the Harvard Institute for International Development, p. 51; Eugene Staley and Richard Morse, 1965, *Modern Small Industry for Developing Countries,* New York: McGraw-Hill, pp. 5-8, 14-25.

Table 14: Share of Establishments by Firm-Size Group and Region in Indonesian Manufacturing, 1974-2006

Region	1974/5	1986	1996	2006
Java	**984,647 (100.00%)**	**1,077,943 (100.00%)**	**1,768,288 (100.00%)**	**2,158,913 (100.00%)**
Micro (1-4)	95.95%	91.99%	89.42%	89.13%
Small (5-19)	3.44%	7.00%	9.25%	9.75%
Medium (20-99)	0.50%	0.82%	1.03%	0.85%
Large (≥100)	0.11%	0.19%	0.30%	0.28%
Sumatra	**109,465 (100.00%)**	**157,813 (100.00%)**	**376,696 (100.00%)**	**403,914 (100.00%)**
Micro (1-4)	92.56%	92.38%	91.07%	88.70%
Small (5-19)	6.92%	6.72%	8.09%	10.58%
Medium (20-99)	0.39%	0.67%	0.62%	0.48%
Large (≥100)	0.12%	0.23%	0.22%	0.24%
Sulawesi	**100,883 (100.00%)**	**117,649 (100.00%)**	**208,611 (100.00%)**	**231,455 (100.00%)**
Micro (1-4)	96.20%	95.36%	93.14%	91.89%
Small (5-19)	3.63%	4.36%	6.55%	7.79%
Medium (20-99)	0.15%	0.24%	0.26%	0.25%
Large (≥100)	0.02%	0.04%	0.05%	0.07%
Kalimantan	**38,199 (100.00%)**	**65,198 (100.00%)**	**131,574 (100.00%)**	**120,701 (100.00%)**
Micro (1-4)	96.06%	95.43%	93.55%	91.78%
Small (5-19)	3.52%	3.95%	5.88%	7.81%
Medium (20-99)	0.32%	0.35%	0.37%	0.24%
Large (≥100)	0.10%	0.27%	0.19%	0.16%
Bali	**22,386 (100.00%)**	**33,149 (100.00%)**	**88,784 (100.00%)**	**83,589 (100.00%)**
Micro (1-4)	96.55%	93.78%	92.92%	88.16%
Small (5-19)	3.17%	5.49%	6.55%	11.20%
Medium (20-99)	0.22%	0.63%	0.46%	0.56%
Large (≥100)	0.06%	0.10%	0.07%	0.08%
Eastern Indonesia	**34,208 (100.00%)**	**80,612 (100.00%)**	**178,129 (100.00%)**	**225,357 (100.00%)**
Micro (1-4)	96.66%	97.27%	95.61%	92.83%
Small (5-19)	3.04%	2.54%	4.21%	6.98%
Medium (20-99)	0.26%	0.16%	0.15%	0.17%
Large (≥100)	0.04%	0.04%	0.02%	0.02%
Indonesia Total	**1,289,788 (100.00%)**	**1,532,364 (100.00%)**	**2,759,340 (100.00%)**	**3,223,929 (100.00%)**
Micro (1-4)	**95.71%**	**92.75%**	**90.64%**	**89.61%**
Small (5-19)	**3.74%**	**6.37%**	**8.31%**	**9.48%**
Medium (20-99)	**0.45%**	**0.70%**	**0.81%**	**0.68%**
Large (≥100)	**0.10%**	**0.17%**	**0.24%**	**0.23%**

Sources: BPS, *Industrial Census 1974/75,* Jakarta: BPS; BPS, *Economic Census* (1986, 1996, 2006), Jakarta: BPS.

Notes: See Appendix **Table 32**, **Table 33, Table 34** and **Table 35** for underlying provincial data.

Table 15: Share of Employees by Firm-Size Groups and Region in Indonesian Manufacturing, 1974-2006

<table>
<tr><th>Region</th><th>1974/5</th><th>1986</th><th>1996</th><th>2006</th></tr>
<tr><td>Java</td><td>3,817,289 (100.00%)</td><td>4,062,012 (100.00%)</td><td>7,824,002 (100.00%)</td><td>9,207,494 (100.00%)</td></tr>
<tr><td>Micro (1-4)</td><td>78.61%</td><td>52.09%</td><td>38.79%</td><td rowspan="2">57.57%</td></tr>
<tr><td>Small (5-19)</td><td>6.40%</td><td>15.20%</td><td>17.25%</td></tr>
<tr><td>Medium (20-99)</td><td rowspan="2">14.99%</td><td>7.70%</td><td rowspan="2">43.96%</td><td>7.45%</td></tr>
<tr><td>Large (≥100)</td><td>25.01%</td><td>34.98%</td></tr>
<tr><td>Sumatra</td><td>424,826 (100.00%)</td><td>552,153 (100.00%)</td><td>1,370,215 (100.00%)</td><td>1,601,759 (100.00%)</td></tr>
<tr><td>Micro (1-4)</td><td>74.72%</td><td>48.70%</td><td>48.27%</td><td rowspan="2">63.89%</td></tr>
<tr><td>Small (5-19)</td><td>12.37%</td><td>14.23%</td><td>18.20%</td></tr>
<tr><td>Medium (20-99)</td><td rowspan="2">12.92%</td><td>7.18%</td><td rowspan="2">33.53%</td><td>4.88%</td></tr>
<tr><td>Large (≥100)</td><td>29.88%</td><td>31.23%</td></tr>
<tr><td>Sulawesi</td><td>339,735 (100.00%)</td><td>249,003 (100.00%)</td><td>519,764 (100.00%)</td><td>592,468 (100.00%)</td></tr>
<tr><td>Micro (1-4)</td><td>90.61%</td><td>74.51%</td><td>71.54%</td><td rowspan="2">87.51%</td></tr>
<tr><td>Small (5-19)</td><td>6.94%</td><td>13.66%</td><td>17.91%</td></tr>
<tr><td>Medium (20-99)</td><td rowspan="2">2.45%</td><td>4.00%</td><td rowspan="2">10.54%</td><td>3.82%</td></tr>
<tr><td>Large (≥100)</td><td>7.83%</td><td>8.67%</td></tr>
<tr><td>Kalimantan</td><td>143,750 (100.00%)</td><td>201,239 (100.00%)</td><td>454,180 (100.00%)</td><td>401,353 (100.00%)</td></tr>
<tr><td>Micro (1-4)</td><td>83.16%</td><td>43.84%</td><td>49.39%</td><td rowspan="2">68.33%</td></tr>
<tr><td>Small (5-19)</td><td>6.66%</td><td>9.30%</td><td>13.48%</td></tr>
<tr><td>Medium (20-99)</td><td rowspan="2">10.18%</td><td>4.76%</td><td rowspan="2">37.12%</td><td>3.12%</td></tr>
<tr><td>Large (≥100)</td><td>42.10%</td><td>28.56%</td></tr>
<tr><td>Bali</td><td>75,883 (100.00%)</td><td>84,625 (100.00%)</td><td>206,843 (100.00%)</td><td>238,060 (100.00%)</td></tr>
<tr><td>Micro (1-4)</td><td>84.92%</td><td>64.78%</td><td>64.72%</td><td rowspan="2">85.91%</td></tr>
<tr><td>Small (5-19)</td><td>7.42%</td><td>16.76%</td><td>20.87%</td></tr>
<tr><td>Medium (20-99)</td><td rowspan="2">7.66%</td><td>8.74%</td><td rowspan="2">14.41%</td><td>7.13%</td></tr>
<tr><td>Large (≥100)</td><td>9.72%</td><td>6.96%</td></tr>
<tr><td>Eastern Indonesia</td><td>103,317 (100.00%)</td><td>141,078 (100.00%)</td><td>425,754 (100.00%)</td><td>531,679 (100.00%)</td></tr>
<tr><td>Micro (1-4)</td><td>87.10%</td><td>83.41%</td><td>70.63%</td><td rowspan="2">93.24%</td></tr>
<tr><td>Small (5-19)</td><td>7.23%</td><td>9.98%</td><td>17.49%</td></tr>
<tr><td>Medium (20-99)</td><td rowspan="2">5.67%</td><td>3.36%</td><td rowspan="2">11.88%</td><td>2.62%</td></tr>
<tr><td>Large (≥100)</td><td>3.25%</td><td>4.14%</td></tr>
<tr><td>Indonesia Total</td><td>4,904,800 (100.00%)</td><td>5,290,110 (100.00%)</td><td>10,806,096 (100.00%)</td><td>12,572,813 (100.00%)</td></tr>
<tr><td>Micro (1-4)</td><td>79.51%</td><td>53.51%</td><td>43.75%</td><td>42.57%</td></tr>
<tr><td>Small (5-19)</td><td>7.00%</td><td>14.69%</td><td>17.31%</td><td>19.60%</td></tr>
<tr><td>Medium (20-99)</td><td>3.96%</td><td>7.26%</td><td>5.76%</td><td>6.60%</td></tr>
<tr><td>Large (≥100)</td><td>9.52%</td><td>24.53%</td><td>33.18%</td><td>31.22%</td></tr>
</table>

Sources:

1974/75: BPS, *1974-5 Industrial Census, Household and Cottage Industries Vol. I*, Jakarta: BPS; BPS, *1974-5 Industrial Census, SSE Manufacturing*: *DKI Jakarta,* Jakarta: BPS; BPS, *1974-5 Industrial Census, SSE Manufacturing: East Java*, Jakarta: BPS; BPS, *1974-5 Industrial Census, SSE Manufacturing: DI Yogyakarta,* Jakarta: BPS; BPS, *1974-5 Industrial Census. SSE Manufacturing: Kalimantan, Irian Jaya, Bali, NYY & NTB*, Jakarta: BPS; BPS, *1974-5 Industrial Census, SSE Manufacturing: Sulawesi,* Jakarta: BPS; BPS, *1974-5 Industrial Census, SSE Manufacturing: Sumatra,* Jakarta: BPS; BPS, 1*974-5 Industrial Census, MLE Manufacturing: Indonesia*, Jakarta: BPS; 1974/5 Indonesian total relative shares of medium and large enterprises calculated from Albert Berry, Edgard Rodriguez and Henry Sandee, 2001, 'Small and Medium Enterprise Dynamics in Indonesia', *Bulletin of Indonesian Economic Studies, 37(3):* 363-384, Table 1.

1986: BPS, *1986 Economic Census, Results of Establishment Listing (Final Figures)* (various provinces), Jakarta: BPS.

1996: BPS, *1996 EC Household/Cottage Industry Statistics*, Jakarta: BPS; 1996 Medium and Large Manufacturing Worker Data from Medium & Large Enterprise Worker Data from more precise provincial sources: BPS Kantor Statistik Propinsi Bengkulu, 1997*, Statistik Industri Besar dan Sedang Propinsi Bengkulu 1996*, Bengkulu: BPS Kantor Statistik Propinsi Bengkulu; BPS Propinsi Sumatera Selatan, 1997, *Statistik Industri Besar dan Sedang Propinsi Sumatera Selatan 1996*, Palembangan: BPS Kantor Statistik Propinsi Sumatera Selatan; BPS Propinsi Jawa Tengah, 1998, *Indikator Industri Besar dan Sedang Jawa Tengah / Large and Medium Manufacturing Industry Indicators [Central Java]*, Semarang: BPS Propinsi Jawa Tengah; BPS Kantor Statistik Propinsi NTT, 1997, *Indikator Ekonomi Nusa Tenggara Timur 1996,* Kupang: Kantor Statistik Propinsi Nusa Tenggara Timur; BPS Propinsi Kalimantan Selatan, 1999, *Kalimantan Selatan Dalam Angka / Kalimantan Selatan in Figures 1999*, Banjarbaru: BPS Propinsi Kalimantan Selatan; BPS Propinsi Irian Jaya, 1999, *Irian Jaya Dalam Angka / Irian Jaya in Figures 1998*, Jayapura: BPS Propinsi Irian Jaya; BPS Propinsi Bali, 2001, *Bali Dalam Angka/Bali in Figures 2000*, Denpasar: BPS Propinsi Bali; BPS Propinsi D.I. Yogyakarta, 2001, *Daerah Istimewa Yogyakarta Dalam Angka/Daerah Istimewa Yogyakarta in Figures 2000*, Yogyakarta: BPS Propinsi D.I. Yogyakarta; BPS Propinsi Riau, 2000, *Riau Dalam Angka / Riau in Figures 2000*, Pekanbaru: BPS Propinsi Riau; BPS Propinsi DKI Jakarta, 2001*, Jakarta Dalam Angka / Jakarta in Figures 2000*, Jakarta: BPS Propinsi DKI Jakarta, Table 6.1.6; BPS Propinsi Kalimantan Tengah, 2001, *Kalimantan Tengah Dalam Angka (Kalimantan Tengah in Figures) 2000*, Palangka Raya: BPS Propinsi Kalimantan Tengah, Table 6.1.5; For West Java, Jambi, Lampung, Riau, North, South and West Sumatra, Central, Southeast and South Sulawesi, East, Central and West Kalimantan, West Nusa Tenggara, Maluku and Irian Jaya provincial shares in medium and large manufacturing employment were taken from Frederik Sjöholm, 2002, 'The challenge of combining FDI and regional development in Indonesia', *Journal of Contemporary Asia, 32(3):381-393*, Table 1 and used in conjunction with the Indonesia medium and large enterprise manufacturing number of workers total found in BPS, *1998 Statistik Indonesia / Statistical Yearbook,* Jakarta: BPS; 1996 relative medium and large manufacturing Indonesian total employment shares calculated from Robert Rice and Irfan Abdullah, 2000, *A Comparison of Small and Medium/Large Indonesian Manufacturing Enterprises from 1986 and 1996 by Sector*, Jakarta: Partnership for Economic Growth Project, USAID, (mimeo), Table 5.

2006: BPS, *2006 Economic Census MSE Manufacturing*, Jakarta: BPS; BPS, *2006 Economic Census MLE Manufacturing Part 1*, Jakarta: BPS; relative shares for microenterprises and small enterprises in 2006 calculated from BPS, *2009 Statistik Indonesia Statistical Yearbook*, Jakarta: BPS, Table 7.2.2.

Notes: See Appendix **Table 32**, **Table 33, Table 34** and **Table 35** for underlying provincial data.

Looking at changes in the distribution by number of establishments in each firm-size category in **Table 14** it is clear that while the share of microenterprises declined everywhere in Indonesia, even in the aftermath of the Asian Financial Crisis, the largest advances in firm-size distribution over this period were notable for small enterprises, whereas medium and large enterprises continued to have only small shares in total establishments. This development is in line with Snodgrass and Biggs' observations on changing firm size distribution as a country develops: the growing share of small firms corresponds to an industrialising economy. However, the developments in the shares of medium and large firms reveal a more mixed picture: the share of medium-sized firms doubled and that of large firms nearly tripled in Java during the New Order period. Both also showed substantial increases in Sumatra. Conversely, Eastern Indonesia was the only region to see a fall in the share of medium and large firms during the New Order period. The changes and growing divergence are more pronounced when looking at employment shares.

Table 15 shows the dramatic changes Indonesian manufacturing firm-size distribution underwent during the New Order as measured in employment shares. Employment shares of microenterprises nearly halved in Java and substantially decreased in Sumatra and Kalimantan during the New Order period. In Eastern Indonesia the share actually increased between 1974 and 1986 and only fell slightly by 1996. Again, relative employment in small firms rose everywhere, especially in Bali. Unfortunately, the 1974/75 Industrial Census and 1996 Economic Census only provide regional data for medium and large enterprise development combined. Medium and large enterprise employment reflect divergent trajectories: Java experienced the highest increase during the New Order period, followed by Sumatra with the second highest increase in medium and large manufacturing enterprise employment. With the exception of Eastern Indonesia the sharpest increase in medium and large manufacturing employment occurred between 1974/75 and 1986 throughout Indonesia. This is consistent with the observation in the literature on Indonesian economic development that the early 1980s saw the rise of private businesses due to the New Order government's tax reforms, trade liberalisation and financial sector deregulation. Between 1996 and 2006 the share of medium and large manufacturing establishments only changed very little; in respect to this indicator progress stalled after the Asian Financial Crisis.

These findings stand in line with the general image of the respective regions: Java, the main island and most developed region, had the smallest share of microenterprises and the largest shares of medium and large enterprises in terms of both number of enterprises and employment at the end of the New Order period. Eastern Indonesia and Sulawesi, the poorest regions, had the largest shares of microenterprise employment. Bali's advances were mainly in the rise of small enterprise employment; this can be explained by the specialisation of Balinese manufacturing in traditional handicraft industry. These results show how uneven the industrial development process was in Indonesia, when taking rising average firm-size as an indicator.[270]

Returning to the question about the existence of a missing middle in Indonesia, the difference between the establishment and employment-based figures shows that it is not sufficient to just look at establishment figures, as argued by Hsieh and Olken. The establishment-based figures only show little change, with microenterprises constituting the vast majority of the Indonesian manufacturing sector throughout the New Order period and in the country as a whole. However, the employment-based figures reveal much more detail and variation. The employment-based figures are particularly important given the differences in range of the firm-size brackets (i.e. microenterprises encompass firms between 1-4 workers, whereas firms with 20 all the way to 99 workers fall into the medium-sized category).

In the results for Indonesia overall during the New Order period there was a large drop in the employment share of microenterprises (by nearly half), considerable increases in small enterprise employment shares and large increases in the employment share of large enterprises. But surprisingly medium-sized enterprise employment shares peaked in 1986, despite continued – albeit small – growth in establishment shares from 1974 throughout to 2006. The *1974/75 Industrial Census* shows that the vast majority of manufacturing employment was in microenterprises (at least 75 per cent everywhere). However, from then onwards the comparison showed different regional trajectories during the New Order period and in the aftermath of the Asian Financial Crisis. Java, Sumatra and Kalimantan (in descending order) moved towards a missing middle, with considerable gains in large enterprise development but a persistent gap in medium-sized

[270] See **Table 36** in the Appendix for an overview regional average firm-size.

firm employment. Sulawesi and Eastern Indonesia, at the other end of the spectrum, shared the small share of medium-sized firm employment with the rest of the country, but did not see much growth in the large enterprise segment. Their firm-size distribution remained heavily skewed towards microenterprises in terms of employment as well as establishment shares. Despite the decline in the microenterprise segment and rise of all other firm-size category shares, there is no evidence of a closing of the middle gap anywhere in Indonesia during this period. This could be an indicator for the emergence and then persistence of a missing middle. Similarly, despite the relative decreases, the large presence of cottage firm and household industries was reflective of the fact that Indonesia was still a developing country at the end of the New Order period. The next step is to analyse how Indonesia's firm-size distribution compared to other countries at similar stages of economic development.

Figure 8 and **Figure 9** compare the Indonesian firm-size distribution to the South Korean and Taiwanese cases at comparable stages of economic development (measured in GDP per capita). First, a number of caveats have to be addressed. In the Indonesian censuses the smallest category are microenterprises with 1-4 workers, whereas the Taiwanese census data has 1-3 workers in its smallest bracket. In Indonesia, the next category is small enterprises with 5-19 workers; the Taiwanese data has been aggregated into 4-19 workers in the second category. This means that the Taiwanese figures slightly under-emphasize the importance of microenterprises and overemphasize the importance of small enterprises relative to each other (the medium and large enterprise brackets are the same) compared to Indonesia. The South Korean 1963 census excludes establishments with less than five workers, therefore the following figures comparing Indonesia to South Korea and Taiwan have been replicated in the appendix excluding microenterprises.[271] These caveats have to be borne in mind in the comparison of these datasets.

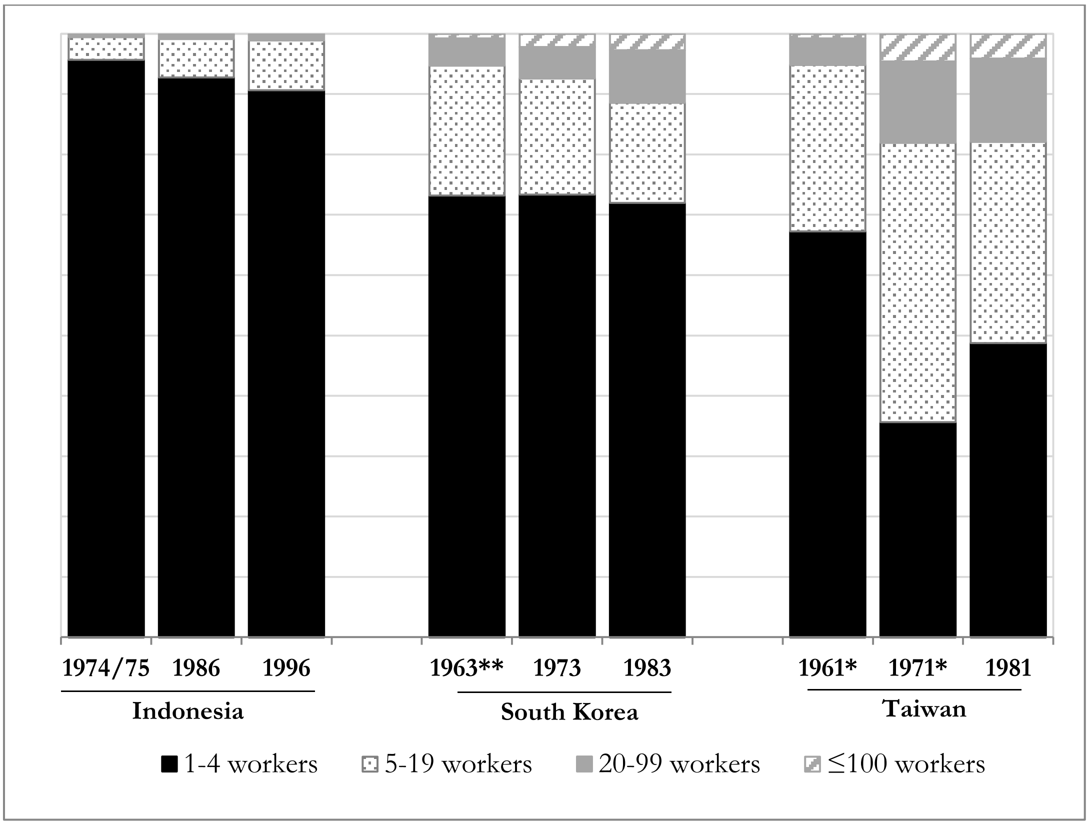
Figure 8 compares Indonesia to South Korea and Taiwan by shares of number of establishments in each firm-size category. A perhaps surprising finding, given Taiwan's reputation of an SME-based economy, is that the share of firms with at least 100 workers was larger than in Indonesia during the entire period not just in South Korea but also in Taiwan. The gap between the latter two countries even grew, so much

[271] See **Figure 31** and **Figure 32**

so that the share of large enterprises in total establishments in Taiwan became larger than in South Korea. Both South Korea and Taiwan had much larger increases in the medium firm-size bracket of 20-99 workers than Indonesia. The comparison of employment shares without microenterprises in the appendix (**Figure 31**) shows that relative to small and large firms, the share of medium-sized establishments actually fell in Indonesia between 1974/75 and 2006, while the same firm-size bracket grew in South Korea and Taiwan between the 1960s and 1980s. When comparing the development of firm-size distributions without microenterprises Indonesia's middle actually grew smaller, while it expanded in South Korea and Taiwan.

A comparison based on employment shares of Indonesia to South Korea and Taiwan in **Figure 9** makes a stronger case for arguing for a missing middle in Indonesia, rather than for a missing top – at least when adhering to Indonesia's definition of an SME, which was relatively small compared to its regional neighbours. Indonesia's average firm-size grew continuously during the New Order period; the share of employment in microenterprises dropped by half, there was a more than threefold growth of large enterprises, the share of small enterprises grew, but there was not much movement in the medium-sized bracket, which indicates a missing middle. Again, when comparing the firm-size distribution in employment shares without microenterprises in **Figure 32** (in the Appendix) the share of small and medium-sized enterprise employment actually declined during the New Order and only marginally increased in the aftermath of the Asian Financial Crisis. However, a surprising observation from the comparison without microenterprises is that the respective shares of small, medium and large-sized enterprise employment in Indonesia in 1974/75 were relatively similar to those in South Korea in 1963 and Taiwan in 1961, when they were at comparable stages of economic development. But whereas the share of small firms dropped considerably in South Korea between 1963 and 1983 and Taiwan between 1961 and 1981, the Indonesian share fluctuated only marginally between 1974 and 2006. Returning to the comparison of employment shares including microenterprises shown in **Figure 9**, Taiwan had an even smaller share in the microenterprise category than South Korea. Despite the considerable drop in microenterprise employment in Indonesia between 1974 and 1996, Indonesia's employment share in this category remained much higher – roughly five times that of South Korea between 1973 and 1983 (there is no data on firms with fewer than five employees in the South Korean 1963 census). Medium-sized firms with 20-99 workers constituted a much higher share of manufacturing employment in Taiwan and South Korea between the 1960s and 1980s than in Indonesia during the New Order period.

Figure 8: Comparison of Firm-Size Distribution by Number of Establishments (in per cent)



Sources:

Indonesia: Calculated from BPS, *1974/75 Industrial Census*, Jakarta: BPS; BPS, *Economic Census* (1986, 1996), Jakarta: BPS.

South Korea: Calculated from Economic Planning Board (EPB), *Report and Mining and Manufacturing Census* (1963, 1973, 1983), Seoul: EPB.

Taiwan: Calculated from ROC, Executive Yuan, Directorate-General of Budget, Accounting and Statistics (DGBAS), 1973, *The 1971 Industrial & Commercial Censuses of Taiwan and Fukien Area, Volume III,* Taipei: Executive Yuan; 1961 and 1981 calculated from Republic of China, 1961-1981 in Makoto Abe and Momoko Kawakami, 1997, 'A Distributive Comparison of Enterprise Size in Korea and Taiwan', *The Developing Economies, 35(4):* 382-400, p. 386.

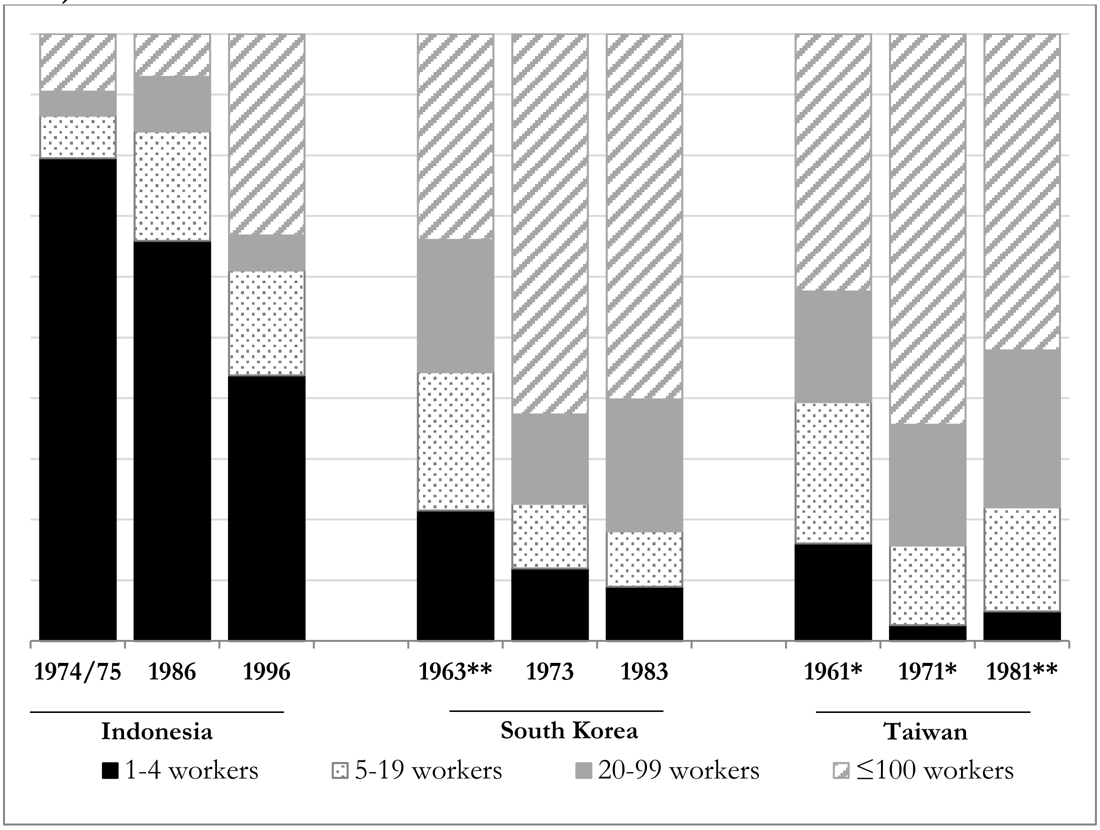
Notes:

***** No data on the number manufacturing establishments with 1-4 workers in the South Korean 1963 census (South Korea 1963 approximation based on relative ratios of small/medium/large 1963to 1973 & growth of number of establishments by firm-size category 63-73 and 73-83)

* For Taiwan 1961&1971 the smallest category encompasses 1-3 workers and the second smallest 4-19 workers instead of 1-4 and 5-19 workers respectively

For a comparison excluding microenterprises see Appendix **Figure 31**.

Figure 9: Comparison of Firm-Size Distribution by Employment Shares (in per cent)



Sources:
Indonesia: Calculated from BPS, *1974/75 Industrial Census*, Jakarta: BPS; BPS, *Economic Census* (1986, 1996, 2006), Jakarta: BPS; relative shares of medium and large enterprises for 1974/75 and 1986 calculated from Albert Berry, Edgard Rodriguez and Henry Sandee, 2001, 'Small and Medium Enterprise Dynamics in Indonesia', *Bulletin of Indonesian Economic Studies, 37(3):* 363-384, Table 1, relative medium and large manufacturing Indonesian employment shares for 1996 calculated from Robert Rice and Irfan Abdullah, 2000, *A Comparison of Small and Medium/Large Indonesian Manufacturing Enterprises from 1986 and 1996 by Sector*, Jakarta: Partnership for Economic Growth Project, USAID, (mimeo), Table 5.
South Korea: Calculated from Economic Planning Board (EPB), *Report and Mining and Manufacturing Census* (1963, 1973, 1983), Seoul: EPB.
Taiwan: ROC, Executive Yuan, *Industrial & Commercial Censuses of Taiwan and Fukien Area (1961, 1971, 1981),* Taipei: Executive Yuan.
Notes:
***** No data on the number manufacturing establishments with 1-4 workers in the South Korean 1963 census (South Korea 1963 approximation based on relative ratios of small/medium/large 1963to 1973 & growth of number of establishments by firm-size category 63-73 and 73-83)
* For Taiwan 1961&1971 the smallest category encompasses 1-3 workers and the second smallest 4-19 workers instead of 1-4 and 5-19 workers respectively and have been recalculated here based on known shares of 1-9, 10-29 and 29-100 & average firm-sizes in 1971 and 1991
** For Taiwan in 1981 the smallest categories are 1-9, 10-29 and 29-100 workers instead of 1-4, 5-19, and 20-99 respectively
For a comparison excluding microenterprises see Appendix **Figure 32.**

The comparison shows that both in terms of establishment as well as employment shares Indonesia had a very small middle and this did not change during the New Order period. However, the missing middle literature gives no clear definition of relative firm-size ratios that constitute a missing middle. When looking at establishment shares Indonesia has a unimodal firm-size distribution, as does South Korea – despite its reputation for the strength of its large firms and conglomerates. Only Taiwan's firm-size distribution differed, developing from a unimodal pattern towards a bloated middle. This observation is in line with Taiwan's reputation of being an SME-based economy. When looking at employment shares, Indonesia's firm-size distribution changed from a unimodal to a bimodal pattern between 1986 and 1996 when microenterprise employment continued to fall and large enterprise employment grew but the share of medium-sized employment remained roughly equal. It could be argued that this was to be expected as Indonesia was still a developing country at the time. Many developing countries have very many very small firms and few large firms.[272] However, the comparison with South Korea and Taiwan at similar stages of economic development (using a fifteen year lag) did not support this argument. Both South Korea and Taiwan had a much larger average firm-size and faster growth in average firm-size as well as a greater decline in micro and small enterprise employment. The share of medium sized firms in employment and establishments in Indonesia was not just smaller than in Taiwan, known for the strength of its SMEs, but also those of South Korea. Indonesian average firm-size grew during the New Order period, but the data suggest that as it grew a missing middle emerged, which persisted in the aftermath of the Asian Financial Crisis.

3.5 Role of SMEs in the Manufacturing Sector

An analysis of SME development has to invariably delve deeper than just considering changes in number of establishments and share of employment. Their contribution to value added is a useful indicator to understand the importance of the respective firm-

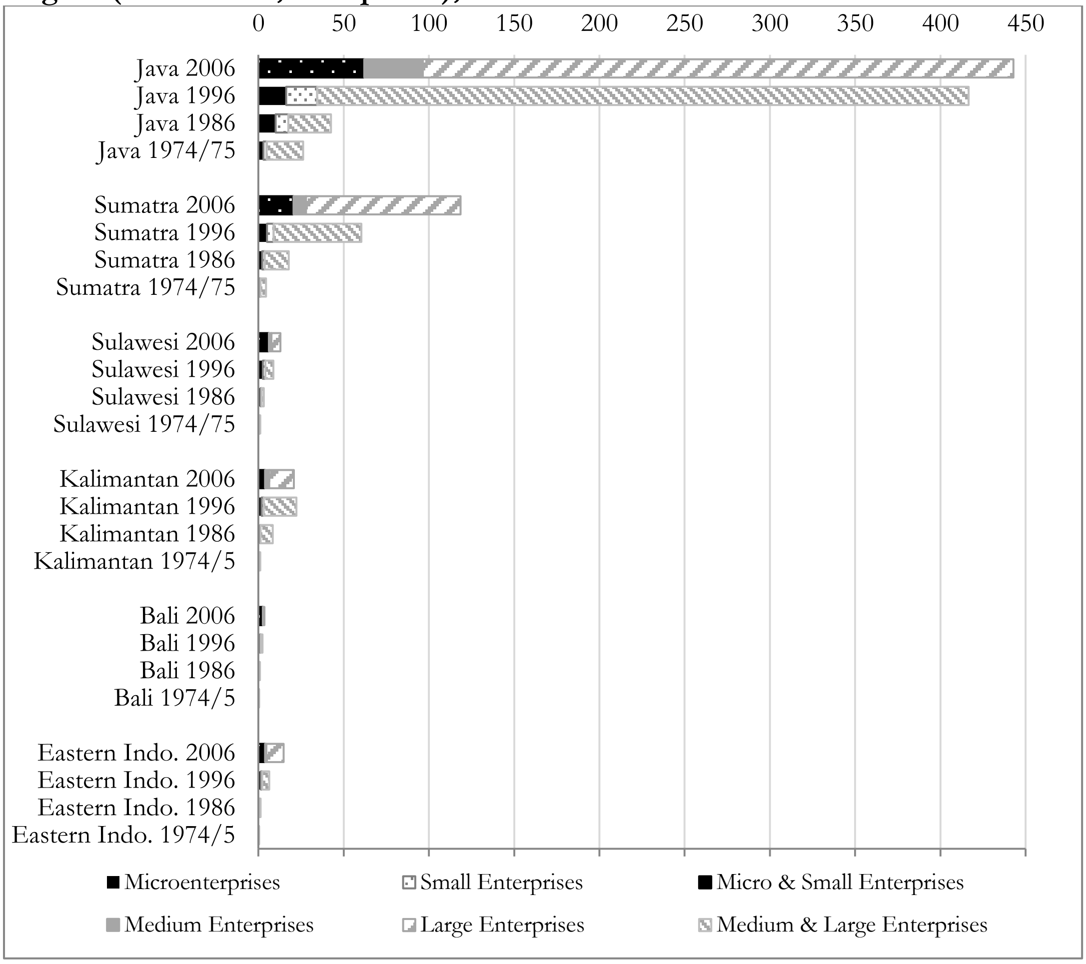
[272] For further discussion see: Donald R. Snodgrass and Tyler Biggs, 1996, *Industrialization and the Small Firm: Patterns and Policies,* San Francisco: International Centre for Economic Growth and the Harvard Institute for International Development, p. 31 and James Tybout, 2000, Manufacturing Firms in Developing Countries: How Well Do They Do, and Why?, *Journal of Economic Literature, 38(1)*:11-44, p. 15.

size category to the manufacturing sector and the economy as a whole. If what we expect to see from Snodgrass and Biggs's findings happens, which is that as a country develops the typical manufacturing establishment changes from traditional household industry to a modern factory SME with more complex production lines, we would expect to see this reflected in increases in value added.[273]

Figure 10 illustrates the absolute value added by firm-size group, summarised at the regional level. The data show that between 1974-1996 the absolute value added of household and cottage industries at constant prices was higher than the value added of small enterprises for Indonesia overall and in all regions (with the exception of Java in 1996, when the value added contribution of household and cottage industries was only 90 per cent of that of small enterprises). However, the ratio between these two categories varied over time and between regions so that no clear trend is discernible. The only year for which the economic census data was disaggregated between medium and large enterprises was 2006, which shows that medium-sized manufacturing establishments constituted only a small share of total value added. However, these trends within the household, cottage and small industry and medium and large industry categories respectively are easily explained if we take into account the number of firms in each category.

[273] Donald R. Snodgrass and Tyler Biggs, 1996, *Industrialization and the Small Firm: Patterns and Policies,* San Francisco: International Centre for Economic Growth and the Harvard Institute for International Development, p. 51; Eugene Staley and Richard Morse, 1965, *Modern Small Industry for Developing Countries,* New York: McGraw-Hill, pp. 5-8, 14-25.

Figure 10: Regional Manufacturing Value Added by Firm-Size Group and Region (billion IDR, 2006 prices), 1975-2006



Sources: BPS, *1974/75 Industrial Census, Household & Cottage Industries,* Jakarta: BPS; BPS, *1974/75 Industrial Census, SSE Manufacturing* (various provinces), Jakarta: BPS; 1986 Cottage industries and microenterprise VA calculated from BPS, *1986 Economic Census, Home Industry Statistics*, Jakarta: BPS , Tables 24.1 & 24.2; BPS, *1986 Economic Census, Small Scale Manufacturing Industry Statistics,* Jakarta: BPS; Medium and large enterprise VA from: BPS, *1974/75 Industrial Census, M&LE,* Jakarta: BPS; BPS, *1996 Economic Census, Household /Cottage Industry Statistics,* Jakarta: BPS; BPS, *1996 Economic Census, Small Scale Manufacturing Industry Statistics,* Jakarta: BPS;

2006 own calculations using data from BPS, *2006 Economic Census, Micro and Smallscale Establishment: Manufacturing*, Table 2.2 and from BPS, *2006 Economic Census, MLE Manufacturing Part 1*, Tables 6 & 7.

