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HIGH TAX BURDEN REDUCES COMPETITIVENESS: A STUDY OF THE COCOA INDUSTRY IN INDONESIA

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ABSTRACT

Introduction: Due to its large production in Indonesia, cocoa beans have the potential to be one of the commodities that can increase state revenue, as they provide higher value-added than unprocessed cocoa beans. Domestic cocoa bean output has not been able to meet the needs of the domestic cocoa processing industry; hence cocoa bean imports have increased year after year. On the other hand, domestic processed cocoa producers must incur a significant tax burden to import cocoa beans. Finally, the total tax paid in the cocoa industry is substantial. It also makes domestic processed cocoa goods unable to compete with imported products. **Background Problems**: This study analyzes the tax policies' effects on the cocoa industry's local-oriented and export-oriented business processes. **Novelty:** This study provides critical insights into a comprehensive overview of tax policy on the processes of the cocoa business, whereas previous studies only addressed tax policies in one area of the cocoa industry, either the upstream, intermediate, or downstream sectors. **Research Methods:** This study applied a qualitative approach and collected the data through a literature study and in-depth interviews. **Results:** The findings revealed that tax policies on the local-oriented and export-oriented business processes of cocoa vary. The export-oriented downstream cocoa industry can utilize the facilities of a bonded zone, where the tax policy differs from that of a non-bonded zone. **Conclusions:** There are differences in the tax policies for cocoa's local and export-oriented business processes. The main issue for the local-oriented business processes is VAT. The imposition of VAT on cocoa beans is ultimately detrimental to farmers.

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INTRODUCTION

Indonesia has a highly strategic location and a tropical climate. Areas with a tropical climate are generally suitable for agriculture (geologinesia.com, 2018). Therefore, Indonesia is also referred to as an agrarian country whose economic activities rely on the agricultural sector. One agricultural commodity contributing to Indonesia's foreign exchange is cocoa, which is included as an estate crop. As its climatic conditions enable Indonesia to cultivate cocoa, it is unsurprising that the total area of cocoa plantations in 2015 reached 1,709,284 hectares (the Ministry of Agriculture, 2016).

This vast area of cocoa plantations allows Indonesia to be the third largest cocoa-producing country in the world, following the Ivory Coast and Ghana (worldatlas.com, 2018). Based on the data from the International Cocoa Organization (ICCO), cocoa beans produced by these three countries made up 67 percent of the worldwide cocoa beans in 2015, as presented in Table 1.

The amount of cocoa beans produced in Indonesia, as displayed in Table 1, means they are one of the export commodities with considerably bright prospects (Susanto, 2007, p. 9), since overseas cocoa processing companies require Indonesian cocoa beans for blending purposes. However, even with the potential to obtain high revenue from the export of cocoa beans, Indonesia continues to suffer losses as the exported cocoa beans are merely raw materials with a lower value-added compared to processed cocoa products, such as chocolate. In recent years, the United States has annually exported chocolate with a value of greater than USD 1 billion (farmfolio.net, 2017). On the other hand, based on the data from the Directorate General of Plantations of the Ministry of Agriculture, the export value of cocoa beans in Indonesia in 2015 was USD 114.98 million (the Ministry of Agriculture, 2016). The value-added obtained by Indonesia is merely 10 percent of that of the United States. It indicates that the value-added to the cocoa commodity is, in reality, enjoyed by cocoa bean processing countries instead of cocoa bean producing countries such as Indonesia.

In order to maintain the availability of domestic cocoa beans, the Indonesian government imposes a tax, in the form of export duty, on the export of cocoa beans. Purwito (2010, p. 45) states that export duty is a tax on the movement of exported goods. The goods traffic tax is levied on the entry and exit of goods into and out of the customs area, and is incurred by

Table 1. Global cocoa beans production in 2015

Country	Total Production (In Thousands of Tons) *	Total Production (%)
Ivory Coast	1,581	39.55%
Ghana	778	19.46%
Indonesia	320	8.01%
Ecuador	232	5.80%
Cameroon	211	5.28%
Nigeria	200	5.00%
Brazil	141	3.53%
Other countries	534	13.37%
Total Global Cocoa Bean Production	3,997	100%

Notes: *the total figure is rounded.
Source: ICCO Quarterly Bulletin of Cocoa Statistics Vol. XLIV, No. 3, processed by the authors (2018)

the users of customs services when the goods cross Indonesian borders. The tax on the movement of goods is also known as a customs duty or a tariff. There are two forms of tariffs, namely import duty and export duty. According to Purwito and Indriani (2015, p. 103), import duty is imposed on imported goods from outside the customs area and is collected by customs officials based on the applicable laws regarding an ad valorem tariff. Conversely, the export duty is a tax on goods that is imposed on exported goods, even though not all exported goods are subject to export duty.

