ERIA Discussion Paper Series

No. 420

Indonesia's Local Content Requirements: An Assessment on Consistency with Free Trade Agreement Commitments*

Oscar FERNANDO

World Trade Organization

Lili Yan ING

Economic Research Institute for ASEAN and East Asia (ERIA)

February 2022

Abstract: Local content requirements (LCRs) are one of several economic instruments used by governments to protect infant domestic industries or to generate employment. Indonesia has LCR policies in several sectors. However, LCRs are often inconsistent with a country's World Trade Organization commitments. Additionally, free trade agreements could also have provisions that regulate LCRs. This paper assesses whether Indonesia's free trade agreements have provisions on LCRs, and whether its regulations are consistent with them.

Keywords: Local Content Requirements, WTO, FTA, East Asia, Indonesia

JEL Classification: F1, F13, F15

_

^{*} The view expressed here are authors and do not represent any of the WTO Secretariat or Member Countries, or ERIA.

1. Introduction

International trade today enjoys very low tariffs following the success of the multilateral trading system. Additionally, the global economy is also supported by free trade agreements, and trends suggest that countries are active in signing them. The World Trade Organization (WTO) has recorded 350 active regional trade agreements as of 15 October 2021, compared to 1995, when the number was just 57 (WTO, 2021).

As tariffs are low, governments resort to non-tariff measures (NTMs) to protect domestic industry. There are many types of NTMs, such as customs procedures, application of certain standards, subsidies, quantitative restrictions, and local content requirements (LCRs). It is important to note that not all NTMs are bad; many have legitimate objectives, such as protecting human life, safety, and health, or protecting the environment. However, NTMs can be crafted in a way to be a disguised restriction or to constitute an arbitrary and unjustifiable discrimination. In these cases, NTMs not only disturb international trade, but also potentially negatively impact consumers.

Following the Great Recession in 2008, LCRs began regaining popularity. Governments normally adopt LCR policies with the objective to create jobs instantly at home or to nurture infant industries. However, in most cases, LCRs actually reduce efficiency and could be inconsistent with a country's commitments in trade agreements. LCRs are not a new policy for Indonesia; in the 1990s, it introduced the 'National Car Programme' through some laws and regulations. These measures were challenged at the WTO in 1996, which found some inconsistencies with Indonesia's commitments.

Indonesia today still utilises LCRs to promote certain industries, such as manufacturing, automotive, pharmacies, telecommunication, and electric vehicles. Section 2 outlines Indonesia's free trade agreement (FTA) regime. Section 3 reviews Indonesia's LCR policies and regulations, and Section 4 assesses their alignment with its FTAs. Section 5 reviews LCR policies in other countries, particularly in East Asia. Section 6 concludes and offers policy recommendations.

2. Indonesia's FTA Regime

Indonesia currently has 16 FTAs and comprehensive economic partnerships (CEPs). Of these, 13 remain active, while the other three have been signed but have not yet entered into force. Indonesia is a member of the Association of Southeast Asia Nations (ASEAN); therefore, all FTAs in that context also apply to Indonesia. Table 1 lists the FTAs and CEPs that have been signed by Indonesia and are currently in force.

Beyond the 16 agreements included in Table 1, Indonesia is currently also in the process of negotiating an FTA with the European Union and is exploring the possibility to have trade agreements with other economies, including Canada, the Eurasian Economic Union, Kenya, Morocco, and South Africa.

Many literatures provide detailed study on economic impact of these FTAs to Indonesia's trade and investment, which mostly indicate positive linkages between FTAs and Indonesia's economy. A study by Damuri and Sudjito (2013) suggested that there was significant increase in the total trade between Indonesia and its partners (ASEAN member states, Japan, and China) after the respective FTAs entered into force. This study also suggested that Indonesia's exports to its FTA partners increased to US\$121.2 billion in 2012 from US\$25.8 billion in 1996. Foreign direct investment (FDI) inflows from Japan increased from around US\$1.37 billion in 2008 to US\$4.71 billion in 2013, while inflows from Republic of Korea (henceforth, Korea) increased from US\$301 million in 2008 to US\$2.2 billion in 2013 (Statistics Indonesia). A positive trend is also found from Australia and New Zealand, albeit in fluctuating numbers, with the FDI from Australia increasing from around US\$239 million in 2010 to US\$685 million in 2014, and FDI from New Zealand increasing from around US\$3 million in 2010 to US\$17.6 million in 2014.

A study by Cali et al. (2019) estimates that by 2030, the Indonesia–European Union Comprehensive Economic Partnership Agreement (I-EU CEPA) will increase Indonesia's accumulated GDP by 9.14%, while the Regional Comprehensive Economic Partnership (RCEP) will increase Indonesia's GDP by 0.4%. It also estimates that exports and imports will increase around 13% and 2.7% from the I-EU CEPA and the RCEP, respectively.

Table 1. List of Indonesia's FTAs

No	Agreement	Partner(s)	Status
1.	ASEAN Trade in Goods	ASEAN Member States	In force since 2010
	Agreement ¹		
2.	ASEAN–Australia–New	ASEAN Member	In force since 2010
	Zealand Free Trade Area	States, Australia, New	
	Agreement (AANZFTA)	Zealand	
3.	ASEAN – Hong Kong, China	ASEAN Member	In force since 2019
	Free Trade Agreement	States, Hong Kong,	
	(AHKFTA)	China	
4.	ASEAN – China Free Trade	ASEAN Member	In force since 2005
	Agreement (ACFTA)	States, China	
5.	ASEAN – India Free Trade	ASEAN Member	In force since 2010
	Agreement (AIFTA)	States, India	
6.	ASEAN – Japan Comprehensive	ASEAN Member	In force since 2008
	Economic Partnership (AJCEP)	States, Japan	
7.	ASEAN – Korea Free Trade	ASEAN Member	In force since 2007
	Agreement (AKFTA)	States, Korea	
8.	Indonesia – Australia	Australia	In force since 2020
	Comprehensive Economic		
	Partnership (IA-CEPA)		
9.	Indonesia – Chile	Chile	In force since 2019
	Comprehensive Economic		
	Partnership Agreement		
10.	Indonesia – Pakistan Free Trade	Pakistan	In force since 2013
	Agreement		
11.	Preferential Tariff Arrangement	Bangladesh, Egypt,	In force since 2011
	- Group of Eight Developing	Iran, Malaysia, Nigeria,	
	Countries	Pakistan, Turkey	

_

 $^{^{1}}$ For the purpose of analysis in this paper, the ASEAN Comprehensive Investment Agreement and its subsequent amendments will be assessed in parallel with the ASEAN Trade in Goods Agreement.

12.	Indonesia – Japan Economic	Japan	In force since 2008
	Partnership Agreement (IJEPA)		
13.	Indonesia – European Free	Iceland, Liechtenstein,	In force since 2021
	Trade Association Free Trade	Norway, Switzerland	
	Agreement		
14.	Indonesia – Mozambique Free	Mozambique	Signed in 2019, not
	Trade Agreement		yet in effect
15.	Indonesia – Korea Free Trade	Korea	Signed in 2020, not
	Agreement		yet in effect
16.	Regional Comprehensive	ASEAN Member	Will enter into
	Economic Partnership (RCEP)	States, Australia, China,	force 1 January
		Japan, Korea, New	2022
		Zealand	

ASEAN = Association of Southeast Asian Nations, FTA = free trade agreement.

Notes: The subsequent protocols or amendments of the FTAs identified in the table are not listed.