Notes: 2006 was the only year for which cottage industry and small enterprise could not be disaggregated;
Deflator used was calculated from the GDP deflator reported in The World Bank, 2017, *World Development Indicators*, Washington, D.C.: The World Bank, GDP deflator (base year varies by country) [Data file] Retrieved from https://data.worldbank.org/indicator/NY.GDP.DEFL.ZS?locations=ID

Breaking down the data to value added per worker for each firm-size category allows for an even more meaningful analysis of SME development and how their role in the economy changed. This step makes it possible to assess not only how the relative productivity of different firm-size categories changed over time but also how productivity varied for the same firm-size category between provinces. When looking at the value added per worker in **Figure 11** it is clear that the value added increased with increasing firm-size category for all Indonesian regions throughout the entire period from 1974 to 1996, meaning the larger the firm the higher the labour productivity. However, in the case of Bali during the entire period the value added per worker of its small enterprises lagged only marginally behind large enterprise productivity. This can be explained by the aforementioned strength of the Balinese artisan handicraft industry. The 2006 data, which disaggregates between medium and large enterprise value added, shows an unexpected exception to this pattern: medium and large enterprises performed almost equally well.[274] The low productivity of micro and small enterprises relative to the starkly increasing value added of medium and large firms (with the exception of Bali) could be indicative of Arthur Lewis' dual economy model, in which the modern ("capitalist") sector, "which uses reproducible capital, and pays capitalists for the use thereof" is separate from the traditional ("subsistence") sector, with lower worker productivity and characterised by not using reproducible capital. According to Lewis, as the country develops the modern sector expands and absorbs labour from the traditional sector until the labour surplus characteristic of underdeveloped economies disappears and wages increase above subsistence levels.[275] Rotenberg et al argue that in this scenario the persistence of any kind of missing middle can be explained through Engel's law. According to Rothenberg et al, this means that the low income traditional sector workers purchase the inferior goods produced by the traditional sector and only with rising incomes through economic development do preferences shift towards higher quality products produced by the modern sector. Demand then increases the size of the formal sector and labour shifts from the former to the latter.[276] Rothengerg et al argue

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[274] Own calculations based on BPS, *2006 Economic Census, MLE Manufacturing Part 1*, Jakarta: BPS, Tables 6 & 7.

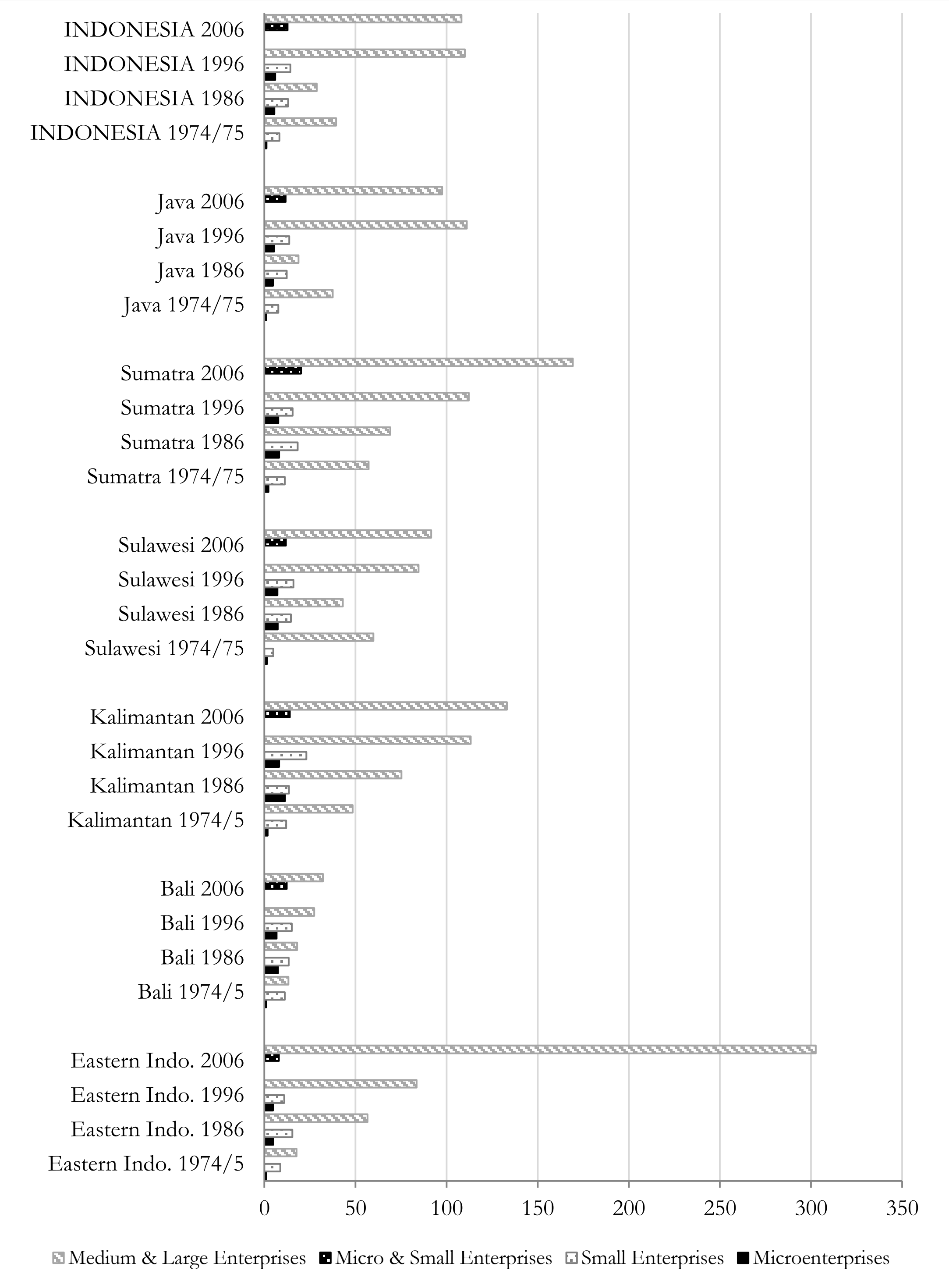
[275] Arthur Lewis, 1954, 'Economic Development with Unlimited Supplies of Labour', *Manchester School, 22*: 139-191, pp. 146-147, 152, 190.

[276] Alexander Rothenberg, Arya Gaduh, Nicholas Burger, Charina Chazali, Indrasari Tjandraningsih, Rini Radikun, Cole Sutera and Sarah Weilant, 2016, 'Rethinking Indonesia's Informal Sector', *World Development, 80:* 96-113, p. 98.

that this exit of the informal sector signifies a shift from negative income elasticities of demand towards equilibrium.[277]

[277] Alexander Rothenberg, Arya Gaduh, Nicholas Burger, Charina Chazali, Indrasari Tjandraningsih, Rini Radikun, Cole Sutera and Sarah Weilant, 2016, 'Rethinking Indonesia's Informal Sector', *World Development, 80:* 96-113, p. 111 (Note 6).

Figure 11: Value Added per Employee by Region and Firm-Size Category, 1975-2006 (million IDR, 2006 prices)



Sources:

1974/75: Own calculations based on data from BPS, *1974/75 Industrial Census, Household & Cottage Industries, Vol. I*, Jakarta: BPS; BPS, *1975/75 Industrial Census, SSE Manufacturing* (various provinces), Jakarta: BPS; BPS, *1974/75 Industrial Census, M&LE*, Jakarta: BPS.

1986: Own calculations based on data from BPS, *1986 Economic Census, Home Industry Statistics*, Jakarta: BPS, Tables 24.1 & 24.2; BPS, *1986 Economic Census, Small Scale Manufacturing Industry Statistics*, Jakarta: BPS; BPS, *1986 Economic Census, Results of Establishment Listing (Final Figures)* (various provinces) , Jakarta: BPS; BPS, *1986 Economic Census in Graphs*, Jakarta: BPS, Table 3.1.

1996: BPS, *1996 Economic Census, Household /Cottage Industry Statistics*, Jakarta: BPS; BPS, *1996 Economic Census, Small Scale Manufacturing Industry Statistics*, Jakarta: BPS; **medium and large enterprise VA sources**: BPS Kantor Statistik Propinsi Bengkulu, *1997, Statistik Industri Besar dan Sedang Propinsi Bengkulu 1996*, Bengkulu: BPS Kantor Statistik Propinsi Bengkulu; BPS Propinsi Sumatera Selatan, 1997, *Statistik Industri Besar dan Sedang Propinsi Sumatera Selatan 1996*, Palembangan: BPS Kantor Statistik Propinsi Sumatera Selatan; BPS Propinsi Jawa Tengah, 1998, *Indikator Industri Besar dan Sedang Jawa Tengah / Large and Medium Manufacturing Industry Indicators [Central Java]*, Semarang: BPS Propinsi Jawa Tengah; BPS Kantor Statistik Propinsi NTT, 1997, *Indikator Ekonomi Nusa Tenggara Timur 1996*, Kupang: Kantor Statistik Propinsi Nusa Tenggara Timur, Table 6.3.2; BPS Propinsi Jambi, 2000, *Jambi Dalam Angka/Jambi in Figures 1999*, Jambi: BPS Propinsi Jambi, Tables VI.1.6&7; BPS Propinsi Kalimantan Selatan, 1999, *Kalimantan Selatan Dalam Angka / Kalimantan Selatan in Figures 1999*, Banjarbaru: BPS Propinsi Kalimantan Selatan, Tables 6.1.7&9; BPS Propinsi Irian Jaya, 1999, *Irian Jaya Dalam Angka / Irian Jaya in Figures 1998*, Jayapura: BPS Propinsi Irian Jaya, Table 6.1.4; BPS Propinsi Bali, 2001*, Bali Dalam Angka/Bali in Figures 2000*, Denpasar: BPS Propinsi Bali, Table 6.1.7; BPS Propinsi D.I. Yogyakarta, 2001, *Daerah Istimewa Yogyakarta Dalam Angka/Daerah Istimewa Yogyakarta in Figures 2000*, Yogyakarta: BPS Propinsi D.I. Yogyakarta, Table 6.1.6; BPS Propinsi Riau, 2000, *Riau Dalam Angka / Riau in Figures 2000*, Pekanbaru: BPS Propinsi Riau, Table 6.1.8; BPS Propinsi DKI Jakarta, 2001, *Jakarta Dalam Angka / Jakarta in Figures 2000*, Jakarta: BPS Propinsi DKI Jakarta, Table 6.1.6; BPS Propinsi Kalimantan Tengah, 2001, *Kalimantan Tengah Dalam Angka (Kalimantan Tengah in Figures) 200*0, Palangka Raya: BPS Propinsi Kalimantan Tengah, Table 6.1.5; BPS Propinsi Sulawesi Tengah, 2001, *Sulawesi Tengah Dalam Angka (Sulawesi Tengah in Figures) 2001*, Palu: BPS Propinsi Sulawesi Tengah, Table VI.1.1; For Central Java, Riau, West Sumatra, Southeast Sulawesi, East Kalimantan West Kalimantan, West Nusa Tenggara and Maluku, provincial shares in manufacturing value added were taken from Frederik Sjöholm, 2002, 'The challenge of combining FDI and regional development in Indonesia', Journal of Contemporary Asia, 32(3):381-393, Table 1 and used in conjunction with the Indonesia medium and large enterprise manufacturing value added total found in BPS, *1998 Statistik Indonesia / Statistical Yearbook*, Jakarta: BPS; Southeast Sulawesi could only be roughly approximated based on performance in 1986, 2006 and relative to Household, Cottage and Small Industry Manufacturing as its share in VA was listed as 0.0% in Sjöholm.

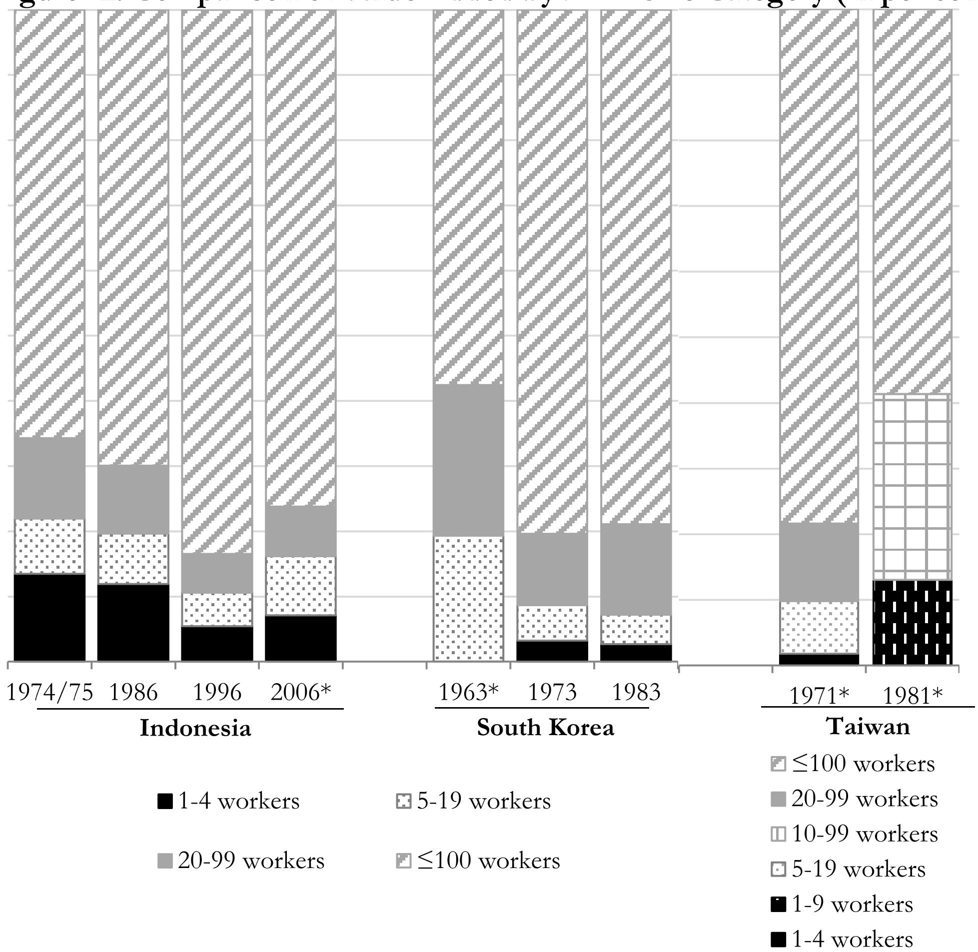
2006: Own calculations using data from BPS, 2006 *Economic Census, Micro and Smallscale Establishment: Manufacturing*, Jakarta: BPS, Table 2.2 and from BPS, *2006 Economic Census, MLE Manufacturing Part 1*, Jakarta: BPS, Tables 6 & 7.

Notes: Only year for which cottage industry and small enterprise could not be disaggregated;

The exceptional performance of medium and large enterprise VA in Eastern Indonesia in 2006 was solely driven by Papua.

Figure 12 shows the relative shares of each firm-size bracket in total manufacturing value added in Indonesia compared to South Korea and Taiwan at a similar stage of economic development as Indonesia during the New Order period. The data show an overall decline in the contribution of large enterprises in South Korea and Taiwan, whereas their share increased in Indonesia, with the exception of 2006. **Figure 13**, **Figure 14** and **Figure 15** show the value added per worker by firm-size category in each country. It is in the value added per worker that the strength of Taiwanese SMEs becomes apparent; it is the only country out of the three in which micro and small enterprises had a value added per worker that is higher than that of medium enterprises. But also in South Korea micro and small enterprises had a higher value added per worker relative to large enterprises than in Indonesia. However, the value added per worker of medium relative to large enterprises was comparable between the three countries. This could be indicative of the existence of some kind of dual economy, in which Indonesian micro and small enterprises operated at subsistence level with low worker productivity and medium and large enterprises were part of the modern industrial sector.

Figure 12: Comparison of Value Added by Firm-Size Category (in per cent)



Sources:

Indonesia: Calculated from BPS, *1974/75 Industrial Census* Jakarta: BPS; BPS, *Economic Census* (1986, 1996, 2006) Jakarta: BPS; relative shares of medium and large enterprises for 1974/75 and 1986 calculated from Albert Berry, Edgard Rodriguez and Henry Sandee, 2001, 'Small and Medium Enterprise Dynamics in Indonesia', *Bulletin of Indonesian Economic Studies, 37(3):* 363-384, Table 1; relative medium and large manufacturing Indonesian shares for 1996 calculated from Robert Rice and Irfan Abdullah, 2000, *A Comparison of Small and Medium/Large Indonesian Manufacturing Enterprises from 1986 and 1996 by Sector*, Jakarta: Partnership for Economic Growth Project, USAID, (mimeo), Table 5); relative shares for microenterprises and small enterprises in 2006 calculated from BPS, 2009 *Statistik Indonesia Statistical Yearbook,* Jakarta: BPS, Table 7.2.2.

South Korea: Calculated from ROK, EPB, *Report and Mining and Manufacturing Census* (1963, 1973, 1983), Seoul: EPB.

Taiwan: ROC, Executive Yuan, Directorate-General of Budget, Accounting and Statistics (DGBAS), 1973, *The 1971 Industrial & Commercial Censuses of Taiwan and Fukien Area,* Taipei: Executive Yuan*;* 1981 calculated from Republic of China, 1961-1981 in Makoto Abe and Momoko Kawakami, 1997, 'A Distributive Comparison of Enterprise Size in Korea and Taiwan', *The Developing Economies, 35(4):* 382-400, p. 386.

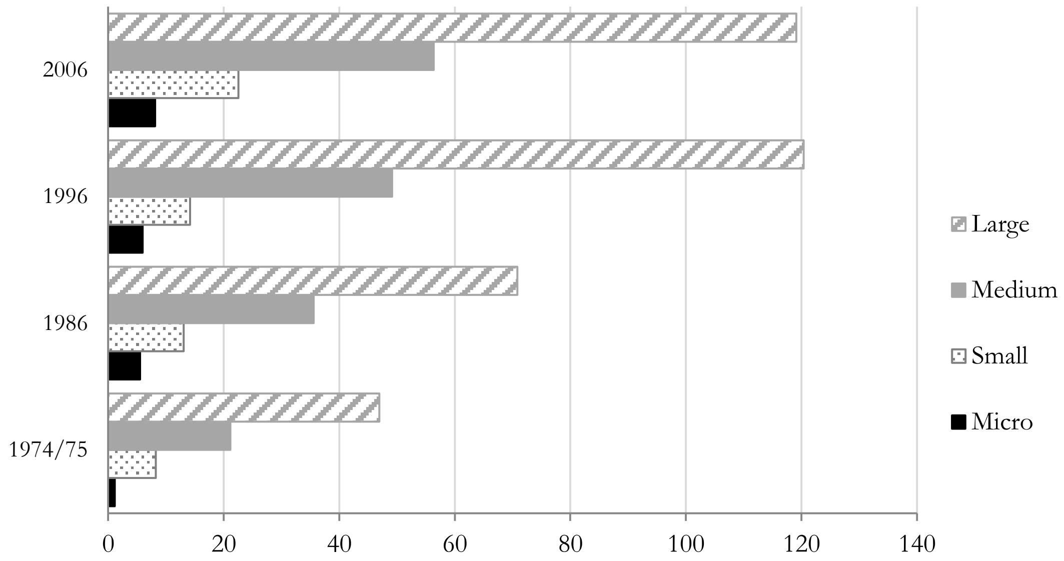
Notes:

***** No data on the number of manufacturing establishments with 1-4 workers in the South Korean 1963 census

* For Taiwan in 1961 no data is available

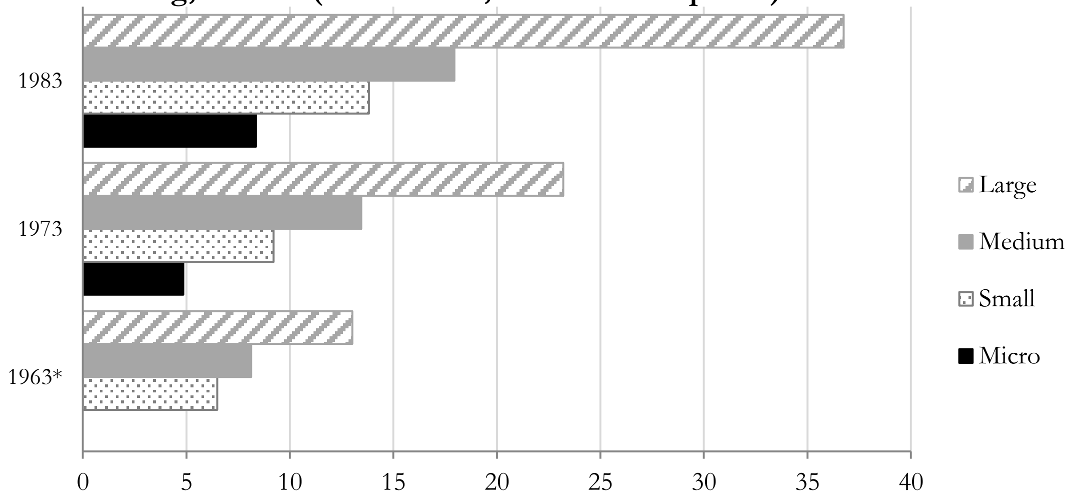
*For Taiwan in 1971 census the smallest category encompasses 1-3 workers and the second smallest 4-19 workers instead of 1-4 and 5-19 workers respectively.

Figure 13: Value Added per Employee by Firm-Size Category in Indonesian Manufacturing, 1975-2006 (million IDR, 2006 prices)



Sources: Calculated from BPS, *1974/75 Industrial Census*, Jakarta: BPS; BPS, *Economic Census* (1986, 1996, 2006), Jakarta: BPS; relative shares of medium and large enterprises for 1974/75 and 1986 calculated from Albert Berry, Edgard Rodriguez and Henry Sandee, 2001, 'Small and Medium Enterprise Dynamics in Indonesia', *Bulletin of Indonesian Economic Studies, 37(3):* 363-384, Table 1; relative medium and large manufacturing Indonesian shares for 1996 calculated from Robert Rice and Irfan Abdullah, 2000, *A Comparison of Small and Medium/Large Indonesian Manufacturing Enterprises from 1986 and 1996 by Sector*, Jakarta: Partnership for Economic Growth Project, USAID, (mimeo), Table 5; relative shares for microenterprises and small enterprises in 2006 calculated from BPS, 2009 *Statistik Indonesia Statistical Yearbook*, Jakarta: BPS, Table 7.2.2.

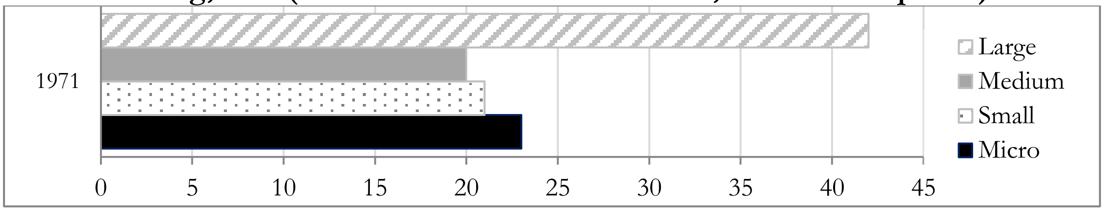
Figure 14: Value Added per Employee by Firm-Size Category in Korean Manufacturing, 1963-83 (million won, 2010 constant prices)



Sources: Calculated from Economic Planning Board (EPB), *Report and Mining and Manufacturing Census* (1963, 1973, 1983); Price deflator calculated from Bank of Korea, National Accounts from OECD Stats 2018.

Notes: *No data on the number manufacturing establishments with 1-4 workers in the South Korean 1963.

Figure 15: Value Added per Employee by Firm-Size Category in Taiwanese Manufacturing, 1971 (thousand New Taiwan Dollars, 1971 current prices)



Source: Calculated from The Committee of Industrial and Commercial Censuses of Taiwan and Fukien Area, 1973, *The 1971 Industrial & Commercial Census Volume III,* Taipei: Executive Yuan.

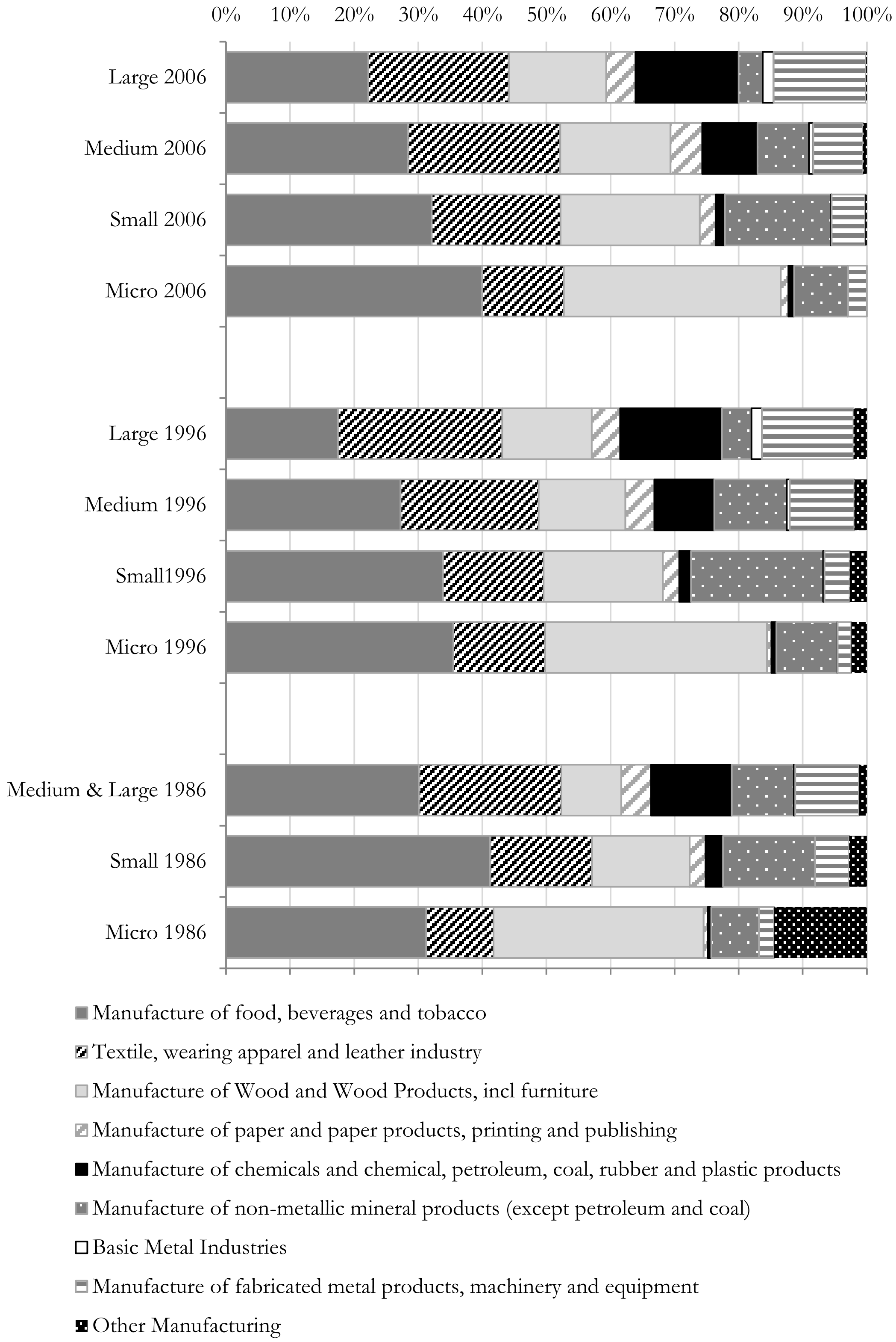
Notes: For Taiwan the smallest category encompasses 1-3 workers and the second smallest 4-19 workers instead of 1-4 and 5-19 workers respectively; for Taiwan there is no comparable data in the 1961 and 1981 censuses.

The next question that naturally emerges is whether the low value added of micro and small enterprises in Indonesia is a result of operating in different industrial subsectors. **Figure 16** and **Figure 17** show the Indonesian establishment and employment shares by firm-size group and industrial sub-sector respectively. The figures show that the majority of Indonesian manufacturing microenterprises were in light labour-intensive industries (food and tobacco, textiles, and wood products), while small enterprises were concentrated in the same three sectors with the addition of a stronger share in non-metallic mineral products. The majority of medium-sized firms were in the same three sectors as micro and small enterprises. However, the presence of medium-sized firms in other sectors (with the exception of heavy industry) was much stronger. Amongst large firms nearly two thirds were in these light industries and a third in heavy and chemical industries, which naturally favours large enterprises because of their capital-intensity and economies of scale. It is notable that the relative shares of industrial sub-sectors did not change much for any firm-size category between 1986 and 2006.

Figure 18 shows the value added by firm-size group and industrial sub-sector and **Table 16** the value added per worker. These results show that the previous finding, that value added per worker increases with each firm-size category, is not just the result of different-sized firms being concentrated in different industrial sub-sectors. The main caveat here is that the firm-size categories are very broad, however the broad categorisation of heavy versus light industries still holds. **Table 16** clearly shows that the value added per worker increases with each firm-size category for every industrial sub-sector. The only exception to this shown in the data here is the value added per worker in the basic metal industries (industrial classification major group 37) in 1996, when medium-sized firms outperformed large firms in terms of value added per worker. A further breakdown of industrial subsectors (not shown here) revealed that this was due to the high value added that medium-sized firms had in 1996 in iron and steel basic industries. Hidden by the broader categories is also the fact that in 2006 medium-sized firms had a higher value added per worker in two sub-categories of the fabricated metal products, machinery and equipment (38) sector as well as in recycling, summarised under "others" (39).[278] This could be an indication that at least some medium-sized firms were beginning to exploit their advantages, i.e. breaking into niche markets. In general, however, these results show that the low productivity in smaller firm-size categories cannot be explained through concentration in different sub-sectors with inherent higher value added.

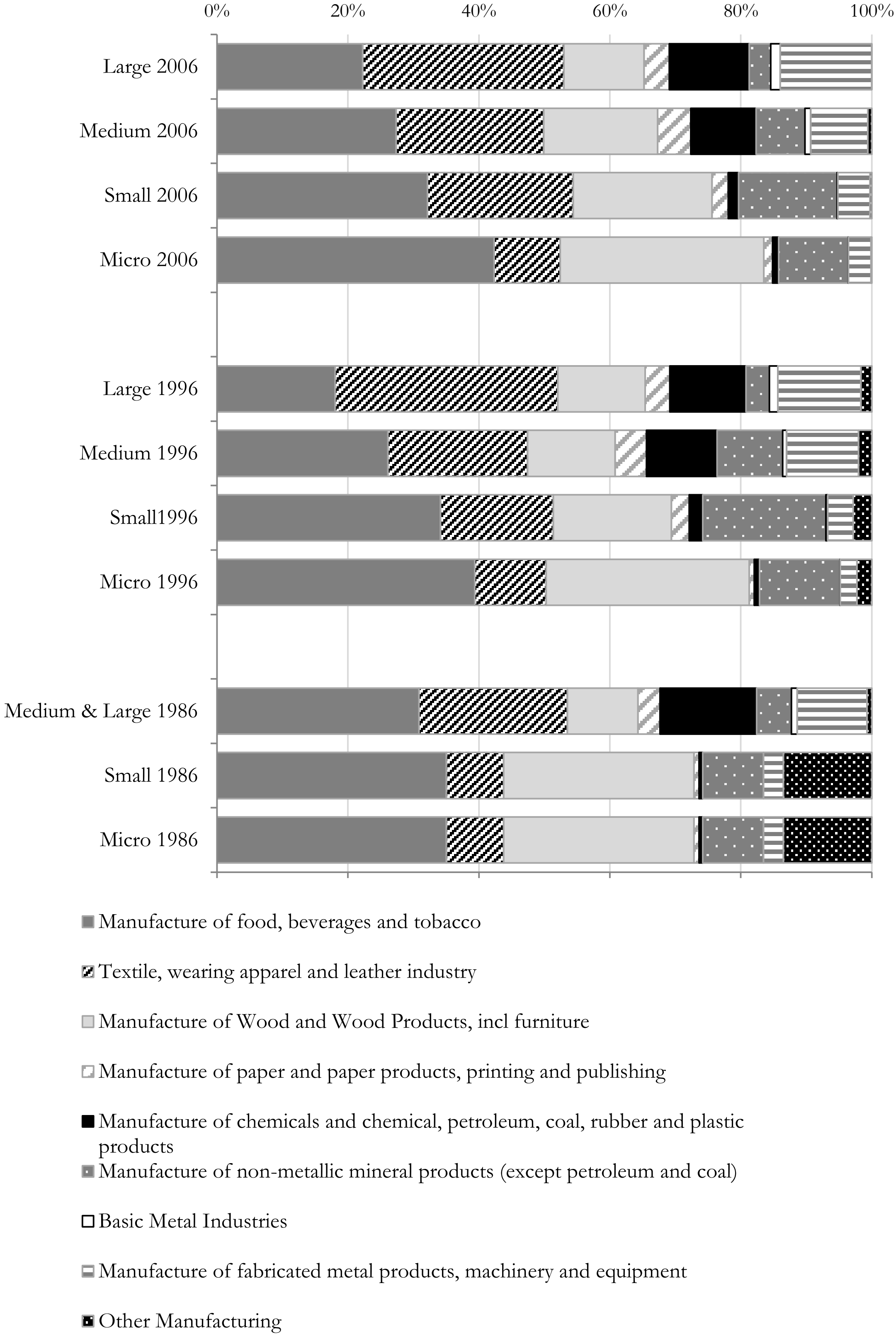
278 The two sub-sectors were (1) Radio, television and communication equipment apparatus and (2) Medical, precision and optical instruments, watches and clocks.

Figure 16: Industrial Sub-sector Shares of Establishment by Firm-Size Category and Industrial Classification Major Groups in Indonesia, 1986-2006



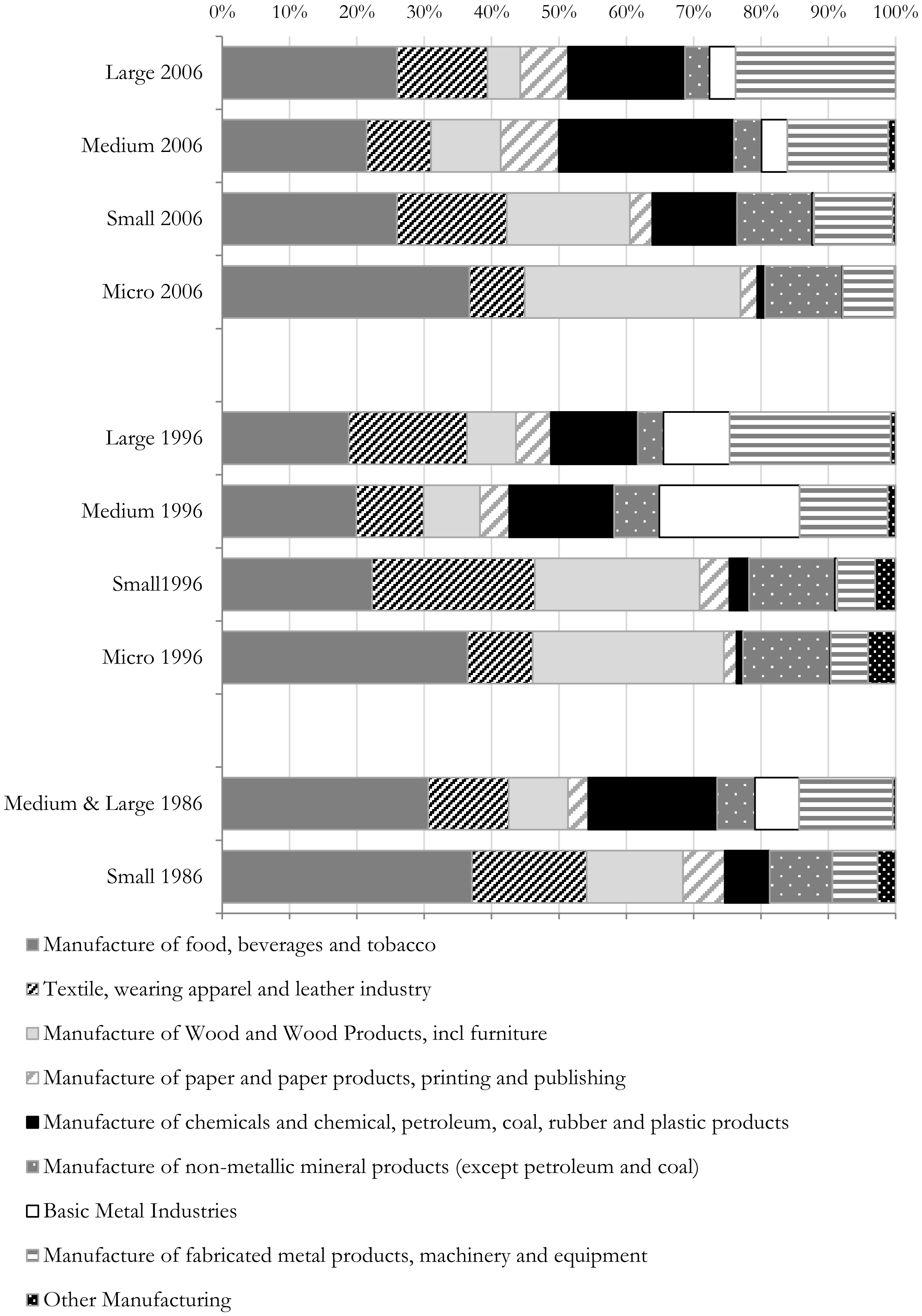
Sources: BPS, *Economic Census* (1986, 1996, 2006), Jakarta: BPS.
Notes: Based on old major industrial groups used in the 1986 and 1996 economic censuses.

Figure 17: Industrial Sub-sector Shares of Employment by Firm-Size Category in Indonesia, 1986-2006



Sources: BPS, *Economic Census* (1986, 1996, 2006), Jakarta: BPS.

Figure 18: Industrial Sub-sector Shares of Value Added by Firm-Size Category in Indonesia, 1986-2006



Sources: BPS, *Economic Census* (1986, 1996, 2006)*,* Jakarta: BPS.