The current tax on exported goods has a regulatory function, serving as an instrument to monitor the implementation of government policies in the economic, monetary, and social fields. The imposition of export duty on the export of cocoa beans is one of the efforts taken by the government to increase the production of the domestic cocoa processing industry by utilizing available domestic raw materials. However, the domestic production of cocoa beans has yet to meet the needs of the domestic cocoa processing industry, leading to an annual increase in the import of cocoa beans. Cocoa beans are subject to tax, in the form of import duty. It is argued that the import duty policy is utilized to protect the start-up or growing domestic industries through educational protection to ensure that the industries can compete, known as infant industry arguments (Rosdiana & Irianto, 2014, p. 73; Suranovic, 2010, p. 529). In addition to the import duty on cocoa beans, domestic processed cocoa producers are obliged to bear a significant tax burden, including value-added tax (from now on referred to as VAT).

VAT is a tax on consumption, classified as an indirect tax collected by taxable entrepreneurs, as stated by Lamensch (2015, p. 11). Rosdiana, Irianto, and Putranti (2011, p. 66) state that VAT is a sales tax collected several times (multiple-stage levies) from value-added actions that arise in all production and distribution lines. Even though VAT is collected on all production and distribution lines, it does not cause a cascade effect due to the tax credit, namely the method of recovering tax paid by taxable entrepreneurs. Thus, the percentage of the tax burden borne by consumers remains equal to the applicable rate (Sukardji, 2009, p. 36).

Terra and Kajus (2011, p. 273) state that VAT is a tax on consumption that is only imposed on the consumption of taxable goods by someone in the country. In this case, the domestic cocoa processing industry bears the brunt of the VAT. The imposition of VAT is increasingly burdensome for the domestic cocoa processing industry, which is currently unable to compete with foreign cocoa processing industries. New small, emerging industries, particularly in developing countries, require protection to compete with old industries in developed countries. Since industries in developed countries have better information and knowledge relating to the production processes, market characteristics, labor, and others, it enables them to continue to generate profit seven when their products are sold at less than the international market prices (Suranovic, 2010, p. 529). Another study by Khan (2001) shows that governments have extensively taxed the sector through price and distribution systems and exports, in order to relocate a large percentage of the agricultural surplus to industry (urban regions) and raise revenue. This approach has slowed agricultural expansion. This study shows ways to directly tax agricultural commodities so that they retain their incentives and equity, and earn significant money.

The domestic production of cocoa beans has not been able to meet the needs of the domestic cocoa processing industry, so imports of cocoa beans have increased every year. On the other hand, to be able to import cocoa beans, domestic processed cocoa producers must pay a significant tax burden. In the end, the total tax incurred in the cocoa industry is 17.5 percent, namely import duty of 5 percent, VAT on imports of 10 percent, and Income Tax Article 22 of 2.5 percent (in-depth interview with Indonesian Cocoa Industry Association, 2019).[1] It also causes domestic processed cocoa products to be unable to compete with processed cocoa products from abroad.

Based on the background above, cocoa is one of the potential commodities that could increase state revenue, mainly if the domestic industry processes the cocoa beans into value-added products. However, the existing applicable tax policies in the upstream and downstream cocoa industries may be an incentive or disincentive. Tax incentives have become a means to encourage investment in start-up companies and a tool for the state to promote its essential businesses and sectors (Juarez & Manrique, 2018, p. 5). In contrast, tax incentives should not be used to overcome deficiencies in the design of tax systems or inadequate physical, financial, legal, or institutional infrastructure (Zolt, 2014, p. 5).

In the case of VAT, Tait (1988, pp. 50-55) suggests two VAT incentives: exemption and zero-rating. Furthermore, Tait (1988, p. 56) states that three justifications are offered for VAT facilities. First, VAT exemption is provided to increase the progressivity of VAT. Second, there are goods and services that, according to Musgrave, are considered "meritorious" or profitable, entitling them to obtain VAT facilities. Third, there is an administrative difficulty in collecting VAT on certain goods and services, thus the better option is to exempt them from tax.