They are, however, used for analysis in this paper.

Source: The Asian Development Bank (https://aric.adb.org/database/fta [accessed 9 November 2021]) and Indonesia's Ministry of Trade's website

(http://ditjenppi.kemendag.go.id/index.php/bilateral/fta-pta-cepa [accessed 9 November 2021]).

3. Indonesia's LCR Policies and Regulations

LCR policies regained popularity after the Great Recession in 2008. The Organisation for Economic Co-operation and Development (OECD) identified 146 new LCR measures since the Great Recession through 2015. In terms of characteristics of imposing countries, the OECD found that, of the 146 LCR measures, around 58% are imposed by countries with gross domestic product (GDP) of more than US\$800 billion, while 54% of these measures are imposed by countries with more than 100 million population. This suggests that large economies tend to believe that their domestic markets are attractive enough for certain industries or firms to change their methods of production and develop a local industry (Stone, Messent, and Flaig, 2015).

This section focuses on LCR regulations that target specific sectors and confer certain benefits. Regulations that are related to LCRs, but in the context of government procurement, will not be assessed in detail because Indonesia does not currently have market access commitments on government procurement under the WTO or any FTAs. Additionally, regulations on technical guidelines in the methodology to calculate the percentage of local content will not be discussed in detail because they do not contain requirements or offer certain benefits.

The current LCR regime in Indonesia can be traced back to 2006 when the government introduced Minister of Industry Regulation No. 10 of 2006 Regarding the Use of Domestic Production Machineries to Obtain Facilities on Import Duties for Goods and Materials. Indonesia's efforts to implement the LCR regulations were reinforced in 2018 when President Joko Widodo issued Presidential Decision No. 24 of 2018 Regarding the National Team on Increased Use of Domestic Product. This team is tasked to monitor, supervise, evaluate, and promote the use of domestic products. A similar ambition is also reflected in the Strategic Plan of the Ministry of Industry 2020–2024, which sets 13 strategic objectives (*Sasaran Strategi*–SS) based on stakeholders, consumers, internal processes, and learning and growth perspectives. The SS-3 aims to increase capability of local industry with the following indicators:

- a. The target of local content (weighted average), which is 49% in 2020, will be 53% in 2024.
- b. The target of local content in government procurement (goods and services), which is 46.63% in 2020, will be 52.48% in 2024.
- c. Products that are certified to have $\geq 25\%$, which is targeted to be 6,200 products in 2020, will be 8,400 products in 2024.
- d. The percentage of *Standard Nasional Indonesia* in industries was set to 5% in 2020, and will be 20% in 2024.

In general, Indonesia's laws and regulations on LCRs can be categorised into several groups. The first is those that only deal with government procurement, such as i) Law No. 3 of 2014 on Industry; ii) Presidential Decree No. 16 of 2018, which is amended by Presidential Decree No. 12 of 2021 on Government Procurement for Goods and Services; iii) Minister of Industry Regulation No. 48 of 2010 on

Guidelines on Utilization of Domestic Products in Development of Electricity Infrastructure; iv) Minister of Industry Regulations No. 16 of 2020 on Provisions and Procedures of Local Content Calculation for Pharmaceutical Products; and v) Government Regulation No. 29 of 2018 on Industry Empowerment. These regulations might be useful for companies as guidelines to calculate the percentage of local content, if they want to participate in government procurement activities.

The second group is those that are related to LCRs, but do not necessarily require the use of domestic products to conduct business or to obtain certain benefits. Some of these regulations are: i) Presidential Decree No. 146 of 2015 on Construction and Development of Oil Refinery, which only encourages this sector to prioritise domestic products; and ii) Minister of Trade Regulation No. 71 of 2019 on Operation of Franchises, which encourages franchise businesses to prioritise domestic products.

The third group is those that calculate local content for certain products, without requiring those products to use it. Some examples of these regulations are: i) Minister of Industry Regulation No. 29 of 2017 on Procedures to Calculate Local Content of Cell Phones, Laptops, and Tablet Computers; ii) Minister of Industry Regulation No. 22 of 2020 on Procedures to Calculate Local Content on Electronics and Telematics Products; and iii) Minister of Industry Regulation No. 27 of 2020 on Specification, Roadmap for Development, and Calculation of Local Content for Battery Electric Vehicles.

The fourth group is those that require the use of local content or domestic products to conduct business, or those that provide certain benefits or incentives if local content or domestic products are used. These regulations would be the ones relevant to Indonesia's FTA commitments. Table 2 provides the list of Indonesia's LCR regulations that fall under this group.

Table 2. List of Indonesia's Local Content Requirement Regulations
Relevant to Indonesia's Free Trade Agreement Commitments

NT	D 14	Local Content	D 64 C 4 1	Covered
No	Regulation	Requirements	Benefits Granted	Sector(s)
1.	Minister of	Minimum 30% local	Requirement for	Tele-
	Communication and	content for	wireless broadband	communication
	Information	"subscriber station"	services in Indonesia.	
	Regulation No. 7 of	and minimum 40%	There are no additional	
	2009 concerning	local content for	benefits.	
	Radio Frequency Band	"base station". The		
	Setup for Wireless	requirement is		
	Broadband Services	increased to 50%		
		within 5 years.		
2.	Minister of Industry	Certain percentage	Requirement to be able	Energy
	Regulation No. 54 of	of local content for	to construct power	
	2012 on Guidelines in	construction of	plants. There are no	
	Utilizing Domestic	power plants.	additional benefits.	
	Products for			
	Construction of			
	Infrastructure on			
	Electricity			
3.	Minister of Trade	Requirement for	Requirement to	Food and
	Regulation No. 7 of	food and beverage	operate the franchise.	Beverage
	2013 concerning	franchises to source	There are no additional	
	Development of	80% of their raw	benefits.	
	Partnership for Food	materials and		
	and Beverages	equipment		
	Franchises	domestically.		
4.	Minister of	Requirement for	Requirement for the	Tele-
	Communication and	digital television	device to be traded or	communication
	Information	receiver device (set-	used in Indonesia.	
	Regulation No. 32 of	top-box) to have	There are no additional	
	2013 concerning	minimum 20% local	benefits.	
	Operation of Digital	content. The		

N.T.	Dogulation	Local Content	D	Covered
No	Regulation	Requirements	Benefits Granted	Sector(s)
	Television and	requirement is		
	Multiplexing	increased to 50%		
	Broadcasting through	within 5 years.		
	the Terrestrial System			
5.	Minister of Energy and	• Requirement to use	Businesses will be	Energy
	Natural Resources	certain percentage	accorded with ranks	
	Regulation No. 15 of	of domestic	based on compliance	
	2013 concerning the	products and	and will be fined for	
	Use of Domestic	services in	non-compliance.	
	Products in Upstream	upstream oil and		
	Oil and Gas	gas businesses.		
	Businesses	• Price preference		
		for domestic		
		products.		
6.	Minister of	Minimum 30% local	Requirement for	Tele-
	Communication and	content for "base	telecommunication	communication
	Information	station" and	devices with LTE	
	Regulation No. 27 of	minimum 20% local	technology to be	
	2015 on Technical	content for	allowed to be traded or	
	Requirements for	"subscriber station".	used in Indonesia.	
	Telecommunication	The requirement	There are no additional	
	Devices with LTE	increased in 2017	benefits.	
	Technology	and 2019.		
7.	Minister of Industry	Minimum 40% local	Requirement for	Energy
	Regulation No. 15 of	content for	transmission towers	
	2016 on Technical and	transmission tower	and conductors in	
	Price Standards for	and conductor	Indonesia. There are	
	Domestic		no additional benefits.	
	Transmission Tower			
	and Conductor in			
	Relation to			
	Acceleration of			