Table 16: Value Added per Worker by Firm-Size Group and Industrial Major Group in Indonesia, 1986-2006 (thousand IDR, 2006 prices)

		1986		1996				2006			
Code	Description	Small	MLE	Micro	Small	Medium	Large	Micro	Small	Medium	Large
31	Manufacture of food, beverages and tobacco	11,808	62,121	5,487	9,236	37,048	123,978	7,045	18,179	44,121	138,833
32	Textile, wearing apparel and leather industry	13,003	33,062	5,270	19,887	22,854	61,376	6,602	16,502	23,900	52,041
33	Manufacture of Wood and Wood Products, incl. furniture	13,713	51,194	5,438	19,264	30,362	65,025	8,382	19,459	33,717	47,432
34	Manufacture of paper and paper products, printing and publishing	29,413	55,516	14,178	23,067	44,106	164,673	14,859	30,440	96,116	221,166
35	Manufacture of chemicals and chemical, petroleum, coal, rubber and plastic products	27,179	81,398	6,988	19,999	70,221	131,596	10,483	176,863	146,859	169,204
36	Manufacture of non-metallic mineral products (except petroleum and coal)	8,887	66,689	6,240	9,604	32,583	127,782	8,748	16,693	30,784	132,079
37	Basic Metal Industries	-	442,567	16,336	18,784	1,668,456	900,533	18,246	51,017	244,268	317,266
38	Manufacture of fabricated metal products, machinery and equipment	17,244	81,980	12,834	20,291	57,858	224,993	18,047	53,716	96,735	202,669
39	Other manufacturing industries	13,145	34,124	10,766	15,334	28,002	49,959	16,457	33,941	102,448	82,894
	TOTAL	**13,177**	**62,672**	**5,934**	**14,176**	**48,619**	**119,023**	**8,126**	**22,534**	**56,375**	**119,104**

Sources: BPS, *Economic Census* (1986, 1996, 2006), Jakarta: BPS.

3.6 Constraints faced by SMEs

In the missing middle literature there are competing theories on which firm-size segments are disadvantaged in developing countries. The data collected from the Indonesian Economic Censuses helps shed light on what small enterprises identified as their main constraints and allow for an analysis of how these issues changed over time. Unfortunately, only the 2006 Economic Census contains comparable information on medium enterprises, but given the gap in medium-sized enterprises it is important to understand why small enterprises in Indonesia generally did not grow larger and into medium and eventually large enterprises. **Table 17** shows how many small enterprises experienced difficulties in running their businesses and, if so, identified the main reason (listing each option as a share of the total number of establishments in each province and year). There are two caveats: the 1986 census permitted more than one answer for type of difficulty experienced, whereas the 1996 and 2006 census allowed for only one; second, the 2006 census reported the small enterprise results together with those for microenterprises. Both will be borne in mind in the interpretation of the results.

The first clear trend in the data is that the number of small firms reporting difficulties steadily decreased between 1986 and 2006 everywhere in Indonesia. One explanation could have been changing survey design, but looking at the questionnaires for each of the censuses reveals that the question asking about difficulties experienced remained quite similar. The 1986 Economic Census asked about "difficulties experienced by the entrepreneur/owner/business in running the establishment".[279] The 1996 Economic Census changed the phrasing to "main obstacle experienced by the business over the past year".[280] The 2006 Economic Census asked "whether the

[279] BPS, *1986 Economic Census Small Industry Questionnaire (SE 86 32),* Jakarta: BPS, Section X (Other Information), Question 6 ("Apakah perusahaan ini mengalami kesulitan dalam menjalankan usaha?").

[280] BPS, *1996 Economic Census Small Scale Industry and Cottage Industries Questionnaire (SE 96-S03)*, Jakarta: BPS, Section IX (Constraints and Business Prospects), Question 3 ("Kendala utama yang dialami usaha ini selama setahun yang lalu (Oktober 1995 – September 1996)?").

business experienced any difficulties that year".[281] Possibly the relative decrease of type of difficulty reported holds the answer.

The second noteworthy trend in the dataset is that there is a change in the type of main difficulty reported. As might be expected, lack of capital is the most often cited constraint. However, when comparing provinces over time the number of provinces reporting marketing difficulties as their main issue increased with each census. In 1986 the majority of small firms in only four out of 26 provinces identified marketing issues as their main constraint, more significant than lack of capital. In 1996 this increased to six provinces and by 2006 there were 8 reporting marketing difficulties as their main problem. The latter is likely an underestimation because the 2006 data combines the results for micro and small enterprises; a comparison of the 1986 and 1996 small enterprise figures in **Table 17** with the issues reported by microenterprises shown in **Table 37** (Appendix) indicates that the 2006 results combining both firm-size categories are likely biased towards a stronger emphasis on lack of capital and underemphasize the lack of skill as a major constraint. This further strengthens the point that lack of capital, whilst remaining the most often identified main constraint, became increasingly second to the concern about lack of skills between 1986 and 2006. Particularly remarkable were the regional trends in Java and Kalimantan. Both islands showed a clear trend towards an increasing number of provinces in which the majority of small firms reported marketing difficulties as their main issue. Both islands also had the smallest share of firms highlighting problems due to a lack of capital in 1986 to 2006. At first glance one could assume that firms on both islands had particular difficulty marketing their products, but that seems unlikely, at least in the case of Java, where population density was highest, and which also had the best developed infrastructure and communication networks. A deficit in these same factors, however, could account for marketing being particularly difficult for small firms in Kalimantan, which was the region with the lowest population density in all of Indonesia and was characterised by poor infrastructure. At least for Java it is conceivable that this trend was instead driven through improvements in access to capital.

281 BPS, *2006 Economic Census Micro and Small Enterprise Questionnaire (SE06-UMK Produksi)*, Jakarta: BPS, Section VIII (Constraints and Business Prospects), Question 1("Apakah usaha ini mengalami kesulitan selama tahun 2006?").

Table 18 reports constraints faced by medium-sized firms in 2006, the only year for which data on medium-sized firms are available. For medium-sized firms in Indonesia the main constraint was reported as marketing issues, followed by lack of capital. However, grouped into "other reasons" was a shortage of raw material, which was the most frequently reported main difficulty in Kalimantan and Sulawesi.

Table 17: Main Difficulty faced by Small Firms as Share of Total Number of Establishments in that Firm-size Category and Province, 1986-2006 (in per cent)

Region & Year	No Difficulty	Difficulty	Type of Difficulty			
			Lack of Capital	Marketing Difficulty	Lack of Skill	Others
1986						
Java	22.2	77.8	29.4	27.6	7.3	13.5
Sumatra	16.8	83.3	35.1	24.7	4.9	18.5
Sulawesi	19.5	80.5	42.5	17.8	9.3	11.0
Kalimantan	16.7	83.3	32.8	20.7	6.3	23.6
Bali	19.6	80.4	32.2	20.1	6.9	21.2
Eastern Indonesia	15.1	84.9	39.6	20.3	12.5	12.5
INDONESIA	**21.1**	**78.9**	**31.1**	**26.3**	**7.2**	**14.3**
1996						
Java	36.6	63.5	19.1	23.0	2.2	19.3
Sumatra	27.9	72.1	30.8	24.6	2.1	14.6
Sulawesi	39.2	60.8	32.9	14.1	2.6	11.3
Kalimantan	35.3	64.7	23.4	19.8	2.4	19.2
Bali	35.5	64.5	29.6	22.9	2.4	9.5
Eastern Indonesia	33.4	66.6	35.1	13.2	2.8	15.4
INDONESIA	**35.3**	**64.7**	**22.5**	**22.2**	**2.2**	**17.8**
2006						
Java	49.2	50.8	14.6	17.0	0.9	18.4
Sumatra	44.4	55.6	21.8	15.0	0.7	18.2
Sulawesi	44.6	55.5	24.3	12.1	0.7	18.3
Kalimantan	47.4	52.6	14.9	16.4	0.7	20.7
Bali	43.8	56.2	17.1	25.7	0.6	12.9
Eastern Indonesia	41.0	59.0	28.4	14.2	1.0	15.5
INDONESIA	**47.4**	**52.6**	**17.2**	**16.4**	**0.9**	**18.1**

Sources: BPS, *1986 Economic Census: Small Scale Manufacturing Industry Statistics*, Jakarta: BPS; BPS, *1996 Economic Census: Small Scale Manufacturing Industry Statistics,* Jakarta: BPS; BPS, *The 2006 Economic Census Results: Micro and Smallscale Establishments,* Jakarta: BPS.

Notes: Only one difficulty per enterprise in 1996 and 2006, multiple answers possible in 1986 (25,741 out of 69,114 enterprises reporting difficulty had named more than difficulty); the 2006 Economic Census figures are for both small-scale enterprises and microenterprises, small-scale enterprises constitute 9.57% of this joint group in all of Indonesia in 2006.

Table 18: Main Difficulty faced by Medium-sized Firms by Region, 2006 (in per cent)

Region	No Difficulty	Difficulty	Type of Difficulty			
			Lack of Capital	Marketing Difficulty	Lack of Skill	Others
Java	54.9	45.1	8.3	11.2	1.4	8.8
Sumatra	53.8	46.2	9.2	7.6	0.8	10.8
Sulawesi	66.3	33.7	8.5	5.9	0.7	17.5
Kalimantan	59.3	40.7	5.2	6.2	0.4	29.7
Bali	61.1	39.0	10.3	13.9	2.4	7.9
Eastern Indonesia	60.6	39.4	7.9	10.3	0.7	8.2
INDONESIA	**55.4**	**44.6**	**8.4**	**10.7**	**1.3**	**9.5**

Source: Calculated from BPS, *The 2006 Economic Census Results: Medium and Large Establishment (Manufacturing),* Jakarta: BPS, Table 10.

Notes: The actual totals of type of difficulty are considerably lower than the total of firms which have experienced difficulties, it is not clear from the census why that is the case.

3.7 Concluding Remarks

The empirical analysis of Indonesia's missing middle showed that it emerged and persisted during the New Order period while the country underwent a rapid industrial transformation. Indonesia's economic development during this period is clearly visible in the drastic fall in relative number and employment shares of microenterprises and overall increasing average firm-size. However, the share of medium-sized firms increased only marginally. While small the share of small enterprises grew considerably. This indicates that the core issue is really the development of medium-sized firms. The large expansion of employment in large enterprises shows that Indonesia's firm-size distribution during the New Order changed from being heavily skewed towards microenterprises to a missing middle. The comparison of Indonesia to South Korea and Taiwan at similar levels of economic development showed that both had a much higher share of medium-sized firms in terms of establishments as well as employment throughout the period of comparison. This suggests that Indonesia's missing middle cannot be explained just by its economic development stage.

However, this change at the national aggregate level did not occur everywhere in Indonesia. Java, Sumatra and Kalimantan clearly exhibit this pattern, moving towards a missing middle between 1975 and 1986, which then persisted. However, while Eastern Indonesia, Bali and Sulawesi experienced growth in average firm-size, their overall firm-size distribution remained skewed towards microenterprises – with a weak middle (as the rest of the country), but combined with a much smaller presence of large enterprises. These latter three regions also contributed considerably less to the value added of the manufacturing sector in Indonesia than the former three throughout this period. This reflects how uneven industrial development was throughout Indonesia.

Considering the question of the role SMEs played in the Indonesian economy, the comparison of value added per worker showed that productivity was considerably lower for smaller firms. This trend held when comparing value added per worker of different firm-size categories by industrial sub-sectors. In comparison, South Korean micro and small enterprises had a higher ratio of value added per worker relative to medium and large firms. In Taiwan micro, small and medium enterprises even had relatively similar value added per worker. The gap in Indonesia in medium-sized firms and low value added per worker of small firms could also be indicative of a dual economy, in which the domestic traditional sector and the modern larger firms produce different goods and serve different markets. The analysis of main constraints identified by small enterprises indicates that the main barriers to growth identified were lack of marketing opportunities and access to credit. Interestingly, access to credit as a main constraint for small enterprises decreased over time. The next chapter looks into this development, given that lack of capital is one of the most commonly assumed constraints to SME development.

Extending the period of analysis to 2006 allowed an assessment of how the Indonesian manufacturing sector evolved in the aftermath of the Asian Financial Crisis. The comparison of Indonesian GDP per capita to South Korea and Taiwan showed that in 1996, at the end of the New Order period, Indonesia was roughly at the level of South Korea and Taiwan in the mid-1970s. In 2006 that was still the case and Indonesia's gap behind these two Tiger economies had widened from twenty to thirty years. The firm-distribution reflected this stagnation, with little change between 1996 and 2006. The total value added of large enterprises actually declined between 1996 and 2006; large enterprises' value added per worker remained at close to the same levels, while the value added per worker in micro, small and medium enterprises continued to grow.[282] This shows that smaller firms weathered the crisis better than their larger counterparts. However, this conclusion comes with the caveat that these aggregates do not take net exits and entries into account.

Placing the issue of Indonesia's missing middle with medium-sized firms (rather than missing small and medium-sized firms) has important implications, given that most research on Indonesia's small and medium enterprises actually focuses on small enterprises. This is understandable, given the difficulty of separating medium from large enterprise data in many official Indonesian government statistics, where they are grouped together, as well as the level of detail available in the Indonesian economic censuses for small manufacturing industry (for example surveys on difficulties faced in running businesses or which government programme they have received support from).

[282] The analysis of the changes of value added by industrial subsectors showed that the largest contributor to the decrease of value added of large firms was because of a drop between 1996 and 2006 in the basic metals sector.

Chapter 4: Access to Credit for Indonesian SMEs in the 20th Century: Bridging the Gap towards Financial Inclusion

Lack of access to credit is one of the most commonly identified barriers to growth for SMEs worldwide, in particular in developing countries.[283] The previous chapter on Indonesian manufacturing SMEs showed that lack of capital was the most commonly identified constraint to business development between 1986 and 2006. The findings also revealed that the share of firms identifying lack of capital as their main constraint declined during this period. This is likely to have several causes, among which the most obvious may be that access to finance improved for SMEs. Much has been written about microfinance in Indonesia.[284] However, while SMEs face similar issues in terms of being unable to offer suitable collateral and fulfilling other requirements, SMEs tend to need larger loans than microenterprises, and hence require separate analysis.[285] This chapter explores the development of access to credit for Indonesian SMEs. Little has been written about how the facilitation of access to credit has influenced SME development. There are ad hoc assessments of the importance of informal finance for SMEs, but what appears to be missing is a structural analysis of how access to credit for SMEs developed and how this shaped SME development.

The first section analyses the development of general access to credit in the twentieth century and the share of small business credit therein. The evolution of small

283 International Finance Corporation (IFC), 2013, Closing the Credit Gap for Formal and Informal Micro, Small, and Medium Enterprises, Washington, DC: IFC, p. 11 ; Alex Coad and Jagannadha P. Tamvada, 2008, 'The Growth and Decline of Small firms in Developing Countries', *Papers on Economics and Evolution, 2008(#0808):*1-33, pp. 3-4; Dennis Anderson, 1982, 'Small Industry in Developing Countries: A Discussion of Issues', *World Development, 10(11):* 913-948, p. 933; Bert Hoselitz, 1959, 'Small Industry in Underdeveloped Countries', *The Journal of Economic History, 19(4)*:600-618, p. 614; Jong-Il You, 1995, 'Small firms in economic theory', *Cambridge Journal of Economics, 19(3)*:441-462, p. 453.

284 Richard Patten, Jay Rosengard and Don Johnston, 2001, 'Microfinance Success Amidst Macroeconomic Failure: The Experience of Bank Rakyat Indonesia During the East Asian Crisis', *World Development, 29(6)*: 1057-1069; Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: IBRD/World Bank; Jay Rosengard et al, 2007, 'The Promise and The Peril of Microfinance Institutions in Indonesia', *Bulletin of Indonesian Economic Studies, 43(1)*: 87–112; David Henley, 2010, 'Microfinance in Indonesia: evolution and revolution, 1900 – 2000' in: *Southeast Asia's Credit Revolution: From moneylenders to microfinance* (pp. 173-189), Abingdon: Routledge ; Hans Dieter Seibel, Agus Rachmadi and Djarot Kusumayakti, 2010, 'Reform, Growth and Resilience of Savings-led Commercial Microfinance Institutions: The Case of the Microbanking Units of Bank Rakyat Indonesia', *Savings and Development, 34(3):* 277-303.

285 Joe Dougherty and Radoslava Dogandjieva, 2015, 'The Elephant in the Room: Financial Inclusion for the Missing Middle', *Innovations: Technology, Governance, Globalization, 10(1-2):* 147-162, p. 154.

business credit in Indonesia can be traced back to the foundations laid by the Dutch in the late colonial period. In the early twentieth century, the Dutch government invested in developing a credit system for the indigenous population. District banks, village banks, village paddy banks and state pawnshops persisted and evolved during the twentieth century, continuing to provide financial services. It needs to be established to what extent the SME sector benefitted from these institutions. From the beginning of the New Order period in 1966 until the fall of oil prices in 1982 the Indonesian banking sector and credit market were tightly regulated, with state banks as the main actors. Thee Kian Wie described this fall in oil prices as "the post-oil boom shock", to which the government responded with adjustment measures and policy reforms to restore macroeconomic stability and reduce the country's dependence on oil and gas exports.[286] The section shows that financial sector deregulation of the 1980s led to a significant increase in private sector lending and a rise in small-scale business credit. However, when the majority of subsidised directed credit programmes for SMEs were phased out in 1990, the ratio of small-scale business to total credit continued to fall until the outbreak of the Asian Financial Crisis.

The second section delves into the various credit schemes the Indonesian government introduced from the early 1970s to facilitate access to finance for small businesses. The general consensus in the literature is that these generally showed – at best – mixed results. Major issues across various schemes were low repayment rates, misuse of loans (for personal rather than business use) and overall ineffectiveness.[287] However, in stark contrast to the issues faced by these subsided credit schemes stands the success of the credit facility Kupedes (*Kredit Umum Pedesaan,* General Rural Credit), introduced through the Indonesian People's Bank (BRI, Bank Rakyat Indonesia) in February 1984 as a market-based rural credit product. In comparison to subsidised programmes, Kupedes became financially viable within three years. Self-financed through deposits at attractive interest rates, it grew consistently and maintained its high

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286 Thee Kian Wie, 2012, *Indonesia's Economy since Independence,* Singapore: Institute of Southeast Asian Studies, pp. 101-102, 104.

287 Ross McLeod, 1994, 'A Changing Financial Landscape: The Evolution of Finance Policy in Indonesia', *in:* F.J.A. Bouman and Otto Hospes (Eds.), *Financial Landscapes Reconstructed: The Fine Art of Mapping Development* (pp. 85-104), New York: Routledge; Thee Kian Wie, 2006, 'Policies for Private Sector Development in Indonesia, *ADB Institute Discussion Paper, 46:* 1-46, pp. 30-34; Tulus Tambunan, 2000, *Development of Small-Scale Industries during the New Order Government in Indonesia,* Aldershot, UK/Brookfield, USA: Ashgate, pp. 184-185; Albert Berry, Edgard Rodriguez and Henry Sandee, 2001, 'Small and Medium Enterprise Dynamics in Indonesia', *Bulletin of Indonesian Economic Studies, 37(3):* 363-384, pp. 377-379.

repayment rate even during the Asian Financial Crisis. The question here is how relevant was Kupedes for SMEs. This section discusses and compares the objectives, conditions, credit volume dispersed of the most important small business credit schemes, as well as more specific details regarding credit use by distinguishing between working and investment capital loans and sectoral distribution of credit allocation.

McLeod has shown that informal finance not only plays an important role in the early stages of economic development, but continues to evolve and take on a complementary role to formal financial institutions as the economy evolves.[288] In a case study of Yogyakarta, McLeod demonstrated how small firms in particular rely on both forms of finance.[289] However, the development of informal finance has already been extensively researched.[290] In contrast, the role of state pawnshops in providing access to credit for small-scale businesses, which developed in the pre-Independence period and continued to evolve over the course of the twentieth century, has received very little attention. The third section therefore focuses on state pawnshops, which played an important role in Indonesia, very different from in Western countries. The Dutch colonial authorities declared a state monopoly on pawnshops in the early twentieth century to limit the influence of Chinese moneylenders whose interest rates and business practices were perceived as exploitative.[291] Beyond their common role as a lender in times of need, state pawnshops also constituted a source for working and investment capital for many entrepreneurs.[292] This section builds on the work of van Laanen, who analysed the emergence of the people's credit system in colonial Indonesia

[288] Ross McLeod, 1994, 'A Changing Financial Landscape: The Evolution of Finance Policy in Indonesia', *in:* F.J.A. Bouman and Otto Hospes (Eds.), *Financial Landscapes Reconstructed: The Fine Art of Mapping Development* (pp. 85-104), New York: Routledge, pp. 85-87.

[289] Ross McLeod, 1991, 'Informal and Formal Sector Finance in Indonesia: The Financial Evolution of Small Businesses', *Savings and Development, 15(2):* 187-209.

[290] For a discussion of informal finance in Indonesia see for example Ross McLeod, 1991, 'Informal and Formal Sector Finance in Indonesia: The Financial Evolution of Small Businesses', *Savings and Development, 15(2):* 187-209; Heiko Schrader, 1997, *Changing Financial Landscapes in India and Indonesia: Sociological Aspects of Monetization and Market Integration*, Hamburg: LIT.

[291] For a detailed discussion of the practices of moneylenders and the declaration of a state monopoly on state pawnshops in response to them see Jan Luiten van Zanden, 2009, 'Credit and the Colonial State: The Reform of capital markets on Java', 1900-30, *in:* David Henley and Peter Boomgaard (Eds.), *Credit and Debt in Indonesia, 860-1930: From Peonage to Pawnshop, from Kongsi to Cooperative* (pp. 160-177), Singapore: ISEAS, pp. 165-167.

[292] Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, p. 303.

in great detail, and expands the dataset to cover the entire twentieth century.[293] By expanding the dataset this chapter shows how long it took for some of these institutions established under the Dutch to recover and regain their pre-independence levels of lending in real terms. For state pawnshops recovery to 1938-levels of outstanding loans took until 1960; village banks only reached the same levels in the early 1990s.

The subsequent section on financing and access to credit of Indonesian manufacturing SMEs ties this chapter with the preceding chapter; using the same economic census data I analyse how many firms actually accessed these different credit schemes and how this has evolved over time. Finally, the analysis of access to credit for Indonesian SMEs is put into context by taking a comparative perspective on credit access in South Korea and Taiwan.

Methodologically this chapter traces the development of overall credit volume and small credit programmes using the Indonesian Central Statistical Office's *Annual Statistical Yearbooks* and Bank Indonesia's *Annual Rep*orts. BRI is the main source for the Kupedes data. In section three this chapter links the evolution of small business credit to the findings of the preceding chapter, by using Economic Census data to investigate how manufacturing SMEs were financed and how many actually accessed the various SME credit schemes. The main sources to track the development of state pawnshops are the Central Statistical Office's *Statistical Yearbooks* and Bank Indonesia's *Annual Reports*, which note development on activities such as number of offices, total loans extended, loans redeemed and loans outstanding as well as repayment period and interest rates.

293 Jan T.M. van Laanen, 1980, *Changing Economy in Indonesia: A Selection of Statistical Source Material from the Early 19th Century up to 1940*, *Volume 6, Money and Banking 1816-1940* (edited by Peter Boomgaard and Jan T.M. van Laanen), The Hague: Nijhoff; Jan T.M. van Laanen, 1990, 'Between the Java Bank and the Chinese Moneylender: banking and Credit in Colonial Indonesia', *in:* Anne Booth, W.J. O'Malley and Anna Weidemann, *Indonesian Economic History in the Dutch Colonial Era* (pp. 244-266), New Haven: Yale University Southeast Asia Studies.

4.1 General Access to Credit

4.1.1 Credit during the Late Colonial Period

A key development in providing general access to credit in Indonesia dates back to the early twentieth century; one of the important colonial legacies of the Dutch was establishing a credit system geared towards the indigenous population with the goal to provide cheap credit by minimising costs, which was developed from the 1900s onwards. The ethical colonial policy proclaimed by Queen Wilhelmina in 1901 identified the development of a low-cost popular credit system that provided cheap credit as a main objective, at the same time minimising the costs of doing so.[294] The formal credit market that initially formed under Dutch colonial rule mainly served European clients. The formal credit market was also readily available for larger Chinese trading firms, whilst other non-Europeans and the indigenous population relied mostly on the informal credit market.[295] One of the institutions introduced as part of this development was state pawnshops. These pawnshops are particularly interesting here, given that beyond their common role as a lender in times of need, they were a source of start-up capital for many entrepreneurs.

There were two important sources for informal credit: traders who provided credit under the *ijon* system and itinerant travelling credit providers, the *mindering Chinees* (literally, instalment Chinese).[296] Under the *ijon* system traders would extend credit up to the expected value of the harvest (traditionally rice). Repayment would not only be in agricultural produce, but also in commodities such as processed food products and handicrafts or even labour. In particular in its latter form the system could lead to debt bondage and thus was met with strong criticism and government regulations outlawing the practice (though there is evidence of its continued practice well into the 1970s).[297] The majority of these traders were small shopkeepers, many of whom were Chinese,

[294] Heiko Schrader, 1997, *Changing Financial Landscapes in India and Indonesia: Sociological Aspects of Monetization and Market Integration*, Hamburg: LIT, p. 213.

[295] Alexander Claver, 2014, *Dutch Commerce and Chinese Merchants in Java: Colonial Relationships in Trade and Finance, 1800-1942*, Leiden: Brill, p. 264.

[296] Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, pp. 301-2.

[297] Ace Partadireja, 1974, 'Rural Credit: The Ijon System', *Bulletin of Indonesian Economic Studies, 10(3):* 54-71, pp. 54-5, 63.

who often worked with indigenous middlemen. The traders borrowed their working capital from importers and wholesale dealers in commercial areas and ports. The *mindering Chinees* travelled to villages and market places to collect their capital and interest in small instalments. These *mindering Chinees* usually lent out very small sums at high nominal interest rates and in turn drew their own capital borrowing from affluent Chinese.[298] This business practice was later forbidden during Japanese rule and thus "virtually disappeared".[299] This reflects the important historic role Sino-Indonesians played in the supply of credit to the indigenous population.

The movement to establish a popular credit system at the turn of the nineteenth to the twentieth century was in part motivated by the aim of limiting the growing economic power of the Chinese.[300] The growth of the credit volume supplied by the different institutions of the popular credit system established by the Dutch colonial government is illustrated in **Figure 19**. By 1903, the system worked as follows: *priyayi* banks, which were later to become the *volksbanken* or *afdeelingsbanken* (district banks), oversaw both *lumbung desa* (village paddy banks) and *bank desa* (village money banks). The district banks primarily lent to officials, merchants, wealthier farmers and also Europeans in areas to which the existing colonial credit system had not yet been extended. The district banks received generous initial support from the state. They also soon started attracting funds from the first local cash credit institutions (e.g. the village banks, which provided credit in the form of currency, unlike the village paddy banks), as well as deposits from European settlers. The village paddy banks lent in kind to cultivators, who used the rice either for consumption or as seed and repaid in kind after the next harvest. The village banks evolved after 1904, providing small short-term credit, often to be repaid in ten instalments. Their primary customers were small traders and craftsmen looking for working capital credit.[301] By 1912 this system had grown to comprise 75 district banks, 12,424 paddy banks and 1,336 village banks.[302]

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298 T.A. Fruin, 1938, 'Popular and Rural Credit in the Indies: I. The Need for Credit and its Unorganized Supply', *Bulletin of the Colonial Institute of Amsterdam*, *I(2):* 106-115, pp. 112-3; Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, pp. 301-3.

299 John O. Sutter, 1959, *Indonesianisasi: Politics in a Changing Economy 1940-1955, Volume 4*, Ithaca, N.Y.: Southeast Asia Program, Cornell University, p. 268.

300 Leonardus T. Schmit, 1991, *Rural Credit Between Subsidy and Market: Adjustment of Village Units of Bank Rakyat Indonesia in Sociological Perspective*, Leiden: Faculty of Social Sciences, Leiden University, pp. 39, 46.

301 Heiko Schrader, 1997, *Changing Financial Landscapes in India and Indonesia: Sociological Aspects of Monetization and Market Integration*, Hamburg: LIT, p. 213; Leonardus T. Schmit, 1991, *Rural Credit Between*

Figure 19 shows a decline in lending after 1929 and an accelerating drop in loans outstanding after 1931. This pattern corresponds to Boomgard's analysis of the depression in Southeast Asia, which shows that while Indonesia was affected by the spread of the Great Depression in late 1929, which coincided with a severe drought, initially this was "little more than a traditional slump" and that in fiscal terms "1931 was Indonesia's first depression year".[303] However, not all popular credit institutions were affected the same way. Sumitro's PhD thesis on the impact of the depression on the popular credit system shows that village paddy banks were affected far less by this credit slump, because they received repayments in kind.[304]

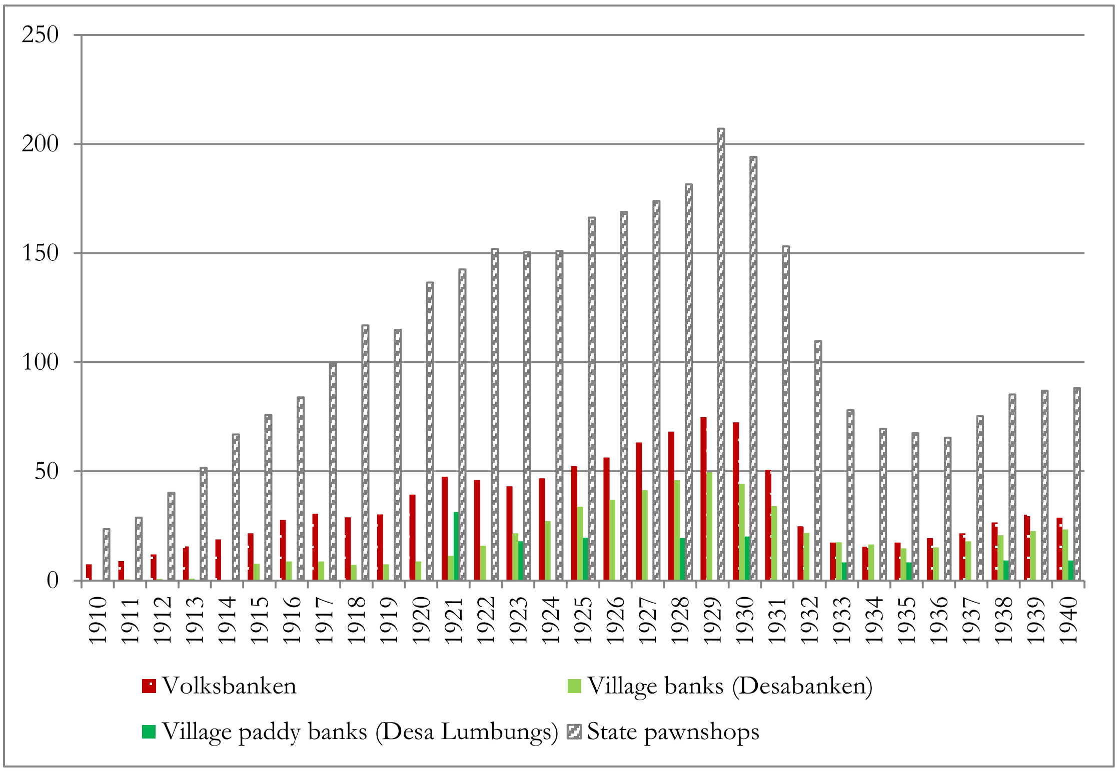
Subsidy and Market: Adjustment of Village Units of Bank Rakyat Indonesia in Sociological Perspective, Leiden: Faculty of Social Sciences, Leiden University, p. 46; Jan T.M. van Laanen, 1990, 'Between the Java Bank and the Chinese Moneylender: banking and Credit in Colonial Indonesia', *in:* Anne Booth, W.J. O'Malley and Anna Weidemann (Eds.), *Indonesian Economic History in the Dutch Colonial Era* (pp. 244-266), New Haven: Yale University Southeast Asia Studies, p. 259; Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, p. 303.

302 Leo Schmit, 1994, *A History of the "Volkscredietwezen" (Popular Credit System) in Indonesia (1895-1935),* The Hague: Development Cooperation Information Department of Foreign Affairs, p. 7.

303 Peter Boomgaard, 2000, 'Surviving the Slump: Developments in Real Income During the Depression of the 1930s in Indonesia, Particularly Java', *in:* Peter Boomgaard and Ian Brown (Eds.), *Weathering the Storm: The Economies of Southeast Asia in the 1930s Depression,* Singapore: Institute of Southeast Asian Studies, pp. 24-26.

304 Sumitro Djojohadikusumo, 1943, *Het volkscredietwezen in de Depressie* [The People's Credit System in the Depression], Haarlem: Bohn, pp. 122-125.

Figure 19: Credit Volume of the People's Credit System in Colonial Indonesia, 1910-40 (in million guilders)



Source: Data from CEI, Volume 6, 1980, *Changing Economy in Indonesia: A Selection of Statistical Source Material from the Early 19th Century up to 1940*, *Volume 6, Money and Banking 1816-1940* (edited by Peter Boomgaard and Jan T.M. van Laanen), The Hague: Nijhoff; Village paddy bank data from Jan T.M. van Laanen, 1990, 'Between the Java Bank and the Chinese Moneylender: banking and Credit in Colonial Indonesia', *in:* Anne Booth, W.J. O'Malley and Anna Weidemann (Eds.), *Indonesian Economic History in the Dutch Colonial Era* (pp. 244-266), New Haven: Yale University Southeast Asia Studies, p. 260.

Notes*:* See Appendix **Table 38** for underlying data.

Another credit institution established under the Ethical Policy that requires a closer look is state pawnshops.[305] **Figure 19** illustrates the role of state pawnshops in providing domestic credit. The comparison shows that total loans outstanding of state pawnshops were larger than those of district banks, village paddy banks and village money banks combined in the entire late colonial period. Concluding that the interest rates and general business practices of Sino-Indonesian moneylenders were 'exploiting' the credit needs of the indigenous population, the Dutch colonial government began establishing state pawnshops in 1901. These pawnshops provided credit not only in

[305] This system gained so much attention that it became the subject of study by other colonial officials, such as the British colonial official and historian John S. Furnivall and the French colonial official and agricultural expert Yves Henry – see John S. Furnivall, 1934, 'State and Private Money Lending' in: *Studies in the Social and Economic Development of the Netherlands East Indies, III*, University of Rangoon; Yves Henry, 1926, 'Le crédit populaire agricole et commercial aux Indes néderlandaises', *Bulletin Économique de l'Indochine, 29(177):* 69-124; as well as the French Governor General Gabriel L. Angoulvant, 1926, *Les Indes néderlandaises: leur rôle dans l'économie internationale,* Paris: Le Monde Nouveau.

times of hardship but also for working capital and investment.[306] The growth of pawnshops as well as their profitability (and thus financial self-sufficiency) is highlighted in **Table 19**. In 1903 the government declared a state monopoly on pawnshops in Java and Madura, but only extended this to the Outer Islands in 1921.[307]

Table 19: State Pawnshops in the Netherland Indies, 1901-1930

Year	Number of Shops	Transactions (million pawns)	Advances (million guilders)	Loans repaid (million guilders)
1901	1,000	.04	.08	n/a
1905	23,000	1.79	2.96	2.47
1910	165,000	15.16	20.78	20.88
1915	313,000	34.64	75.90	66.22
1920	360,000	35.79	136.52	124.43
1925	398,000	47.92	166.25	149.06
1930	453,000	51.55	194.14	174.75

Source*:* John S Furnivall, 1934, 'State pawnshops in Netherlands India', *in:* Studies in the Social and Economic Development of the Netherlands East Indies, III, University of Rangoon, p. 12 (Appendix); 'Loans repaid' from CEI, Volume 6, 1980, *Changing Economy in Indonesia: A Selection of Statistical Source Material from the Early 19th Century up to 1940*, *Volume 6, Money and Banking 1816-1940* (edited by Peter Boomgaard and Jan T.M. van Laanen), The Hague: Nijhoff, Table 7.
Notes*:* Transactions refers to number of pawns (million pawns); advances refer to sums lent (million guilders): loans repaid.

The credit volume of all these popular credit institutions dropped in the post-colonial period. However, state pawnshops, village and paddy banks did continue to play a role in rural credit supply well into the late twentieth century, as shown in this chapter.

4.1.2 Access to Credit during the Early Post-Independence Years

Under President Sukarno (1945-1967) Indonesia's first independent government embarked on the task of transforming the former Dutch colony into a national economy. Within this process two major shifts in government policy occurred, which

306 Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, 1998, pp. 302-4; Leonardus T. Schmit, 1991, *Rural Credit Between Subsidy and Market: Adjustment of Village Units of Bank Rakyat Indonesia in Sociological Perspective*, Leiden: Faculty of Social Sciences, Leiden University, p. 56; George McTurnan Kahin, 2003, *Nationalism and Revolution in Indonesia*, Ithaca, NY: Cornell Southeast Asia Program, p. 2; CEI, Volume 6, 1980, *Changing Economy in Indonesia: A Selection of Statistical Source Material from the Early 19th Century up to 1940*, *Volume 6, Money and Banking 1816-1940* (edited by Peter Boomgaard and Jan T.M. van Laanen), The Hague: Nijhoff, p. 42.

307 Heiko Schrader, 1997, *Changing Financial Landscapes in India and Indonesia: Sociological Aspects of Monetization and Market Integration*, Hamburg: LIT, p. 218.

had a large impact on general credit allocation. The first was a shift towards increasing nationalism and the second a growing hostility towards private capitalism. The culmination of both was the nationalisation of Dutch enterprises and banks.[308] The takeover of Dutch enterprises began in December 1957, though legal ownership was transferred only in 1959. *De Javaasche Bank* (the Java Bank) was nationalised in 1951, and in 1953 renamed Bank Indonesia – Indonesia's central bank. By 1957 the Dutch lost their dominance in Indonesian commercial banking, and in early 1960s the remaining Dutch banks were all nationalised.[309] This had a more general impact on credit allocation in terms of favouring public over private and national over foreign enterprises. As the banking system became increasingly dependent on central bank finance, and with the growing role of political influence over credit allocation, these preferences became significant determinants.[310]

The shift towards growing nationalism also found expression in attempts to foster indigenous entrepreneurship. In a 1951 memorandum Bank Indonesia emphasized the need to promote Indonesian economic emancipation and support weak indigenous entrepreneurship. The number of loan applications by indigenous Indonesian private entrepreneurs quickly rose.[311] In April 1950 the Government introduced the *Benteng* (Fortress) Programme, which restricted import licenses for certain commodities to indigenous importers. As part of these efforts, indigenous importers were given cheap access to easy credit.[312] The share of foreign-exchange credit distributed through the *Benteng* programme was initially quite substantial: *Benteng* importers received 37 per cent in 1953, which more than doubled to 76 per cent in 1954.[313] After the end of the Korean War boom Indonesian foreign-exchange reserves

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308 Heinz Arndt, 1966, 'Banking in Hyperinflation'**,** *Bulletin of Indonesian Economic Studies, 2(5)*: 45-70, p. 47.