The tax policies should complement each other and not be a disincentive to the development of domestic industries. In addition, the tax policies should be utilized to stimulate export-oriented domestic production with value-added. This study aims to provide an overview and analyze the tax policies on cocoa's local and export-oriented business processes.

To date, there have been limited studies comparing tax policies between the local-oriented and export-oriented business processes in the cocoa industry. In addition, previous studies only discussed tax policies in one part of the cocoa industry, either the upstream, intermediate, or downstream part. This study offers some critical insights into a holistic overview of the cocoa business' processes, to provide input to be considered by policymakers regarding the tax policies on cocoa in Indonesia. The remaining parts of the paper include Section 2, which describes the data, results, and discussions regarding the tax policies for local and export-oriented cocoa processes, and Section 3 provides the conclusions.

TAX POLICIES IN LOCAL AND EXPORT-ORIENTED COCOA BUSINESS PROCESSES

The cocoa business' processes consist of two patterns, namely, a general pattern and a partnership pattern. In the general pattern, the cocoa beans are sold as non-fermented beans,

[1] This study applied a qualitative approach. The data were collected through literature studies and in-depth interviews with various parties, namely: (1) Fiscal Policy Agency, Ministry of Finance, (2) The Directorate General of Customs and Excise, (3) The Directorate General of Taxes, (4) The Ministry of Agriculture, (5) The Ministry of Industry, (6) Associations of cocoa industry namely Indonesian Cocoa Association (Askindo), (AIKI), Indonesian Cocoa Farmers Association (APKAI), Sustainable Cocoa Development Program (SCDP) for European Union, (7) cocoa upstream industries, (8) cocoa processing industries, (9) chocolate-based food/beverage industries, and (10) experts on taxation and agribusiness. Field observation was conducted in Blitar, East Java, to get an overview of cocoa business processes from upstream to downstream.

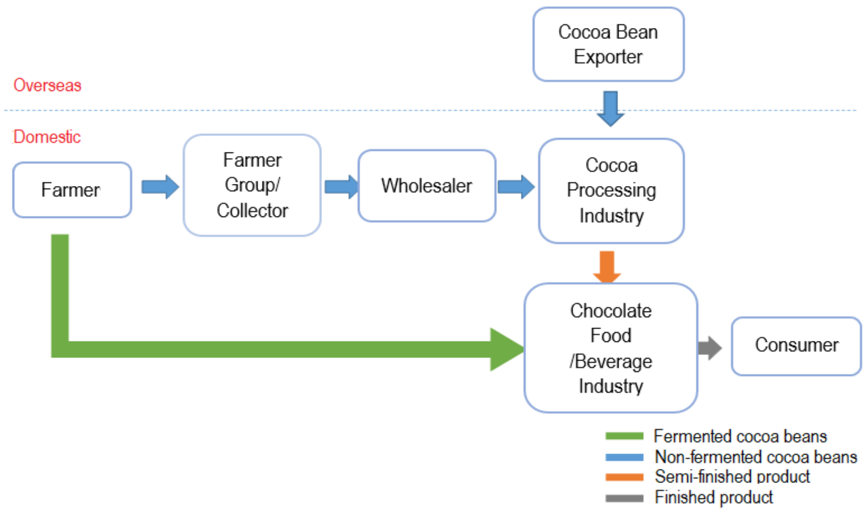
and this business process involves several parties in the upstream, intermediate, and downstream cocoa industries. Non-fermented cocoa beans, obtained from the upstream cocoa industry, are processed into semi-finished cocoa products by the intermediate cocoa industry. Furthermore, the semi-finished cocoa products are then processed by the downstream industry into chocolate-based food/beverage products. On the other hand, in the partnership pattern, farmers sell fermented cocoa beans to the downstream cocoa industry. The cocoa business' processes, both in the general and partnership patterns, are closely related to the tax policy. The analysis of the tax policies of each party is divided into two categories, namely those of local-oriented business processes and export-oriented business processes.

1. Tax Policies on Local-Oriented Cocoa Commodity

Figure 1 illustrates the scheme of the local-oriented business processes, where the processed products from the downstream cocoa industry are sold domestically. There are three schemes for purchasing cocoa beans; their direct purchase from farmers, purchase through wholesalers, and the purchase of imported cocoa beans. The purchase through wholesalers and imports includes the general pattern to obtain non-fermented cocoa beans. The direct purchase from farmers includes a partnership pattern to obtain fermented cocoa beans. The aspects of taxation related to each of the parties in the local-oriented business processes are presented in Table 2.