No	Regulation	Local Content Requirements	Benefits Granted	Covered Sector(s)
	Development of			
	Infrastructure on			
	Electricity, as			
	amended by Minister			
	of Industry Regulation			
	No 6 of 2018, and			
	Minister of Industry			
	Regulation No. 24 of			
	2020			
8.	Minister of	Requirement for	Requirement for the	Tele-
	Communication and	Internet Protocol	device to be used in	communication
	Information	Set-Top-Box to have	Indonesia. There are	
	Regulation No. 6 of	minimum 20% local	no additional benefits.	
	2017 concerning	content. This		
	Operation of Internet	requirement is		
	Protocol Television	increased to 50% in		
	Services	5 years.		
9.	Minister of Industry	The import of certain	To secure approval for	Automotive
	Regulation No. 34 of	vehicles using IKD	IKD import and to	
	2017 on 4-Wheeled or	scheme should use	obtain preferential	
	more Automotive	local components	import tariffs.	
	Industry, as amended	within 5 years at the		
	by Minister of Industry	latest since the date		
	Regulation No. 5 of	of approval.		
	2018, and as replaced			
	by Minister of Industry			
	Regulation No. 23 of			
	2021			
10.	Head of Investment	Minimum 30% local	• Incentives on	Investment
	Coordinating Board	content in the	importation of goods	
	Regulation No. 6 of	machines used for	and raw materials	
	2018 on Guidelines	production	for 4 years	
	regarding Investment			

NI.	D	Local Content	D 6"4 C 4 1	Covered
No	Regulation	Requirements	Benefits Granted	Sector(s)
	Approval and		• Extension of	
	Facilitation		incentives of up to 4	
			years	
11.	Presidential	Requirement to	Fiscal and non-fiscal	Electric Vehicle
	Regulation No. 55 of	produce BEV with	incentives for	
	2019 on Acceleration	certain percentage of	compliance, including:	
	of Battery Electric	local content.	• import duty	
	Vehicle for Road	2- to 3-wheel	incentives for BEV	
	Transportation	vehicle:	that are imported	
	Program	→ 2019–23: 40%	using CKD and IKD	
		→ 2024–25: 60%	scheme, and	
		→ 2026–onwards:	imported	
		80%	components during	
		4-wheel vehicle	certain period;	
		→ 2019–21: 35%	• incentives for sales	
		→ 2022–23: 40%	tax on luxury goods;	
		→ 2024–29: 60%	• exemption or	
		→ 2030–onwards:	reduction of	
		80%	central/regional	
			taxes;	
			• suspension of import	
			duties for export	
			purposes;	
			• export financing	
			incentives;	
			• exemption from	
			certain road	
			restriction; and	
			• right for production	
			in the case of BEV	
			technology patent is	
			owned by central	
			owned by central	

NT.	D 1.4.	Local Content	D C4 . C 4 . 1	Covered
No	Regulation	Requirements	Benefits Granted	Sector(s)
			and/or regional	
			government.	
12.	Minister of	Minimum 20% local	Requirement for	Tele-
	Communication and	content for	broadcasting devices	communication
	Information	broadcasting devices	to be allowed to be	
	Regulation No. 4 of	and internet protocol	traded or used in	
	2019 on Technical	set top box	Indonesia. There are	
	Requirements for		no additional benefits.	
	Telecommunication			
	Devices for Television			
	and Radio			
	Broadcasting			
13.	Minister of	Requirement for	Requirement for	Tele-
	Communication and	telecommunication	telecommunication	communication
	Information	operators to meet	operators. There are no	
	Regulation No. 12 of	certain level of local	additional benefits.	
	2019 concerning	content in their		
	Procedure for	capital and		
	Assessing	operational		
	Achievement of	expenditures		
	Domestic Component			
	in Capital and			
	Operational			
	Expenditure of			
	Telecommunications			
	Operator			

BEV = Battery Electric Vehicles, CKD = Completely Knocked Down, IKD = Incomplete Knocked Down, LTE = Long-Term Evolution.

Note: This table cover regulations between 2000–20. It does not include laws or regulations on procedural and administrative matters, such as Presidential Decree on the Establishment of National Team on Increased Use of Domestic Product, methodology to calculate the local content on certain products, or technical guidelines on government procurement activities.

Source: Authors.

4. Consistency of Indonesia's LCR Policies with Its Commitments in FTAs

LCR policies are complex; therefore, there are some disciplines under international trade law that concern them. The framework of the WTO concerns four Agreements, which will be elaborated below. This is relevant for Indonesia's FTA commitments because some of them incorporate or refer to the relevant provisions from the WTO Agreements.

Previous disputes in the WTO suggest that different Agreements look at different aspects of LCRs. Therefore, the same LCRs can be subject to multiple WTO rules. For example, the Panel in the *Indonesia – Autos (WT/DS54/R; WT/DS55/R; WT/DS59/R; WT/DS64/R)* case, stated that Article III of the General Agreement on Tariffs and Trade (GATT) prohibits discrimination between domestic and imported products while the Agreement on Subsidies and Countervailing Measures (ASCM) regulates the provision of subsidies to enterprises. Similarly, the Trade-Related Investment Measures (TRIMs) Agreement and the ASCM target different aspects of LCRs. In the case of the ASCM, what is prohibited is the grant of a subsidy contingent on use of domestic goods, not the requirement to use domestic goods as such. In the case of the TRIMs Agreement, what is prohibited are TRIMs in the form of LCRs, not the grant of an advantage, such as a subsidy. Similarly, in the context of FTAs, one LCR regulation can be subject to multiple provisions.

The General Agreement on Tariffs and Trade

As LCR policies essentially provide preference for domestic products over imported products, this concerns the 'National Treatment' provision stipulated under Article III. Paragraph 4 of Article III of the GATT requires imported products to be treated no less favourably compared with domestic products with respect to laws and regulations affecting their sale or use. Some authors also argue that paragraphs 1, 5, and 8 are related to LCR policies (Weiss, 2016).

The Agreement on Trade-Related Investment Measures

TRIMs cover investment between WTO members in the area of trade in goods, but not services. Article II of the TRIMs Agreement stipulates that no WTO Members shall apply any trade-related investment measures that are inconsistent with Article III of the GATT.

This article also provides an illustrative list of measures that are inconsistent with Article III of the GATT. Relevant parts of paragraph 1 of the illustrative list provide:

- 1. TRIMs that are inconsistent with the obligation of national treatment provided for in paragraph 4 of Article III of GATT 1994 include those which are mandatory or enforceable under domestic law or under administrative rulings, or compliance with which is necessary to obtain an advantage, and which require:
 - (a) the purchase or use by an enterprise of products of domestic origin or from any domestic source, whether specified in terms of particular products, in terms of volume or value of products, or in terms of a proportion of volume or value of its local production.

The Agreement on Subsidies and Countervailing Measures

Article 3 of the ASCM prohibits export subsidies and local content subsidies because they are designed to directly affect trade and thus are most likely to have adverse effects on the interests of other Members. Article 1 of the ASCM defines subsidies, which is a financial contribution or price support by a government that confers a benefit. Considering that some LCR regulations provide certain types of benefits to firms that comply with them, these could also be considered as subsidies.