309 Gunnar Myrdal, 1968, *Asian Drama: An Inquiry into the Poverty of Nations, Vol. II* , New York: Pantheon Books, p. 838.

For an in-depth analysis of the process of nationalisation of Bank Indonesia, the rapidly growing share of Indonesian staff within the bank post-independence see J. Thomas Lindblad, 2005, 'From Java Bank to Bank Indonesia: A case study of *indonesianisasi* in practice', *Lembaran Sejarah, 8(2):* 15-32.

310 Heinz Arndt, 1966, 'Banking in Hyperinflation'**,** *Bulletin of Indonesian Economic Studies, 2(5)*: 45-70, p. 66.

311 J. Thomas Lindblad, 2005, 'From Java Bank to Bank Indonesia: A case study of *indonesianisasi* in practice', *Lembaran Sejarah, 8(2):* 15-32, p. 22.

312 Bisuk Siahaan, 1996, *Industrialisasi di Indonesia: Dari Hutang Kehormatan sampai Banting Stir,* Jakarta: Deperindag, p. 168.

313 Richard Robison, 1986, *Indonesia: The Rise of Capital*, Singapore: Equinox Publishing, p. 45.

declined sharply.[314] However, the programme became renowned for widespread corruption, rent-seeking and its general ineffectiveness. Rather than fostering a strong indigenous business class, the programme had strengthened "a group of socially unproductive rent-seekers" by the time it was abandoned in the late 1950s.[315] Robison found that small-scale traders were at a particular disadvantage because they usually lacked the political connections to those in charge of allocating credit (and licenses), as well as a growing reluctance of the Government to grant subsided loans, which they needed to meet the working capital requirement of at least IDR100,000 to qualify for *Benteng*.[316]

From independence Indonesia suffered from rampant inflation, but by the early 1960s prices began to grow faster than the expansion of money supply and by 1965 accelerated into hyperinflation.[317] Little statistical information exists on banking during the early post-independence period. Arndt ascribed this situation to "one of the by-products of monetary mismanagement, the almost complete suppression after 1960 of official financial statistics and accounts".[318] Moreover, Higgins was already discussing the unreliability of official statistics of the Indonesian economy in the mid-1950s as a widely acknowledged issue.[319] However, Arndt has published extensively on banking during this period using unpublished central bank data.[320] He found that hyperinflation reinforced two trends: first, Indonesia had inherited a characteristically colonial banking system, geared towards providing short-term credit for trade. Second was the aforementioned increasing role of political influence, with a preference for public over private and national over foreign enterprise. Hyperinflation reinforced both, strengthening the power of "political controllers of the central bank" while increasing the cost of credit. As a result private sector credit was increasingly diverted to speculative activities. [321] This left the majority of private firms starved of formal credit

314 Richard Robison, 1986, *Indonesia: The Rise of Capital*, Singapore: Equinox Publishing, p. 46.

315 Thee Kian Wie, 2003, R*ecollections: The Indonesian Economy, 1950s-1990s,* Singapore: Institute of Southeast Asian Studies, p. 12.

316 Richard Robison, 1986, *Indonesia: The Rise of Capital*, Singapore: Equinox Publishing, pp. 44-46.

317 Heinz Arndt, 1966, 'Banking in Hyperinflation', *Bulletin of Indonesian Economic Studies, 2(5)*: 45-70, p. 45.

318 Heinz Arndt, 1966, 'Banking in Hyperinflation', *Bulletin of Indonesian Economic Studies, 2(5)*: 45-70, p. 45.

319 Benjamin Higgins, 1956, 'Indonesia's Development Plans and Problems', *Pacific Affairs, 29(2)*: pp. 107-125, pp. 110-111.

320 Heinz Arndt, 1966, 'Banking in Hyperinflation', *Bulletin of Indonesian Economic Studies, 2(5)*: 45-70, p. 45.

321 Heinz Arndt, 1966, 'Banking in Hyperinflation', *Bulletin of Indonesian Economic Studies, 2(5)*: 45-70, pp. 66-68.

(those without personal connections to bank officials and thus access to subsidised credit).[322] Much like under colonial rule, most domestic industry continued to depend on informal finance.[323]

4.1.3 General Access to Credit during the New Order Period

Commercial banking during the New Order period can be grouped into three policy phases. The first phase from 1966-1982 was characterised by a tightly regulated credit market with state banks as the main actors. The 1966 Credit Policy stipulated how much credit was to be allocated to specific sectors as well as the minimum share of all credit that was to be given to the public sector (including cooperatives).[324] In the early 1970s the government introduced 32 liquidity credit programmes. In 1982 state banks held 80 per cent of total bank assets while the share of private domestic banks in total bank assets had fallen from 25 per cent in 1968 to 12 per cent in 1982.[325] **Figure 20** shows that credit to the private non-financial sector as a share of GDP decreased during this first phase and only started to increase with the deregulation following the falling oil prices in 1982. The shift towards export orientation and liberalisation of the early 1980s was accompanied by financial sector reforms, which removed credit ceilings and interest rate controls.[326] This second phase from 1983-1989 was characterised by financial sector deregulation and the rise of private sector lending. Issuing new banking licenses had been suspended since the early 1970s and was only reopened with the deregulation policy package known as Pakto 88 (*Paket Oktober 1988,* Policy Package October 1988). With Pakto 88 a commercial bank could be set up with a minimum start-up capital of IDR 10 billion (USD 6 million) and a private rural bank with a start-up capital of IDR 50 million (USD 30,000).[327] The objective of the deregulation package was to expand

[322] Heinz Arndt, 1966, 'Banking in Hyperinflation', *Bulletin of Indonesian Economic Studies, 2(5)*: 45-70, pp. 62, 69.

[323] Heinz Arndt, 1966, 'Banking in Hyperinflation', *Bulletin of Indonesian Economic Studies, 2(5)*: 45-70, pp. 46, 69.

[324] Decision of the Minister for Central Bank Affairs No. Kep./6/UBS/66, see Bank Indonesia, 1968, *Report for The Years 1960-1965,* Jakarta: Bank Indonesia, pp. 281-2.

[325] Detlev Holloh, 2001, *ProFI Microfinance Institutions Study*, Denpasar: Bank Indonesia & German Technical Cooperation (GTZ), p. 40.

[326] Bank Indonesia, 1983, *Annual Report 1983/1983,* Jakarta: BI, p. 9.

[327] USD equivalents in this chapter are calculated with the annual average exchange rate in Appendix **Figure 33.**

banking services and encourage competition between banks generally, but particularly to modernise and improve the outreach of the rural financial system.[328] However, directed credit programmes still played a major role in this phase. It was not until the third phase, beginning in 1990, that we see the end of subsidised directed credit programmes. In 1990 the government phased out all but four subsidised directed credit lending programmes.[329] The restructuring of the banking sector during this period has been referred to as 'a watershed in the relationship between the state and private banking sectors'.[330] With the 1992 Banking Law, banking legislation was simplified and became more standardised: it reduced the type of banks from four to two: commercial banks (*bank umum*) and rural banks or, more correctly, people's credit banks (*bank perkreditan rakyat*). Indonesia's seven state-owned banks were brought under a single set of legislation and turned into state-owned liability companies, while Bank Indonesia focused its efforts on strengthening its supervisory capacities.[331] Between March 1988 and December 1996 the number of private national banks increased from 67 to 164 (145 per cent increase) and their number of branches from 546 to 3,964 (626 per cent increase), compared to state banks, which remained seven and expanded their branches from 835 to 1,379, by only 65 per cent.[332] **Figure 20** shows that with these changes credit dispersed by domestic banks to the private non-financial sector relative to GDP accelerated until the Asian Financial Crisis hit Indonesia in late 1997.

[328] Bank Indonesia, 2007, *Sejarah Bank Indonesia, Bagian Tiga: Perbankan - Sejarah Perbankan Periode 1983-1997*, Jakarta: Unit Khusus Museum Bank Indonesia, pp. 2-3, 6.

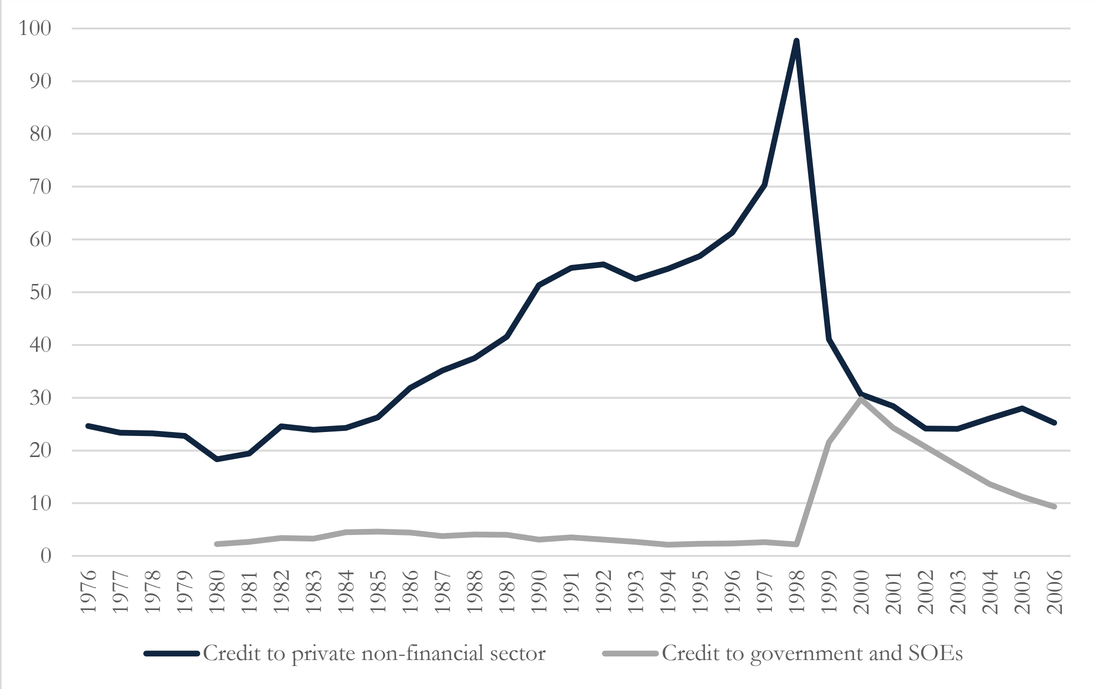
[329] Bank Indonesia, 1990, Report for the Financial Year 1989/1990, Jakarta: Bank Indonesia, p. 16.

[330] Detlev Holloh, 2001, *ProFI Microfinance Institutions Study*, Denpasar: Bank Indonesia & German Technical Cooperation (GTZ), p. 41.

[331] Act No. 7 of 1992 concerning Banking (State Gazette of the Republic of Indonesia Year 1992 Number 31, Supplementary to State Gazette of Republic of Indonesia Number 3472), Article 5(1); Michael Bennett, 1995, 'Banking Deregulation in Indonesia', *University of Pennsylvania Journal of Business Law, 16(3):*443-481, pp. 450-451; Bank Indonesia, 1993, Report for the Financial Year 1992/93, Jakarta: Bank Indonesia, p. 9.

[332] For underlying data from bank Indonesia's Monthly Statistics see Detlev Holloh, 2001, *ProFI Microfinance Institutions Study*, Denpasar: Bank Indonesia & German Technical Cooperation (GTZ), p. 41.

Figure 20: Credit by Domestic Banks to Private vs Public Sector, 1976-2006 (share of GDP)

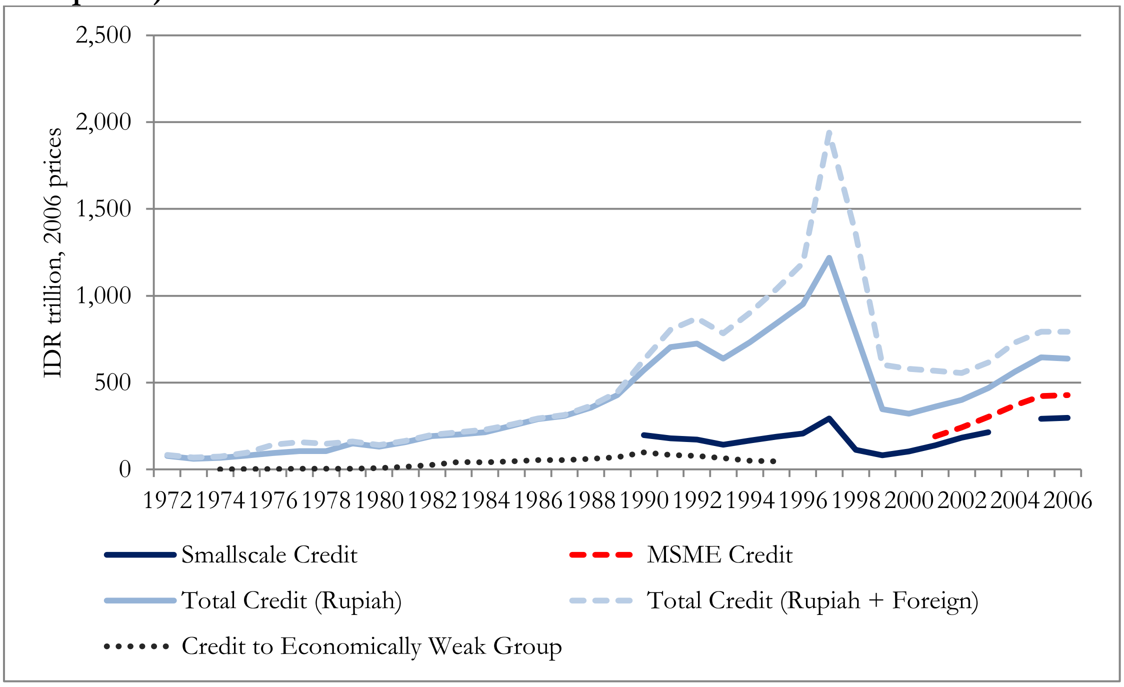


Sources: Data on credit to private non-financial sector from Bank for International Settlements, *Total Credit to Private Non-Financial Sector, Adjusted for Breaks, for Indonesia [QIDPAM770A]*, retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/QIDPAM770A, February 7, 2019; Data on credit to government and SOEs from World Bank, *Credit to Government and State-Owned Enterprises to GDP for Indonesia [DDEI08IDA156NWDB]*, retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/DDEI08IDA156NWDB, February 7, 2019.

Notes: Share of GDP, not seasonally adjusted.

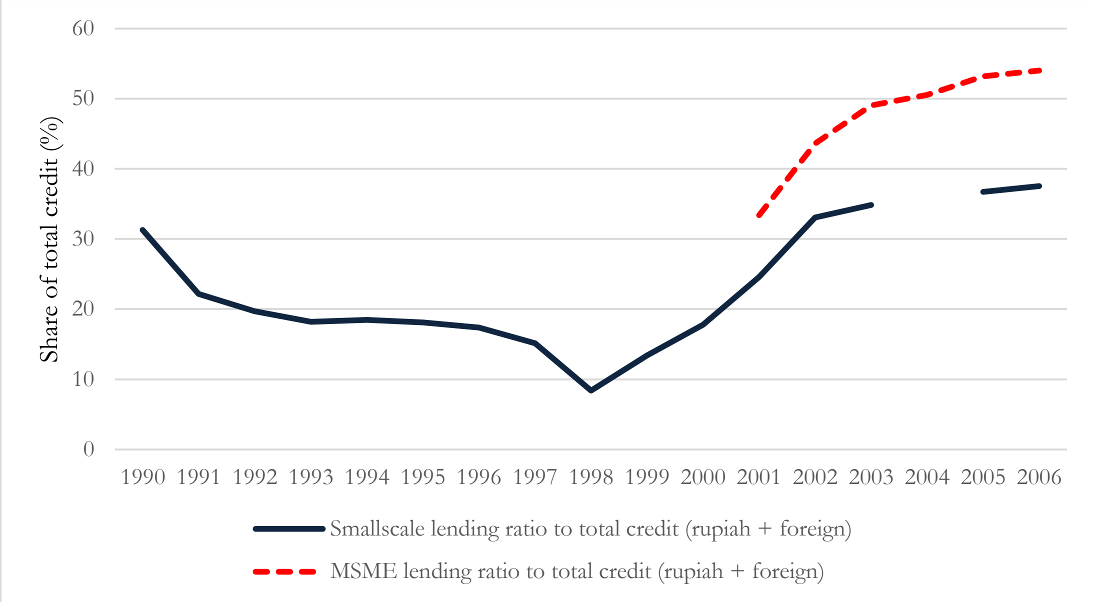
However, the question remains as to how far this credit expansion benefitted SMEs. **Figure 21** illustrates the volume of credit small-scale businesses received relative to total credit dispersed. Between 1974 and 1995 Bank Indonesia's *Annual Reports* included 'credits to economically weak groups', which included various small-scale business lending schemes. Credit to this group began to fall in 1990, when the majority of these programmes were phased out and replaced by a 20 per cent lending quota of banks to small-scale businesses (small-scale credit in the figure). While total credit was expanding drastically in the 1990s up until the Asian Financial Crisis, small-scale business credit remained relatively stable. **Figure 22** shows that the ratio of small-scale business credit relative to total credit actually fell between 1990 and 1998. In the aftermath of the Asian Financial Crisis, the banking crisis led to a severe credit crunch. However, credit to small-scale businesses continued to rise in the period of post-crisis economic recovery, even when the small-scale business lending obligation was formally abolished in 2001 (with Bank Indonesia Regulation 3/2/PBI/2001). This was in part due first to the continued strength of the BRI microbanking units and of the People's Credit Banks (BPR), and next to the transformation of BRI, after its restructuring in 2000, into an SME bank, including micro, small commercial and medium enterprise divisions. **Figure 21** shows the dramatic effect of the Asian Financial Crisis, with small-scale credit returning to pre-crisis levels in 2003, while total credit only returned to the level of the late 1980s. Therefore the increasing ratio of small-scale and MSME to total credit after the crisis is only partly driven by small-scale business credit expansion but also by the fall in overall credit.

Figure 21: Small-scale and Total Credit Outstanding, 1973-2006 (trillion IDR, 2006 prices)



Source: Calculated from data from Bank Indonesia, *Annual Reports (various years),* Jakarta: BI.
Notes: MSME stands for micro, small and medium-sized credit, encompassing loans up to IDR 5 billion
No data for small-scale credit lending in 2004;
"Credit to economically weak group" is a term used in Bank Indonesia's *Annual Reports* between 1974 and 1995, which included various subsidised directed lending programmes as well as BRI's Kupedes (for a full list see Appendix **Table 45**).
Deflator used was calculated from the GDP deflator reported in The World Bank, 2017, *World Development Indicators*, Washington, D.C.: The World Bank, GDP deflator (base year varies by country) [Data file] Retrieved from https://data.worldbank.org/indicator/NY.GDP.DEFL.ZS?locations=ID

Figure 22: Small-scale to Total Credit Ratios (in per cent)



Source: Calculated from data from Bank Indonesia, *Annual Reports (various years),* Jakarta: BI.
Notes: No data for MSME lending in 2004.

The next section disentangles these various small-scale business lending programmes and their different fates.

4.2 The Evolution of Small Credit Programmes in Indonesia

From the 1970s onwards various credit schemes targeting SMEs for the provision of smallholder credit were introduced, with mixed results. Between 1974 and 1995 small credit was predominantly disbursed through programme credits. In the *Bank Indonesia Annual Reports* this is grouped into 'credits for the economically weak group'.[333] The government's second five-year development plan for 1974/75-1978/79 (Repelita II) prioritised the need to support 'weaker economic groups' to enable catch-up and thereby strengthen the national private sector. Much of the rhetoric focussed on strengthening indigenous entrepreneurship, which was equated with these 'weaker economic groups' and regarded as needing support in order to balance the strength of

[333] See Appendix Table 45 for an overview of how rapidly these programmes expanded. These included the programmes discussed in this chapter such as KIK/KMKP, Kredit Mini, Kredit Midi and KUPEDES, but also credits for cooperatives, farm enterprises, teachers, students and petty traders.

large-scale foreign and national private companies.[334] Repelita II identified multiple channels in order to provide more opportunities for SMEs to increase and expand their business: providing access to capital and credit, marketing assistance, skill development, technology promotion, and supporting cooperatives.[335] In order to strengthen the capital base of indigenous small businesses the Indonesian government introduced a number of credit schemes (see **Table 20**).

334 Republik Indonesia, 1974, *Rencana Pembangunan Lima Tahun Kedua 1974/75 – 1978/79* [Second Five-Year Development Plan], Jakarta: Departemen Penerangan R.I. [Ministry of Information, Republic of Indonesia], Book 1, Chapter 5, pp. 142-3,152-3.

335 Republik Indonesia, 1974, *Rencana Pembangunan Lima Tahun Kedua 1974/75 – 1978/79* [Second Five-Year Development Plan], Jakarta: Departemen Penerangan R.I. [Ministry of Information, Republic of Indonesia], Chapter 5, pp. 165-7.

Table 20: Key Indonesian Small Credit Lending Programmes and Products in Comparison

	Loan size	Interest rate	Maturity
KIK *(introduced in 1973 to assist indigenous small enterprises engaged in labour-intensive activities)*	IDR 5 million max. (no minimum) (USD 12,000)	12% p.a.	5 years
KMKP *(introduced in 1973 to assist small enterprises)*	IDR 5 million max. (no minimum) (USD 12,000)	15% p.a.	3 years
Kredit Mini *(introduced in 1974 to support off-farm activities of small businesses particularly in rural areas, which did not qualify for KIK/KMKP)*	IDR 10,000 – 100,000 (USD 24 - 240)	12% p.a. for investment capital 15% p.a. for working capital	3 years for investment capital 1 year for working capital 1 season for agricultural purposes
Kredit Midi *(introduced in 1981 to serve those small businesses too large for Kredit Mini and too small for KIK/KMKP)*	IDR 200,000 – 500,000 (USD 320 - 800)	10.5% p.a.	
Kupedes *(introduced in 1984 to provide credit to creditworthy small borrowers for general purposes to cover investment, working capital and trade needs)*	IDR 25,000 – 1 million (USD 25 – 1,000)	1.5% p.m. on the original balance for working capital[336] 1.0% p.m. for investments loans	Max. 24 months for working capital Max. 36 months for investment loans
KUK *(introduced in 1990 to foster small-scale business development)*	Up to IDR 200 million (USD 110,000)	*Terms and conditions beyond qualifying asset criteria were to be determined by banks themselves*	

Source: Bank Indonesia, *Annual Reports (various years),* Jakarta: BI.

Notes: USD equivalents calculated with annual exchange rate at the year of programme introduction, see Appendix **Figure 33** for exchange rate;

Loan sizes, interest rates and credit ceilings at time of introduction of loan programme/product;

For subsequent changes see Appendix **Table 42 (**KUK), **Table 43** (KIK) and **Table 44** (KUK);

The minimum loan size of Kupedes remained unchanged, but the maximum was gradually increased to IDR 100 million (USD 11,000) (see BRI, *2008 Annual Report,* Jakarta: BRI, p. 76); smaller Kupedes loans continued to be charged at a 1.5% monthly flat rate on the original balance, but the rate was gradually decreased for larger loans to 1.2-1.5% p.m. for loans between IDR 3-5 million and 1.2% p.m. for loans ≥IDR 5 million. The latter being equivalent to a declining rate of ca. 26 %; see BRI, 1996, *BRI Unit Products*, Jakarta: BRI International Visitor Program, p. 7.

[336] This translated into a declining balance rate of roughly 32% on a 12-month loan, if all payments were made on time - BRI, 1996, *BRI Unit Products*, Jakarta: BRI International Visitor Program, p. 6.

KIK (*Kredit Investasi Kecil,* small-scale investment credit) / KMKP (*Kredit Modal Kerja Permanen,* permanent working capital credit) were both rolled out in January 1974 to finance indigenous small firms in need of investment/working capital for labour-intensive activities.[337] In the same year Kredit Mini (mini credit) was introduced, to provide credit for off-farm economic activities to small-scale rural businesses which did not qualify for financing under KIK/KMKP.[338] Kredit Mini was complemented by Kredit Midi in 1980, which was introduced to fill the gap for those rural entrepreneurs too large for Kredit Mini, but who did not qualify for KIK/KMKP.[339] These programmes marked a shift from the government's focus on agricultural credit (particularly for food crop cultivation) towards small-scale business credit.

The vast majority of agricultural credit was channelled through the government's subsidised large-scale agricultural extension programme BIMAS (*Bimbingan Masal,* Mass Guidance Programme). BIMAS ran between 1970 and 1985, initially aiming at rice self-sufficiency through rice intensification as part of the green revolution, later expanding its scope from just focusing on rice to other agricultural produce.[340] BIMAS evolved out of a pilot project which was conducted in some villages in West Java in 1964. The first version of BIMAS was short-lived, running from 1964-68, due to the deteriorating political conditions as well as a number of issues inherent in the programme design.[341] After Suharto came to power the government made renewed efforts at agricultural mass guidance to achieve self-sufficiency in rice production, as well as to improve welfare and overall stability in the rural sector by introducing BIMAS Gotong Royong (self-help mass guidance programme).[342] This second version of BIMAS had an even shorter life span and was terminated in 1970. BIMAS Gotong Royong was the promotion of self-help in name only; through a top-down approach foreign companies provided new rice varieties, fertilisers and pesticides to further push

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337 World Bank, 1983, *Indonesia: Rural Credit Study (Report No. 4566-IND),* Jakarta: World Bank (Indonesia Programs Division), Annex 3 pp. 7-9.

338 World Bank, 1983, *Indonesia: Rural Credit Study (Report No. 4566-IND),* Jakarta: World Bank (Indonesia Programs Division), Annex 3 pp. 14-15.

339 World Bank, 1983, *Indonesia: Rural Credit Study (Report No. 4566-IND),* Jakarta: World Bank (Indonesia Programs Division), Annex 3 p. 16.

340 Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, pp. 178-9.

341 Leonardus T. Schmit, 1991, *Rural Credit Between Subsidy and Market: Adjustment of Village Units of Bank Rakyat Indonesia in Sociological Perspective*, Leiden: Faculty of Social Sciences, Leiden University, p. 102.

342 Leonardus T. Schmit, 1991, *Rural Credit Between Subsidy and Market: Adjustment of Village Units of Bank Rakyat Indonesia in Sociological Perspective*, Leiden: Faculty of Social Sciences, Leiden University, pp. 104, 108.

rice intensification amongst local farmers.[343] The third version of BIMAS, which ran from 1973 to 1985, was conducted on a much larger scale. The rapid growth of BIMAS meant a rapid expansion of the Bank Rakyat Indonesia's (BRI) village or rural unit desa system, through which BIMAS was dispersed. Kredit Mini and Kredit Midi were channelled through the same financial infrastructure.

In the third and fourth five-year development plans (Repelita III, 1979/80 - 1983/84 and Repelita IV, 1984/85-1988/89) the government reiterated the need to support the weak indigenous entrepreneur through improving access to credit.[344] Kredit Mini and Kredit Midi had revealed that rural entrepreneurs had a large unmet demand for non-agricultural credit.[345] However, by the early 1980s government revenues contracted because of the fall in oil prices, while simultaneously the agricultural extension scheme BIMAS had become unsustainable given its high default rate.[346] In June 1983 the Government began introducing a series of financial regulation measures, including full interest deregulation in 1983 and other measures to stimulate the private sector, such as external trade liberalization in 1987.[347] These reforms enabled an important reform of BRI's unit desa system, which had been in charge of dispersing BIMAS as well as Kredit Mini and Kredit Midi. In late 1983 Kredit Mini and Kredit Midi were both discontinued; the last new BIMAS loans were issued in mid-1984.[348] Given the option of closing or reforming the units, BRI decided on reform, transforming them into self-reliant financial intermediaries beyond government control.

343 L. Jan Slikkerveer, 2019, 'Gotong Royong: An Indigenous Institution of Communality and Mutual Assistance in Indonesia', *in: Integrated Community-Managed Development: Strategizing Indigenous Knowledge and Institutions for Poverty Reduction and Sustainable Community Development in Indonesia* (pp. 307-320), Cham: Springer, p. 316.

344 Republik Indonesia, 1979, *Rencana Pembangunan Lima Tahun Ketiga 1979/80 – 1983/84* [Third Five-Year Development Plan], Jakarta: Republik Indonesia, Book 1, Chapter 6, pp. 243-44, 152-3; Republik Indonesia, 1984, *Rencana Pembangunan Lima Tahun Keempat 1984/85 – 1988/89* [Fourth Five-Year Development Plan], Jakarta: Republik Indonesia, Book 1, Chapter 1, pp. 44-5, 59, Chapter 7, pp. 302-4, 326.

345 Richard Patten and Jay Rosengard, 1991, *Progress with Profits: The Development of Rural Banking in Indonesia,* San Francisco: International Center for Economic Growth, p. 66.

346 World Bank, 1983, *Indonesia: Rural Credit Study (Report No. 4566-IND),* Jakarta: World Bank (Indonesia Programs Division), pp. 22-23.

347 Leonardus T. Schmit, 1991, *Rural Credit Between Subsidy and Market: Adjustment of Village Units of Bank Rakyat Indonesia in Sociological Perspective*, Leiden: Faculty of Social Sciences, Leiden University, p. 147.

348 Richard Patten and Jay Rosengard, 1991, *Progress with Profits: The Development of Rural Banking in Indonesia,* San Francisco: International Center for Economic Growth, p. 67.

A policy turning point was the withdrawal of central bank liquidity credit and the shift from subsidised credit programmes to market-led finance with market rates of interest on savings and loans. For the BRI's village units this shift occurred in 1983/84 with the introduction of two commercial products: Kupedes (*Kredit Umum Pedesaan*, General Rural Credit) and Simpedes (*Simpanan Pedesaan*, Rural Savings). BRI with its units, albeit not with its other business segments, became a trailblazer. Six years later, in 1990, it was followed by the phasing out of 32 out of 36 subsidized credit programmes. They were replaced by an SME lending quota of commercial banks of 20 per cent (known as KUK – *kredit usaha kecil* or small business credit).[349] The next section analyses each of the main credit schemes targeting SMEs which evolved during the New Order period.

4.2.1 KIK/KMKP

KIK and KMKP were introduced in 1973 to provide subsidised credit to indigenous small enterprises engaged in labour-intensive activities in all sectors of the economy. **Figure 23** shows the rapid expansion of both programmes. At the time of introduction the credit limit was IDR 5 million (USD 12,000) per borrower per programme credit. The schemes were not mutually exclusive; a borrower could take up a loan under each scheme of up to IDR 5 million to a total of IDR 10 million. In 1984 the credit ceiling was increased to IDR 15 million (USD 15,000) per customer for both KIK and KMKP.[350] Initially the programme had a 100 per cent minimum collateral requirement, which was subsequently reduced in 1978.[351] In order to qualify for KIK/KMKP, at least 75 per cent of the capital had to be owned by indigenous Indonesians or more than half of the board members had to be indigenous Indonesians, as well as fulfilling the following financial criteria:

- Net worth ≤ IDR 20 million (USD 50,000); and
- Current assets ≤ IDR 10 million (USD 25,000); and

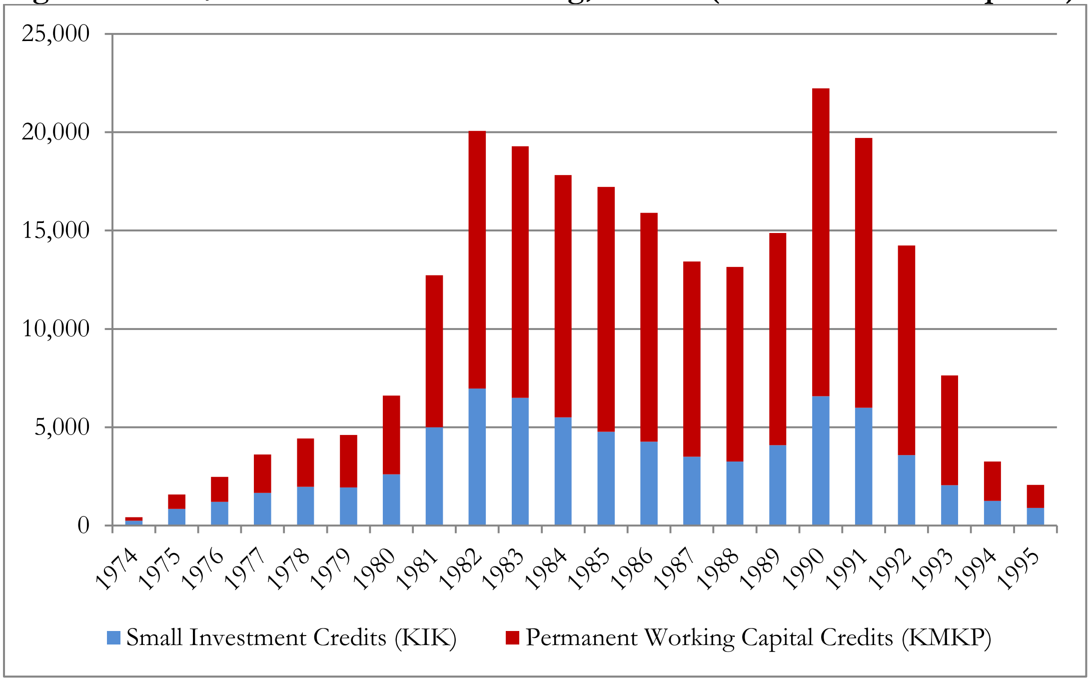
[349] Marguerite S. Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia,* Washington, DC: International Bank for Reconstruction and Development/The World Bank, pp. 31, 34.

[350] Bank Indonesia, 1990, *Statistik Ekonomi-Keuangan Indonesia/Indonesian Financial Statistics, Vol XXIII, No 12,* p. 4.

[351] Bruce Bolnick, 1982, 'Concessional Credit for Small Scale Enterprise', *Bulletin of Indonesian Economic Studies, 18(2):* 65-85, p. 70.

- Outstanding liabilities to banks ≤ IDR 10 million (USD 25,000)[352]

Figure 23: KIK/KMKP Credit Outstanding, 1974-95 (IDR billion in 2006 prices)



Sources: Bank Indonesia, *Annual Reports (various years),* Jakarta: BI.
Notes: Deflator used was calculated from the GDP deflator reported in The World Bank, 2017, *World Development Indicators*, Washington, D.C.: The World Bank, GDP deflator (base year varies by country) [Data file] Retrieved from https://data.worldbank.org/indicator/NY.GDP.DEFL.ZS?locations=ID

As **Figure 24** shows, KMKP was much larger than KIK not only in loan amount approved but also in number of loan applications approved. Grizzell found that the credit ceiling imposed on banks up until 1983 led to a preference for short-term working capital loans to maximise profits.[353] Interestingly **Figure 24** shows that the number and volume of KMKP loans rose at a faster rate than KIK loans even after the credit ceilings were lifted in 1983 as part of wider financial deregulation measures. While the credit ceilings had been abolished, Bank Indonesia only gave banks short-term credits, which, as Grizzell has argued, explains this continued preference.[354] Bank

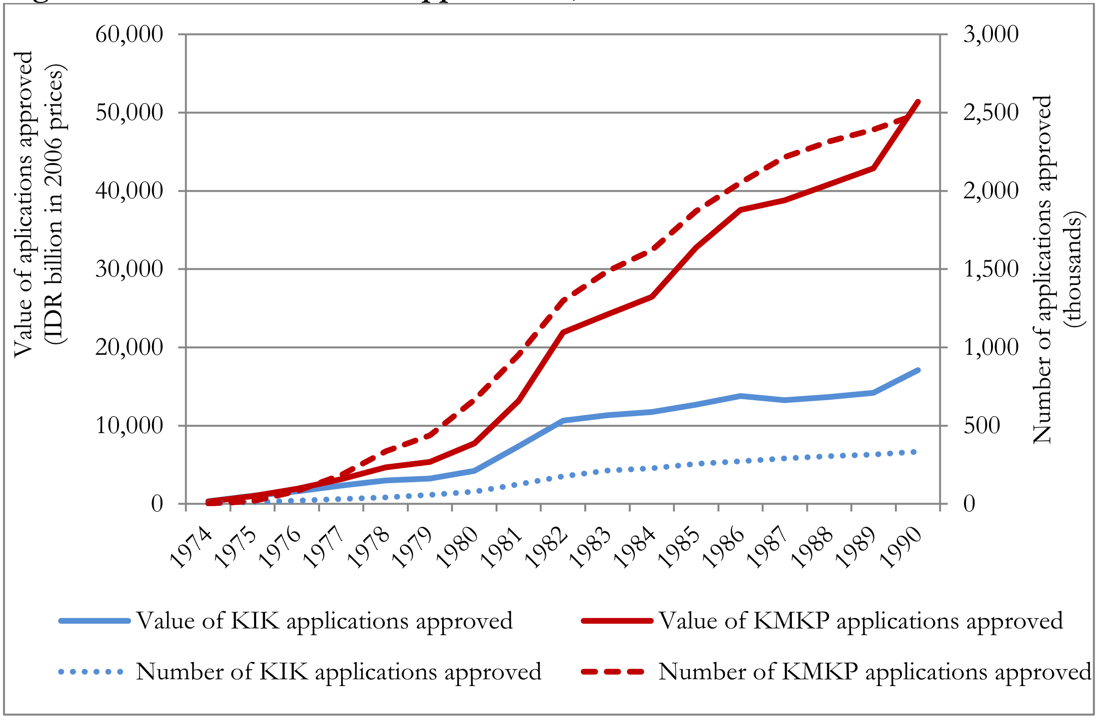
[352] USD equivalents calculated with 1973 exchange rate.

[353] Steve Grizzell, 1988, *Promoting Small-Scale Manufacturing in Indonesia; What Works?*, Jakarta: Development Studies Project II, DSP Research Memo No. 17, p. 16.

[354] Steve Grizzell, 1988, *Promoting Small-Scale Manufacturing in Indonesia; What Works?*, Jakarta: Development Studies Project II, DSP Research Memo No. 17, p. 16.