Following the issuance of the Supreme Court Decree No 70 of 2013, the delivery of cocoa beans is considered to be a delivery of taxable goods, the provisions of which are stipulated in the Circular of the Director General of Taxes No. SE-24/PJ/ 2014. Therefore, the aspect of VAT is inherent in the local-oriented cocoa business' processes. The parties selling/delivering cocoa beans must collect VAT if they are taxable entrepreneurs, or individuals/business entities with a gross circulation of at least IDR4,800,000,000 in one tax year. When collecting VAT, the party selling/delivering the cocoa beans must prepare a tax invoice which

Figure 1. Local-oriented cocoa business processes



Source: Processed by the authors (2019)

Table 2. The scheme of tax imposition for local-oriented cocoa commodity

No	Party	Input		Output		Tax Burden	
1	Farmers (non-taxable entrepreneurs)	Purchase of seeds, fertilizers, etc.	IDR20,000	Non-fermented cocoa beans	IDR23,000	Input VAT	IDR2,000
				Fermented cocoa beans	IDR30,000	Output VAT	-
						Overpaid VAT	IDR2,000
2	Farmersgroups/collectors (non-taxable entrepreneurs)	Non-fermented cocoa beans	IDR23,000	Non-fermented cocoa beans	IDR25,000	Input VAT	-
						Output VAT	-
						Underpaid VAT	-
3	Wholesalers (taxable entrepreneurs)	Non-fermented cocoa beans	IDR25,000	Non-fermented cocoa beans	IDR27,000	Input VAT	-
						Output VAT	IDR2,700
						Underpaid VAT	IDR2,700
						Income Tax Art. 22	IDR67.5
4	Cocoa processing industry	Non-fermented cocoa beans	IDR27,000	Cocoa butter	IDR60,000	Input VAT - Domestic	IDR4,200
		Others	IDR15,000	Cocoa powder	IDR20,000	Input VAT - Import	IDR2,940
		Imported cocoa beans	IDR28,000			Output VAT	IDR8,000
						Underpaid VAT	IDR 860
						Import Duty	IDR1,400
						Income Tax Art. 22 - Import	IDR 735
5	Chocolate food/beverage industry	Fermented cocoa beans	IDR30,000	Chocolate bar (80gr)	IDR55,000	Input VAT	IDR1,500
		Others	IDR15,000			Output VAT	IDR5,500
						Underpaid VAT	IDR4,000
		Cocoa powder	IDR20,000	Chocolate bar (80gr)	IDR45,000	Input VAT	IDR3,500
		Others	IDR15,000			Output VAT	IDR4,500
						Underpaid VAT	IDR1,000

Source: Processed by the authors (2019)

accords with the applicable regulations. From the buyers' perspective, buyers subject to VAT can credit the VAT paid when purchasing cocoa beans (input VAT) as long as they are taxable entrepreneurs and have a tax invoice for purchasing said cocoa beans.

Most cocoa farmers are community farmers, as approximately 97 percent of cocoa plantations are community plantations. The gross circulation or turnover of these community farmers does not reach IDR4,800,000,000. Thus, they are not taxable entrepreneurs. Therefore, farmers cannot collect VAT when selling cocoa beans to farmers'groups/collectors or the chocolate food/beverage industry. On the other hand, farmers are obliged to pay VAT when purchasing seeds, fertilizers, and other items used for cultivating and harvesting cocoa. As presented in Table 2, it is assumed that farmers purchase seeds, fertilizer, etc., worth IDR20,000. Concerning this purchase, farmers are subject to 10 percent VAT, namely IDR2,000. This value is considered a VAT input. However, as they are not taxable entrepreneurs, farmers cannot collect VAT when selling their cocoa beans, hence the non-existent output VAT. As a result, farmers experience overpaid VAT of IDR2,000. The burden of overpaid VAT is charged by reducing the margin obtained due to the existence of the benchmark of the international average price for cocoa beans. Thus, farmers do not have the power to raise the selling price. On the side of the farmers'groups/collectors, there is no tax burden as they purchase and sell cocoa beans without VAT. Afterward, wholesalers (taxable entrepreneurs) purchase cocoa from the farmers'groups/collectors without VAT input. However, when they sell the cocoa beans to the cocoa processing industry, they impose output VAT and issue tax invoices. Based on the illustration in Table 2, the wholesalers will impose an output VAT of IDR2,700. Since there is no VAT input from the farmers' groups/ collectors, the wholesalers should pay VAT to the State Treasury, in the same amount as their output VAT, which is IDR2,700.