The Agreement on Government Procurement

The Agreement on Government Procurement (GPA) is currently a Plurilateral Agreement in the WTO, which means that it applies only to Members who ratify it. One of the general principles provided in Article IV of the GPA is non-discrimination, where GPA Parties must ensure that domestic goods, services, and suppliers are treated equally in 'covered government procurement'. However, since Indonesia is not a party to the GPA, this obligation does not apply to it.

4.1. Relevant Provisions in Indonesia's FTAs

Indonesia currently has 16 FTAs, 13 of which are in effect, while three are still pending ratification. Table 3 lists the provisions from these agreements that are relevant to LCRs.

In Indonesia's FTAs, the disciplines of National Treatment pertain to Article III of the GATT. This approach would mean that if a regulation is found to be inconsistent with Article III, it is also inconsistent with the relevant provisions in the FTAs. With regard to ASCM provisions, Indonesia's FTAs generally reaffirm the stipulated rights and obligations of countries. However, the discipline on 'prohibition of performance requirements' in some of Indonesia's FTAs differs from those under the TRIMs Agreement.

With regard to government procurement, the RCEP is the only FTA where Indonesia includes a relevant chapter. However, the commitment in the Government Procurement Chapter of the RCEP Agreement is limited to transparency and cooperation, with no market access commitment. Therefore, Indonesia's LCR regulations related to government procurement are not relevant because Indonesia does not have a correlating commitment in its FTAs.

Indonesia's LCR regulations that do pertain to its FTA commitments are identified in Table 2. In general, these regulations either: 1) require the use of local content or domestic products to conduct business; or 2) provide certain benefits or incentives if local content or domestic products are used.

Table 3. List of Provisions in Indonesia's Trade Agreements that are
Relevant to Local Content Requirements

No.	Agreement	National Treatment	Subsidy and Countervailing Measures	Prohibition of Performance Requirements
1.	ASEAN	Article 6 ^a	Article 87 ^b	Article 7 of
	Comprehensive			ACIA, as
	Investment			amended by 4th
	Agreement (ACIA)			Protocol of ACIA
2.	ASEAN–Australia–	Article 4 ^a of	N/A	Article 5 of
	New Zealand Free	Chapter 2		Investment
	Trade Area			Chapter
	Agreement			
3.	ASEAN – Hong	Article 5 ^a of	Article 1 ^b of	N/A
	Kong, China Free	Chapter 2	Chapter 7	
	Trade Agreement			
4.	ASEAN – China	Article 2 ^a	Article 7 ^b	N/A
	Free Trade			
	Agreement			
5.	ASEAN – India Free	Article 3 ^a	N/A	N/A
	Trade Agreement			
6.	ASEAN – Japan	Article 15 ^a of	N/A	N/A
	Comprehensive	Chapter 2		
	Economic			
	Partnership			
7.	ASEAN – Korea	Article 2 ^a	N/A	Article 6 ^c
	Free Trade			
	Agreement			
8.	Indonesia – Australia	Article 2.4 ^a	N/A	Article 14.6
	Comprehensive			
	Economic			
	Partnership			
9.	Indonesia – Chile	Article 3.3 ^a	Article 8.2 ^b	N/A
	Comprehensive			
	Economic			
	Partnership			
	Agreement			

No. 10.	Agreement Indonesia – Pakistan Free Trade Agreement	National Treatment Article 5 ^a	Subsidy and Countervailing Measures Article 5 ^b	Prohibition of Performance Requirements N/A
11.	Preferential Tariff Arrangement – Group of Eight Developing Countries	Article 8 ^a	Only confirmation that Parties have rights to initiate investigations	N/A
12.	Indonesia – Japan Economic Partnership Agreement	Article 19 ^a	N/A	Article 63°
13.	Indonesia – European Free Trade Association Free Trade Agreement	Article 2.9 ^a	Article 2.14 ^b	N/A
14.	Indonesia – Mozambique Free Trade Agreement	Text not available	Text not available	Text not available
15.	Indonesia – Korea Free Trade Agreement	Text not available	Text not available	Text not available
16.	Regional Comprehensive Economic Partnership (RCEP)	Article 2.3 ^a	Article 7.11 ^b	Article 10.6°

ASEAN = Association of Southeast Asian Nations.

Notes:

Source: Authors' compilation.

a: National Treatment provisions in these Agreements normally are reaffirmation of rights and obligations under General Agreement on Tariffs and Trade 1994 or incorporation of Article III, *mutatis mutandis*.

b: Provisions on subsidies and countervailing measures in these Agreements are reaffirmation of rights and obligations in the Agreement on Subsidies and Countervailing Measures of the World Trade Organization.

c: Performance requirements in these Agreements are a reaffirmation of rights and obligations under Trade-Related Investment Measures or incorporation of relevant provisions.

4.2. Consistency with National Treatment Principle under GATT

The provisions of Article III of the GATT certainly ban LCRs that set a required minimum for the consumption of local goods (Shadikhodjaev, 2018). There are a few paragraphs from Article III that are relevant to LCRs, namely 4, 5, and 8. Paragraph 8, which focuses on government procurement activities, does not concern Indonesia because it does not have market access commitment on government procurement. Paragraphs 4 and 5 of Article III of the GATT 1994 read as follows:

Paragraph 4. The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use. The provisions of this paragraph shall not prevent the application of differential internal transportation charges which are based exclusively on the economic operation of the means of transport and not on the nationality of the product.

Paragraph 5. No contracting party shall establish or maintain any internal quantitative regulation relating to the mixture, processing or use of products in specified amounts or proportions which requires, directly or indirectly, that any specified amount or proportion of any product which is the subject of the regulation must be supplied from domestic sources. Moreover, no contracting party shall otherwise apply internal quantitative regulations in a manner contrary to the principles set forth in paragraph 1.

Paragraph 5 clearly stipulates that WTO members are not allowed to require any specified amount or proportion of any product to be supplied from domestic sources. While paragraph 5 has been cited in 11 disputes in the WTO, there is no decision from the Panel or the Appellate Body. In some of these cases, the Panel and the Appellate Body decided that they have made the findings that are necessary for the resolution of the dispute, after making decision for claims under Articles III:2 and III:4.

Paragraph 4 requires WTO members to accord imported products *treatment* no less favourable than that accorded to like products of national origin. In the *United States – Section 337* dispute, the panel found:

A formal difference in treatment between imported and like domestic products is thus neither necessary, nor sufficient, to show a violation of Article III:4. Whether or not imported products are treated 'less favourably' than like domestic products should be assessed instead by examining whether a measure modifies the *conditions of competition* in the relevant market to the detriment of imported products.

This means that treating imported and domestic products differently does not automatically make a regulation inconsistent with Article III:4. However, a measure will be inconsistent with this paragraph if the regulation adversely affects the conditions of competition for the imported products in the relevant market. The Appellate Body in *Brazil – Taxation* said:

The ICT programmes are designed in a manner that creates incentives for the market participants, that is, purchasers of intermediate ICT products, to behave in a manner that has the 'direct practical effect' of treating imported intermediate ICT products less favourably than like domestic intermediate ICT products. In this case, by creating an incentive to purchase incentivized domestic intermediate ICT products in order to be relieved from and/or to face reduced administrative burdens. Accordingly, we agree with the Panel that, 'when faced with a decision to choose', a purchaser, 'under normal circumstances, will prefer to avoid the administrative burden that comes with the payment of the tax' and thus prefer to purchase incentivized domestic intermediate ICT products.