Indonesia explained the slower growth rate of KIK as an outcome of the overall "sluggish economic situation".[355]

Figure 24: KIK/KMKP Loan Applications, 1974-90



Sources: Bank Indonesia, *Annual Reports (various years)*, Jakarta: BI.
Notes: Deflator used was calculated from the GDP deflator reported in The World Bank, 2017, *World Development Indicators*, Washington, D.C.: The World Bank, GDP deflator (base year varies by country) [Data file] Retrieved from https://data.worldbank.org/indicator/NY.GDP.DEFL.ZS?locations=ID

However, the financial sector deregulation did not just lift credit ceilings, but also freed up interest rates and encouraged savings mobilisation to make banks competitive.[356] These changes led to a rapid increase in non-directed lending, leading banks to shift personnel and financial activities from programme lending, including KIK/KMKP. A project evaluation study found that from this point onwards "KIK/KMKP lending became a perfunctory exercise, relegated to junior staff".[357] KIK/KMKP provided supply-driven credit, originating in a policy environment which rewarded banks for the quantity of funds they channelled through. The new policy environment encouraged

[355] Bank Indonesia, 1983/1984 *Annual Report,* Jakarta: BI.

[356] Binhadi, 1995, *Financial Sector Deregulation, Banking Development and Monetary Policy: The Indonesian Experience (1983-1993),* Jakarta: Institut Bankir Indonesia, p. 63.

[357] Hans Dieter Seibel, 1991, *Technical Assistance to Bank Indonesia for SEDP II (extended into SEDP III and IV), Project Evaluation Report EEC NA/82-19,* Frankfurt: INTEGRATION, p. 29.

demand-driven finance. The repayment record of KIK/KMKP has been widely criticised for its poor repayment record; Grizzell estimated the default rate to lie around 27 per cent.[358] This was in part the result of poor staff training and misappropriation of funds, but the more fundamental issue was the lack of incentives for bank staff to collect outstanding loans. KIK/KMKP were abolished in January 1990 as part of the wider measures to reduce liquidity credits.[359]

Three impact studies have been conducted on KIK/KMKP. The first was a sample survey conducted in 1978/79 in East Java, Central Java and West Sumatra. The second survey was conducted in 1982 in East Java, South Sulawesi and North Sumatra, covering the period 1979-81.[360] The third study was a sample survey which interviewed 620 small-scale business entrepreneurs (of which 470 remained after data cleaning) across 13 provinces which had received KIK/KMKP for the first time in 1984.[361] All three studies have been largely dismissed on methodological grounds.[362] However, the KIK/KMKP project evaluation report found that "among the less questionable results are a relatively high economic rate of return, a notable increase in employment (during 1978-84 about 300,000 jobs were created through KIK alone), a relatively low level of output from the employment generated and a remarkable effect on value added".[363] Another widely accepted finding from the second and third studies was that the vast

358 Steve Grizzell, 1988, *Promoting Small-Scale Manufacturing in Indonesia; What Works?*, Jakarta: Development Studies Project II, DSP Research Memo No. 17, p. 18; World Bank, 1983, *Indonesia: Rural Credit Study (Report No. 4566-IND),* Jakarta: World Bank (Indonesia Programs Division), Annex 3 p. 14; Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, p. 101.

359 Binhadi, 1995, *Financial Sector Deregulation, Banking Development and Monetary Policy: The Indonesian Experience (1983-1993),* Jakarta: Institut Bankir Indonesia, pp. 261-262.

360 For a critical discussion of the methodology of the second survey see Bruce Bolnick and Eric Nelson, 1990, 'Evaluating the economic impact of a special credit programme: KIK/KMKP in Indonesia', *The Journal of Development Studies, 26(2)*: 299-312.

361 The issues of the first and second survey were covered in the report of the third survey: Central Project Management Unit, Cooperative and Small Credit Department, Bank Indonesia, 1986, *Economic Impact of KIK/KMKP (SEDPI and SEDP II),* Jakarta: Bank Indonesia, pp. 3-4; the survey design and issues with data collection and representativeness of the third study are discussed on pp. 13-21, 50.

362 Hans Dieter Seibel, 1991, *Technical Assistance to Bank Indonesia for SEDP II (extended into SEDP III and IV), Project Evaluation Report EEC NA/82-19,* Frankfurt: INTEGRATION, pp. 23-24.

363 Hans Dieter Seibel, 1991, *Technical Assistance to Bank Indonesia for SEDP II (extended into SEDP III and IV), Project Evaluation Report EEC NA/82-19,* Frankfurt: INTEGRATION, p. 24.

majority of KIK/KMKP loans were given to existing businesses (90-98 per cent) rather than start-ups.[364]

Set against its own criteria of channelling credit to small-scale enterprises and promoting employment generation KIK/KMKP could be a deemed a success. However, the programme's high cost and low repayment rate made it unsustainable. Grizzell argued that the majority of KIK/KMKP loans financed trading activities, despite the programme's objective of strengthening small-scale industrial enterprises.[365] Beyond this some have raised questions about the potential negative side effects of the programme. Most prominently, McLeod argued that reallocation of credit towards indigenous small-scale enterprises meant it was allocated away from, and hence to the detriment of, medium and large firms as well as businesses which did not fulfil the ethnicity requirements.[366]

4.2.2 Kredit Mini & Kredit Midi

'Kredit Mini' (mini credit) was developed to support small business entrepreneurs through small and easier to obtain credits. Under Kredit Mini, small entrepreneurs could take up a loan of maximum IDR 100,000 (USD 240) per customer at an interest rate of 12 per cent per annum. In 1980, a second programme was introduced to complement Kredit Mini: Kredit Midi, which provided small business owners with loans between IDR 200,000-500,000 (USD 320-800) at 10.5 per cent interest per annum.[367] Kredit Mini was introduced to support small firms too small for KIK/KMKP loans, Kredit Midi was subsequently introduced for those firms either too

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[364] Bruce Bolnick, 1982, 'Concessional Credit for Small Scale Enterprise', *Bulletin of Indonesian Economic Studies, 18(2):* 65-85, p. 76; World Bank, 1983, *Indonesia: Rural Credit Study (Report No. 4566-IND),* Jakarta: World Bank (Indonesia Programs Division), p. 27; Hans Dieter Seibel, 1991, *Technical Assistance to Bank Indonesia for SEDP II (extended into SEDP III and IV), Project Evaluation Report EEC NA/82-19,* Frankfurt: INTEGRATION, p. 24.

[365] Steve Grizzell, 1988, *Promoting Small-Scale Manufacturing in Indonesia; What Works?*, Jakarta: Development Studies Project II, DSP Research Memo No. 17, p. 15.

[366] Ross McLeod, 1983, 'Concessional Credit for Small Scale Enterprise: A Comment', *Bulletin of Indonesian Economic Studies, 19(1):* 83-89, p. 84.

[367] Republik Indonesia, 1984, *Rencana Pembangunan Lima Tahun Keempat 1984/85 – 1988/89* [Fourth Five-Year Development Plan], Jakarta: Republik Indonesia, Book1, Chapter 7, pp. 302-3.

large for, or which had outgrown Kredit Mini, but were still too small for KIK/KMKP.[368]

Kredit Mini and Midi were dispersed through BRI's village units, which had been rapidly expanded with BIMAS. BIMAS, as noted earlier, was a heavily subsidised agricultural extension scheme that ran between 1970 and 1985. With the rapid expansion of BIMAS credit came the exponential growth of BRI's village units, through which BIMAS was disbursed. However, with presidential instruction INPRES 4/1973 BRI also received the general mandate to extend non-BIMAS rural credit. Part of this diversification was the introduction of the credit scheme Kredit Mini (mini credit).[369]

Kredit Mini, and later Kredit Midi, had two crucial differences from BIMAS: first, they provided loans in cash rather than in kind, and second, the loan recipients were selected by BRI village unit staff rather than government officials.[370] Contrary to BIMAS, Kredit Mini and Kredit Midi maintained high repayment rates, which was in part attributable to the criteria and process followed to establish borrower creditworthiness.[371] The ratio of arrears to outstanding loans of fTable 43Kredit Mini remained below 6 per cent throughout its lifetime, while the long-term loss ratio of Kredit Midi was 3.8 per cent when it was terminated in 1984.[372] While borrower selection had much improved between the two programmes, a World Bank study described the loan application procedure as "cumbersome" because it required numerous forms, steps and usually had to run through three different administrative levels.[373] Despite the burdensome application procedure, **Table 21** shows that the loans outstanding through Kredit Mini – and Kredit Midi in its short lifespan – increased rapidly. The data in **Table 21** also shows that this increase was driven by an expansion

368 World Bank, 1983, *Indonesia: Rural Credit Study (Report No. 4566-IND),* Jakarta: World Bank (Indonesia Programs Division), pp. 28-29.

369 Richard Patten and Jay Rosengard, 1991, *Progress with Profits: The Development of Rural Banking in Indonesia,* San Francisco: International Center for Economic Growth, pp. 60-1.

370 Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, p. 185.

371 Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, p. 185.

372 Kredit Mini in World Bank, 1983, *Indonesia: Rural Credit Study (Report No. 4566-IND),* Jakarta: World Bank (Indonesia Programs Division), Annex 3, p. 15; Kredit Midi in Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, p. 212.

373 World Bank, 1983, *Indonesia: Rural Credit Study (Report No. 4566-IND),* Jakarta: World Bank (Indonesia Programs Division), Annex 3, pp. 15-16.

of short-term working capital; the previous subsection showed that similarly, the number and value of KMKP loans (working capital loans) were far larger than those of KIK (investment loans). Kredit Mini and Kredit Midi showed that there was a large demand for cash loans.

Kredit Mini and Kredit Midi were gradually phased out during the 1980s when the village units could no longer be sustained (without reform) because of the termination of BIMAS and its subsidies. In 1983/4, Kredit Mini had still disbursed IDR 36.6 billion (0.004 per cent of GDP) to 491,000 people; by 1987/88, this had fallen to IDR 0.8 billion (0.0006 per cent of GDP) and 7,800 customers. Kredit Midi had disbursed IDR 34 billion (0.04 per cent of GDP) to 146,600 people in 1983/4, but by 1987/88 this had fallen to IDR 0.7 billion (0.005 per cent of GDP) and only 500 customers.

Table 21: Kredit Mini & Kredit Midi Loans Outstanding and Investment and Working Capital Credit Shares, 1975-84 (IDR billion in 2006 prices)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Mini Credits										
Credit outstanding	124	239	344	415	457	443	824	1,061	989	526
Investment	22.9%	21.1%	18.0%	16.5%	18.8%	15.0%	9.8%	10.5%	9.5%	10.8%
Working capital short-term	77.1%	78.9%	82.0%	83.5%	81.3%	85.0%	90.2%	89.5%	90.5%	89.2%
Midi Credits										
Credit outstanding							161	521	659	483
Investment							12.5%	14.3%	11.9%	11.8%
Working capital short-term							87.5%	85.7%	64.3%	88.2%

Sources: Bank Indonesia, *Annual Reports (various years),* Jakarta: BI.
Notes: Deflator used was calculated from the GDP deflator reported in The World Bank, 2017, *World Development Indicators*, Washington, D.C.: The World Bank, GDP deflator (base year varies by country) [Data file] Retrieved from https://data.worldbank.org/indicator/NY.GDP.DEFL.ZS?locations=ID

4.2.3 Kupedes

A scheme that has received much praise and achieved considerably higher loan repayment rates is the market-based general rural credit loan product Kupedes (*Kredit*

Umum Pedesaan) as well as its rural savings counterpart Simpedes (*Simpanan Pedesaan*).[374] Kupedes was introduced in 1984 to replace BIMAS. By the early 1980s the default rate on loans provided under BIMAS had risen to over 50 per cent, reflecting the moral hazard problem created by subsidised loans.[375] In the words of Minister of Finance at the time Ali Wardhana: "By the early 1980s we began to realize that year after year, the subsidies and arrears of BIMAS, KIK, and KMKP were large, the programs were inefficient, and the loans generally did not reach the intended borrowers".[376] The financial deregulation introduced in June 1983 made the development of Kupedes possible. Some of the major relevant changes included lifting the ceiling on interest rates for loans and deposits, granting banks more autonomy and encouraging banks to expand their products and services.[377]

BRI reorganised and reformed the village units (*unit desa*), that had been set up as part of the BIMAS programme, to become self-sustaining microbanking units, With that came increased responsibility at the village unit level and the introduction of a simplified transparent accounting and reporting system and improved supervision at the branch level. The units were turned into independent profit and loss centres, with profit incentives for staff as very effective incentives to borrowers for timely repayment.[378] Loans were made in cash rather than in kind and the selection of borrowers was made by the staff of the units, something which had previously been done primarily by the Department of Agriculture and various other government officials and committees.[379] When they were founded, BRI village units operated at sub-district (*kecamatan)* level.

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374 UNIDO, 1997, *Industrial Development Global Report 1997*, Oxford University Press, p. 98; The World Bank, 1996, 'Kupedes: Indonesia's Model Small Credit Program, *OED Précis, 104,* Washington, DC: Operations Evaluation Department, The World Bank; Marguerite S. Robinson, 2001, *The Microfinance Revolution, Volume 1: Sustainable Finance for the Poor,* Washington, DC: International Bank for Reconstruction and Development/The World Bank, p. xxiv.

375 Hans Dieter Seibel and Mayumi Ozaki, 2009, *Restructuring of State-owned Financial institutions: lessons from Bank Rakyat Indonesia,* Manila: Asian Development Bank, p. 1; Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, p. 218.

376 Ali Wardhana (Minister of Finance, Government of Indonesia, 1968-83; Coordinating Minister for Economics, Finance, and Industry, Government of Indonesia, 1983-88) *in:* Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, p. xxvi.

377 Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, p. 229.

378 Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, p. 218.

379 Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, pp. 181, 220.

While the BRI units initially served primarily rural areas, in 1989 the decision was made to expand and add urban units (*unit kota)*. While the units are still referred to as BRI village units or *unit desa* this in fact refers to both types of units.[380] By 1990 about 20 per cent of all BRI units were in urban areas, by 1996 their share is estimated to have grown to 25 per cent.[381]

Kupedes was administered through BRI, as were KIK/KMPK, however, with some important differences with implications for the incentive structure for the implementing units. Kupedes was a product of the BRI units, while KIK/KMKP was a government programme channelled through BRI branches as well as other banks. Kupedes loans were funded through savings mobilisation and were allocated at market rates of interest through the unit desa, which bore the credit risk but also paid their staff 10 per cent bonus on profits, whereas KIK/KMPK loans were subsidised and only handled at the branch and higher level, with 75 per cent of each loan insured by the state through Indonesian Credit Insurance Ltd.[382] Thus while BRI offered both KIK/KMKP and Kupedes, they were not offered by the same outlet: in BRI's technical terms, the unit desa provided microcredit whilst SME credits were different business segments handled at the BRI branch level. The unit desa offered only Kupedes loans as a general purpose loan instrument and provided no other loan products and Kupedes loans were not available anywhere other than at the unit desa.[383]

The Kupedes scheme had also in-built incentives for prompt loan repayment for the customer: if all payments had been made in full and on time, a quarter of the total amount of interest was refunded. Furthermore, by demonstrating creditworthiness through a good repayment record subsequent loan sizes would gradually increase.[384] This stood in stark contrast to KIK/KMKP, where borrowers could obtain new loans

380 Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, p. 169.

381 Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, p. 319.

382 UNIDO, 1997, *Industrial Development Global Report 1997*, Oxford University Press, p. 98; Robinson, 2002, pp. 218, 220, 223; Kupedes received start-up funding for the period of $207 million and has been profitable ever since 1986.

383 Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, p. 239.

384 Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, p. 218.

before repaying existing loans.[385] In 1996, President Director of BRI Djokosantoso Moeljono (1993-2000) stated that 'more than 80 percent of Kupedes borrowers borrow again, and they need to know that their ability to borrow again depends on their own performance, not on factors outside their control'.[386] In 1988, a study by Grizzell found that the default rate of Kupedes was 2-3 per cent, compared to 27 per cent for KIK/KMKP.[387]

Borrowing under the Kupedes scheme was particularly attractive given the flexibility in loan size and terms, with a minimum loan size of about 25,000 to 25 million IDR in 1996 (then roughly equivalent to 10.50 to 10,500 USD), loan maturities ranging between three and 24 months for working capital loans and up to 36 months for investment loans, as well as instalments varying between single, monthly and seasonal payments, with monthly being the most common mode.[388] The effective annual rate of interest was 44 per cent, minus a rebate of the equivalent of 11 per cent for timely repayment, which left the borrower with an interest rate of 33 per cent per annum.[389]

After disbursing its first loans in January 1984, Kupedes more than doubled its customers between 1984-87, from 641,000 to 1,315,000 people and its loans disbursed increased from IDR 110.7 billion (USD 108 million) to IDR 429.2 billion (USD 300 million) as shown in **Figure 25**. Kupedes loan sizes were much more flexible than the other schemes, ranging from IDR 25,000 to IDR 2 million.[390] The 12 months loss ratio of BRI units in **Figure 26** shows the overall high repayment rate of Kupedes. The 12 months loss ratio hit a peak of 5 per cent in 1991, when BRI restricted unit lending in

385 Hans Dieter Seibel, 1991, *Technical Assistance to Bank Indonesia for SEDP II (extended into SEDP III and IV), Project Evaluation Report EEC NA/82-19,* Frankfurt: INTEGRATION, p. 50.

386 In Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank p. 238.

387 Steve Grizzell, 1988, *Promoting Small-Scale Manufacturing in Indonesia; What Works?*, Jakarta: Development Studies Project II, DSP Research Memo No. 17, p. 29.

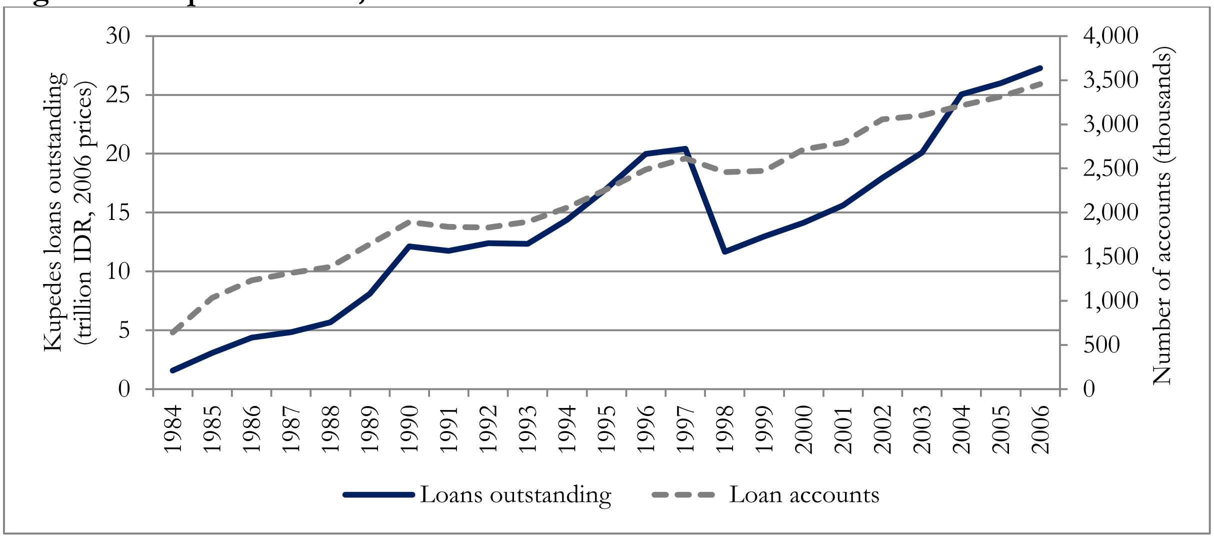
388 Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, 2002, pp. 217, 239, 240-2; initial range of loans in 1984 was between 25,000 and 1 million IDR (equivalent to 23 to 931 1984 USD).

389 Hans Dieter Seibel, Agus Rachmadi and Djarot Kusumayakti. 2010, 'Reform, Growth and Resilience of Savings-led Commercial Microfinance Institutions: The Case of the Microbanking Units of Bank Rakyat Indonesia', *Savings and Development, 34(3):* 277-303*,* p. 285.

390 Republik Indonesia, 1989, *Rencana Pembangunan Lima Tahun Kelima 1989/90 – 1993/94* [Fifth Five-Year Development Plan], Jakarta: Republik Indonesia, Book 1, Chapter 7, pp. 382-3.

response to a tight money period.[391] In contrast to the response to this milder crisis in 1992, BRI did not restrict Kupedes lending during the Asian Financial Crisis. In addition to not restricting lending, BRI accepted decreased interest spreads in 1998 when it raised the interest rates on Kupedes deliberately slowly. Patten, Rosengard and Johnson argue that this strategy played to "psychological importance to Kupedes borrowers of stability".[392] **Figure 26** shows that the arrears ratio indeed remained much lower in 1998-99 during this much more severe crisis than in 1991-92. The arrears ratio, which measures the number of loan repayments that are late a day or more as a share of total loans outstanding, remained remarkably low between 1984 and 2006, including the Asian Financial Crisis years. The strong performance of Kupedes in terms of both loan disbursement and repayment continued during the Asian Financial Crisis with the number of loans increasing from 2.5 to 2.7 million between 1996 and 2000, little change in the repayment rate and the system remaining profitable throughout this economically turbulent period.[393]

Figure 25: Kupedes Loans, 1984-2006



Source: Data from BRI, 2015, *Laporan Statistik BRI Unit*, Jakarta: BRI.

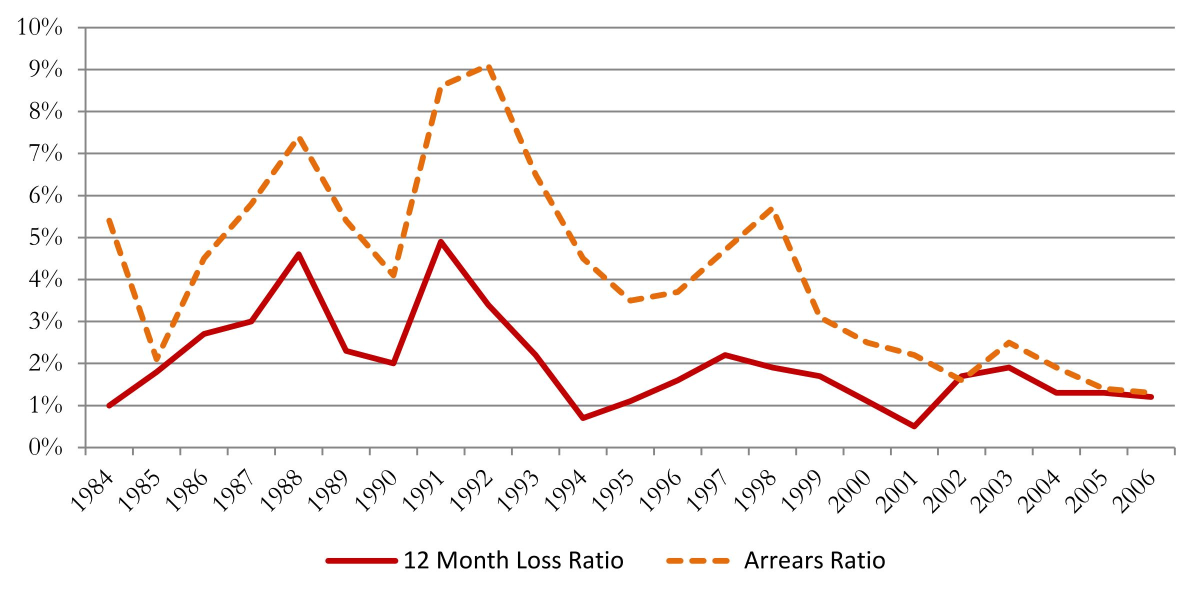
Notes: Deflator used was calculated from the GDP deflator reported in The World Bank, 2017, *World Development Indicators*, Washington, D.C.: The World Bank, GDP deflator (base year varies by country) [Data file] Retrieved from https://data.worldbank.org/indicator/NY.GDP.DEFL.ZS?locations=ID

391 BRI, 1996, *BRI Unit Products*, Jakarta: BRI International Visitor Program, p. 12

392 Richard Patten, Jay Rosengard and Don Johnston, 2001, 'Microfinance Success Amidst Macroeconomic Failure: The Experience of Bank Rakyat Indonesia During the East Asian Crisis', *World Development, 29(6)*: 1057-1069, p. 1064

393 Marguerite Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia*, Washington, DC: International Bank for Reconstruction and Development/The World Bank, pp. 389-90.

Figure 26: Loss Ratio and Arrears of BRI Units, 1984-2006



Source: Data from BRI, 2015, *Laporan Statistik BRI Unit*, Jakarta: BRI.

Notes: Arrears are total payments overdue one day or more as the share of total loans outstanding, excluding loans written off; the 12 month loss ratio measures the change in the previous 12 months in the cumulative amount of loans that have become due and remain unpaid (see BRI, 1996, *BRI Unit Products*, Jakarta: BRI International Visitor Program, pp. 10-11).

4.2.4 KUK

From February 1990 onwards, commercial banks were required to extend 20 per cent of their total credit to small businesses as investment and working capital, known as KUK (*kredit usaha kecil* - small business credit).[394] When KUK was introduced in 1990 eligibility was determined by asset criteria: businesses had to have no more than IDR 600 million (USD 330,000) in net assets (excluding land and business estates).[395] In 1997 the criteria were altered with Board of Directors of Bank Indonesia Decree No. 29/4/KEP/DIR, which stipulated that eligibility for small-scale business credit was based on the definition of Indonesian Law Number 9 of 1995 regarding Small Enterprises.[396] The new definition set the criteria for small-scale enterprises for businesses to qualify to either have net assets worth a maximum of IDR 200 million (USD 70,000) (excluding land and business facilities) or have a maximum of IDR 1

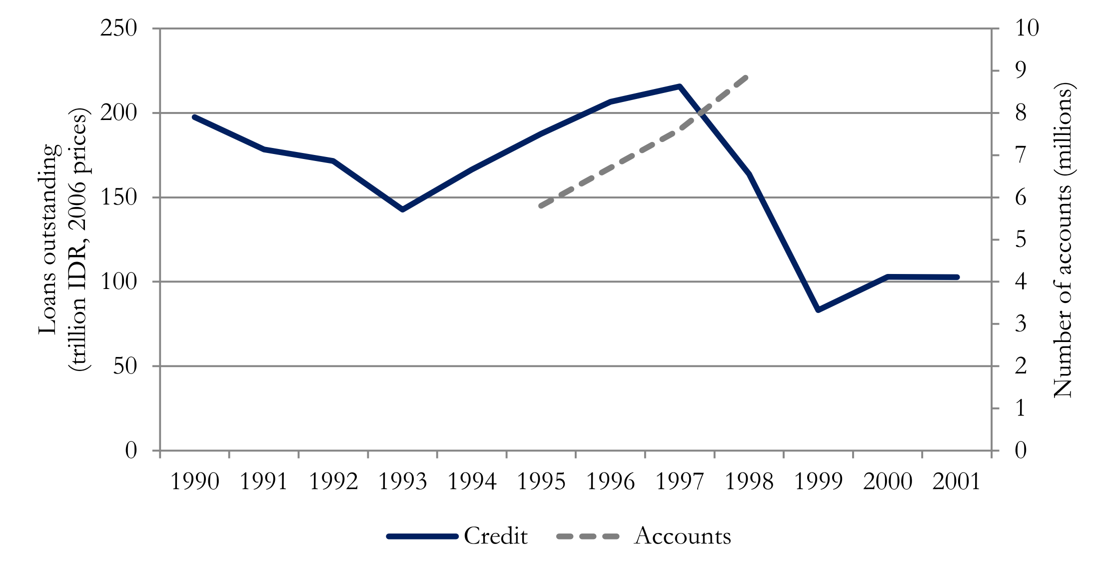
[394] Bank Indonesia, 1990, *1989/1990 Annual Report,* Jakarta: BI, pp. 16-17.

[395] Bank Indonesia, 1990, *1989/1990 Annual Report*, Jakarta: BI, pp. 16-17.

[396] BI Regulation 3/2/PBI/2001 4 January 2001 concerning Provision of Credit to Small Business & Circular Letter 3/9/BKR 17 May 2001 concerning Operational Guidelines for the Provision of Credit to Small Business maintained these eligibility criteria.

billion (USD 340,000) in sales.[397] In addition, qualifying businesses must be owned by Indonesian citizens and could not be a subsidiary or branch of a medium or large-sized business. Beyond these asset criteria, banks were to determine the terms and conditions themselves. McLeod found that as a result banks lent to firms under KUK that would have been too large to qualify for KIK/KMKP.[398]

Figure 27: KUK (Small Business Credit), 1990-2001



Source: Data from Bank Indonesia, *Annual Reports (various years),* Jakarta: BI.

Notes: KUK defined as: IDR 200 million max. 1990-93, IDR 250 million max. 1994-97, IDR 350 million max. 1998-2000, IDR 500 million max 2001;
Deflator used was calculated from the GDP deflator reported in The World Bank, 2017, *World Development Indicators*, Washington, D.C.: The World Bank, GDP deflator (base year varies by country) [Data file] Retrieved from https://data.worldbank.org/indicator/NY.GDP.DEFL.ZS?locations=ID

The May 29 1993 Deregulation Package relaxed the rules somewhat, calculating the mandatory lending requirement based on ratio to rupiah denominated credit only, rather than the previous rule of having to lend 20% of total credit in both rupiah and foreign currencies to small businesses.[399] In April 1997, the lending requirement was increased to 22.5-25.0% of total lending and the credit ceiling was raised from IDR 250 to 350 million (from USD 86,000 to USD 120,000). But in the following year when the Asian

[397] USD equivalents calculated with 1997 exchange rate.

[398] Ross McLeod, 1994, 'A Changing Financial Landscape: The Evolution of Finance Policy in Indonesia', *in:* F.J.A. Bouman and Otto Hospes (Eds.), *Financial Landscapes Reconstructed: The Fine Art of Mapping Development* (pp. 85-104), New York: Routledge, p. 102.

[399] Bank Indonesia, 1994, *1993/1994 Annual Report*, Jakarta: BI, pp. 73-75.

Financial Crisis hit Indonesia, only a few banks could meet the KUK lending obligation.[400] The lending obligation was suspended during the financial crisis and **Figure 27** shows that subsequently loans dropped by almost half between 1998 and 1999.[401] By 1999, Bank Indonesia indefinitely suspended sanctions on banks not meeting the lending requirement and on 4 January 2001 with BI Regulation 3/2/PBI/2000 credit extension to small businesses was no longer a legal obligation but rather just a recommendation.

One of the issues KUK faced was that in order to meet the lending quota, many banks extended loans directly to SME owners (who utilised the loans for private purposes) rather than to the business as working or investment capital.[402] A World Bank report found that banks were hesitant to extend credit to SMEs due to their lack of collateral and thus the risk of the loan, a problem many SMEs face worldwide.[403] KUK did little to address these concerns in practice. Rosengard and Prasetyantoko found KUK to be "fatally flawed conceptually and a dismal failure operationally", with banks lacking an internal mandate, desire or expertise to lend to MSMEs and circumventing the lending requirement through "extremely creative" representation of their loan portfolios.[404]

4.2.5 Post-Asian Financial Crisis Developments

Recovery from the Asian Financial Crisis set off in 1998 with immediate policy responses, which were based on the fourth agreement with the IMF signed on 24 June 1998 (Second Supplementary Memorandum of Economic and Financial Policies,

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400 Board of Directors of Bank Indonesia Decree No 30/4/KEP/DIR, 4 April 1997; Bank Indonesia, 1999, *1998/1999 Annual Report*, p. 91

401 Marguerite S. Robinson, 2002, *The Microfinance Revolution, Volume 2: Lessons from Indonesia,* Washington, DC: International Bank for Reconstruction and Development/The World Bank, p. 104.

402 Thee Kian Wie, 2006, 'Policies for Private Sector Development in Indonesia, *ADB Institute Discussion Paper*, 46: 1-46, p. 31.

403 The World Bank, 2005, *Microfinance Case Studies: Indonesia, Indonesia's Rural Financial System: The Role of the State and Private Institutions,* Washington, DC: World Bank, p. 27.

404 Jay Rosengard and Agustinus Prasetyantoko, 2011, 'If the Banks are Doing So Well, Why Can't I Get a Loan? Regulatory Constraints to Financial Inclusion in Indonesia', *Asian Economic Policy Review, 6:* 273–296, p. 290;

In particular giving consumer loans to SME-owners rather than business loans, discussed in Thee Kian Wie, 2006, 'Policies for Private Sector Development in Indonesia, *ADB Institute Discussion Paper*, 46: 1-46, p. 44.

MEFP) and set out various policies and measures to implement fiscal and structural reforms, including improving access to credit for small-scale enterprises. With Law 23/1999 of 16 November 1999, Bank Indonesia was no longer allowed to extend liquidity credit to support programme credits to ensure the independence of the central bank. The MEFP also stipulated measures to encourage the privatisation or closure of nonviable state-owned enterprises. The new policy regime also included SME-targeted support measures, such as the introduction of the new credit scheme KTA (*Kredit Tanpa Agunan*), which forewent collateral requirements but was restricted to formally registered SMEs from all sectors.[405]

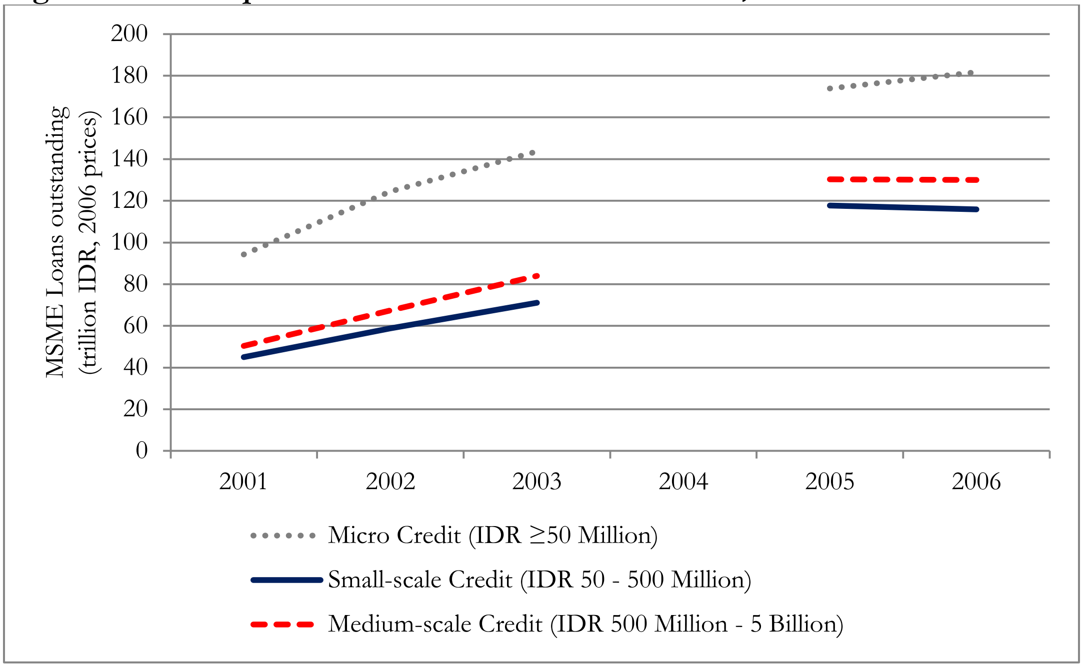
From 2001 onwards the *Bank Indonesia Annual Reports* distinguished between micro, small and medium credit. Before 2001, the small credit category only corresponded to micro and small credit, which encompassed loans of up to IDR 350 million. The new credit categories introduced with the *2001 Bank Indonesia Annual Report* were micro credit (up to IDR 50 million / USD 5,000), small-scale credit (IDR 50 – 500 million / USD 5,000 – 50,000) and medium-scale credit (IDR 500 million – 5 billion / USD 50,000 – 500,000). **Figure 28** shows that the micro, small-scale and medium-sized credit segments expanded at similar rates between 2001 and 2003. However, by 2005 the share of micro credit had fallen to 41 per cent (from 49 per cent in 2003), while the share of small-scale as well as medium-sized credit relative to total MSME continued to grow.[406]

However over 95% of small-scale loans lent through KUK between 1995 and 2001 had a maximum credit line of IDR 50 million. Therefore the medium credit category (loans between IDR 0.5 and 5 billion) reported from 2001 onwards served different consumer segments. The medium-scale credit share of total credit grew continuously between 2001 and 2006, from 8.8 per cent to 16.5 per cent. However, whether this is reflective of a longer process of medium-scale credit growth or reflective of recovery from the Asian Financial Crisis is unclear due to data constraints.

[405] Tulus Tambunan, 2000, *Development of Small-Scale Industries during the New Order Government in Indonesia,* Aldershot, UK/Brookfield, USA: Ashgate, p. 186.

[406] Note that the Bank Indonesia Annual Reports did not report separate figures for the different segments in 2004.

Figure 28: Development of MSME Credit in Indonesia, 2001-2006



Source: Data from Bank Indonesia, *Annual Reports (2003- 2006),* Jakarta: BI.
Notes: No separated data available for 2004, the total of MSME credit in 2004 was IDR 353 trillion (in 2006 prices);
Deflator used was calculated from the GDP deflator reported in The World Bank, 2017, *World Development Indicators*, Washington, D.C.: The World Bank, GDP deflator (base year varies by country) [Data file] Retrieved from https://data.worldbank.org/indicator/NY.GDP.DEFL.ZS?locations=ID

In terms of post-crisis developments in SME credit Bank Rakyat Indonesia (BRI) deserves special attention. As the previous discussion of Kupedes has shown, BRI's units had weathered the Asian Financial Crisis impressively well. However, its bigger loans to the corporate sector had performed much worse than BRI's smaller loans during the crisis.[407] The government launched the 'Forward Steps for Bank Improvement and Restructuring Program' in August 1998, which focused on restructuring banks which were insolvent but politically too important to let fail. As part of this programme BRI was restructured between 1999 and 2003, which entailed reducing its corporate loan segment and focusing on micro and SME lending. Important milestones in the restructuring process included the recapitalisation of BRI in 2000 with IDR 29 trillion (USD 3 billion) in government bonds and its partial privatisation in late 2003 with a public share of 41 per cent. [408] As a result BRI

[407] Hans Dieter Seibel and Mayumi Ozaki, 2009, *Restructuring of State-owned financial institutions: lessons from Bank Rakyat Indonesia,* Manila: Asian Development Bank, p. 14.