On the other hand, the benchmark of the international average cocoa price also puts wholesalers in a difficult position as they cannot necessarily impose VAT on the selling price. This condition induces wholesalers to reduce the purchase price of cocoa beans from the farmers'groups/collectors (non-taxable entrepreneurs), indirectly reducing the VAT burden on the farmers'groups/collectors. However, the farmers'groups/collectors also reduce the purchase price of the cocoa beans they buy from the farmers. In this case, the farmers become the most disadvantaged party. Previously, it was explained that farmers have to bear the overpaid VAT by reducing their price margins. In this regard, a decrease in the price of cocoa beans reduces the income of cocoa farmers. Eventually, the net income obtained by these farmers becomes relatively small. As a consequence, a significant number of cocoa farmers have decided to plant other commodities instead.

The cocoa processing industry will purchase cocoa beans from wholesalers. The material can be purchased from local wholesalers or overseas wholesalers. If they purchase cocoa beans from overseas wholesalers, other charges should be paid by them, namely import duty of five percent, income tax Article 22 on imports of 2.5 percent and import VAT of 10 percent. Based on Table 2 above, the VAT underpayment borne by the cocoa processing industry is the least among all, amounting to IDR860. This is because the cocoa processing industry tends to purchase cocoa beans from wholesalers who are taxable entrepreneurs in order to be able to credit the input VAT.

However, the chocolate food/beverages industry can choose its raw materials, whether in the form of cocoa beans, which are purchased from farmers, or cocoa powder, which is purchased from the cocoa processing industry. It will affect the VAT underpayment of the chocolate food/beverages industry. Based on Table 2, it is shown that the VAT underpayment from using cocoa beans is more significant than the VAT underpayment from using cocoa powder.

The issue of VAT on agricultural commodities is one of the concerns of the agricultural commodity-producing countries. The current VAT system causes farmers to be the disadvantaged party since they are not taxable entrepreneurs with the ability to credit input VAT when purchasing seeds, fertilizers, and other items. Even though the farmers may be confirmed as taxable entrepreneurs, the administrative obligations attached to taxable entrepreneurs are rather complicated; the cost of taxation may be greater than the amount of tax incurred. Therefore, the European Union countries apply several specific VAT schemes on agricultural commodities at reduced rates. Veen et al. (2007) suggest that the imposition of VAT on farmers is frequently different from that imposed on other business actors (Table 3). There is an agricultural agreement scheme in the Netherlands where farmers are fully exempted from VAT. On the other hand, those purchasing agricultural products from farmers are subject to a tariff reduction of 5.1 percent.

Due to the absence of specific VAT schemes on agricultural commodities, the imposition of VAT in Indonesia follows the general VAT scheme. The Ministry of Agriculture proposeda zero percent VAT incentive for three years (in-depth interview with the Directorate of Processing and Marketing of Agricultural Products, 2019). However, the proposal remains unrealized at the time of writing this article.

Table 3. Specific systems for agriculture in European Countries

Country	VAT Agriculture
Netherlands	The agricultural arrangement, fixed-rate reduction of 5.1% for buyers of the products
Belgium	The agricultural arrangement, compensation is 6% above the sale price
Czech Republic	Relief on VAT if their turnover is less than €31,358 (general facility)
Denmark	Small farmers do less VAT returns and payments
France	Fixed system available for small producers. Reimbursement by government
Germany	Fixed arrangement (9% agricultural goods)
Hungary	Fixed arrangement for small-scale producers. A compensatory surcharge of 12% for vegetables and 7% for animal products
Poland	Provision for farmers (5% increase for products bought from farmers)
Spain	Particular system for small farmers, 7%
England	Flat rate addition of 4%

Source: *Veen et al.* (2007)