The jurisprudence in the WTO suggests that incentivising businesses to use domestic products would be inconsistent with Article III:4 of the GATT 1994. A number of Indonesia's LCR regulations do provide incentives for using domestic products, for example, Presidential Regulation No. 55 of 2019 on Acceleration of Battery Electric Vehicle for Road Transportation Program and Minister of Industry Regulation No 34 of 2017 on 4-Wheeled or More Automotive Industry. Therefore,

it is likely that these regulations are to be found inconsistent with Indonesia's commitment under Article III:4 of the GATT 1994. Considering the approach in Indonesia's FTAs where the National Treatment principle is often incorporated *mutatis mutandis*, the same legal analysis can be applied, and the same conclusion can be drawn.

4.3. Consistency with Subsidies and Countervailing Measures Provisions

Subsidy and Countervailing Measure (SCM) provisions in Indonesia's FTAs are merely a reaffirmation of rights and obligations of contracting Parties under the WTO's ASCM, as indicated in Table 3. Some FTAs do not even have provisions on SCM. In the RCEP Agreement, there are several procedural provisions for Anti-Dumping and Countervailing Duties, but nothing that will affect Indonesia's rights and obligations under the relevant Agreements in the WTO. Additionally, the Section on Anti-Dumping and Countervailing Duties in the RCEP Agreement is carved out from a dispute settlement.

Indonesia's FTAs make insignificant, if not zero, changes to its rights and obligations under the WTO. It appears that countries have not put subsidy programmes on the table in their Regional Trade Agreement negotiations and thus feel a continuing need for countervailing duties as a weapon to wield against such support (Teh et al., 2007). Another reason that countries, including Indonesia, do not include substantive commitments on SCM is they prefer to address the issue of subsidies using the existing mechanism in the WTO instead of creating another process under the FTAs. Therefore, these FTAs do not create additional obligations or commitments to Indonesia, particularly in terms of LCRs.

4.4. Consistency with Provision on Prohibition of Performance Requirements

Indonesia has six FTAs that have a provision on Prohibition of Performance Requirements in their Investment Chapter, as indicated in Table 3. However, this provision was drafted in a rather simple way in the ASEAN–Australia–New Zealand Free Trade Area Agreement (AANZFTA) and the ASEAN–Korea Free Trade Agreement. Article 6 of ASEAN–Korea Investment Agreement incorporates provisions of the TRIMs Agreement, *mutatis mutandis*. Meanwhile, Article 5 of AANZFTA Investment Chapter provides that:

No Party shall apply in connection with the establishment, acquisition, expansion, management, conduct, operation, or sale or other disposition of an investment of an investor of a Party in its territory any measure which is inconsistent with the Agreement on Trade-Related Investment Measures in Annex 1A to the WTO Agreement.

This approach means that relevant provisions on LCRs in the TRIMs Agreement will apply to Indonesia. As mentioned above, Article 2.1 of the TRIMs Agreement prohibits countries to apply trade-related investment measures that are inconsistent with the provisions of Article III or Article XI of GATT 1994. The jurisprudence in the WTO suggests that, to be inconsistent with this Article, an investment measure must be related to trade. The Panel in *Indonesia-Autos* decided that, to be an investment measure, the regulation does not have to be introduced by the investment body. The Panel found that Indonesia's measures were aimed at encouraging a local manufacturing capability for finished motor vehicles and parts and components. Inherent to this objective is that these measures necessarily have a significant impact on investment in these sectors.

Similarly, the Panel in Canada – Renewable Energy / Feed-in Tariff (FIT) Program found that the 'minimum required domestic content level' in Canada's measure constituted investment measures related to trade in goods within the meaning of Article 1 of the TRIMs Agreement. This is also based on the evidence that one of the aims of the FIT Program and the FIT and microFIT Contracts is to encourage investment in the local production of equipment associated with renewable energy generation in the Province of Ontario. Considering this jurisprudence, Indonesia's LCR regulations can be categorised as investment measures because they aim to develop specific local sectors and to encourage investment in products subject to them.

Indonesia's LCR regulations identified in Table 3 also appear to match the description in paragraph 1(a) of the Illustrative List of TRIMs. These regulations do require the purchase or use of domestic products, either in terms of value or volume. The Panel in *India – Solar Cells* found that TRIMs falling under paragraph 1(a) of the TRIMs Illustrative List are necessarily inconsistent with Article III:4 of

the GATT 1994. Therefore, it is likely that these regulations are to be found inconsistent with Indonesia's commitment under AANZFTA and AKFTA.

The other four FTAs, namely the ACIA, the IJEPA, the IA–CEPA, and the RCEP Agreement, have more elaborated provisions on Prohibition of Performance Requirements, where they share many similarities. Relevant parts of Article 10.6 in the RCEP Agreement provide the following:²

- 1. No Party shall impose or enforce, as a condition for establishment, acquisition, expansion, management, conduct, operation, or sale or other disposition of an investment in its territory of an investor of any other Party, any of the following requirements:
 - (a) (...);
 - (b) to achieve a given level or percentage of domestic contents;
 - (c) to purchase, use, or accord a preference to goods produced in its territory, or to purchase goods from person in its territory;
- 2. No Party shall condition the receipt or continued receipt of an advantage, in connection with the establishment, acquisition, expansion, management, conduct, operation, or sale or other disposition of an investment in its territory of an investor of any other Party on compliance with any of the following requirements:
 - (a) to achieve a given level or percentage of domestic contents;
 - (b) to purchase, use, or accord a preference to goods produced in its territory, or to purchase goods from person in its territory; (....)

These two paragraphs prohibit a Party to the Agreement from requiring investors to achieve a certain level or percentage of domestic content, or to source goods that are produced in its territory, as a condition to do activities enumerated in the chapeau of paragraphs 1 and 2. Similar provisions can also be found in the ACIA, the IJEPA, and the IA–CEPA, with slight variations on what activities are covered in the chapeau of paragraphs 1 and 2.

-

² https://rcepsec.org/wp-content/uploads/2020/11/Chapter-10.pdf.

Indonesia's LCR regulations identified in Table 2 require the two things provided in the above paragraphs. For example, Minister of Communication and Information Regulation No. 27 of 2015 requires all devices with 'long-term evolution' technology in Indonesia to have minimum 30% local content for 'base stations' and a minimum of 20% local content for 'subscriber stations'. There is no jurisprudence from these FTAs that could be used to interpret the meaning of these provisions. However, based on their ordinary meaning, it is likely that Indonesia's LCR regulations inconsistent with these paragraphs.

5. Review of LCR Policies in East Asia and Other Countries

Adoption of LCR policies to develop a specific sector or industry is not uncommon. There are a handful of countries that adopted LCR policies in the past, and their experience could shed some light for Indonesia. Some of these countries abandoned the LCR policies, some were brought to dispute in the WTO, and some were arguably successful.

5.1. Thailand's Automotive Industry

Thailand is one of the countries that adopted LCR policies in the past, with the objective of developing its automotive industry. Warr and Kohpaiboon (2017) explain Thailand's policy environment to develop the automotive industry. Thailand started to encourage domestic production of vehicles in the early 1960s by imposing high import tariffs for 'completely built up' and 'completely knocked down' cars. In 1982, Thailand required all vehicles to have 45% domestic content; this was increased to 54% in 1986. Additionally, Thailand also required foreign manufacturers to operate in joint ventures with domestic partners.