[408] Hans Dieter Seibel and Mayumi Ozaki, 2009, *Restructuring of State-owned financial institutions: lessons from Bank Rakyat Indonesia,* Manila: Asian Development Bank, p. 11.

experienced a substantial growth in total assets and profitability. **Table 22** shows how the MSME loan segment expanded between 1998 and 2006 while the share of corporate loans in total BRI lending fell from 35 per cent in 1998 to 13 per cent in 2006. As a result of these restructuring efforts the non-performing loan (NPL) ratio fell to "a historically low level" in 2000 and remained between 5 and 6 per cent between 2000 and 2006, compared to 11 per cent in the pre-crisis years (1996 and 1997).[409]

When comparing **Figure 28** and **Table 22**, it should be noted that the loan size categories between Bank Indonesia and BRI differ: Bank Indonesia's medium-scale credit segment encompassed loans between IDR 500 million – 5 billion, while BRI's medium-sized business segment encompassed loans between IDR 5-50 billion. **Table 23** adjusts for these differences and compares the BI MSME credit data to BRI's loans to its micro and small business segments. The calculations in **Table 23** show that BRI loans constituted 17-20 per cent of all MSME lending in Indonesia between 2001 and 2006.[410] These reforms and emphasis on MSME banking in urban and rural areas meant that BRI significantly improved access to credit for Indonesian SMEs.

[409] Hans Dieter Seibel and Mayumi Ozaki, 2009, *Restructuring of State-owned financial institutions: lessons from Bank Rakyat Indonesia,* Manila: Asian Development Bank, pp. 11, 17.

[410] For calculations see **Table 23** in Appendix

Table 22: BRI Loans Outstanding by Business Segment Shares, 1998-2006 (in per cent)

Business Segment	1998	1999	2000	2001	2002	2003	2004	2005	2006
Micro (≥ IDR 50 million)	11.1%	18.2%	29.7%	30.4%	30.5%	30.5%	30.8%	30.2%	30.22%
Small Consumer Fixed Income (≥ IDR 200 million)	7.3%	11.0%	21.2%	24.0%	24.2%	23.5%	n/a	n/a	21.21%
Small Commercial (≥ 5 billion)	42.9%	46.8%	17.3%	19.0%	24.2%	26.6%	n/a	n/a	27.05%
Small Business (= Small Consumer Fixed Income & Small Commercial)	**50.2%**	**57.8%**	**38.5%**	**43.0%**	**48.4%**	**50.2%**	**51.1%**	**50.4%**	**48.27%**
Medium (IDR 5-50 billion)	4.2%	5.4%	11.7%	3.7%	3.7%	4.6%	4.6%	6.2%	8.22%
Corporate (> IDR 50 billion)	34.5%	18.6%	12.5%	22.9%	17.4%	14.7%	13.6%	13.2%	13.29%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
(IDR trillion in 2006 prices)	**(IDR 104.8)**	**(IDR 70.7)**	**(IDR 47.7)**	**(IDR 51.2)**	**(IDR 58.8)**	**(IDR 67.4)**	**(IDR 81.4)**	**(IDR 86.2)**	**(IDR 90.3)**
Gross non-performing loan ratio (NPL)	53.0%	19.9%	5.0%	4.9%	6.7%	6.0%	4.2%	4.7%	4.8%

Source: Shares calculated based on data from Bank Rakyat Indonesia, *Laporan Tahunan / Annual Reports (various years)* Jakarta: BRI; Bank Rakyat Indonesia, *Financial Update (various years),* Jakarta: BRI.

Notes: USD equivalents for loan sizes: Micro ≥USD 5,000, Small Consumer Fixed Income ≥USD 20,000, Small Commercial ≥USD 500,000, Medium USD 500,000 – 5 million, Corporate >USD 5 million;

IDR totals deflated to 2006 prices, using a GDP deflator calculated from The World Bank, 2017, *World Development Indicators*, Washington, D.C.: The World Bank, GDP deflator (base year varies by country) [Data file] Retrieved from https://data.worldbank.org/indicator/NY.GDP.DEFL.ZS?locations=ID

Table 23: BRI Share in Total MSME Loans Outstanding, 2001-2006 (trillion IDR, 2006 prices)

	2001	2002	2003	2004	2005	2006
BRI MSME segment by BI definition (Total of micro, small consumer and small commercial credit)	37.6	46.4	54.4	66.6	69.4	70.9
Total MSME Loans Outstanding (BI Annual Reports)	189.5	240.3	293.2	353.4	421.9	427.5
BRI share in total MSME Loans Outstanding	19.8%	19.3%	18.6%	18.8%	16.5%	16.6%

Sources: Calculated from BRI, *Annual Reports (2003, 2006, 2007)*, Jakarta: BRI; BRI, *BRI Financial Updates (2004, 2005, 2007)*, BRI: Jakarta; Bank Indonesia, *Annual Reports (2003, 2005, 2006),* Jakarta: BI.

4.2.6 Sectoral Comparison

Table 24 - **Table 27** show the relative sectoral distribution of loans of KIK/KMKP, Kupedes, KUK, and the category introduced in 2001, MSME credit.[411] The majority of small-scale business credit went into trade, but there are significant differences in relative shares as well as where the rest of credit was allocated. **Table 24** shows that over half of all KIK loans in 1980 and 1985 were given to small-scale businesses in trade and transport, whereas trade alone made up nearly 70 per cent of all KMKP loans. However, KMKP only played a very small role in financing transport; instead the second largest sector was industry.

Despite being a rural loan product, only less than a quarter of Kupedes loans were used for agricultural purposes; about 60 per cent were used to finance trading activities (**Table 25**). Schmit carried out his PhD research project on BRI and its village units between 1986 and 1988 and found that trade loans "were considered the lowest risk and the best suited for monthly instalments", but that in reality loans were often

[411] Note that there is no sectoral breakdown of the distribution of Kredit Mini and Midi, however by design they were intended for off-farm activities.

used for multiple purposes. [412] Thee Kian Wie similarly found that there was a preference for small-scale business engaged in trade or services rather than manufacturing, because the latter carried higher risk, made lower profits and evaluating their loan applications required more technical knowledge.[413]

Unfortunately there is no data on the sectoral distribution of KUK prior to the Asian Financial Crisis. The increasing share of loans for agriculture shown in **Table 26** was the result of people moving back to rural areas and into agriculture.[414] The hypothesis is strengthened by the falling share of agriculture after 2000, which continued in the MSME credit figures in **Table 27**. The sector receiving the second largest share of MSME credit – after trade – was industry. However, **Table 27** shows that the share of trade rose as the share of industry fell between 2001 and 2006.

The overall dominance of trade in sectoral loan allocation is explained by the role of trade in the Indonesian economy. The share of non-agricultural firms engaged in trade rose from 55 per cent in 1986 to 58 per cent in 1996 and 59 per cent in 2006.[415] A breakdown of number of firms by firm-size category shows that outside of agriculture the majority of microenterprises were in trade in 1996 and 2006 (unfortunately there is no data on number of firms by firm-size category and sector in the *1986 Economic Census*).[416] However, the same comparison shows that the largest non-agricultural sector in which both small- and medium-sized firms were engaged in 1996 was manufacturing, but that this had shifted to trade by 2006. This shift is clearly visible in the change of sectoral allocation of MSME credit shown in **Table 27**.

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412 Leonardus T. Schmit, 1991, *Rural Credit Between Subsidy and Market: Adjustment of Village Units of Bank Rakyat Indonesia in Sociological Perspective*, Leiden: Faculty of Social Sciences, Leiden University, p. 194.

413 Thee Kian Wie, 1993, 'Industrial Structure and Small and Medium Enterprise Development in Indonesia', *EDI Working Paper*, p. 13.

414 Lisa Cameron, 1999, 'Survey of Recent Developments', *Bulletin of Indonesian Economic Studies, 35(1):*3-40, p. 17.

415 Calculated from Indonesian Economic Census data

416 See **Table 40** and **Table 41** in the Appendix for underlying data

Table 24: Cumulative KIK/KMKP Credit by Sector 1980 and 1985 (in per cent)

	1980		1985	
	KIK	**KMKP**	**KIK**	**KMKP**
Agriculture	16.0	7.6	12.8	6.0
Industry	13.3	16.2	13.0	10.7
Trade	28.5	68.7	34.2	69.1
Transport	30.1	1.4	23.5	0.7
Other	11.3	8.0	16.5	13.4
Total	100	100	100	100

Source: Central Project Management Unit, Cooperative and Small Credit Department, Bank Indonesia, 1986, *Economic Impact of KIK/KMKP (SEDPI and SEDP II),* Jakarta: Bank Indonesia, Table 2.4.

Table 25: Kupedes Loans by Sector, 1987-92 (in per cent)

	1987	**1990**	**1991**	**1992**
Trade	63	58.3	58.9	60.0
Agriculture	32	23.7	23.4	23.2
Industry	2	2.3	2.3	2.2
Fixed Income	n/a	11.4	11.0	10.1
Other	3	4.3	4.4	4.5
Total	100	100	100	100

Sources: 1987 from Leonardus T. Schmit, 1991, *Rural Credit Between Subsidy and Market: Adjustment of Village Units of Bank Rakyat Indonesia in Sociological Perspective*, Leiden: Faculty of Social Sciences, Leiden University, p. 317, Table 9; 1990-1992 from World Bank, 1994, *Project Completion Report: Indonesia – BRI/Kupedes Small Credit Project (Loan 2800-IND, Report No, 12973,* Washington, DC: World Bank, Annex 10.

Table 26: KUK by Sector, 1997-2001 (in per cent)

	1997	**1998**	**1999**	**2000**	**2001**
Agriculture	10.0	16.7	20.7	16.4	17.6
Industry	10.0	3.9	3.0	3.0	4.0
Trade, Restaurant & Hotel	28.1	23.5	23.7	18.2	19.7
Services	16.5	12.3	9.1	8.3	8.0
Others	35.5	43.6	43.5	54.1	50.7
Total	100	100	100	100	100

Source: Calculated from data from Bank Indonesia *Annual Report (various years),* Jakarta: BI.

Notes: The share of "others" is very large, but unfortunately there is no explanation of what this comprises in Bank Indonesia's Annual Reports, Bank Indonesia's Monthly Financial Statistics or Indonesia's Statistical Yearbooks.

Table 27: MSME Credit by Sector, 2001-2006 (in per cent)

	2001	**2002**	**2003**	**2004**	**2005**	**2006**
Agriculture	5.4	5.3	4.2	4.5	3.7	3.5
Mining	0.3	0.3	0.3	0.3	0.3	0.3
Industry	12.4	13.7	11.8	9.8	8.8	8.6
Electricity, Water & Gas	0.1	0.1	0.0	0.0	0.1	0.3
Construction	2.5	2.2	2.2	2.2	2.1	2.4
Trade	21.8	24.0	25.5	24.8	25.3	26.7
Transportation	2.1	2.3	2.5	2.2	1.8	1.5
Business Services	4.4	5.0	6.4	5.7	6.0	5.9
Social Services	1.3	1.4	1.4	1.6	1.4	1.4
Others	49.7	45.7	45.7	48.9	50.6	49.3
Total	100	100	100	100	100	100

Source: Bank Indonesia *Annual Report (various years),* Jakarta: BI.

Notes: The share of "others" is very large, but unfortunately there is no explanation of what this comprises in Bank Indonesia's Annual Reports, Bank Indonesia's Monthly Financial Statistics or Indonesia's Statistical Yearbooks.

4.3 State Pawnshops

Many of the popular credit institutions established during the colonial period took a hard hit in the post-independence era, in particular state pawnshops and village banks. Booth showed that in the post-independence period loans from pawnshops at first dropped drastically by 80 per cent from 1940 to 1951 and then slowly increased, but still remained far below the level sustained during the Dutch period.[417] **Figure 29** builds on the work of Booth and expands the dataset to compare the loans outstanding of the popular credit system in the late colonial period to the Old Order period. **Figure 29** shows that state pawnshops only recovered their pre-war lending volume by 1960, but then reversed into a rapid decline as inflation accelerated into hyperinflation and the public started to lose confidence in the Indonesian currency.[418] Village banks did not recover their pre-war levels. The figures have been deflated to 1953 prices using the index of average retail prices in Jakarta of 15 home produced and 15 imported consumption articles. The high repayment rate in **Figure 29** as well as in **Figure 30** provides further evidence that state pawnshops in Indonesia do not just serve the poorest in times of need, but have been an important source of working capital loans for the rural population.[419]

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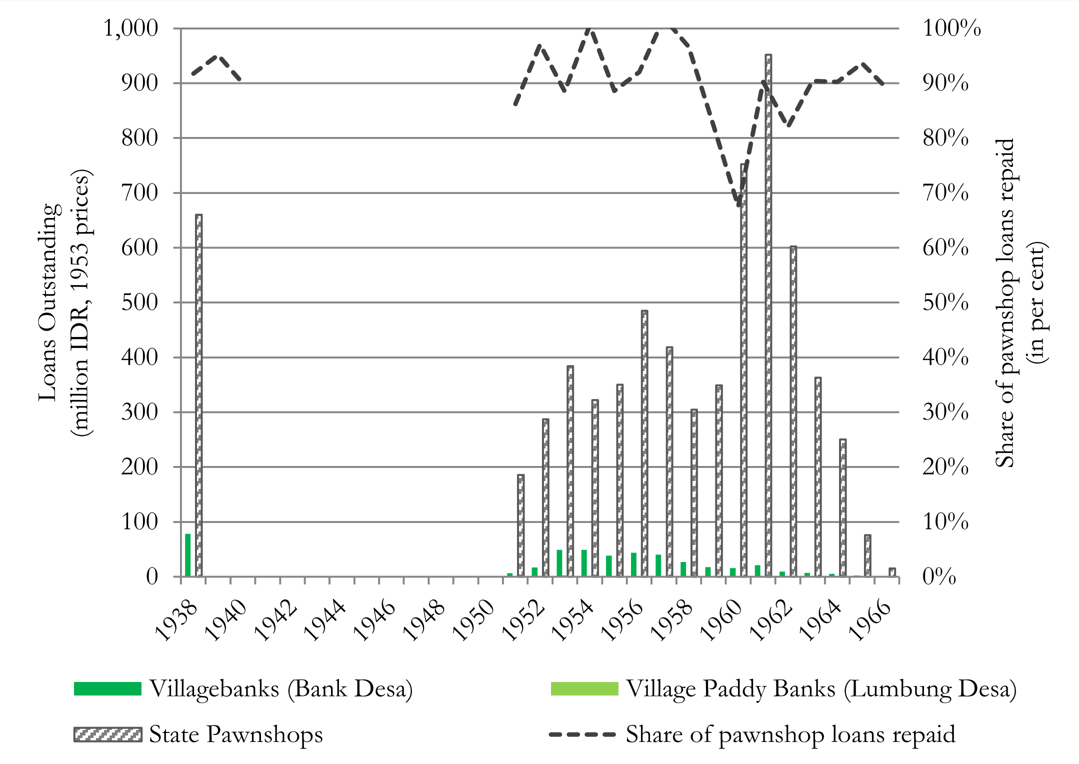
[417] Anne Booth, 1998, *The Indonesian Economy in the Nineteenth and Twentieth Centuries: A History of Missed Opportunities,* Basingstoke: Macmillan and New York: St. Martin's Press, p. 315.

[418] Heinz Arndt, 1966, 'Banking in Hyperinflation'**,** *Bulletin of Indonesian Economic Studies, 2(5)*: 45-70, p. 53.

[419] The repayment rate comes with the caveat of being a rather crude measure: it is calculated as the ratio of amount borrowed to amount repaid in any given year, hence does not factor in that some loans carry-over to the next year and does not reflect arrears.

Figure 29: State Pawnshops and Village Banks: Loans Outstanding, 1938-66 (IDR million, 1953 prices)



Source: data from The Java Bank (De Javasche Bank), *Report for the Financial Year 1952-53,* Jakarta: The Java Bank; BI, Report for the Year 1954-55, Jakarta: BI; BI, *Statistical Pocketbook of Indonesia 1959*, Jakarta: BI; BI, *Statistical Pocketbook of Indonesia 1968-69,* Jakarta: BI.

Notes: Deflated with index of average retail prices in Jakarta of 15 home produced and 15 imported consumption articles (1953 prices) from Statistical Pocketbook of Indonesia 1968-69, pp. 377-9, Table XVI.3&4;

No data available for 1939-1950;

Loan repayment calculated as the ratio of amount repaid over amount borrowed from state pawnshops in a year.

Figure 30 shows how these institutions continued during the New Order period, the Asian Financial Crisis and its aftermath. Unlike village banks, state pawnshops played a role in small-scale business credit.[420] The significance of state pawnshops is also reflected in their credit volume. The data shows that state pawnshops began to recover as the currency stabilised and the economy recovered in the late 1960s. Until 1990 outstanding loans increased quite steadily until government regulation No 10 in 1990 changed the legal status of pawnshops to profit-oriented state enterprise/public corporations (from *Perjan Pegadaian* to *Perum Pegadaian*), after which lending expanded

[420] Jan T.M. van Laanen, 1990, 'Between the Java Bank and the Chinese Moneylender: banking and Credit in Colonial Indonesia', *in:* Anne Booth, W.J. O'Malley and Anna Weidemann (Eds.), *Indonesian Economic History in the Dutch Colonial Era* (pp. 244-266), New Haven: Yale University Southeast Asia Studies, p. 263.

much more rapidly. State pawnshops played an important role during the Asian Financial Crisis not just to assist the low income groups, but Bank Indonesia reported that the sluggish banking industry led a large number of debtors to seek out pawnshops as an alternate source of short-term working capital credit.[421] In 1998 the number of clients of state pawnshops increased by over 90 per cent.[422]

By 1990 state pawnshops had five different credit schemes, which ranged from a minimum loan size of IDR 5,000 (USD 3) to loans of more than IDR 20 million (USD 11,000). Interest rates increased with loan size and ranged from 1.25 per cent per 15 days for loans up to IDR 150,000 (USD 80) to 1.75 per cent for loans of more than IDR 500,000 (USD 270). Standard loan maturity was 120 days, but it was common to use the same collateral for loan renewal.[423]

Pawnshops have historically been an important source for working and investment capital for entrepreneurs; a number of policy changes later formalised and expanded that role.[424] Bank Indonesia announced a new policy in 1995 to "widen pawn services from low income customers to also include middle-income customers by broadening lending services coverage and offering innovative products", which included new services offered and increasing loan sizes.[425] The role of state pawnshops in providing SME finance was formalised with Minister of Finance Letter No. S-121/MK-06/2004, which appointed state pawnshops as one of the "Operating Financial Institutions for the extension of MSME credit".[426] The outreach of state pawnshops was further increased when BRI units and state pawnshops began offering each other's services in 2006.[427] A 2008 World Bank study found that 25 per cent of state pawnshop

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421 Bank Indonesia, 1999, *Annual Report 1998/1999*, Jakarta: BI, p. 100.

422 Bank Indonesia, 1999, *Annual Report 1998/1999*, Jakarta: BI, p. 100.

423 Detlev Holloh, 2001, *ProFI Microfinance Institutions Study*, Denpasar: Bank Indonesia & German Technical Cooperation (GTZ), p. 36.

424 On the role of state pawnshops in financing small-scale business activities during the late colonial period see: John S Furnivall, 1934, 'State pawnshops in Netherlands India', *in: Studies in the Social and Economic Development of the Netherlands East Indies, III*, University of Rangoon, p. 11.

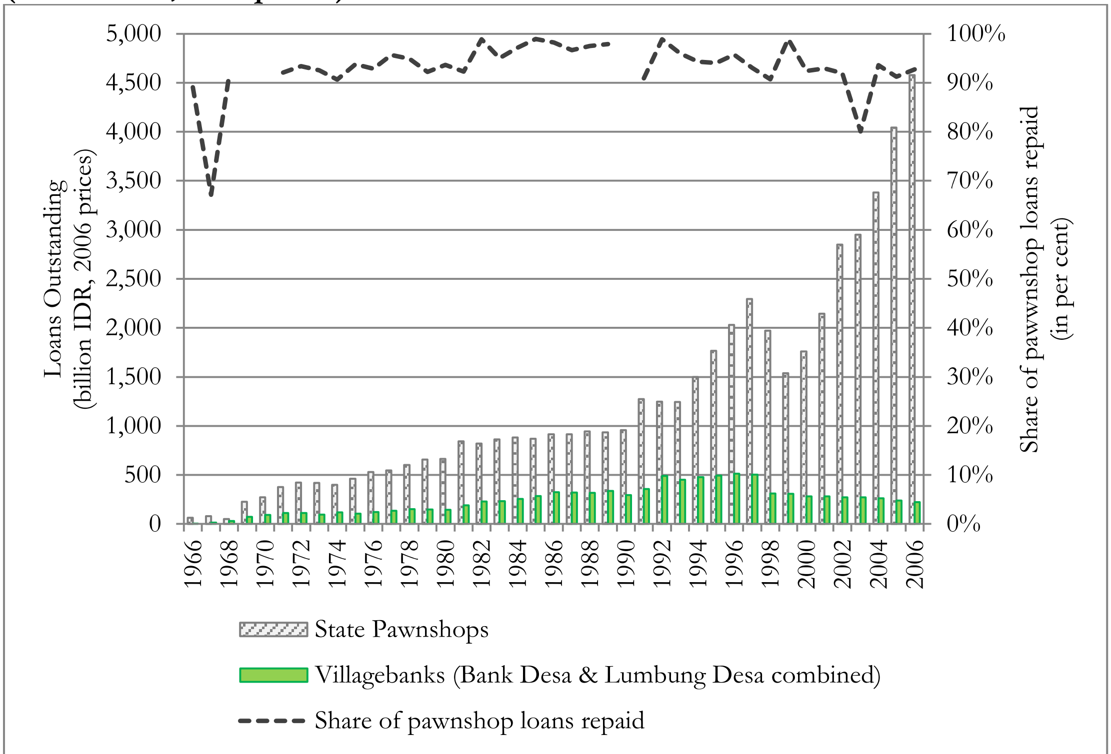
425 Bank Indonesia, 1996, *Annual Report 1995/1996*, Jakarta: BI, pp. 90-91.

426 Bank Indonesia, 2004, *Annual Report 2004*, Jakarta: BI, p. 104.

427 Bank Indonesia, 2006, *Annual Report 2006*, Jakarta: BI, p. 172.

borrowers used their loans to finance their businesses and a further 15 per cent of borrowers used their loans for mixed purposes (personal and business).[428]

Figure 30: State Pawnshops and Village Banks: Loans Outstanding, 1966-2006 (IDR billion, 2006 prices)



Source: Data for 1966-77 from BPS, *Statistical Pocketbook of Indonesia (various years)*, Jakarta: BPS; Data for 1978-2006 from BPS, *Statistical Yearbook of Indonesia (various years)*, Jakarta: BPS.

Notes: From 1990 onwards village banks comprise both Bank Desa and Lumbung Desa, for visual simplification the data series has been combined throughout in this chart;
Loan repayment calculated as the ratio of amount repaid over amount borrowed from state pawnshops in a year

4.4 Financing and Access to Credit of Indonesian Manufacturing SMEs

Section 4.1.3 showed that in absolute terms the credit volume dispersed to small-scale businesses increased over the New Order period. The previous chapter, as we have seen, found that lack of credit was the main obstacle identified by firms to their

[428] Results reported in World Bank, 2010, *Improving Access to Financial Services in Indonesia*, Jakarta/Washington D.C.: World Bank, p. 109.

business development, though its importance seems to have declined. This section uses the same economic census data for a case study on how financing and access to credit changed for Indonesian manufacturing SMEs with the rise of the various SME credit schemes.

Table 28 shows that the majority of micro and small manufacturing enterprises in Indonesia were self-financed. In absolute terms the number of firms using loan facilities in general, and banks specifically, increased between 1986 and 2006. However, only the share of manufacturing microenterprises using a loan facility increased between 1986 and 1996 (9.2 per cent of all microenterprises in 1986 and 13.1 per cent in 1996 used a loan facility), while the share of all small-scale enterprises using a loan facility actually fell (from 43.1 per cent of all small-scale enterprises in 1986 to 26.8 per cent in 1996). The share of firms whose main loan came from banks actually fell in both firm-size categories (from 1.7 per cent in 1986 to 1.5 per cent in 1996 for microenterprises and from 21.5 per cent in 1986 to 11.3 per cent in 1996 for all small-scale enterprises). When grouping together microenterprises and small-scale enterprises to make 1986 and 1996 comparable with the 2006 data the share of firms using loan facilities grew from 11.3 per cent in 1986 to 14.3 per cent in 1996 and 15.9 per cent in 2006. This continuous growth was driven by microenterprises, which constituted a growing majority in the firm-size distribution. However, when grouping together micro and small-scale enterprises the share of firms fell as expected between 1986 and 1996 (from 2.9 per cent to 2.3 per cent), but then grew to a peak of 4 per cent in 2006. To interpret these developments this section first disentangles loans received from banks to separate out the various credit schemes; the second step is to look at the reasons manufacturing firms give for not having a loan.

Table 28: Source of Main Loan of Manufacturing Micro and Small-scale Enterprises, 1986-2006 (Number of Establishments)

	Total Number of establishments	**Don't use loan facility**	**Use Loan Facility**	**Source of Main Loan**			
				Bank	Cooperative	Non-bank financial institution	Others
1986 Microenterprises	1,491,336 (100.00%)	1,353,674 (90.77%)	137,662 (9.23%)	25,689 (1.72%)	25,491 (1.71%)	8,043 (0.54%)	96,344 (6.46%)
1986 Small enterprises	94,534 (100.00%)	53,800 (56.91%)	40,734 (43.09%)	20,343 (21.52%)	1,628 (1.72%)	n/a	18,763 (19.85%)
1986 Micro & Small enterprises	1,585,870 (100.00%)	1,407,474 (88.75%)	178,396 (11.25%)	46,032 (2.90%)	27,119 (1.71%)	8,043 (0.51%)	115,107 (7.26%)
1996 Microenterprises	2,625,211 (100.00%)	2,280,190 (86.86%)	345,021 (13.14%)	38,973 (1.48%)	12,779 (0.49%)	5,951 (0.23%)	287,318 (10.94%)
1996 Small enterprises	242,030 (100.00%)	177,178 (73.20%)	64,852 (26.80%)	27,317 (11.29%)	2,395 (0.99%)	1,489 (0.62%)	33,651 (13.90%)
1996 Micro & Small enterprises	2,867,241 (100.00%)	2,457,368 (85.70%)	409,873 (14.30%)	66,290 (2.31%)	15,174 (0.53%)	7,440 (0.26%	320,969 (11.19%)
2006 Micro & Small enterprises	3,194,461 (100.00%)	2,685,856 (84.08%)	508,605 (15.92%)	126,113 (3.95%)	28,595 (0.90%)	23,056 (0.72%)	359,303 (11.25%)

Sources: Calculated from data from BPS, *Economic Censuses (1986, 1996, 2006),* Jakarta: BPS.
Notes: Microenterprises are firms with 1-4 workers, small-scale enterprises employ 5-19 workers.

Table 29 shows how many micro and small manufacturing firms took a loan from the various schemes discussed in the preceding section. The census results show that in 1986 KIK and KMKP loans constituted the vast majority of bank loans to micro and small-scale businesses. The major caveat here is that the 1986 census results did not list Kupedes loans as a separate category. However, Schmit's analysis of the sectoral classification of the Kupedes loan portfolio showed that in 1987 there were 21,649 loans outstanding classified as industrial loans.[429] This indicates that in 1986, two years after its introduction, Kupedes was already playing an important role in financing micro and small manufacturing enterprises and that in terms of number of loans Kupedes was not trailing far behind the government-subsidised KIK/KMKP schemes. In 1986 0.7 per cent of all manufacturing microenterprises and 3.4 per cent of small enterprises said that they had a KIK loan, while for KMKP these figures were 0.6 per cent and 6.1 per cent respectively. In 1990 KIK/KMKP were converted into KUK, the small business credit scheme that required banks to extend 20 per cent of their loans to small businesses. The comparison shows that in 1996 fewer firms had obtained loans under KUK than in 1986 from KIK/KMKP. The 1996 census shows that Kupedes not only played an important role in financing microenterprises (0.6 per cent of manufacturing microenterprises had taken up a Kupedes loan), but also in financing small enterprises (3 per cent of manufacturing small enterprises had a Kupedes loan, compared to 3.8 per cent that had received credit under KUK).

Table 29: Type of Small-scale Business Credit Scheme/Loan Product Accessed 1986-96 (Number of Establishments)

	Small investment credit (KIK)	Permanent working capital credit (KMPK)	Small business credit (KUK)	Kupedes	Retailer credit (KCK)	Others
1986 Microenterprises	9,774	8,521	n/a	n/a	8,043	45,837
1986 Small enterprises	3,222	5,717	n/a	n/a	n/a	18,763
1996 Microenterprises	1,775	n/a	13,559	14,758	n/a	8,881
1996 Small enterprises	2,969	n/a	9,245	7,326	n/a	7,777

Source: Data from BPS, *1986 and 1996 Economic Censuses,* Jakarta: BPS.

[429] Leonardus T. Schmit, 1991, *Rural Credit Between Subsidy and Market: Adjustment of Village Units of Bank Rakyat Indonesia in Sociological Perspective*, Leiden: Faculty of Social Sciences, Leiden University, p. 317.

The question remains that if lack of access to credit is the most commonly cited constraint, then why did not more firms ask for a loan? The *1996 and 2006 Economic Censuses* have asked firms about the main reason for not taking a bank loan. Unfortunately no such data are available for 1986. It should be borne in mind that the share of micro and small enterprises that did not have a bank loan stayed roughly the same between 1996 and 2006 (see **Table 28**). The 2006 economic census results reported more options than the 1996 survey allowed for. Captured in "others" in the 2006 results in **Table 30** were the micro and small enterprises that reported the reason for not having a loan was that their proposal had been rejected, but these only constituted 1.4 per cent of all firms that did not have external funding. Comparing the 1996 and 2006 results in **Table 30** shows that procedural issues in accessing formal finance were on the rise. While lack of interest in obtaining a loan constituted the most frequently given reason in both 1996 and 2006, the share dropped sharply. These results indicate that access to credit was a pervasive issue for Indonesian SMEs during the New Order period and beyond.

Table 30: Reasons for not having a Loan of Manufacturing Micro and Small-scale Enterprises, 1996-2006 (in per cent)

	Do not lack capital / not interested in bank loan	Do not know / difficulty with procedure	Lack collateral	Other
1996 Microenterprises	79.9	5.4	10.3	4.5
1996 Small enterprises	82.2	3.9	8.7	5.2
2006 Micro & small enterprises	50.5	29.4	18.7	1.4

Source: Data from BPS, *1996 and 2006 Economic Censuses,* Jakarta: BPS.

4.5 Access to Credit in Comparative Perspective

Drawing on the experiences of South Korea and Taiwan helps shed light on how Indonesia performed in relative terms and ties into the comparative approach of the previous chapter. The previous chapter argued that the differences in firm size distribution between South Korea and Taiwan can be largely attributed to government policy. The cases of South Korea and Taiwan are of particular interest here given the similarities with Indonesia in terms of industrial policy histories, shifting from import substitution policies towards export orientation as part of general shifts towards market-liberalisation and privatisation. However, the similarities between South Korea, Taiwan and Indonesia extend beyond their industrial policy histories. Both South Korea and Taiwan significantly improved access to finance and credit for SMEs from the late 1970s onwards, around the time when the Indonesian government introduced a number of programmes to provide small-scale business credit. The previous chapter showed that Indonesia suffered from a missing middle compared to South Korea and Taiwan, and identified access to credit as one of the main constraints. The question follows whether differences in access to credit help explain this divergence in firm-size distribution.

South Korean SMEs in the 1960s and 1970s were relatively disadvantaged by the aim of the South Korean government to lower the debt-equity ratio and the prioritisation of heavy and chemical industries, which naturally favours large enterprises because of its capital-intensity and economies of scale.[430] This strengthened South Korean large enterprises, resulting in their increasing share in employment and value added until the mid- to late 1970s. As a result of large enterprise-favouritism it was difficult for SMEs to get access to credit until the 1980s.[431] From the late 1970s onwards, however, the share of SMEs in South Korean manufacturing industry grew as their access to finance improved. The 1980s saw an overall shift of South Korean government policy towards active support for SME development, which also extended to the formal financial market.[432] This credit preference given to South Korean SMEs from the late 1970s to the early 1990s contributed to the increasing share of SMEs in employment and value-added in manufacturing industry. These policies were designed "to offset the discriminatory access to credit in the 1970s and to prevent credit market domination by large firms".[433]

430 The greater dependence of SMEs on credit is discussed in Keishi Sugiura, 2002, Japan: The Role of SMEs in the Mature Economy, *in* Charles Harvie and Boon-Chye Lee (Eds.), *The Role of SMEs in National Economies in East Asia* (pp. 325-350), Cheltenham: Edward Elgar Publishing Limited, p. 337.

431 Linsu Kim and Jeffrey B. Nugent, 1994, The Republic of Korea's Small and Medium Size Enterprises and Their Support Systems, *World Bank Policy Research Working Paper, 1404*, p. 30; Jeffrey B. Nugent and Seung-Jae Yhee, 2001, *Small and Medium Enterprises in Korea: Achievements, Constraints and Policy Issues*, Washington, D.C.: IBRD/The World Bank, p. 22.

432 Nakki Baek and Wonchan Ra, 2001, *Entrepreneurship in Korea: An Analysis of Factors Affecting SME Start-Up,* Seoul: Korea Institute for Industrial Economics and Trade (KIET), p. 35.

433 Heather Smith, 2000, *Industry Policy in Taiwan and Korea in the 1980s: Winning with the Market,* Cheltenham/Northampton: Edward Elgar Publishing Limited, p. 107.

Similar to Indonesia in the 1950s, the South Korean government took control over financial institutions in the 1950s, which left SMEs largely dependent on informal finance.[434] As a result of the increasing political influence over the banking sector, banks had little decision-making power over the allocation of credit in South Korea in the 1960s and in Indonesia in the 1950s and 1960s.[435] Moreover, Dollar and Sokoloff's account of credit starved South Korean SMEs in the 1970s leading to a dualistic industrial structure in which large enterprises used modern technology and small firms used more traditional methods and were lower in productivity bears strong similarities with the situation of Indonesian SMEs at the time.[436] The late 1970s and 1980s marked a significant change in South Korean SME policy and improvement of access to finance for South Korean SMEs, at a time when Indonesia began introducing its various SME credit programmes. In 1976 South Korea introduced an SME lending quota: 35 per cent for national commercial banks and 80 per cent for local commercial banks.[437] While this is impressive by comparison to Indonesia's 20 per cent, South Korean SMEs at the time were defined as enterprises with 5-299 workers whereas in Indonesia all enterprises with more than 100 workers were considered large firms. At least on paper, South Korean and Indonesian SME credit policies were more similar than expected at the time, given the difference in roles SMEs played in the two economies.

While Taiwan did not follow directly discriminatory policies in its granting of credit, large enterprises with their higher credit ratings (better bookkeeping and accounting systems) were more likely to receive a loan from commercial banks.[438] Yet SMEs similarly relied much more on loans as a capital source than did large enterprises (e.g. 41.3 per cent on average of all SMEs 1987-1991, compared to 29.8 per cent of all large enterprises), whereas the primary capital source for Taiwanese large enterprises

[434] Yung Chul Park, 1991, 'The Development of Financial Institutions and the Role of Government in Credit Allocation' in: Lee-Jay Cho and Yoon Hyung Kim (Eds.), *Economic Development in the Republic of Korea: a Policy Perspective* (pp. 45-72), Honolulu: East-West Center, pp. 50, 70.

[435] Yung Chul Park, 1991, 'The Development of Financial Institutions and the Role of Government in Credit Allocation' in: Lee-Jay Cho and Yoon Hyung Kim (Eds.), *Economic Development in the Republic of Korea: a Policy Perspective* (pp. 45-72), Honolulu: East-West Center, p. 48.

[436] David Dollar and Kenneth Sokoloff, 1994, 'Industrial Policy, Productivity Growth, and Structural Change in the Manufacturing Industries: A Comparison of South Korea and Taiwan', *in:* Joel Aberbach, David Dollar and Kenneth Sokoloff, *The Role of the State in Taiwan's Development* (pp. 5-25), Armonk, NY: M. E. Sharpe, p. 10.

[437] Nak Ki Baek, 1992, 'The exploitation of niche markets by small and medium Korean enterprises', *Small Enterprise Development, 3(3):*48-53, p. 49.

[438] Kuo-Ting Li, 1995, *The Evolution of Policy Behind Taiwan's Development Success (2nd Edition),* Singapore: World Scientific Publishing, p. 233.

was equity (27.7 per cent for SMEs compared to 46 per cent for large enterprises 1987-1991).[439] In 1969 the Taiwanese government announced it would "raise funds for providing financial assistance to [SMEs] in meeting their need for medium- and long-term capital".[440] In the 1970s the difficulty experienced by SMEs in obtaining credit was further aggravated by the recession and inflation caused by the oil crisis of 1973, to which Taiwanese financial institutions responded with more conservative loan requirements. Until 1975 banks were legally prohibited from granting credit for more than 70 per cent of the appraised value of collateral.[441] The government thus established the Small and Medium Enterprise Credit Guarantee Fund of Taiwan (SMEG) as a non-profit organization in 1974 to help SMEs "cope with these situations".[442] Because of the higher risk associated with SME loans lenders preferred short-term loans. In 1977, 70 per cent of bank loans matured within one year and only 8 per cent of loans had a maturity of more than 7 years. This decreased gradually, and in 1996 only 33% of loans matured within one year and loans with a maturity of more than seven years increased to 41 per cent.[443] Providing assistance to SMEs to obtain long-term investments was thus identified as a policy goal in the Ten-Year Economic Development Plan (1980-1989), and credit facilities for SMEs in Taiwan "saw drastic improvement in the 1980s".[444] In her analysis of the sources of finance of Taiwanese enterprises, Smith shows that between 1985 and 1995 37-46 per cent of SMEs relied on formal finance.[445]

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439 Central Bank of China, Survey of Funding Situations of Private Enterprises, Data Tape, cited in Ya-Hwei Yang and Jia-Dong Shea, 1999, 'Evolution of Taiwan's Financial System', *in:* Seiichi Masuyama, Donna Vandenbrink and Chia S. Yue (Eds.), *East Asia's Financial Systems: Evolution & Crisis* (pp. 260-290), Singapore: Institute of Southeast Asian Studies & Nomura Research Institute, p. 274.

440 Council for International Economic Cooperation and Development, 1969, *The Republic of China's Fifth Four-Year Plan for Economic Development of Taiwan, 1969-1972,* Taipei: Executive Yuan, p. 14.

441 Central Bank of China, Survey of Funding Situations of Private Enterprises, Data Tape, cited in Ya-Hwei Yang and Jia-Dong Shea, 1999, 'Evolution of Taiwan's Financial System', *in:* Seiichi Masuyama, Donna Vandenbrink and Chia S. Yue (Eds.), *East Asia's Financial Systems: Evolution & Crisis* (pp. 260-290), Singapore: Institute of Southeast Asian Studies & Nomura Research Institute, p. 275.

