



palgrave▶pivot

# Economic Resurgence in ASEAN

Navigating Convergence,  
Innovation, and Trade for  
Enhanced Productivity

*Edited by*  
**Fithra Faisal Hastiadi**

palgrave  
macmillan

# Economic Resurgence in ASEAN

Fithra Faisal Hastiadi  
Editor

# Economic Resurgence in ASEAN

Navigating Convergence, Innovation, and Trade  
for Enhanced Productivity

palgrave  
macmillan

*Editor*

Fithra Faisal Hastiadi  
Department of Economics  
Faculty of Economics and Business  
universitas Indonesia  
Depok, Indonesia

ISBN 978-3-031-53409-6      ISBN 978-3-031-53410-2 (eBook)  
<https://doi.org/10.1007/978-3-031-53410-2>

© The Editor(s) (if applicable) and The Author(s), under exclusive license to Springer Nature Switzerland AG 2024

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use. The publisher the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Palgrave Macmillan imprint is published by the registered company Springer Nature Switzerland AG.

The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Paper in this product is recyclable.

# CONTENTS

<b>1 Indonesian Economy in Time of Covid: Surviving the Turmoil through Manufacturing Sector</b>	<b>1</b>
Fithra Faisal Hastiadi	
<b>2 Post-COVID Recovery: Harnessing Digital Platforms</b>	<b>9</b>
Fithra Faisal Hastiadi and Muhammad Raihan Ramadhan	
<b>3 A Better Match: Do Technology Gaps with Foreign Subsidiaries Affect Domestic Firms' Productivity? Case Study of Indonesian Manufacturing</b>	<b>25</b>
Mufid Asshiddiq Rahman and Fithra Faisal Hastiadi	
<b>4 International Trade and Human Development Convergence: The Tale of ASEAN</b>	<b>45</b>
Baihaqi Anugrah Pratama and Fithra Faisal Hastiadi	
<b>5 From Trade and Foreign Direct Investment to Technology: International R&amp;D Spillovers and Productivity in ASEAN</b>	<b>63</b>
Muhammad Sayyid Ramadhan and Fithra Faisal Hastiadi	
<b>6 Labor Productivity, Bilateral Trade, and Institutional Quality in ASEAN 6 Countries: Gravity Approach</b>	<b>79</b>
Shafa Kalila Aryanti and Fithra Faisal Hastiadi	

<b>7</b>	<b>The Asean-6 Manufacturing Sector and Institutional Quality in the Midst of Soaring Global Value Chains</b>	<b>95</b>
	Fariz Raffandi Marzuki and Fithra Faisal Hastiadi	
<b>8</b>	<b>Free Trade Agreement, Upgrading Quality, and Economies of Scale</b>	<b>117</b>
	Lilis Nurul Husna and Fithra Faisal Hastiadi	
<b>9</b>	<b>ASEAN Outlook of Indo-Pacific: Pushing All the Wheels to Gain Regional Sustainability</b>	<b>145</b>
	Fithra Faisal Hastiadi	
	<b>Index</b>	<b>171</b>

## NOTES ON CONTRIBUTORS

**Shafa Kalila Aryanti** obtained her BA in Economics from the Universitas Indonesia in 2023. As an undergraduate student, she focused on macroeconomics and international economics with a keen interest in the topics of the Association of Southeast Asian Nations (ASEAN). During her BA, she also worked as a teaching assistant in the Department of Economics at Universitas Indonesia, assisting with microeconomics classes for three semesters. After she graduates, she becomes part of the Research and Advisory team at Bukalapak, specializing in the investment markets.

**Fithra Faisal Hastiadi** is the founder at Next Policy, an economist, a researcher, and at the Faculty of Economics and Business, Universitas Indonesia. He holds a PhD from Waseda University, Japan, and has previously worked as an associate researcher at the Asian Development Bank Institute, Tokyo, Japan. He has extensive experience as a researcher and economist in various government and private institutions, including serving as the spokesperson for the Minister of Trade in 2020.

**Lilis Nurul Husna** holds a BA in Statistics from Sekolah Tinggi Ilmu Statistik (now Politeknik STIS) and a Master's in Economics from Universitas Indonesia. She works at BPS-Statistics Indonesia as a statistician in the Import Statistics Division.

**Fariz Raffandi Marzuki** graduated from Universitas Indonesia with a Bachelor's degree in Economics. He completed his thesis in December 2022, focusing on the manufacturing global value chain participation of

ASEAN-6 countries. He also offers expert insights on macroeconomics, including exchange rates, digital transformation, and food security.

**Baihaqi Anugrah Pratama** is a fresh graduate of Economics from the University of Indonesia. His thesis was concerned with the effect of intra- and extra-regional trade on the convergence in ASEAN countries. Baihaqi's primary interests are in the topic of economic development and regional integration. Currently, Baihaqi is active in the banking industry.