The policies changed in the 1990s for at least three reasons: first, Thailand's commitments under the TRIMs Agreement, the policies of the reform-oriented government, and the Asian Financial Crisis. Second, Thailand's commitment under TRIMs required them to remove restrictions on foreign ownership and the Asian Financial Crisis made foreign investments urgently needed. Third, the currency depreciation also made it more profitable for manufacturers in Thailand to export their products. In 2000, Thailand abolished LCRs for domestically located final

assemblers. The combination of these events and policies became the turning point for Thailand's automotive industry and now it is one of the countries where car manufacturers locate their factories.

Aside from changes in trade policy, public investment in infrastructure also played a big role in the development of Thailand's automotive industry. However, the policy changes are one of the key factors of Thailand's success, considering that its neighbours such as Indonesia and Malaysia, who did not adopt such policies, were left behind.

5.2. China's Automotive Industry

China surpassed the US as the largest automotive market and producer in 2009 based on the data from the Association of Automobile Manufacturers, as cited by the Chinese Embassy to the US (Jie, 2010). However, LCR policies were adopted in China's automotive industry decades ago. Although China had to revise many of its laws and regulations on LCRs, a study by Hufbauer, et al. (2013a) found that they persist through foreign ownership requirements, financing arrangements, and informal government suggestions. The informal administration also means that a WTO challenge would encounter very high evidentiary hurdles.

The study also suggested that Chinese officials use encouragement to transfer technology and use local content instead of formal requirement to foreign companies. However, this creates worry for companies that the encouragement can become obligatory, particularly given the high degree of discretion of Chinese officials when reviewing investment applications or to recommend a Chinese bank loan. The study found that auto prices in China may be 7% higher than they would be with reformed policies and an appreciated exchange rate. However, they also acknowledged that China's automotive policies have accomplished their mission to develop the automotive industry.

5.3. LCRs of Some Countries in the Energy Sector

A study by Silva for the United Nations Conference on Trade and Development (UNCTAD) in 2014 found that several countries had been successful in using LCRs to develop their domestic energy sector. For example, Brazil transformed its state-owned enterprise, Petrobras, into a global energy player by

introducing a policy where contractors are required to purchase local goods and services only when they are competitive on cost and quality with foreign suppliers. Malaysia developed its state oil company, Petronas, by pursuing an aggressive human resources strategy that requires firms under production-sharing contracts to secure equipment, facilities, goods, materials, and services locally unless a waiver is granted. Norway developed its domestic industry by investing in research and development, as well as building strong links between private firms and local academic centres. Norway also gave preference to domestic firms when they were considered competitive. Additionally, companies were required to conduct at least 50% of the research for technology needed to develop prospects in Norway at local institutions.

In the study by UNCTAD, the lesson is that local content requirements must focus on capacity building and value added rather than mere ownership. The golden rule is to give priority to local products and services only when they are competitive in terms of price, quality, and timely availability.

India also used LCRs in developing its solar power industry in the past decade. The Indian Government introduced the Jawaharlal Nehru National Solar Mission in 2010 with the objective to 'establish India as a global leader in solar energy, by creating the policy conditions for its diffusion across the country as quickly as possible.' Under this programme, India purchases solar power generated by developers through a 25-year term contract, with guaranteed rates that are determined by two Indian electricity regulatory commissions. The LCR aspect in this programme is how India imposed domestic content requirements on participating solar power developers. This regulation was challenged by the US at the WTO (WT/DS/456), and it was found to be inconsistent with National Treatment provisions under the GATT and the TRIMs Agreement. However, the programme can be considered relatively successful in developing India's solar industry. A study by the International Renewable Energy Agency in 2018 found that India was producing the world's cheapest solar power. This is due to some

_

 $^{^3}$ https://www.indiascienceandtechnology.gov.in/st-visions/national-mission/jawaharlal-nehrunational-solar-mission-jnnsm

factors, such as low cost of labour, and land certainty, but also the incentives and LCR policy (Karan, 2019).

Many studies have suggested alternatives to LCR policies. A study suggested that creating a business-friendly environment, encouraging corporate social responsibility, expanding training, improving logistics, increasing investment in infrastructure, and imposing tariffs and subsidies could deliver more job creation, impose fewer costs on the economy, and generate more economic growth (Hufbauer et al., 2013b). Another study noted that there are alternatives to LCRs such as the 'lighter touch' of industrial policy measures, exploiting flexibilities under trade agreements, corporate social responsibility, and exploiting the 'water' in the tariffs. However, it is acknowledged that there is no ready-made policy tool that can be applied across the board as a perfect substitute to what are and remain WTO-illegal LCR measures (Sauvé, 2016).

6. Conclusion and Recommendations

Indonesia adopted LCR regulations decades ago. Today, Indonesia still utilises LCR regulations to develop several industries; some of these are questioned by WTO members in the TRIMs Committee (WTO, 2020). These regulations are likely to be found inconsistent with Indonesia's commitment to its FTAs, particularly with regard to the principles of National Treatment and provision on Prohibition of Performance Requirements.

Government procurement is one area where Indonesia has many regulations on LCRs. Unlike regulations for commercial businesses, LCRs in government procurement can still be in Indonesia's toolkit. This is because Indonesia does not have any market access commitment on government procurement in its FTAs, or even in the WTO.

Many countries have used and are using LCR policies. Some of these countries were successful, but some others abandoned the policies. Countries that successfully utilised LCRs share similarity, where they focus on capacity building and value added of their domestic industry, instead of focusing merely on local ownership. Additionally, governments of these countries also invest in research and development, as well as building the human resources. In many of these cases,

preference will only be given to domestic companies or products only if they are competitive in terms of price and quality. Otherwise, affording protection to domestic producers without encouraging them to be competitive would run against the objective of developing competitive domestic industries.

The establishment of the National Team on Increased Use of Domestic Product was a good effort by the Indonesian government to have a coordinated effort in implementing LCRs. This is because LCR regulations can be introduced not only by Ministry of Trade, but also other ministries or agencies, making interagency coordination important. The Ministry of Trade can assess whether the LCR regulations introduced by other ministries or agencies will violate Indonesia's trade commitments. In cases where the LCR regulations are found to potentially violate Indonesia's trade commitments, there should be a calculation of risk and strategy in case there are questions, complaints, or even disputes from other countries.

There are several alternative policy tools available to achieve the same objective of promoting and developing local industries, which are consistent with Indonesia's trade commitments. For example, Indonesia could raise the tariffs to the bound rate for certain products, utilise corporate social responsibility, and using LCRs for government procurement activities. However, it should be noted that the other countries' experience appears to show that there is no single policy that can achieve this objective. A mix of policies to create a business-friendly environment, encourage research and innovation, investment in infrastructure, as well as building the capacity of human resources would be necessary to nurture domestic industries and enhance competitiveness.