442 Small and Medium Enterprise Credit Guarantee Fund of Taiwan (Taiwan SMEG), 2006, *About Us,* Retrieved September 12, 2012, from:

http://www.smeg.org.tw/english/about/objective_establishment_briefhistory.htm

443 Ya-Hwei Yang and Jia-Dong Shea, 1999, 'Evolution of Taiwan's Financial System', *in:* Seiichi Masuyama, Donna Vandenbrink and Chia S. Yue (Eds.), *East Asia's Financial Systems: Evolution & Crisis* (pp. 260-290), Singapore: Institute of Southeast Asian Studies & Nomura Research Institute, p. 275.

444 Council for Economic Planning and Development, 1980, *Ten Year Economic Development Plan for Taiwan, Republic of China (1980-1989),* Taipei: Executive Yuan, p. 38;

Cheng Tun-jen, 2001, 'Transforming Taiwan's Economic Structure in the 20th Century, *in:* Richard L. Edmonds and Steven M. Goldstein (Eds.), *Taiwan in the Twentieth Century: A Retrospective View (The China*

The share of Taiwanese SME loans fluctuated between 30-40 per cent of total credit between 1972 and 1999.[446] For South Korea the share of SME loans out of total credit extended by commercial banks grew from 33 per cent in 1979 to 50 per cent in 1995.[447] The ratio of Indonesian small-scale business loans to total credit presented in **Figure 22** comes with the caveat that it only covers small-scale business lending until 2001, but shows that the ratio of small-scale business credit to total credit in Indonesia fell from 31 per cent in 1990 to 17 per cent in 1996. In 2001 Bank Indonesia began publishing MSME credit as a separate category, which grew from 38 per cent of total lending in 2001 to 53 per cent in 2006. Any comparison of Indonesia with South Korea and Taiwan is complicated by the different firm-size categories grouped into SMEs and the lack of separate data on medium-sized business credit in Indonesia prior to 2001, but interpreting the data with caution indicates that in the 1990s up until the Asian Financial Crisis (a) Indonesian SMEs were roughly on a par with Taiwanese SMEs in terms of share of bank loans extended to SMEs relative to total credit; and (b) that both lagged considerably behind South Korea.

4.6 Concluding Remarks

This chapter has shown the rise of small-scale business credit programmes in the 1970s and 1980s. The introduction of these programmes was part of an effort to make credit available for off-farm activities. Up until the introduction of KIK/KMKP in 1973 and then Kredit Mini in 1974, the vast majority of small-scale credit was only available to the agricultural sector and within that mainly for food crops (i.e. the large-scale rice intensification programme BIMAS). The rapid expansion of KIK/KMKP, Kredit Mini and Kredit Midi revealed that there was a large, thereto unmet demand for non-agricultural small-scale credit.

Quarterly Special Issue No 1) (pp. 19-36), Cambridge/New York/Melbourne: Press Syndicate of the University of Cambridge, p. 33.

445 Calculated from Heather Smith, 2000, *Industry Policy in Taiwan and Korea in the 1980s: Winning with the Market,* Cheltenham/Northampton: Edward Elgar Publishing Limited, Table 2.10.

446 John Q. Tian, 2006, *Government, Business, and the Politics of Interdependence and Conflict across the Taiwan Strait*, New York: Palgrave Macmillan, Figure 4.2.

447 Jeffrey B. Nugent and Seung-Jae Yhee, 2001, *Small and Medium Enterprises in Korea: Achievements, Constraints and Policy Issues*, Washington, D.C.: IBRD/The World Bank, Table 22.

Despite the introduction of these credit programmes, access to credit continued to remain an issue for small-scale businesses in Indonesia throughout the New Order period and beyond. The majority of small firms did not benefit from SME-targeted credit programmes. Larger small-scale as well as medium-sized firms were more likely to benefit from KIK/KMKP and the SME-lending quota (KUK) than smaller firms. The sectoral comparison showed that manufacturing SMEs were relatively disadvantaged, given the higher lending risk and complexity of project appraisal. In turn, firms seeking loans for trading activities were at a comparative advantage, given lower lending risk and preference for short-term working capital loans. Another group with a structural disadvantage in obtaining formal finance were small, new firms. The vast majority of KIK/KMKP loans were given to existing firms. Grizzell argued that access to credit generally appeared to be a key constraint for start-ups.[448] McLeod, a passionate critic of concessional credit programmes for SMEs, acknowledged in a study on Indonesia that access to finance is "often considerably more expensive to small firms". However, McLeod continued to argue that given the higher financial uncertainty of lending to a new borrower without an established reputation, higher lending costs were in line with Pareto efficiency and hence not a market imperfection.[449]

The analysis of the various SME-targeted credit programmes and the success of Kupedes indicate that the issue for SMEs in accessing formal finance was not high rates of interest. The design of Kupedes implemented many lessons learned from Kredit Mini and Midi as well as the negative experience of KIK/KMKP. These included simplified loan application assessment procedures; profit incentives for bank staff to ensure loan collection; returning a quota of the interest payments to customers and increasing loan size upon timely repayment of all instalments by the (exact) due date to encourage loan repayment; and setting market interest rates to ensure viability of the lending scheme. However, despite the success of Kupedes as a result of all the differences in design to KIK/KMKP in particular, the SME lending quota introduced in 1990 failed to learn from the still-fresh experience of Kupedes and thus did little to address, or compensate for, the inherent issues SMEs have in accessing formal finance (lack of collateral and difficulty proving creditworthiness). This resulted in a flexible

[448] Steve Grizzell, 1988, *Promoting Small-Scale Manufacturing in Indonesia; What Works?*, Jakarta: Development Studies Project II, DSP Research Memo No. 17, p. 2.

[449] Ross McLeod, 1991, 'Informal and Formal Sector Finance in Indonesia: The Financial Evolution of Small Businesses', *Savings and Development, 15(2):* 187-209, pp. 206, 208.

interpretation by the banks of what type of lending qualified in fulfilling their lending obligation, in particular giving consumer loans to SME-owners directly rather than actual business credit.

However, contrary to the failure of implementing lessons learned with the SME lending quota, BRI itself did learn from the Kupedes experience. Following the Asian financial crisis BRI was restructured in 2000. BRI extended its market-led strategy to all its SME business segments, including consumer, small commercial and medium-size enterprise credit, while limiting its (formerly loss-making) large enterprise exposure to 20 per cent of its portfolio. As a result, in the two decades to follow, BRI redefined itself as an SME bank and became the largest and most profitable of Indonesia's commercial banks and a model for other banks.

Chapter 5: Conclusion

This dissertation has analysed how the role of SMEs in the Indonesian economy changed over time and how the Government's SME policies evolved, with a particular focus on the New Order period. The analysis was guided by two overarching questions: (1) What factors influenced the creation and success of SMEs? (2) How did SME development in turn affect the national business landscape? Point of departure is the observation in the literature that the structure of Indonesian business lacks a middle range. As a theoretical framework my analysis applies the Asian development model. This includes, amongst others, systematic comparisons with the experiences of South Korea and Taiwan. The main finding emphasises the need to differentiate between small enterprises belonging to the traditional sector with little growth potential and medium enterprises of the modern manufacturing sector resembling the modem dynamic SMEs in South Korea and Taiwan. The 'missing middle' in Indonesia refers to missing medium enterprises rather than SMEs overall. This weakness in terms of business structure is linked to path dependence reaching back to late colonial and immediate post-independence periods. Self-financing is found to form persistent bottlenecks in the development of small enterprises.

This dissertation makes an important qualification to the existing literature on Indonesian SMEs. While small and medium enterprises are often grouped together there are important differences between the two groups in the case of Indonesia. Small and medium enterprises played different roles in the Indonesian manufacturing sector. Small firms, along with microenterprises, showed relatively low value added per worker and were concentrated in a few light and labour-intensive industrial subsectors. In contrast, medium-sized firms were much more diversified in their activities and had a value added per worker relative to large enterprises that was comparable with South Korea and Taiwan at similar stages of economic development. The 1996 and 2006 Economic Census data showed that in terms of value added per worker medium-sized firms had even outperformed large enterprises in some industrial subsectors. This indicates that medium-sized firms in Indonesia were part of the structural industrial transformation and drivers of growth, while small-scale enterprises for the most part remained part of the domestic traditional sector.

5.1 The Role of Path-dependence in Indonesian SME Development

Chapter two showed how the New Order government inherited a weak indigenous entrepreneurial class from colonial Indonesia, reinforced by Indonesia's first independent government. Japan invaded Indonesia in 1942. Rule under Japanese occupation at first took steps to strengthen Indonesian entrepreneurship, but these were short-lasting. By 1943 it began to restructure the Indonesian economy to support its war efforts, abandoning earlier investments into economic and human capital development. When Indonesia gained independence in 1945, the government was faced with a largely unskilled labour force, due to insufficient investments into education and little opportunity to gain business experience in Dutch firms.

Under President Sukarno, the government attempted to strengthen indigenous entrepreneurship with policies such as the *Benteng* (Fortress) programme. The introduction of the *Benteng* programme in April 1950 restricted import licenses for certain commodities to indigenous importers. However, due to shortcomings in education and vocational training, as well as the high working capital requirement for eligibility, only few indigenous Indonesian importers benefited from the programme. *Benteng* and other similar measures to promote indigenous entrepreneurship during the 1950s were largely ineffective. Instead, they were plagued by corruption. Rather than contribute to an emerging new entrepreneurial class they fostered growth of a small group of rent-seekers.

Moreover, the Old Order government's ideological shift towards nationalism and growing hostility towards private capitalism created an environment unconducive to private sector development. By 1958 the regime abandoned attempts to strengthen indigenous entrepreneurs limiting economic power wielded by foreigners, in particular the Dutch and the Chinese. Instead the government focussed on nationalising foreign enterprises and bringing key sectors under the control of state-owned enterprises as part of its move towards a 'guided economy'. As has been discussed in more detail in the fourth chapter, these shifts also had an impact on credit allocation. Public firms were favoured over private as were national enterprises favoured over foreign. With accelerating inflation political influence played a growing role in credit allocation reinforcing these trends leaving the majority of private firms starved of formal credit. The policies of the 1950s and 1960s made it difficult for indigenous businesses to grow.

The analysis of government development plans in the third chapter showed that this legacy translated into the New Order government's perception of indigenous enterprises as weak, in need of government support and protection. Accordingly, the New Order government began introducing SME support policies in the early 1970s motivated by welfare considerations, in particular to promote income equality and labour absorption. Reflections on the potential of a dynamic SME sector and its role in contributing to overall economic development appeared in policy documents only relatively late. Repelita IV (1984-89) was the first five-year government development plan to even mention the potential of the value added of SMEs.

5.2 Changing Patterns in Indonesian Firm-size Distribution

The third chapter showed that during the New Order period the firm-size distribution of the manufacturing sector moved from very many microenterprises and a few large enterprises towards a decline of the micro segment to the benefit of small and large firms. In other words, the firm-size distribution of the Indonesian manufacturing sector in the 1970s exhibited a 'missing top'. With the subsequent declining share in number of establishments and employment of microenterprises at one end and rising share of large enterprises at the other end, a 'missing middle' began to emerge. When measured in terms of share of number of establishments, this appeared as a more gradual development. However, the employment share-based data set reveals that this shift happened between the 1974/75 Industrial Census and the 1986 Economic Census – and continued to persist beyond the end of the New Order period and the aftermath of the Asian Financial Crisis. This structural transformation of the manufacturing sector in terms of the rise of large enterprises is consistent with the observation in the Indonesian economic development literature that the liberalisation and deregulation measures in the early 1980s paved the way for the rise of private enterprise in Indonesia.

While these overall trends generally held everywhere in Indonesia, there was still considerable regional variation. The share of microenterprises in manufacturing declined everywhere in Indonesia but still constituted a much larger share in the poorest regions, particularly Sulawesi and Eastern Indonesia. In contrast, Java saw the sharpest decline of microenterprises in manufacturing establishments and employment. Conversely large enterprises constituted a much smaller share of the regional economies of Sulawesi and Eastern Indonesia than in the rest of Indonesia, while Java had the greatest share of large as well as medium-sized enterprises throughout this period. This variation reflects the unevenness of the process of industrial development in Indonesia.

The comparison of the Indonesian firm-size distribution with South Korea and Taiwan at a time when they had roughly the same GDP per capital levels showed that (a) this missing middle could not be explained by Indonesia's stage of economic development, as well as (b) the differences extended beyond firm-size distribution. Indonesia's SMEs also played a different role in the national economy. Indonesian micro and small-scale enterprises had much lower value added per worker during the New Order period than in Taiwan and South Korea during the benchmark years of comparison. However, interestingly the value added per worker of medium-sized firms relative to large firms was comparable between the three countries. Given that Indonesian medium-sized firms are so much more productive than micro and small-scale enterprises, the persistence of the missing middle was an even more worrying development. Indonesian SME support programmes generally targeted micro and small-scale firms, instead of focussing on the SME segment with growth potential. This was the result of the perception of weak indigenous entrepreneurship that needed to be supported on welfare grounds.

5.3 SME Growth and Access to Credit

The fourth chapter focused on access to small-scale business credit, one of the most commonly identified constraints to SME development in general, which was also confirmed in the analysis of issues faced by Indonesian manufacturing SMEs in the third chapter. In the 1970s there was a shift from agricultural credit (particularly for food crop cultivation) towards small-scale business credit with the introduction of a number of subsidised directed credit programmes. These programmes included the small-scale investment credit programme KIK and its working capital counterpart KMKP (introduced in 1973); Kredit Mini (introduced in 1974), which offered loans for non-agricultural activities of small-scale businesses too small to qualify for

KIK/KMKP; and Kredit Midi (introduced in 1981), which served the small-scale business segment either too large for or graduated from Kredit Mini and still too small for KIK/KMKP.

However, there were a number of issues in the design and implementation of these directed credit programmes, which all fall under a policy approach of supply leading finance. The lessons learned were implemented in the transformation in the early 1980s of the former village units (*unit desa*) of BRI as heavily loss-making providers of subsidized targeted credit into highly profitable microbanking units as market-led financial intermediaries. They comprised two principal mutually reinforcing products, both applying market rates of interest: Kupedes, a general credit loan product, and Simpedes, a very attractive savings product mobilizing the resources for the ever-growing number and size of Kupedes loans. Initially a rural loan product when it was introduced in 1984, Kupedes became a general loan product with the expansion of BRI units into urban areas in 1989. With the transformation of BRI into an SME bank around 2000, the units became the strategic model for the transition from supply leading to sustainable market-led finance.

The rapid expansion and high repayment rate of Kupedes demonstrated that the issue for SMEs in accessing formal finance was not high interest rates and hence that subsidised SME credit programmes were not the solution. Instead, offering successively larger loan sizes upon full timely repayments made it possible for firms to prove creditworthiness without the barrier of large collateral requirements. Kupedes also showed the importance of simplified loan application and approval procedures, which constituted a barrier for many firms to apply for KIK/KMKP as well as Kredit Mini and Kredit Midi loans.

The case study of access to finance for small-scale manufacturing firms linked the third and fourth chapter, using the same Economic Census data. The case study showed that the majority of small-scale manufacturing firms have been self-financed. The share of micro and small-scale enterprises whose main loan came from banks fell for both firm-size categories between 1986 and 1996. This leads to the larger question, why didn't more SMEs ask for a loan, given that access to credit was identified as a main constraint? This question is particularly relevant in light of the proliferation of small-scale business credit programmes. As expected, lack of collateral remained a pertinent issue. Particularly the high collateral requirements of KIK/KMKP kept many firms from applying for a loan. But many firms also identified procedural issues as one of the main reasons they did not apply for a loan. This stands in line with the findings that Kredit Mini and Kredit Midi suffered from cumbersome application procedures. KIK/KMKP had lengthy loan approval procedures. Finally, despite the 20 per cent SME lending requirement under KUK, many banks had no internal mandate to lend to SMEs. They often preferred to lend to larger firms and existing customers.

However, the case study also revealed that, contrary to the 1986 to 1996 decrease, between 1996 and 2006 the share of micro and small-scale manufacturing enterprises taking up a bank loan increased significantly (from 2.3 per cent to 4 per cent). It is perhaps a surprising finding that the share of firms taking a bank loan increased between 1996 and 2006, given the credit crunch which followed the banking crisis of 1997. However, the comparison of small-scale business to total credit in Chapter 4 showed that by 2003 small-scale business credit had recovered to pre-crisis levels, whilst total credit outstanding was still around the level it had last had in the late-1980s. These improvements in SME credit can be explained by post-crisis reforms. BRI, for example, underwent thorough restructuring between 1999 and 2003. As part of the restructuring BRI reduced its lending to the corporate sector and set the target to lend 80 per cent of its portfolio to micro, small and medium enterprises. Between 2001 and 2006 BRI lending constituted a fifth of all MSME loans outstanding in Indonesia.

Similar to the restructuring of BRI, state pawnshops also increased their MSME lending portfolio in the aftermath of the crisis. State pawnshops, which date back to the late colonial period, have historically played a different role than their European counterparts. State pawnshops in Indonesia were not just a source of cash for the poor in times of need, but also an important source for working and investment capital for small-scale business entrepreneurs. In 2004 this role was formalised when the Minister of Finance declared state pawnshops one of the official financial institutions for the extension of MSME credit. The outreach of BRI and state pawnshops was further increased in 2006, when state pawnshops and BRI units began offering each other's services.

Thus while this dissertation has shown that the Indonesian economy stagnated in the aftermath of the Asian financial crisis, with little change in GDP per capita as well as overall firm-size distribution in the manufacturing sector, there were also important improvements for Indonesian SMEs. The share of large enterprises into total value added of the manufacturing sector declined and the value added per worker of large enterprises stagnated between 1996 and 2006. However, between the 1996 and 2006 Economic Censuses the contribution of Indonesian small and medium manufacturing enterprises to total value added and their value added per worker increased. This shows that at least in aggregate, Indonesian SMEs weathered the crisis better than large firms. These improvements went hand in hand with a larger share of small-scale manufacturing taking up bank loans and overall improvements in access to small-scale business credit as a result of post-crisis banking reforms.

5.4 Outlook and Further Research

A number of aspects require further investigation. The third chapter has shown the differences in regional development, and these differences could be used to test how value added linked to other factors. First, based on agglomeration effects we would expect higher value added per worker in areas with large manufacturing sectors in general. More specifically between firm-size categories, we would expect higher value added per SME worker in areas with more large enterprises. The government's industrial policies have sought to develop the SME sector by building linkages to larger firms; policies included encouraging larger firms to buy their inputs from smaller firms and setting up business partnerships between small and large firms or state-owned enterprises under the Foster Parent Programme (*Program Bapak Angkat*).

Second, another aspect to understand the role of SMEs in the Indonesian economy is their role in exports. After the decline in oil revenues in the early 1980s, Indonesia started to pursue an export-led industrialization strategy. However, it needs to be established how far SMEs contributed to exports. SMEs may have served a different purpose (or market). In comparative perspective, small enterprises in South Korea and Taiwan were primarily producing for the domestic market until the 1980s, but in South Korea even medium-sized enterprises were only marginal exporters.[450] The relationship between enterprise size and export sales ratios in these two Tiger economies reveals that SMEs have carried the export drive of Taiwan, whereas in South Korea this was mainly

[450] Samuel I.S. Ho, 1980, 'Small-Scale Enterprises in Korea and Taiwan', *Working Paper No. 384,* Washington, D.C.: The World Bank, p. 88; Alice Amsden, 1989, *Asia's Next Giant: South Korea and Late Industrialization,* New York: Oxford University Press, p. 181.

accomplished by larger firms.[451] The question remains as to what role SMEs played in Indonesian exports, to be dealt with in a future study.

Third, Indonesian government programmes to promote SMEs have largely been dismissed as ineffective for various reasons. Yet more research is required on the role that the government played more generally in aspects such as education, human resource development and improving market conditions – rather than providing credit, which should be left to market-based financial intermediaries. Chapter 4 looked at the role of government in improving access to credit for SMEs, one of the most commonly identified constraints to SMEs worldwide, but more research is required concerning the role that government policy played in improving general framework conditions.

The case study of the manufacturing sector in Chapter 4 analysed the development of access to credit for micro and small-scale enterprises. The Economic Censuses contain no separate information on how medium-sized firms were financed. This analysis would benefit greatly from an expansion by looking at how many medium-sized firms relied on external finance, what share of that constituted formal bank loans (including Kupedes) and to what degree medium-sized firms also relied on loans disbursed through special programmes like KIK/KMKP and KUK.

A major contribution of this dissertation lies in the data collection of the Industrial and Economics Censuses. The dataset built with these sources allows for a regional comparison by firm-size category throughout the New Order period and ties these findings to the developments in the aftermath of the Asian Financial Crisis. This dissertation works with regional summaries in order to ensure narrative coherence. However, all regional data presented here has been collected at provincial level. The data work for this dissertation includes constructing the first provincial or even regional database on value added by firm-size category for the entire New Order period. Unfortunately an analysis at provincial level would have exceeded the scope of this dissertation, by requiring addressing the variation of 26 provinces rather than five regions. Exploiting the underutilised Industrial Census and Economic Census data has enabled a detailed analysis of the firm-size distribution of the Indonesian manufacturing sector and the differentiation of value added and industrial sub-sectors by firm-size category and province between 1974 and 2006. The 1986, 1996 and 2006 Economic

451 Makoto Abe and Momoko Kawakami, 1997, 'A Distributive Comparison of Enterprise Size in Korea and Taiwan', *The Developing Economies, 35(4)*: 382-400, pp. 397-398.

Censuses have further provided insights into the main constraints identified by micro, small and medium-sized firms to their business development, capital ownership and which credit programmes they benefited from.

The constructed dataset bears even further potential. The 1986, 1996 and 2006 Economic Censuses provide information on the highest educational attainment level of micro and small-scale business entrepreneurs and average working hours per week, as well as average wages paid to workers and inputs used by business of all firm-sizes. This dissertation has focused on the manufacturing sector because of the consistency of firm-size categories between censuses and the wider interest in the role of SMEs in Indonesia's industrial transformation. However, the census data further offers a wealth of information on all non-agricultural economic sectors and bears potential for future research to expand our knowledge of Indonesia's economic development during the New Order period.

Appendices

Table 31: GDP per Capita of South Korea, Taiwan and Indonesia compared, 1960-2010 (Int. GK$)

Year	Taiwan	South Korea	Indonesia	Java
1960	1,353	**1,226**	1,015	
1961	**1,398**	1,247	1,048	
1962	1,459	1,245	1,025	
1963	1,545	**1,316**	951	
1964	1,679	1,390	978	
1965	1,810	1,436	990	
1966	**1,916**	**1,569**	965	
1967	2,070	1,645	934	
1968	2,186	1,812	1,018	
1969	2,334	2,040	1,105	
1970	2,537	2,167	1,231	
1971	**2,804**	2,332	1,247	**1,076**
1972	3,113	2,456	1,364	
1973	3,448	**2,824**	1,544	
1974	3,422	3,015	1,549	
1975	3,522	3,162	**1,515**	**1,143**
1976	**3,918**	3,476	1,616	
1977	4,236	3,775	1,698	
1978	4,717	**4,064**	1,740	
1979	4,998	4,294	1,786	
1980	5,260	4,114	1,898	**1,552**
1981	**5,489**	4,302	1,969	
1982	5,590	4,557	1,860	
1983	5,979	**5,007**	1,880	
1984	6,521	5,375	1,971	
1985	6,762	5,670	1,984	
1986	**7,477**	6,263	**2,069**	**1,927**
1987	8,598	6,916	2,138	
1988	8,898	**7,621**	2,227	
1989	9,538	8,027	2,388	
1990	9,938	8,704	2,514	**2,312**
1991	**10,610**	9,446	2,694	
1992	11,304	9,877	2,842	
1993	11,950	**10,391**	2,998	
1994	12,731	11,199	3,170	
1995	13,418	12,094	3,374	
1996	**14,050**	**12,860**	**3,576**	**3,544**

Table 31: GDP per Capita of South Korea, Taiwan and Indonesia compared, 1960-2010 (Int. GK$) ***(continued)***

Year	Taiwan	South Korea	Indonesia	Java
1997	14,696	13,501	3,684	
1998	15,069	12,634	3,151	
1999	15,843	13,890	3,127	
2000	16,628	14,998	3,229	**3,056**
2001	**16,238**	15,481	3,299	
2002	17,001	16,498	3,399	
2003	17,547	**16,882**	3,513	
2004	18,564	17,589	3,640	
2005	19,367	18,227	3,799	
2006	**20,340**	19,124	**3,957**	**3,859**

Source:

Country figures from Maddison Project Database (version 2013); Jutta Bolt. and Jan Luiten van Zanden, 2014, 'The Maddison Project: collaborative research on historical national accounts', *The Economic History Review, 67 (3): 627–651*.

Indonesian regional figures based on own calculations using data for 1971 from BPS in Budy Resosudarmo and Yogi Vidyattama, 2006, 'Regional Income Disparity in Indonesia: A Panel Data Analysis', *ASEAN Economic Bulletin, 23(1)*:31-44, Table 1; Data for 1975 and 1980 from BPS in Takahiro Akita, 1988, 'Regional Development and Income Disparities', *Asian Economic Journal, 2(2):* 165-191, Tables 2 and 3; GDP Data for 1986 and 1990 from BPS, 1992, *Statistik Indonesia / Statistical Year Book of Indonesia 1992*; GDP Data for 1996 from BPS, 2000, *Statistik Indonesia / Statistical Year Book of Indonesia 2000;* Data for 2000 from BPS, 2004, *Statistik Indonesia / Statistical Year Book of Indonesia 2004;* Data for 2006 from BPS, 2008, *Statistik Indonesia / Statistical Year Book of Indonesia 2008* (Provincial summaries for 1971 intrapolated with 1971 population census data; provincial summaries for 1975 extrapolated with 1971 and 1980 population census data; provincial summaries for 1980 intrapolated with 1980 population census data; 1986 per capita calculated with 1985 Intercensal Population Survey figures, except for Jambi, which was extrapolated from 1980 and 1990 population census figures; provincial summaries for 1990 intrapolated with 1990 population census data).

Notes: Figures in bold mark year and country for which SME data from economic and industrial censuses are available.

Table 32: Number of Establishments and Workers in Indonesian Manufacturing by Firm-Size Category and Province, 1974/75

Island / Province	Micro (1-4)		Small (5-19)		Medium (20-99)		Large (≥100)		Total	
	Businesses	Workers	Businesses	Workers	Businesses	Workers*	Businesses	Workers*	Businesses	Workers
JAVA	**944,763**	**3,000,630**	**33,923**	**244,451**	**4,951**	**572,208**	**1,083**		**984,720**	**3,817,289**
DKI Jakarta	16,345	57,949	1,983	18,510	660	87,943	218		19,206	164,402
DI Yogyakarta	86,310	267,860	1,160	9,291	131	13,804	24		87,625	290,955
East Java	171,716	568,971	11,491	71,157	1,462	205,970	357		185,026	846,098
Central Java	520,892	1,633,451	9,212	74,026	1,357	147,862	227		531,688	1,855,339
West Java	149,500	472,399	10,077	71,467	1,341	116,629	257		161,175	660,495
SUMATRA	**101,325**	**317,424**	**7,578**	**52,531**	**427**	**54,871**	**135**		**109,465**	**424,826**
DI Aceh	24,574	73,562	741	5,016	20	2,887	5		25,340	81,465
Bengkulu	4,850	14,837	116	847	3	63	0		4,969	15,747
Jambi	8,207	27,399	440	2,608	22	3,701	8		8,677	33,708
Lampung	8,533	28,773	470	3,633	52	4,319	13		9,068	36,725
Riau	4,836	15,831	684	4,782	38	3,244	11		5,569	23,857
North Sumatra	15,560	52,407	1,985	15,750	213	25,258	59		17,817	93,415
South Sumatra	11,823	38,736	1,922	12,185	43	11,111	30		13,818	62,032
West Sumatra	22,942	65,879	1,220	7,710	36	4,288	9		24,207	77,877
SULAWESI	**97,053**	**307,836**	**3,663**	**23,581**	**150**	**8,318**	**17**		**100,883**	**339,735**
North Sulawesi	29,138	98,184	452	3,221	15	1,013	3		29,608	102,418
Central Sulawesi	355	1,243	296	1,839	5	190	0		656	3,272
Southeast Sulawesi	1,207	3,790	387	2,678	29	941	1		1,624	7,409
South Sulawesi	66,353	204,619	2,528	15,843	101	6,174	13		68,995	226,636

Table 32: Number of Establishments and Workers in Indonesian Manufacturing by Firm-Size Category and Province, 1974/75 *(continued)*

Island / Province	Micro (1-4)		Small (5-19)		Medium (20-99)		Large (≥100)		Total	
	Businesses	Workers	Businesses	Workers	Businesses	Workers*	Businesses	Workers*	Businesses	Workers
KALIMANTAN	**36,693**	**119,539**	**1,344**	**9,573**	**124**	**14,638**	**38**		**38,199**	**143,750**
East Kalimantan	956	3,369	147	1,267	22	958	1		1,126	5,594
Central Kalimantan	992	3,409	191	1,508	17	1,224	4		1,204	6,141
South Kalimantan	22,667	73,761	509	3,694	50	4,434	10		23,236	81,889
West Kalimantan	12,078	39,000	497	3,104	35	8,022	23		12,633	50,126
BALI	**21,613**	**64,442**	**710**	**5,630**	**49**	**5,811**	**14**		**22,386**	**75,883**
EASTERN INDONESIA	**33,064**	**89,985**	**1,041**	**7,474**	**89**	**5,858**	**14**		**34,208**	**103,317**
East Nusa Tenggara	1,845	5,373	264	2,041	12	785	2		2,123	8,199
West Nusa Tenggara	30,050	80,292	555	3,557	60	3,288	7		30,672	87,137
Maluku	186	769	100	855	7	1,023	3		296	2,647
Papua	983	3,551	122	1,021	10	762	2		1,117	5,334
INDONESIA TOTAL	**1,234,511**	**3,899,856**	**48,259**	**343,240**	**5,790**	**661,704**	**1,301**		**1,289,861**	**4,904,800**

Source: Calculated from BPS, *1974/75 Industrial Census,* Jakarta: BPS

Notes: *Number of employees was only given for medium and large manufacturing establishments combined;

Figure for numbers of workers of small-scale enterprises in West Nusa Tenggara had to be calculated by subtracting all other provinces from Indonesia total

Table 33: Number of Establishments and Workers in Indonesian Manufacturing by Firm-Size Category and Province, 1986

Island / Province	Micro (1-4)		Small (5-19)		Medium (20-99)		Large (≥100)		Total	
	Businesses	Workers	Businesses	Workers	Businesses	Workers	Businesses	Workers	Businesses	Workers
JAVA	**991,644**	**2,115,745**	**75,440**	**617,628**	**8,852**	**312,807**	**2,007**	**1,015,832**	**1,077,943**	**4,062,012**
DKI Jakarta	19,228	38,131	7,852	71,487	2,170	56,320	128	181,600	29,378	347,538
DI Yogyakarta	67,582	136,292	2,680	19,265	30	6,260	178	11,187	70,470	173,004
East Java	261,134	556,862	20,094	155,424	2,493	91,995	545	320,509	284,266	1,124,790
Central Java	421,115	864,239	27,193	238,269	1,775	63,864	393	204,389	450,476	1,370,761
West Java	222,585	520,221	17,621	133,183	2,384	94,368	763	298,147	243,353	1,045,919
SUMATRA	**145,783**	**268,897**	**10,605**	**78,596**	**1,056**	**39,667**	**369**	**164,993**	**157,813**	**552,153**
DI Aceh	17,661	27,866	1,028	6,874	33	1,245	12	9,865	18,734	45,850
Bengkulu	4,490	7,385	201	1,338	7	381	2	292	4,700	9,396
Jambi	6,342	11,639	568	3,678	72	2,467	32	11,349	7,014	29,133
Lampung	29,698	61,428	1,135	8,645	122	4,348	44	18,569	30,999	92,990
Riau	12,067	18,695	992	7,628	100	3,840	35	16,516	13,194	46,679
North Sumatra	26,560	46,532	3,747	29,364	520	19,885	162	69,080	30,989	164,861
South Sumatra	22,813	48,953	1,608	11,778	113	4,237	60	31,158	24,594	96,126
West Sumatra	26,152	46,399	1,326	9,291	89	3,264	22	8,164	27,589	67,118
SULAWESI	**112,193**	**185,525**	**5,131**	**34,016**	**278**	**9,971**	**47**	**19,491**	**117,649**	**249,003**
North Sulawesi	21,733	30,782	682	4,777	61	2,238	11	2,333	22,487	40,130
Central Sulawesi	12,097	23,032	614	4,094	25	952	9	3,855	12,745	31,933
Southeast Sulawesi	10,482	16,891	464	3,088	60	1,920	1	138	11,007	22,037
South Sulawesi	67,881	114,820	3,371	22,057	132	4,861	26	13,165	71,410	154,903

Table 33: Number of Establishments and Workers in Indonesian Manufacturing by Firm-Size Category and Province, 1986 *(continued)*

Island / Province	Micro (1-4)		Small (5-19)		Medium (20-99)		Large (≥100)		Total	
	Businesses	Workers	Businesses	Workers	Businesses	Workers	Businesses	Workers	Businesses	Workers
KALIMANTAN	**62,220**	**88,221**	**2,575**	**18,715**	**225**	**9,574**	**178**	**84,729**	**65,198**	**201,239**
East Kalimantan	4,703	8,021	531	4,131	55	1,992	49	32,135	5,338	46,279
Central Kalimantan	4,750	8,036	432	3,086	41	2,113	38	13,725	5,261	26,960
South Kalimantan	39,947	53,166	1,020	7,190	89	3,529	52	19,900	41,108	83,785
West Kalimantan	12,820	18,998	592	4,308	40	1,940	39	18,969	13,491	44,215
BALI	**31,087**	**54,822**	**1,819**	**14,185**	**209**	**7,393**	**34**	**8,225**	**33,149**	**84,625**
EASTERN INDONESIA	**78,408**	**117,668**	**2,046**	**14,081**	**128**	**4,744**	**30**	**4,585**	**80,612**	**141,078**
East Nusa Tenggara	25,973	35,630	384	2,675	21	797	3	573	26,381	39,675
West Nusa Tenggara	43,384	61,173	1,232	8,497	73	2,694	7	1,045	44,696	73,409
Maluku	7,009	17,543	256	1,710	18	821	16	2,140	7,299	22,214
Papua	2,042	3,322	174	1,199	16	432	4	827	2,236	5,780
INDONESIA TOTAL (excl. East Timor)	**1,421,335**	**2,830,878**	**97,616**	**777,221**	**10,748**	**384,156**	**2,665**	**1,297,855**	**1,532,364**	**5,290,110**

Source: Calculated from BPS, *1986 Economic Census,* Jakarta: BPS

Table 34: Number of Establishments and Workers in Indonesian Manufacturing by Firm-Size Category and Province, 1996

Island / Province	Micro (1-4)		Small (5-19)		Medium (20-99)		Large (≥100)		Total	
	Businesses	Workers	Businesses	Workers	Businesses	Workers	Businesses	Workers	Businesses	Workers
JAVA	**1,581,209**	**3,035,115**	**163,605**	**1,349,474**	**18,237**	**3,439,413**	**5,237**		**1,768,288**	**7,824,002**
DKI Jakarta	19,592	42,391	16,715	155,856	3,986	448,347	841		41,134	646,594
DI Yogyakarta	76,546	135,737	5,036	37,619	330	35,966	63		81,975	209,322
East Java	537,151	1,008,038	40,311	344,805	4,746	881,773	1,291		583,499	2,234,616
Central Java	623,492	1,163,544	60,004	497,051	3,906	545,437	764		688,166	2,206,032
West Java	324,428	685,405	41,539	314,143	5,269	1,530,033	2,278		373,514	2,529,581
SUMATRA	**343,070**	**661,374**	**30,492**	**249,410**	**2,321**	**459,431**	**813**		**376,696**	**1,370,215**
DI Aceh	84,386	141,940	3,992	30,045	113	15,821	22		88,513	187,806
Bengkulu	8,948	21,153	826	5,848	13	2,394	11		9,798	29,395
Jambi	15,398	30,458	1,691	15,431	134	29,505	59		17,282	75,394
Lampung	60,602	129,690	6,104	52,238	259	37,935	68		67,033	219,863
Riau	18,236	40,622	2,368	12,589	230	122,234	157		20,991	175,445
North Sumatra	51,617	103,435	6,286	50,506	1,119	181,244	358		59,380	335,185
South Sumatra	48,439	94,374	5,028	40,110	286	51,897	107		53,860	186,381
West Sumatra	55,444	99,702	4,197	42,643	167	16,860	31		59,839	159,205
SULAWESI	**194,293**	**371,854**	**13,669**	**93,115**	**548**	**54,795**	**101**		**208,611**	**519,764**
North Sulawesi	49,627	105,448	4,880	26,268	109	14,484	26		54,642	146,200
Central Sulawesi	27,829	53,223	1,777	12,266	79	4,215	16		29,701	69,704
Southeast Sulawesi	18,904	39,861	1,249	11,472	53	4,215	5		20,211	55,548
South Sulawesi	97,933	173,322	5,763	43,109	307	33,720	54		104,057	250,151

Table 34: Number of Establishments and Workers in Indonesian Manufacturing by Firm-Size Category and Province, 1996 *(continued)*

Island / Province	Micro (1-4)		Small (5-19)		Medium (20-99)		Large (≥100)		Total	
	Businesses	Workers	Businesses	Workers	Businesses	Workers*	Businesses	Workers*	Businesses	Workers
KALIMANTAN	**123,093**	**224,337**	**7,742**	**61,244**	**486**	**168,599**	**253**		**131,574**	**454,180**
East Kalimantan	11,171	21,757	1,419	15,234	117	59,010	61		12,768	96,001
Central Kalimantan	15,999	33,705	1,113	11,207	92	16,860	37		17,241	61,772
South Kalimantan	59,111	98,673	3,117	23,432	147	51,894	87		62,462	173,999
West Kalimantan	36,812	70,202	2,093	11,371	130	42,150	68		39,103	123,723
BALI	**82,500**	**133,876**	**5,817**	**43,163**	**408**	**29,804**	**59**		**88,784**	**206,843**
EASTERN INDONESIA	**170,311**	**300,690**	**7,506**	**74,484**	**268**	**50,580**	**44**		**178,129**	**425,754**
East Nusa Tenggara	73,834	122,050	1,359	10,717	44	1,585	5		75,242	134,352
West Nusa Tenggara	68,902	121,860	4,399	43,133	157	8,430	12		73,470	173,423
Maluku	18,632	38,351	939	13,383	36	25,290	14		19,621	77,024
Papua	8,943	18,429	809	7,251	31	16,860	13		9,796	42,540
INDONESIA TOTAL (excl. East Timor)	**2,494,476**	**4,727,246**	**228,831**	**1,870,890**	**22,268**	**4,207,960**	**6,507**		**2,752,082**	**10,806,096**

Source: Calculated from BPS, *1996 Economic Census,* Jakarta: BPS

Notes: *Number of employees was only given for medium and large manufacturing establishments combined.