**Mufid Asshiddiq Rahman** is a fresh graduate of Economics from the University of Indonesia. His thesis was concerned with the performance of the manufacturing industry of Indonesia. Although his primary interests are in microeconomics and industrial organization, Mufid also enjoys literature on economic crises, economic history, and popular psychology. Still residing in Indonesia, Mufid is active as Assistant to Senior Economist in the finance industry and as teaching assistant at the University of Indonesia.

**Muhammad Raihan Ramadhan** is a junior economist at Bank Indonesia's Payment System Policy Department. Previously, he contributed as a research associate at ERIA, engaging in projects related to international economics and finance. Raihan holds a cum laude bachelor's degree in economics from Universitas Indonesia, showcasing his academic excellence and dedication to his field. His experience spans both practical policy work and rigorous academic research, underscoring his expertise in economics and finance.

**Muhammad Sayyid Ramadhan** is a fresh graduate of Economics from the University of Indonesia. His thesis was concerned with the spillover effect from FDI and trade by developed countries to ASEAN countries. Sayyid has a keen interest in public policy and economic development. Moreover, Sayyid had experience as an assistant lecturer at the University of Indonesia. Currently, Sayyid is managing an agarwood company as Executive Director.



# LIST OF FIGURES

Fig. 1.1	GDP by sector. (Source: Statistics Indonesia)	3
Fig. 1.2	Manufacture sector value-added (%GDP). (Source: Statistics Indonesia and World Bank)	4
Fig. 2.1	Forward and backward linkage quadrant	16
Fig. 2.2	Mobile and fixed-line broadband penetration (Source: World Bank)	19
Fig. 2.3	Reasons for not subscribing to fixed broadband. (Source: World Bank)	19
Fig. 2.4	Average time spent on the Internet. (Source: World Bank)	20
Fig. 2.5	Share of firms that reported adjusting in response to COVID-19. (Source: World Bank)	21
Fig. 2.6	Share of Enterprises that use the Internet. (Source: World Bank)	22
Fig. 2.7	Proposed quadruple helix ecosystem	23
Fig. 3.1	Net FDI inflows, ASEAN5 1971–2021 (Billions USD). (Source: World Bank, 2022a)	26
Fig. 3.2	Net FDI inflows, ASEAN5 (excl. Singapore) 1971–2021 (Billions USD). (Source: World Bank, 2022b)	27
Fig. 4.1	ASEAN countries' HDI score (2003–2021)	47
Fig. 4.2	ASEAN intra-regional trade in billion USD (2003–2021)	47
Fig. 6.1	Labor productivity (2006–2020). (Source: Authors, from Asian Productivity Organization [2022])	82
Fig. 7.1	ASEAN-6 Manufacturing Gross Export (in millions of US\$), 1995–2018. (Sources: OECD Trade in Value Added Database)	97
Fig. 7.2	ASEAN-6 Manufacturing Export Ratio to Merchandise Export (Percentage), 1995–2020. (Source: World Bank)	101

Fig. 7.3	ASEAN-6 Trade Openness (Trade to GDP ratio, percentage), 1995–2018. (Sources: World Bank)	102
Fig. 7.4	ASEAN-6 Manufacturing Backward Linkages (Percentage), 1995–2018. (Sources: OECD Trade in Value Added Database)	105
Fig. 7.5	ASEAN-6 Worldwide Governance Indicators, 1996–2020. (Sources: World Bank)	107
Fig. 8.1	Tariff on intermediate goods in Indonesia. Note: Data unavailable for the years 2014 and 2015. (Source: World Integrated Trade Statistics [WITS])	120
Fig. 8.2	Imports of Indonesia’s automotive industry (2015–2019) by country of origin	131
Fig. 8.3	Export of Indonesia’s automotive industry (2015–2019) by the destination country	132
Fig. 8.4	Trade balance of Indonesia’s automotive industry 2015–2019 (Million US\$)	133
Fig. 8.5	Average commodity tariff rates (%)	133
Fig. 8.6	Average firm’s tariff rates (%)	134
Fig. 8.7	Percentage of automotive industry imports	134
Fig. 8.8	Import Value of automotive industry (Million US\$)	135
Fig. 9.1	Income classification of ASEAN and other emerging countries. 1 = Low Income, 2 = Lower Middle-Income, 3 = Upper Middle-Income, 4 = High Income. (Source: Author’s Compilation)	159