References

- Badan Pusat Statistik (BPS) or Statistics Indonesia (2009–2013), Realisasi Investasi Penanaman Modal Luar Negeri Menurut Negara. https://www.bps.go.id/indicator/13/1843/4/realisasi-investasi-penanaman-modal-luar-negeri-menurut-negara.html (accessed 9 November 2021).
- Cali, M., M. Maliszewska, Z. Olekseyuk, and I. Osorio-Rodarte (2019), 'Economic Impact and Distributional Impacts of Free Trade Agreements: The Case of Indonesia', *World Bank Policy Research Working Paper* 9021. Washington, DC: The World Bank.
- Damuri, Y.R., and A. Sudjito (2013), *Trade and Economic Impacts of Indonesia's FTAs: A Quantitative Analysis*. Jakarta: Center for Strategic and International Studies.
- Hufbauer, G., J. Schott, C. Cimino, M. Vieiro, and E. Wada (2013a), *Local Content Requirements: A Global Problem*. Washington, DC: Peterson Institute for International Economics.
- Hufbauer, G., J. Schott, and C. Cimino (2013b). 'A Plurilateral Agreement on Local Content Requirements', In *Building on Bali: A Work Programme for the WTO*, edited by Simon J. Evenett and Alejandro Jara, pp. 133–42. London: Centre for Economic Policy Research.
- Jie, L. (2010), 'Official Data Confirm China as World's Biggest Auto Producer, Consumer, Challenges Remain', Embassy of the People's Republic of China in the United States of America, 11 January. http://www.chinaembassy.org/eng/xw/t650869.htm.
- Karan, M. (2019), 'How India in a Short Period of Time Has Become the Cheapest Producer of Solar Power', *The Economic Times*, 22 July. https://economictimes.indiatimes.com/small-biz/productline/power-generation/how-india-in-a-short-period-of-time-has-become-the-cheapest-producer-of-solar-power/articleshow/70325301.cms?from=mdr.
- Ministry of Industry of the Republic of Indonesia (2020), 'Rencana Stratregis Kementerian Perindustrian Tahun 2020-2024', Kementerian Perindustrian, 8 May. https://kemenperin.go.id/download/24297/Rencana-Strategis-Kementerian-Perindustrian-2020-2024

- Sauvé, P. (2016), 'Life Beyond Local Content: Exploring Alternative Measures of Industry Support in the Context of WTO Accession', *Journal of International Trade* 1(2016), pp.1–28. https://doi.org/10.7892/boris.94430.
- Shadikhodjaev, S. (2018), *Industrial Policy and the World Trade Organization:*Between Legal Constraints and Flexibilities. Cambridge: Cambridge University Press.
- Silva, S. (2014), 'Local Content Requirements and the Green Economy', United Nations Conference on Trade and Development UNCTAD/DITC/TED/2013/7.
- Stone, S., J. Messent, and D. Flaig (2015), 'Emerging Policy Issues: Localisation Barriers to Trade', *OECD Trade Policy Papers*, No. 180, Paris: OECD Publishing. http://dx.doi.org/10.1787/5js1m6v5qd5j-en.
- Teh, R., T.J. Prusa, and M. Budetta (2007), 'Trade Remedy Provisions in Regional Trade Agreements', *WTO Staff Working Paper*, No. ERSD-2007-03. https://www.wto.org/english/res_e/reser_e/ersd200703_e.pdf.
- Warr, P., and A. Kohpaiboon (2017), 'Thailand's Automotive Manufacturing Corridor', *ADB Economics Working Paper Series* No. 519. http://dx.doi.org/10.22617/WPS189284-2.
- Weiss, M. (2016), 'The Role of Local Content Policies in Manufacturing and Mining in Low- and Middle-Income Countries', *United Nations Industrial Development Organization Inclusive and Sustainable Industrial Development Working Paper Series* 19/2016.
- World Trade Organization (2021), RTAs currently in force (by year of entry into force). http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx (accessed 9 November 2021).
- World Trade Organization (2020), 'Members Probe Indonesia's and Russia's Local Content Measures in Investment Committee', https://www.wto.org/english/news_e/news20_e/trim_15sep20_e.htm (accessed 9 November 2021).

ERIA Discussion Paper Series

No.	Author(s)	Title	Year
2021-52	Nobuaki YAMASHITA	Participation in Global Value Chains	January
(no. 419)	and Doan Thi Thanh HA	and Rent Sharing by Small Firms in	2022
		Viet Nam	
2021-51	Huy Hoang NGUYEN	The Nexus between Inward Foreign	January
(no. 418)	and Quang Hoan	Direct Investment and Global Value	2022
	TRUONG	Chains in Developing Countries: A	
		Case Study of Viet Nam	
2021-50	Ayako OBASHI	Overview of Foreign Direct Investment,	January
(no. 417)		Trade, and Global Value Chains in East	2022
		Asia	
2021-49	Lili Yan ING and Juniarto	Local Content Requirements:	January
(no. 416)	James LOSARI	Assessment from Investment Law	2022
2021-48	Lili Yan ING and Yessy	COVID-19: Impacts on Indonesia's	January
(no. 415)	VADILA	Trade	2022
2021-47	Michelle LIMANTA and	Indonesia's Local Content	January
(no. 414)	Lili Yan ING	Requirements: Assessment with WTO	2022
		Rules	
222021-4	6Chin Hee HAHN and Ju	Export Market Survival of Pioneers and	December
(no. 413)	Hyun PYUN	Followers	2021
2021-45	Subash SASIDHARAN	Market Entry, Survival, and Exit of	December
(no. 412)		Firms in the Aftermath of Natural	2021
		Hazard-related Disasters:	
		A Case Study of Indonesian	
		Manufacturing Plants	
2021-44	Arlan BRUCAL and	Market Entry, Survival, and Exit of	December
(no. 411)	Shilpita MATHEWS	Firms in the Aftermath of Natural	2021
		Hazard-related Disasters:	
		A Case Study of Indonesian	
		Manufacturing Plants	
2021-43	Quang Hoan TRUONG	Spillover Effects of Foreign and	December
(no. 410)	and Van Chung DONG	Domestic Exporting Firms on Export	2021
		Decisions of Local Manufacturing	
		Firms: Evidence from Viet Nam	
2021-42	Ernawati PASARIBU,	Spillover Effects of Social and	December
(no. 409)	Puguh B. IRAWAN,	Economic Interactions on COVID-19	2021
		Pandemic Vulnerability Across	
	Yuni WULANSARI, and	Indonesia's Region	
	Robert KURNIAWAN		
2021-41	Samuel NURSAMSU,	Education for All? Assessing the Impact	October
(no. 408)	Wisnu Harti	of Socio-economic Disparity on	2021

	ADIWIJOYO, and Anissa RAHMAWATI	Learning Engagement During the COVID-19 Pandemic in Indonesia	
2021-40 (no. 407)	Yasuyuki TODO, Keita OIKAWA, Masahito AMBASHI, Fukunari KIMURA, and Shujiro URATA	Robustness and Resilience of Supply Chains During the COVID-19 Pandemic: Findings from a Questionnaire Survey on the Supply Chain Links of Firms in ASEAN and India	September 2021
2021-39 (no. 406)	Irlan Adiyatma RUM	Policy Strategies to Strengthen the Travel and Tourism Sectors from the COVID-19 Pandemic Shocks: A Computable General Equilibrium Model for the Indonesian Economy	September 2021
2021-38 (no. 405)	Tadashi ITO	Identifying the Impact of Supply Chain Disruption Caused by COVID-19 on Manufacturing Production in Japan	September 2021
2021-37 (no. 404)	Gyeong Lyeob CHO, Minsuk KIM, and Yun Kyung KIM	The Global Economic Impact of the COVID-19 Pandemic: The Second Wave and Policy Implications	September 2021
2021-36 (no. 403)	VGR Chandran GOVINDARAJU, Neil FOSTER-MCGREGOR, and Evelyn Shyamala DEVADASON	Regulatory Distance, Margins of Trade, and Regional Integration: The Case of the ASEAN+5	September 2021
2021-35 (no. 402)	Norlin KHALID, Muhamad Rias K. V. ZAINUDDIN, Tamat SARMIDI, Sufian JUSOH, Mohd Helmi ALI, and Faliq RAZAK	The Trade Restrictiveness Index and Its Impact on Trade Performance in Selected East Asian Countries	September 2021
2021-34 (no. 401)	Anming ZHANG,	COVID-19, Air Transportation, and International Trade in the ASEAN+5 Region	September 2021
2021-33 (no. 400)	Xiaowen FU, David A. HENSHER, Nicole T. T. SHEN, and Junbiao SU	Aviation Market Development in the New Normal Post the COVID-19 Pandemic: An Analysis of Air Connectivity and Business Travel	September 2021
2021-32 (no. 399)	Farhad TAGHIZADEH- HESARY, Han PHOUMIN, and Ehsan RASOULINEZHAD	COVID-19 and Regional Solutions for Mitigating the Risk of Small and Medium-sized Enterprise Finance in ASEAN Member States	August 2021
2021-31 (no. 398)	Charan SINGH and Pabitra Kumar JENA	Central Banks' Responses to COVID-19 in ASEAN Economies	August 2021