Table 35: Number of Establishments and Workers in Indonesian Manufacturing by Firm-Size Category and Province, 2006

Island / Province	Micro (1-4)		Small (5-19)		Medium (20-99)		Large (≥100)		Total	
	Businesses	Workers*	Businesses	Workers*	Businesses	Workers	Businesses	Workers	Businesses	Workers
JAVA	**1,924,173**	**5,300,797**	**210,392**		**18,356**	**686,082**	**5,992**	**3,220,615**	**1,930,165**	**9,207,494**
DKI Jakarta	19,365	184,353	14,803		2,344	81,014	610	326,995	19,975	592,362
DI Yogyakarta	69,296	182,982	6,654		405	16,102	106	39,320	69,402	238,404
East Java	610,765	1,555,442	54,162		4,896	180,123	1,361	714,903	612,126	2,450,468
Central Java	761,124	1,930,809	69,591		4,581	161,581	956	545,956	762,080	2,638,346
West Java	463,623	1,447,211	65,182		6,130	247,262	2,959	1,593,441	466,582	3,287,914
SUMATRA	**358,279**	**1,023,358**	**42,715**		**1,937**	**78,163**	**983**	**500,238**	**359,262**	**1,601,759**
DI Aceh	55,179	156,635	6,804		76	2,981	21	4,950	55,200	164,566
Bengkulu	11,153	29,408	903		13	368	8	3,059	11,161	32,835
Jambi	15,277	46,068	1,971		61	2,529	44	28,745	15,321	77,342
Lampung	80,364	217,744	7,626		292	11,403	108	72,101	80,472	301,248
Riau	25,742	79,690	3,590		230	11,459	315	207,470	26,057	298,619
North Sumatra	67,326	204,494	9,531		859	33,956	359	128,635	67,685	367,085
South Sumatra	51,973	153,700	6,208		259	10,202	95	42,244	52,068	206,146
West Sumatra	51,265	135,619	6,082		147	5,265	33	13,034	51,298	153,918
SULAWESI	**212,686**	**518,465**	**18,030**		**584**	**22,614**	**155**	**51,389**	**212,841**	**592,468**
North Sulawesi	42,092	104,240	3,685		92	4,091	34	9,723	42,126	118,054
Central Sulawesi	21,748	55,335	2,132		38	1,737	11	5,329	21,759	62,401
Southeast Sulawesi	36,503	89,348	2,927		120	4,188	14	4,148	36,517	97,684
South Sulawesi	112,343	269,542	9,286		334	12,598	96	32,189	112,439	314,329

Table 35: Number of Establishments and Workers in Indonesian Manufacturing by Firm-Size Category and Province, 2006 *(continued)*

Island / Province	Micro (1-4)		Small (5-19)		Medium (20-99)		Large (≥100)		Total	
	Businesses	Workers	Businesses	Workers	Businesses	Workers*	Businesses	Workers*	Businesses	Workers
KALIMANTAN	**110,783**	**274,228**	**9,425**		**294**	**12,518**	**199**	**114,607**	**110,982**	**401,353**
East Kalimantan	11,969	40,062	2,152		89	3,994	65	42,939	12,034	86,995
Central Kalimantan	17,103	41,774	1,084		48	1,851	26	20,864	17,129	64,489
South Kalimantan	45,330	97,908	2,830		67	3,056	60	30,492	45,390	131,456
West Kalimantan	36,381	94,484	3,359		90	3,617	48	20,312	36,429	118,413
BALI	**73,691**	**204,508**	**9,361**		**469**	**16,977**	**68**	**16,575**	**73,759**	**238,060**
EASTERN INDONESIA	**209,199**	**495,754**	**15,727**		**382**	**13,935**	**49**	**21,990**	**209,248**	**531,679**
East Nusa Tenggara	66,682	133,779	3,344		53	1,841	5	851	66,687	136,471
West Nusa Tenggara	114,396	287,452	9,703		240	8,699	16	2,313	114,412	298,464
Maluku	20,702	51,002	1,659		59	2,312	10	7,221	20,712	60,535
Papua	7,419	23,521	1,021		30	1,083	18	11,605	7,437	36,209
INDONESIA TOTAL	**2,888,811**	**7,817,110**	**305,650**		**22,022**	**830,289**	**7,446**	**3,925,414**	**2,896,257**	**12,572,813**

Source: Calculated from BPS, *2006 Economic Census,* Jakarta: BPS

Notes: *Number of employees was only given for micro and small-scale manufacturing establishments combined;

In previous censuses Banten was included in West Java figures, North Maluku in the Maluku figures, West Papua in the Papua figures, Gorontalo in the North Sulawesi figures, West Sulawesi in the South Sulawesi figures, Kepulauan Riau was included in the Riau figures, Bangka Belitung Islands were included in the South Sumatra figures; the 2006 EC reports these provinces separately, however, here they have been merged to facilitate comparison.

Table 36: Average Number of Employees by Firm-Size Category and Region, 1974-2006

Province	Micro	Small	Medium & Large
1974/75			
Java	3.2	7.2	94.8
Sumatra	3.1	6.9	97.6
Sulawesi	3.2	6.4	49.8
Kalimantan	3.3	7.1	90.4
Bali	3.0	7.9	92.2
Eastern Indonesia	2.7	7.2	56.9
Indonesia	3.2	7.1	93.3
1986			
Java	2.1	8.2	122.4
Sumatra	1.8	7.4	143.6
Sulawesi	1.7	6.6	90.7
Kalimantan	1.4	7.3	234.0
Bali	1.8	7.8	64.3
Eastern Indonesia	1.5	6.9	59.0
Indonesia	2.0	8.0	125.4
1996			
Java	1.9	8.2	146.5
Sumatra	1.9	8.2	146.6
Sulawesi	1.9	6.8	84.4
Kalimantan	1.8	7.9	228.1
Bali	1.6	7.4	63.8
Eastern Indonesia	1.8	9.9	162.1
Indonesia	1.9	8.2	146.2
2006			
Java			160.5
Sumatra			198.1
Sulawesi			100.1
Kalimantan			257.9
Bali			62.5
Eastern Indonesia			83.4
Indonesia	1.9	8.1	161.4

Source:

1974/75 Data: 1974-5 Industrial Census, Household and Cottage Industries Vol. I; 1974-5 Industrial Census. SSE Manufacturing: DKI Jakarta; 1974-5 Industrial Census. SSE Manufacturing: East Java; 1974-5 Industrial Census. SSE Manufacturing: DI Yogyakarta; 1974-5 Industrial Census. SSE Manufacturing: Kalimantan, Irian Jaya, Bali, NYY & NTB; 1974-5 Industrial Census. SSE Manufacturing: Sulawesi; 1974-5 Industrial Census. SSE Manufacturing: Sumatra; 1974-5 Industrial Census. MLE Manufacturing: Indonesia; 1974/5 Indonesian total relative shares of medium and large enterprises calculated from Albert Berry, Edgard Rodriguez and Henry Sandee, 2001, 'Small and Medium Enterprise Dynamics in Indonesia', *Bulletin of Indonesian Economic Studies, 37(3):* 363-384, Table 1.

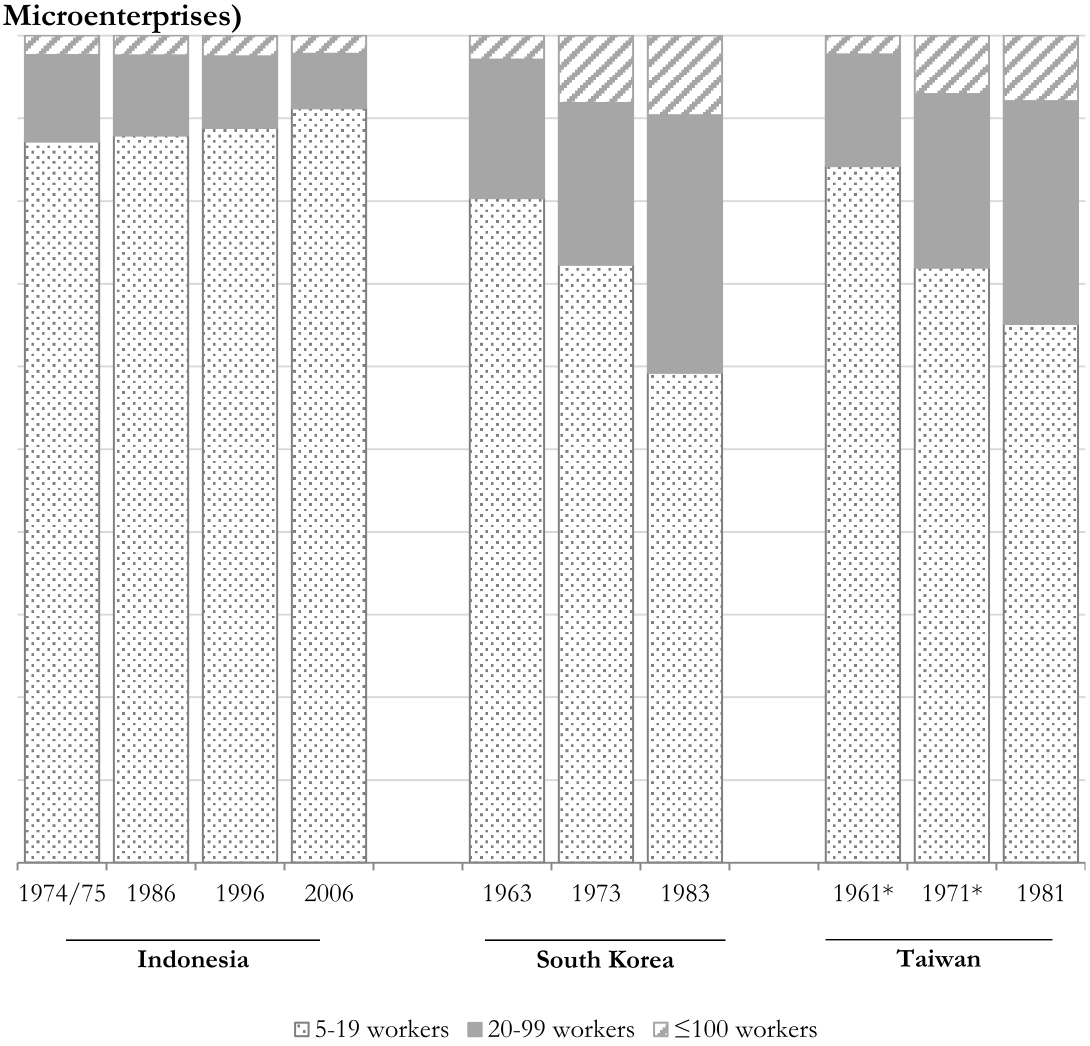
1986 Data: 1986 Economic Census, Results of Establishment Listing (Final Figures) (various provinces).

1996 Data: 1996 EC Household/Cottage Industry Statistics; 1996 Medium and Large Manufacturing Worker Data from Medium & Large Enterprise Worker Data from more precise provincial sources: Kantor Statistik Propinsi Bengkulu, 1997*, Statistik Industri Besar dan Sedang Propinsi Bengkulu 1996*, Bengkulu: BPS Kantor Statistik Propinsi Bengkulu; BPS Propinsi Sumatera Selatan, 1997, *Statistik Industri Besar dan Sedang Propinsi Sumatera Selatan 1996*, Palembangan: BPS Kantor Statistik Propinsi Sumatera Selatan; BPS Propinsi Jawa Tengah, 1998, *Indikator Industri Besar dan Sedang Jawa Tengah / Large and Medium Manufacturing Industry Indicators [Central Java]*, Semarang: BPS Propinsi Jawa Tengah; BPS Kantor Statistik Propinsi NTT, 1997, *Indikator Ekonomi Nusa Tenggara Timur 1996,* Kupang: Kantor Statistik Propinsi Nusa Tenggara Timur; BPS Propinsi Kalimantan Selatan, 1999, *Kalimantan Selatan Dalam Angka / Kalimantan*

Selatan in Figures 1999, Banjarbaru: BPS Propinsi Kalimantan Selatan; BPS Propinsi Irian Jaya, 1999, *Irian Jaya Dalam Angka / Irian Jaya in Figures 1998*, Jayapura: BPS Propinsi Irian Jaya; BPS Propinsi Bali, 2001, *Bali Dalam Angka/Bali in Figures 2000*, Denpasar: BPS Propinsi Bali; BPS Propinsi D.I. Yogyakarta, 2001, *Daerah Istimewa Yogyakarta Dalam Angka/Daerah Istimewa Yogyakarta in Figures 2000*, Yogyakarta: BPS Propinsi D.I. Yogyakarta; BPS Propinsi Riau, 2000, *Riau Dalam Angka / Riau in Figures 2000*, Pekanbaru: BPS Propinsi Riau; BPS Propinsi DKI Jakarta, 2001, *Jakarta Dalam Angka / Jakarta in Figures 2000*, Jakarta: BPS Propinsi DKI Jakarta, Table 6.1.6; BPS Propinsi Kalimantan Tengah, 2001, *Kalimantan Tengah Dalam Angka (Kalimantan Tengah in Figures) 2000*, Palangka Raya: BPS Propinsi Kalimantan Tengah, Table 6.1.5; For West Java, Jambi, Lampung, Riau, North, South and West Sumatra, Central, Southeast and South Sulawesi, East, Central and West Kalimantan, West Nusa Tenggara, Maluku and Irian Jaya provincial shares in medium and large manufacturing employment were taken from Frederik Sjöholm, 2002, 'The challenge of combining FDI and regional development in Indonesia', *Journal of Contemporary Asia, 32(3):381-393*, Table 1 and used in conjunction with the Indonesia medium and large enterprise manufacturing number of workers total found in BPS, *1998 Statistik Indonesia / Statistical Yearbook,* Jakarta: BPS; 1996 relative medium and large manufacturing Indonesian total employment shares calculated from Robert Rice and Irfan Abdullah, 2000, *A Comparison of Small and Medium/Large Indonesian Manufacturing Enterprises from 1986 and 1996 by Sector*, Jakarta: Partnership for Economic Growth Project, USAID, (mimeo), Table 5.

2006 Data: 2006EC MSE Manufacturing; 2006 EC MLE Manufacturing Part 1;); relative shares for microenterprises and small enterprises in 2006 calculated from BPS, 2009 Statistik Indonesia Statistical Yearbook, Table 7.2.2.

Figure 31: Comparison of Indonesia's, South Korea's and Taiwan's Relative Firm-Size Distributions by Number of Establishments (without Microenterprises)



Sources:

Indonesia: Calculated from BPS, *1974/75 Industrial Census,* Jakarta: BPS; BPS, *Economic Census (1986, 1996),* Jakarta: BPS.

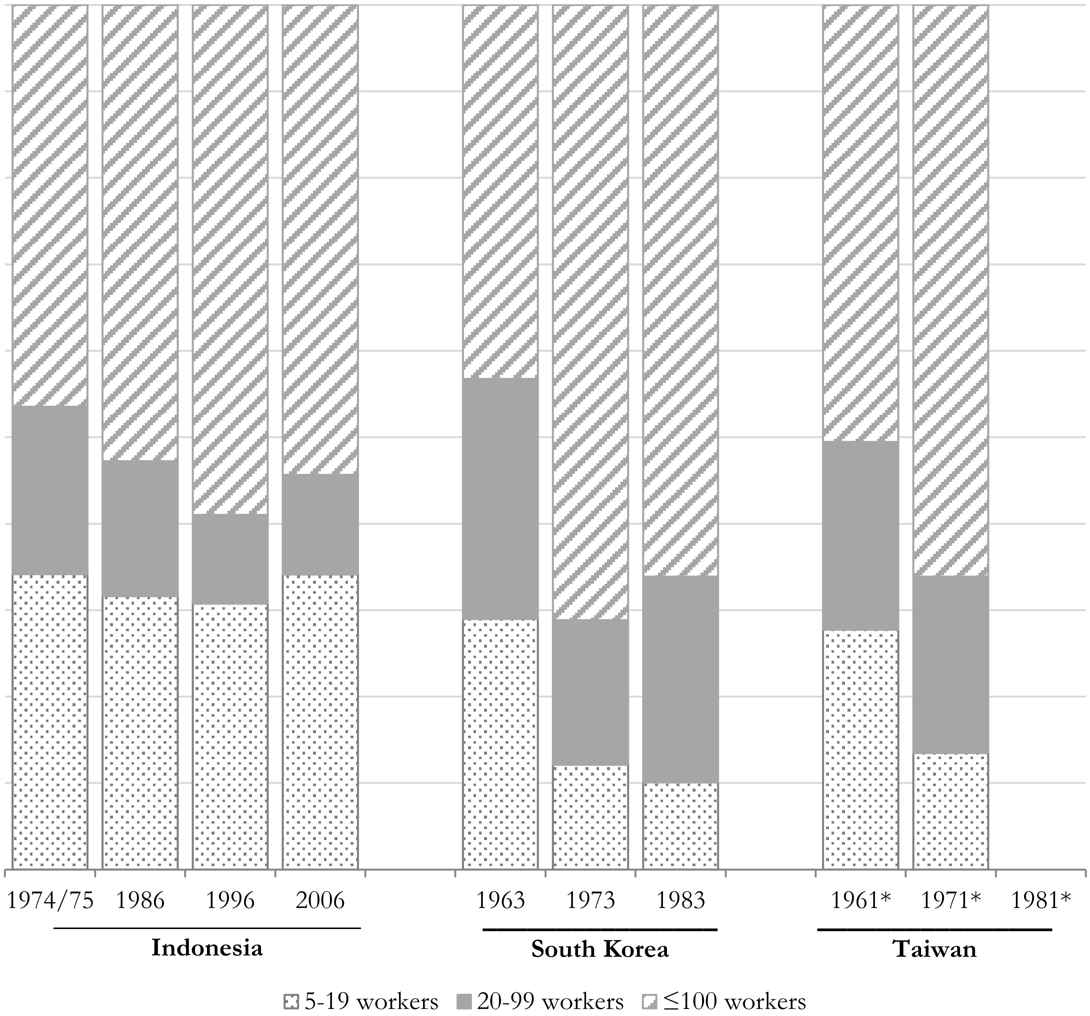
South Korea: Calculated from Economic Planning Board (EPB), *Report and Mining and Manufacturing Census (1963, 1973, 1983)*, Seoul: EPB.

Taiwan: Calculated from ROC, Executive Yuan, Directorate-General of Budget, Accounting and Statistics (DGBAS), 1973, *The 1971 Industrial & Commercial Censuses of Taiwan and Fukien Area, Volume III,* Taipei: Executive Yuan;

1961 and 1981 calculated from Republic of China, 1961-1981 in Makoto Abe and Momoko Kawakami, 1997, 'A Distributive Comparison of Enterprise Size in Korea and Taiwan', *The Developing Economies, 35(4):* 382-400, p. 386.

Notes: *The smallest category in Taiwan in 1961 and 1971 encompasses 4-19 instead of 5-19 workers.

Figure 32: Comparison of Indonesia's, South Korea's and Taiwan's Relative Firm-Size Distributions by Employment Shares (without Microenterprises)



Source:

Indonesia: Calculated from BPS, *1974/75 Industrial Census,* Jakarta: BPS; BPS, *Economic Census (1986, 1996, 2006),* Jakarta: BPS; relative shares of medium and large enterprises for 1974/75 and 1986 calculated from Albert Berry, Edgard Rodriguez and Henry Sandee, 2001, 'Small and Medium Enterprise Dynamics in Indonesia', *Bulletin of Indonesian Economic Studies, 37(3):* 363-384, Table 1, relative medium and large manufacturing Indonesian employment shares for 1996 calculated from Robert Rice and Irfan Abdullah, 2000, *A Comparison of Small and Medium/Large Indonesian Manufacturing Enterprises from 1986 and 1996 by Sector*, Jakarta: Partnership for Economic Growth Project, USAID, (mimeo), Table 5.

South Korea: Calculated from Economic Planning Board (EPB), *Report and Mining and Manufacturing Census (1963, 1973, 1983),* Seoul: EPB.

Taiwan: ROC, Executive Yuan, *Industrial & Commercial Censuses of Taiwan and Fukien Area (1961, 1971, 1981),* Taipei: Executive Yuan.

Notes: *The smallest category in Taiwan encompasses 4-19 instead of 5-19 workers.

Table 37: Main Difficulty faced by Microenterprises as Share of Total Number of Establishments in that Firm-size Category and Province (in per cent), 1986-1996

Region & Year	No Difficulty	Difficulty	Type of Difficulty			
			Lack of Capital	Marketing Difficulty	Lack of Skill	Others
1986						
Java	25.83	74.17	34.46	18.72	1.34	19.65
Sumatra	9.14	90.86	45.69	21.07	1.61	22.49
Sulawesi	8.20	91.80	47.91	15.78	3.43	24.67
Kalimantan	11.52	88.48	44.77	16.24	1.19	26.28
Bali	16.26	83.74	46.71	14.66	1.79	20.58
Eastern Indonesia	7.95	92.05	58.90	17.67	2.77	12.72
INDONESIA	**20.92**	**79.08**	**38.72**	**18.47**	**1.61**	**20.27**
1996						
Java	47.88	52.12	16.04	15.78	4.02	16.29
Sumatra	34.32	65.68	28.28	18.99	3.54	14.86
Sulawesi	40.28	59.72	33.07	12.28	2.67	11.70
Kalimantan	38.21	61.79	25.01	19.78	3.26	13.75
Bali	44.36	55.64	17.51	21.32	3.17	13.64
Eastern Indonesia	30.75	69.25	37.01	19.56	3.62	9.06
INDONESIA	**43.70**	**56.30**	**20.93**	**16.57**	**3.75**	**15.04**

Sources: BPS, *1986 Economic Census: Home Industry Statistics*, Jakarta: BPS; BPS, *1996 Economic Census: Household/Cottage Industry Statistics*, Jakarta: BPS.

Notes: No double-counting, one main constraint identified per establishment.

Table 38: Credit Volume of the People's Credit System in Indonesia, 1910-40 (in million guilders)

Year	Volksbanken (Loans to villagers)	State pawnshops	Village banks (*Desabanken)*	Village paddy banks *(Desalumbungs)*	*Village paddy banks (million kg)*
1910	7.38	23.49	0.36		
1911	8.85 (4.38)	28.85	0.60		
1912	11.98 (5.98)	40.28	0.71		
1913	15.68 (7.52)	51.68	0.84		
1914	18.84 (8.12)	66.85			
1915	21.68 (10.57)	75.90	7.67		
1916	27.77 (13.16)	83.97	8.77		
1917	30.62 (14.44)	99.62	8.71		
1918	28.95 (13.44)	116.90	7.19		
1919	30.22 (14.20)	114.78	7.35		
1920	39.36 (16.63)	136.52	8.78		
1921	47.54 (19.94)	142.53	11.36	31.41	*102*
1922	46.06 (18.29)	151.91	15.91		*92*
1923	43.24 (16.23)	150.52	21.71	17.95	*98*
1924	46.87 (18.46)	151.05	27.27		*103*
1925	52.38 (20.11)	166.25	33.77	19.60	*100*
1926	56.31 (23.15)	168.89	37.02		*104*
1927	63.29 (24.77)	173.89	41.39		*106*
1928	68.3 (26.77)	181.46	45.99	19.49	*106*
1929	74.87 (29.20)	207.02	49.64		*107*
1930	72.44 (28.19)	194.14	44.39	20.20	*108*
1931	50.72 (18.78)	153.12	34.12		*105*
1932	24.83 (7.12)	109.77	21.72		*106*
1933	17.45 (3.45)	78.12	17.49	8.32	*106*
1934	15.46 (7.53[a])	69.58	16.45		*107*
1935	17.4 (6.53[a])	67.52	14.79	8.25	*106*
1936	19.39 (6.61[a])	65.41	15.22		*106*
1937	21.68 (8.62[a])	75.30	18.00		*106*
1938	26.67 (12.2[a])	85.31	20.71	9.17	*108*
1939	30.16 (15.28[a])	87.00	22.67		*111*
1940	28.8 (n/a)	88.19	23.43	9.16	*110*

Source: Data from CEI, Volume 6, 1980, *Changing Economy in Indonesia: A Selection of Statistical Source Material from the Early 19th Century up to 1940*, *Volume 6, Money and Banking 1816-1940* (edited by Peter Boomgaard and Jan T.M. van Laanen), The Hague: Nijhoff;

Village paddy bank data from Jan T.M. van Laanen, 1990. 'Between the Java Bank and the Chinese Moneylender: banking and Credit in Colonial Indonesia', *in:* Anne Booth, W.J. O'Malley and Anna Weidemann (Eds.), *Indonesian Economic History in the Dutch Colonial Era* (pp. 244-266), New Haven: Yale University Southeast Asia Studies, p. 260.

Notes: [a] estimate

Table 39: Consumer Price Index based on Average Retail Price in Jakarta of 15 Home-produced and 15 Imported Consumption Articles, 1938-66 (1953=100)

Year	CPI
1938	**5**
1939	
1940	
1941	
1942	
1943	
1944	
1945	
1946	
1947	
1948	
1949	
1950	
1951	**90**
1952	**87**
1953	**100**
1954	**117**
1955	**170**
1956	**155**
1957	**170**
1958	**259**
1959	**426**
1960	**584**
1961	**586**
1962	**1,663**
1963	**3,651**
1964	**7,405**
1965	**36,844**
1966	**346,506**

Source: calculated from BPS, *Statistical Pocketbook of Indonesia 1968-69*, Jakarta: BPS, pp. 377-9, Table XVI.3&4.

Notes: No data available for 1939-1950

Table 40: Sectoral Shares of Non-agricultural Firms by Firm-size Category, 1996

	Microenterprises	Small enterprises	Medium enterprises	Large enterprises
Mining & Quarrying	1.16%	1.42%	1.22%	1.45%
Manufacturing Industry	15.93%	35.76%	31.73%	59.64%
Electricity, Gas & Water Supply	0.07%	0.23%	0.85%	1.97%
Construction	1.08%	5.37%	10.36%	6.11%
Wholesale and Retail Trade, Restaurants & Accommodation Services	58.80%	33.21%	19.85%	11.73%
Transport, Storage & Communication	10.86%	3.66%	4.66%	4.89%
Financial Institutions	0.24%	4.45%	8.37%	4.66%
Real Estate, Rental Services & Other Services	11.86%	15.90%	22.96%	9.54%
TOTAL	100%	100%	100%	100%
(Total number of firms)	(15,705,491)	(640,304)	(70,225)	(10,913)

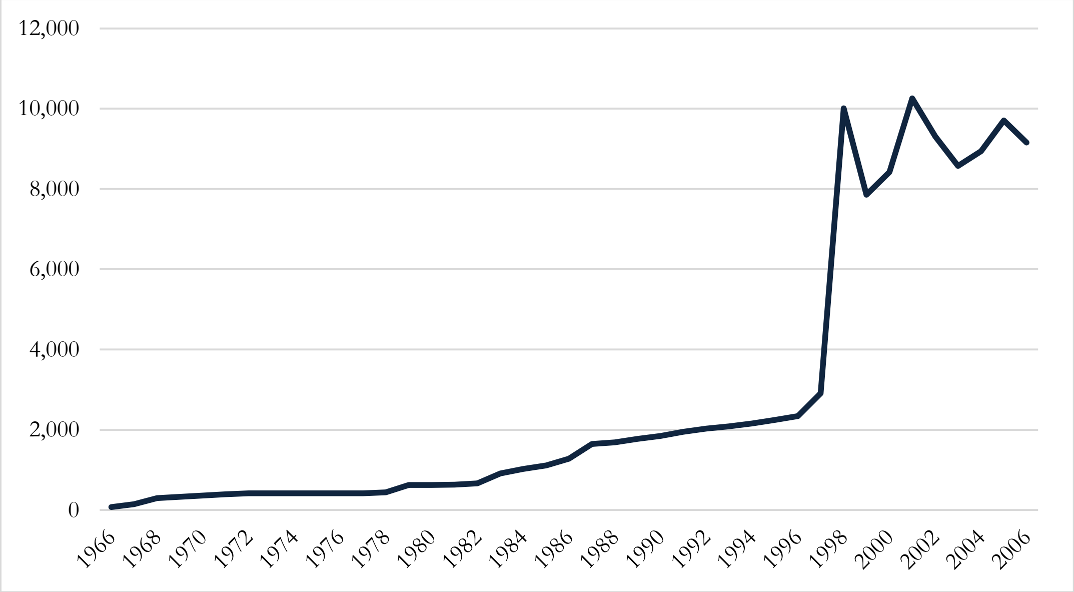
Source: Calculated from BPS, 1996 *Economic Census: Complete Count Result Indonesia,* Jakarta: BPS.

Table 41: Sectoral Shares of Non-agricultural Firms by Number of Firms and Firm-size Category, 2006

	Microenterprises	Small enterprises	Medium enterprises	Large enterprises
Mining & Quarrying	1.18%	0.64%	0.32%	0.80%
Manufacturing Industry	15.33%	8.18%	15.93%	19.69%
Electricity, Gas & Water Supply	0.05%	0.04%	1.33%	1.70%
Construction	0.63%	1.09%	3.27%	4.13%
Wholesale and Retail Trade, Restaurants & Accommodation Services	55.42%	76.14%	45.52%	43.10%
Transport, Storage & Communication	13.24%	5.00%	7.50%	5.22%
Financial Intermediaries	0.18%	0.74%	8.26%	16.61%
Real Estate, Rental Services & Other Services	13.98%	8.18%	17.87%	8.75%
TOTAL	100%	100%	100%	100%
(Total number of firms)	(18,928,220)	(3,587,574)	(164,839)	(44,048)

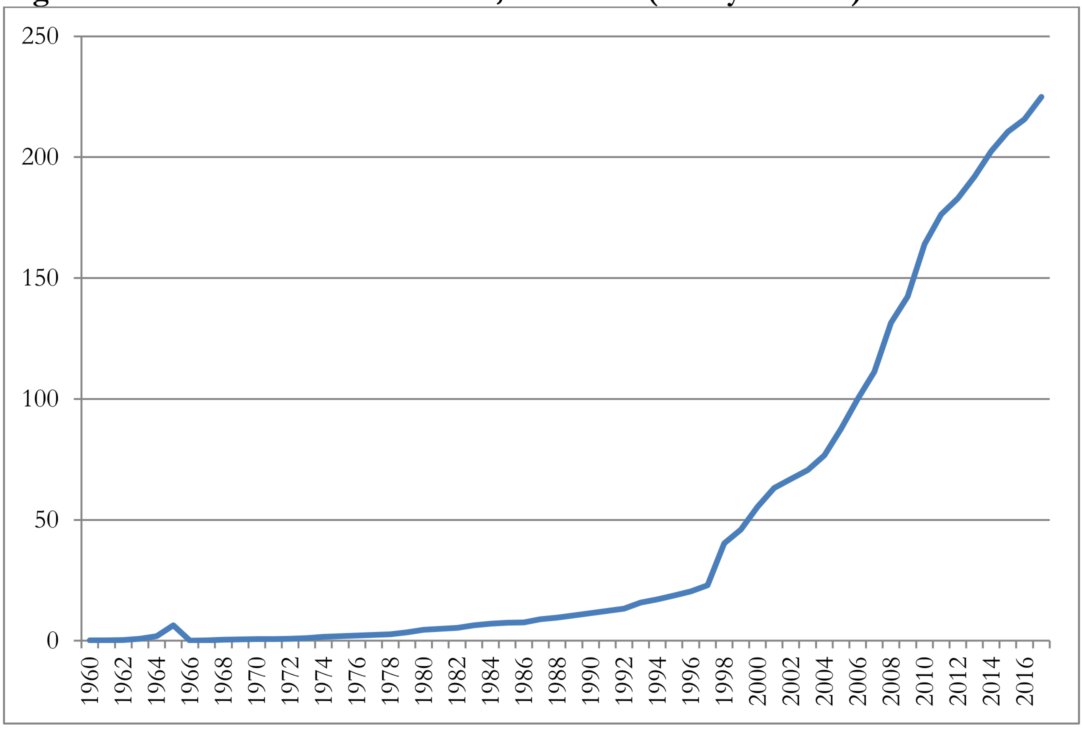
Source: Calculated from BPS, *2006 Economic Census, Establishment Listing Results, Indonesia,* Jakarta: BPS.

Figure 33: IDR Exchange Rate to USD, 1966-2006 (annual average, not seasonally adjusted)



Source: University of Pennsylvania, Exchange Rate to U.S. Dollar for Indonesia [FXRATEIDA618NUPN], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/FXRATEIDA618NUPN, February 7, 2019.

Figure 34: Indonesian GDP Deflator, 1960-2016 (base year 2006)



Source: Calculated from the GDP deflator reported in The World Bank, 2017, *World Development Indicators*, Washington, D.C.: The World Bank, GDP deflator (base year varies by country) [Data file] Retrieved from https://data.worldbank.org/indicator/NY.GDP.DEFL.ZS?locations=ID

Table 42: KIK - Changes in Loan Size, Interest Rate and Maturity, 1973-90

	Loan size	Interest rate	Maturity	Eligibility
1973	IDR 5 million	12% p.a.	5 years	May be utilised for all economic activities; 75 per cent of the firm's capital must be held by indigenous Indonesians or 50 per cent if at least 50 per cent of the board are indigenous Indonesians; the firm must hold all required business licenses
1975				Net worth of borrowers is not to exceed IDR 20 million and their net current assets IDR 10 million
1977	IDR 10 million (for projects previously financed under KMKP with satisfactory debt servicing)			
1982	IDR 15 million (including IDR 5 million supplementary credit)	10.5% p. a.	10 years	

Source: Bank Indonesia, *Annual Reports (various years),* Jakarta: BI; eligibility change from BI Circular No SE /51/UPK 31 March 1975.

Table 43: KMKP - Changes in Loan Size, Interest Rate and Maturity, 1973-90

	Loan size	Interest rate	Maturity	Eligibility
1973	IDR 5 million	15% p.a.	3 years	May be utilised for all economic activities; 75 per cent of the firm's capital must be held by indigenous Indonesians or 50 per cent if at least 50 per cent of the board are indigenous Indonesians; the firm must hold all required business licenses
1975				Net worth of borrowers is not to exceed IDR 20 million and their net current assets IDR 10 million
1977	IDR 10 million (for projects previously financed under KMKP with satisfactory debt servicing)			
1982	IDR 15 million (including IDR 5 million supplementary credit)	12% p.a.	3 years (with a possible renewal of another 3 years)	

Sources: Bank Indonesia, *Annual Reports (various years),* Jakarta: BI; eligibility change from BI Circular No SE /51/UPK 31 March 1975.

Table 44: Changes in Maximum KUK loan size, 1990-2001

Year	Maximum KUK loan size (IDR)
1990	200 million
1991	"
1992	"
1993	"
1994	250 million
1995	"
1996	"
1997	"
1998	350 million
1999	"
2000	"
2001	500 million

Sources: Bank Indonesia, *Annual Reports (various years),* Jakarta: BI.

Table 45: Credit Outstanding to the Economically Weak Group by Credit Scheme, 1974-95 (IDR billion in 2006 prices)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Small Investment Credits (KIK)	242	844	1,213	1,664	1,976	1,944	2,612	5,004	6,962	6,497
Permanent Working Capital Credits (KMKP)	178	738	1,267	1,948	2,453	2,658	4,006	7,716	13,105	12,790
Mini Credits		124	239	344	415	457	443	824	1,061	989
Midi Credits								161	521	659
Kupedes (1985 and consecutive includes outstanding Mini and Midi credits)										
Credits for Cooperatives										3,782
Credits for farm enterprises (KUT) - prior to 1985 Bimas										2,888
Others								1,792	4,077	14,752
Total Credit Outstanding	**421**	**1,707**	**2,718**	**3,956**	**4,844**	**5,060**	**7,061**	**15,497**	**25,726**	**42,357**

Table 45: Credit Outstanding to the Economically Weak Group by Credit Scheme, 1974-95 (IDR billion in 2006 prices) *(continued)*

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Small Investment Credits (KIK)	5,500	4,765	4,267	3,509	3,260	4,089	6,574	5,996	3,588	2,058	1,253	895
Permanent Working Capital Credits (KMKP)	12,322	12,460	11,636	9,918	9,886	10,791	15,658	13,710	10,658	5,580	2,003	1,173
Mini Credits	526											
Midi Credits	483											
Kupedes (1985 and consecutive includes outstanding Mini and Midi credits)	441	2,222	3,573	4,321	4,843	5,812	8,233	11,709	11,545	10,889	10,378	10,698
Credits for Cooperatives	3,951	3,627	3,927	3,103	3,564	3,878	3,651	3,712	16,577	15,566	4,317	4,850
Credits for farm enterprises (KUT) - prior to 1985 Bimas	2,501	2,155	1,898	1,546	1,405	1,273	1,159					
Others	15,989	20,511	29,055	32,147	38,480	45,166	62,536	48,570	34,673	29,990	32,388	28,074
Total Credit Outstanding	**41,714**	**45,739**	**54,355**	**54,544**	**61,439**	**71,009**	**97,811**	**83,697**	**77,041**	**64,083**	**50,340**	**45,690**

Source: Bank Indonesia, *Annual Reports (various years),* Jakarta: BI.
Notes: "Others" groups together the following credit schemes: 'Working Capital Credits under Keppres No. 29/1984' (1985-91), 'Credits with maximum of IDR 75 million' (1984-1995), 'Credits for Teachers (KPG)' (1982-95), 'Credits for Indonesian Students (KMI)' (1983-1995), 'Inpres Pasar' (1983-90), 'Pension Credits' (1983-90), 'Viability Credits up to IDR 75 million' (1983-88), 'Keppres No 14A/1980 credits' (1983-88), 'House Ownership Credits (KPR)' (1981-95), 'Credits for Student Dormitories' (1985-91), 'Perusahaan Into Rakyat (PIR) Plasma/Smallholder Nuclear Estate' (1983-95), 'Rejuvenation, rehabilitation and extension of export plantation (PRPTE)' (1983-95), 'PT Papan Sejahtera' (extended by non-bank institutions; 1981-94), 'Petty Trader Credits Candak Kulak Credits (KCK)' (extended by non-bank institutions, 1981-91);
Deflator used was calculated from the GDP deflator reported in The World Bank, 2017, *World Development Indicators*, Washington, D.C.: The World Bank, GDP deflator (base year varies by country) [Data file] Retrieved from https://data.worldbank.org/indicator/NY.GDP.DEFL.ZS?locations=ID

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