## LIST OF TABLES

Table 2.1	List of Resilient Secondary and Tertiary Sectors	17
Table 2.2	Value-Added Multiplier	18
Table 2.3	The Use of Internet for Work among Workers in Jakarta	21
Table 3.1	Summary statistics for Stage 1 variables (Log, Real measurements)	36
Table 3.2	Summary statistics for Stage 2 variables	38
Table 3.3	Average TFP and TFP growth by two digit-subsectors	39
Table 3.4	Second-stage regression results	40
Table 4.1	Variable, data source, category, and operationalization of variables	54
Table 4.2	Descriptive statistics	55
Table 4.3	Regression result	56
Table 5.1	Research regression result	73
Table 6.1	Descriptive statistics	89
Table 6.2	Inferential analysis	89
Table 7.1	Recapitulation of model estimation LSDV result	108
Table 7.2	ASEAN-6 GVCs participation country rank as LSDV result	109
Table 7.3	Recapitulation of model estimation forward linkages result	111
Table 7.4	Recapitulation of model estimation backward linkages result	113
Table 8.1	Number of observation units by company	127
Table 8.2	The impact of FTA tariffs on import units of value	135
Table 8.3	The impact of FTA tariffs on export units of value	136
Table 8.4	Intra-industry trade Indonesia-Japan in the automotive sector	138

Table 8.5	Export quantity and price	139
Table 9.1	Order of participation level of global production network of each industrial group	154
Table 9.2	Typology of innovation for ASEAN members	157
Table 9.3	GNI per capita growth for ASEAN 2016	160



# Indonesian Economy in Time of Covid: Surviving the Turmoil through Manufacturing Sector

*Fithra Faisal Hastiadi*

**Abstract** Despite the global economic recession in 2020 due to the COVID-19 pandemic, the structure of the Indonesian economy remained relatively unchanged. However, a closer look reveals a long-term trend of deindustrialization since the early 2000s, affecting the export performance of the manufacturing sector. This chapter identifies a need for strategic interventions to leverage the manufacturing sector's contribution to economic growth, emphasizing the importance of manufacturing in achieving convergence and escaping the middle-income trap. We argue that revitalizing the manufacturing sector is crucial for sustained and inclusive economic growth, countering the trend of premature deindustrialization. This chapter also suggests that Indonesia must prioritize the development of its manufacturing sector through addressing issues of financing, trade imbalances, and infrastructure. The government's efforts, such as the omnibus law on job creation and infrastructure development, are

---

F. F. Hastiadi (✉)

Department of Economics, Faculty of Economics and Business,  
universitas Indonesia, Depok, Indonesia

© The Author(s), under exclusive license to Springer Nature  
Switzerland AG 2024

F. Faisal Hastiadi (ed.), *Economic Resurgence in ASEAN*,  
[https://doi.org/10.1007/978-3-031-53410-2\\_1](https://doi.org/10.1007/978-3-031-53410-2_1)

recognized as steps in the right direction, but the study emphasizes the importance of a comprehensive approach to support the manufacturing sector's growth and enhance Indonesia's overall economic competitiveness.

**Keywords** Covid • GDP • Indonesian Economy • Industry

## BACKGROUND

Indonesian economy has been overshadowed by its past remarkable economic growth during the New Order era. During those years, the presence of several commodity booms did assist Indonesia's high-paced economic growth. Aside from this, Indonesia's manufacturing sector also significantly contributes to assisting Indonesia's economic growth, where it provides the most significant portion in terms of contribution to GDP in 1991, compared to other sectors. But soon after the Asian financial crisis in the late 1990s, the growth momentum had halted.

A persistent decrease in export performance may explain the poor performance of Rupiah. Indonesia experiences current account deficit since the fourth quarter of 2011, and it has prolonged ever since. The major problem here is the deficit in primary income account and trade balance. The deficit in primary income is mostly (around 64%) attributable to investments, be it direct, portfolio, or other investments.

The structure of the Indonesian economy in the last five years has generally remained the same without any significant changes. Despite the recession in 2020, caused by the pandemic, Fig. 1.1 presents no significant changes in the structure of the economy. By far, the industrial sector, exports of electrical machinery and equipment and parts thereof alone reached 5.78% or the third largest among Indonesia's leading export commodities. Meanwhile, the agricultural sector, in this case exports of animal or vegetable fats and oils and their cleavage products, constituted 11.31% of all Indonesian exports in 2019 or the second largest.

As far as the structure of the economy is concerned, despite no significant changes in the last five years, if we look at a longer span of years, we can see a significant change in the structure of the economy.