2021-30	Wasim AHMAD,	A Firm-level Analysis of the Impact of	August
(no. 397)		the Coronavirus Outbreak in ASEAN	2021
	CHAHAL, and Shirin		
	RAIS		
2021-29		oThe EU–China Comprehensive	August
(no. 396)	James LOSARI	Agreement on Investment:	2021
		Lessons Learnt for Indonesia	
2021-28	Jane KELSEY	Reconciling Tax and Trade Rules in the	August
(no. 395)		Digitalised Economy: Challenges for	2021
		ASEAN and East Asia	
2021-27	Ben SHEPHERD	Effective Rates of Protection in a World	August
(no. 394)		with Non-Tariff Measures and Supply	2021
		Chains: Evidence from ASEAN	
2021-26	Pavel	Technical Barriers to Trade and the	August
(no. 393)	CHAKRABORTHY and	Performance	2021
	Rahul SINGH	of Indian Exporters	
2021-25	Jennifer CHAN	Domestic Tourism as a Pathway to	July 2021
(no. 392)		Revive the Tourism Industry and	
		Business Post the COVID-19 Pandemic	
2021-24	Sarah Y TONG, Yao LI,	Exploring Digital Economic	July 2021
(no. 391)	and Tuan Yuen KONG	Agreements to Promote Digital	
		Connectivity in ASEAN	
2021-23	Christopher FINDLAY,	Feeling the Pulse of Global Value	July 2021
(no. 390)	Hein ROELFSEMA, and	Chains: Air Cargo and COVID-19	
	Niall VAN DE WOUW		
2021-22	Shigeru KIMURA,	Impacts of COVID-19 on the Energy	July 2021
(no. 389)	IKARII Ryohei, and	Demand Situation of East Asia Summit	
	ENDO Seiya	Countries	
2021-21	Lili Yan ING and Grace	East Asian Integration and Its Main	July 2021
(no. 388)	Hadiwidjaja	Challenge:	
		NTMs in Australia, China, India, Japan,	
		Republic of Korea, and New Zealand	
2021-20	Xunpeng SHI, Tsun Se	Economic and Emission Impact of	July 2021
(no. 387)	CHEONG, and Michael	Australia-China Trade Disruption:	
	ZHOU	Implication for Regional Economic	
		Integration	
2021-19	Nobuaki YAMASHITA	Is the COVID-19 Pandemic Recasting	July 2021
(no. 386)	and Kiichiro FUKASAKU	JGlobal Value Chains in East Asia?	
2021-18	Yose Rizal DAMURI et	Tracking the Ups and Downs in	July 2021
(no. 385)	al.	Indonesia's Economic Activity During	-
ŕ		COVID-19 Using Mobility Index:	
		Evidence from Provinces in Java and	
		Bali	

2021-17	Keita OIKAWA,	The Impact of COVID-19 on Business	June 2021
(no. 384)	Yasuyuki TODO,	Activities and Supply Chains in the	
	Masahito AMBASHI,	ASEAN Member States and India	
	Fukunari KIMURA, and		
	Shujiro URATA		
2021-16	Duc Anh DANG and	The Effects of SPSs and TBTs on	June 2021
(no. 383)	Vuong Anh DANG	Innovation: Evidence from Exporting	
		Firms in Viet Nam	
2021-15	Upalat	The Effect of Non-Tariff Measures on	June 2021
(no. 382)	KORWATANASAKUL	Global Value Chain Participation	
	and Youngmin BAEK		
2021-14	Mitsuya ANDO, Kenta	Potential for India's Entry into Factory	June 2021
(no. 381)	YAMANOUCHI, and	Asia: Some Casual Findings from	
	Fukunari KIMURA	International Trade Data	
2021-13	Donny PASARIBU,	How Do Sectoral Employment	June 2021
(no. 380)	Deasy PANE, and Yudi	Structures Affect Mobility during the	
	SUWARNA	COVID-19 Pandemic	
2021-12	Stathis POLYZOS,	COVID-19 Tourism Recovery in the	June 2021
(no. 379)	Anestis FOTIADIS, and	ASEAN and East Asia Region:	
	Aristeidis SAMITAS	Asymmetric Patterns and Implications	
2021-11	Sasiwimon Warunsiri	A 'She-session'? The Impact of	June 2021
(no. 378)	PAWEENAWAT and	COVID-19 on the Labour Market in	
	Lusi LIAO	Thailand	
2021-10	Ayako OBASHI	East Asian Production Networks	June 2021
(no. 377)		Amidst the COVID-19 Shock	
2021-09	Subash SASIDHARAN	The Role of Digitalisation in Shaping	June 2021
(no. 376)	and Ketan REDDY	India's Global Value Chain	
		Participation	
2021-08	Antonio FANELLI	How ASEAN Can Improve Its	May 2021
(no. 375)		Response to the Economic Crisis	
		Generated by the COVID-19 Pandemic:	
		Inputs drawn from a comparative	
		analysis of the ASEAN and EU	
		responses	
2021-07	Hai Anh LA and Riyana	Financial Market Responses to	April 2021
(no. 374)	MIRANTI	Government COVID-19 Pandemic	
		Interventions: Empirical Evidence from	
		South-East and East Asia	
2021-06	Alberto POSSO	Could the COVID-19 Crisis Affect	April 2021
(no. 373)		Remittances and Labour Supply in	
		ASEAN Economies? Macroeconomic	
		Conjectures Based on the SARS	
2021.05	D GHEDHEDD	Epidemic	1 11 2021
2021-05	Ben SHEPHERD	Facilitating Trade in Pharmaceuticals: A	April 2021
(no. 372)		Response to the COVID-19 Pandemic	

2021-04	Aloysius Gunadi BRATA	COVID-19 and Socio-Economic	April 2021
(no. 371)	et al.	Inequalities in Indonesia:	
		A Subnational-level Analysis	
2021-03	Archanun	The Effect of the COVID-19 Pandemic	April 2021
(no. 370)	KOHPAIBOON and	on Global Production Sharing in East	
	Juthathip JONGWANICH	I Asia	
2021-02	Anirudh SHINGAL	COVID-19 and Services Trade in	April 2021
(no. 369)		ASEAN+6: Implications and Estimates	
		from Structural Gravity	
2021-01	Tamat SARMIDI, Norlin	The COVID-19 Pandemic, Air	April 2021
(no. 368)	KHALID, Muhamad Rias	Transport Perturbation, and Sector	
	K. V. ZAINUDDIN, and	Impacts in ASEAN Plus Five: A	
	Sufian JUSOH	Multiregional Input-Output	
		Inoperability Analysis	

ERIA discussion papers from the previous years can be found at: http://www.eria.org/publications/category/discussion-papers