Fig. 1.1 GDP by sector. (Source: Statistics Indonesia)

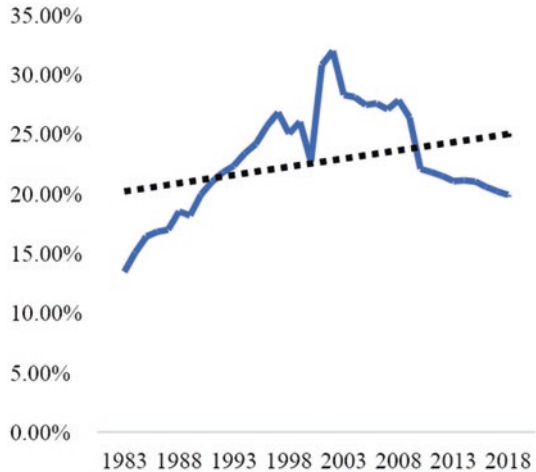
### CAUSES AND ANALYSIS

Over the last decade, the poor export performance has become a product of depleting performance of Indonesia’s manufacturing industries. These industries have a major role in Indonesia’s exports besides the primary commodities. Alas, export had experienced a negative year-on-year (YOY) growth. This officially brings the country over to the third quarter of 2020; investment has otherwise slumped. After experiencing a negative YOY growth of -7.32% in the second quarter, investment plunged further in the third quarter with a YOY growth of -10.77%.

Some of the main sectors that have high multiplier effect such as manufacturing, transportation, as well as retail and trade have been the hardest hit. Even though these sectors started to recover in the third quarter, their growth in the second quarter was one of the worst. Indonesia’s economic growth in 2021 was projected to be ranging from 3.46% (pessimistic), to 4.8% (moderate) and then to 6% (optimistic) due to the baseline effect.

Nevertheless, Indonesia has been experiencing a persistent deindustrialization since early 2000s, as shown in Fig. 1.2. A similar situation also seems to have occurred in terms of Indonesia’s manufacturing export

**Fig. 1.2** Manufacture sector value-added (%GDP). (Source: Statistics Indonesia and World Bank)



performance. After a strong share of export domination within the period of early 1990s to mid-2000s, the share of export contribution from manufacturing sector fell behind raw commodities and tended to show a negative trend (Wihardja, 2016). That phenomenon is believed to have been occurred due to the impact of commodity boom during 2001–2013. Measures over the last five years have naturally restrained domestic demand. But sluggish exports, thanks to the premature deindustrialization, have been compromising every effort to curb the current account deficit. Fortunately, personal consumption remained buoyant amid the heavy external pressure. But it is important to note that the consumption growth is somewhat below average.

The key strategy lies on how we can leverage the manufacturing sector contribution to the economy. According to Rodrik (2013), manufacturing sector is a mode of growth for developing countries that could help them achieve convergence, due to positive correlation between sector growth and productivity. From this standpoint, it is important for Indonesia to clearly utilize its manufacturing sector, especially with its current position as a middle-income country that needs to prepare itself in order to escape from the middle-income trap problem. Productive growth through manufacturing sector is what Indonesia needs to achieve, instead of service sector that seemed to be more productive, but only valid if the country already has a strong human capital endowment.



## FUTURE EXPECTATIONS AND IMPLICATION

Despite job expansions, the situation of informal employment—often known as jobs with low productivity and income and unsafe work practices—has not changed. Job opportunities for young people (aged 15–24) are still underdeveloped. This youth unemployment is somewhat staggering since its ratio to the total employment is quite dominant (62%). Moreover, with the current rate of income-per capita growth (3.9%), escaping from the middle-income trap is somewhat far-reaching. We need at least 6 to 7% of income per capita growth (Hardiana & Hastiadi, 2019) in order to be classified as one the high-income countries. Considering the period of demographic bonus, we will lose the momentum if the government still sees this as business as usual.

Manufacturing sector could provide a smoother structural work transformation (Szirmai, 2012) compared to service sector, since it enables a relatively easier transition for low-skilled labor from agricultural sector to adapt and participate in manufacturing sector. One might argue that the penetration of information technology (IT) could help a country to directly leap from agriculture economy to service-driven economy. Technological transfer is arguably the most important feature from manufacturing sector that each economy needs to pursue. By obtaining technology from more advanced economies through foreign direct investment (FDI), developing economies could absorb any important features of specific industry that they will develop and might become their comparative advantages in the future or strengthening their comparative advantages (Krugman, 1979). Although the concept of technological transfer sounds harmful for advanced economies, it is conspicuous that several countries successfully build their strong economy based on the foundation of technological transfer, such as Thailand, Vietnam, and, most notably, China (Archibugi & Pietrobelli, 2003). Therefore, despite Indonesia's immense and comfortable economic growth since past decades, it is believed that by developing and maximizing potential from manufacturing sector, Indonesia could provide a more sustainable and inclusive economic growth. Improvement in terms of Indonesia's human capital could also be obtained through technological transfer. From this scheme, it is believed that Indonesia's manufacturing sector could be developed due to knowledge obtained from foreign firms that invested in Indonesia and much better equipped workers to participate in this sector. In order to achieve a strong manufacturing sector, defining problems that hinder the