Table 4. The scheme of zero percent VAT for local-oriented cocoa commodity

No	Party	Input		Output		Tax Burden	
1	Farmers (non-taxable entrepreneurs)	Purchase of seeds, fertilizers, etc.	IDR20,000	Non-fermented cocoa beans	IDR23,000	Input VAT	IDR2,000
				Fermented cocoa beans	IDR30,000	Output VAT	-
						Overpaid VAT	IDR2,000
2	Farmers groups/ collectors (non-taxable entrepreneurs)	Non-fermented cocoa beans	IDR23,000	Non-fermented cocoa beans	IDR25,000	Input VAT	-
						Output VAT	-
						Underpaid VAT	-
3	Wholesalers (taxable entrepreneurs)	Non-fermented cocoa beans	IDR25,000	Non-fermented cocoa beans	IDR27,000	Input VAT	-
						Output VAT	IDR 0
						Underpaid VAT	IDR 0
						Income Tax Art. 22	IDR 67.5
4	Cocoa processing industry	Non-fermented cocoa beans	IDR 0	Cocoa butter	IDR60,000	Input VAT - Domestic	IDR1,500
		Others	IDR15,000	Cocoa powder	IDR20,000	Input VAT - Import	IDR2,940
		Imported cocoa beans	IDR28,000			Output VAT	IDR8,000
						Underpaid VAT	IDR 3,560
						Import Duty	IDR1,400
						Income Tax Art. 22 - Import	IDR 735
5	Chocolate food/beverage industry	Fermented cocoa beans	IDR30,000	Chocolate bar (80gr)	IDR55,000	Input VAT	IDR1,500
		Others	IDR15,000			Output VAT	IDR5,500
						Underpaid VAT	IDR4,000
		Cocoa powder	IDR20,000	Chocolate bar (80gr)	IDR45,000	Input VAT	IDR3,500
		Others	IDR15,000			Output VAT	IDR4,500
						Underpaid VAT	IDR1,000

Source: Processed by the authors (2019)

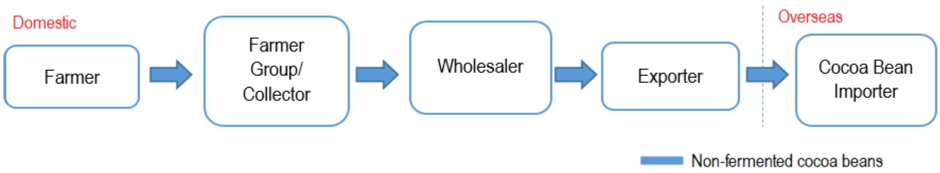
Table 4 illustrates the calculation scheme if a non-collectable VAT incentive is applied to the delivery of cocoa beans. Based on this calculation scheme, the non-collectable VAT policy significantly affects wholesalers. There is no VAT for wholesalers because the output VAT on the delivery of cocoa beans is not payable. If this policy is implemented, wholesalers do not need to pressure farmers' groups to lower the selling price of their cocoa beans. Thus, the farmers' groups and farmers can sell cocoa beans at the desired price margin, while still referring to international prices. The VAT burden previously borne by farmers (by reducing the price margin) can be minimized. In addition, this policy also impacts the cocoa processing industry, where the VAT payable by the cocoa processing industry is more significant than before. The input VAT on the purchase of cocoa beans drops to zero. Thus, the amount of input VAT credited becomes smaller than before.

2. Tax Policies on Export-Oriented Cocoa Commodity

2.1. Tax Policy on the Export of Cocoa Beans

Tax policies for export-oriented cocoa commodities are divided into two categories: the export of processed cocoa beans and the export of cocoa products. They are distinguished due to different aspects of taxation, namely export duty on the exported cocoa beans. Figure 2 displays a chain scheme for the export of cocoa beans involving farmers, farmers' groups/collectors, wholesalers, exporters, and the cocoa bean importers overseas. The aspects of taxation related to each party are presented in Table 5.

Figure 2. Export-oriented cocoa business' processes



Source: Processed by the authors (2019)

Table 5. Tax imposition scheme for the export of cocoa beans

No	Party	Input		Output		Tax Burden	
1	Farmers (non-taxable entrepreneurs)	Purchase of seeds, fertilizers, etc.	IDR20,000	Non-fermented cocoa beans	IDR23,000	Input VAT	IDR2,000
						Output VAT	-
						Overpaid VAT	IDR2,000
2	Farmers groups/collectors (non-taxable entrepreneurs)	Non-fermented cocoa beans	IDR23,000	Non-fermented cocoa beans	IDR25,000	Input VAT	-
						Output VAT	-
						Underpaid VAT	-
3	Wholesalers (taxable entrepreneurs)	Non-fermented cocoa beans	IDR25,000	Non-fermented cocoa beans	IDR27,000	Input VAT	-
						Output VAT	IDR2,700
						Underpaid VAT	IDR2,700
						Income Tax Art. 22	IDR 67.5
4	Exporters	Non-fermented cocoa beans	IDR27,000	Non-fermented cocoa beans	IDR30,000	Input VAT	IDR2,700
						Output VAT	IDR 0
						Overpaid VAT	IDR2,700
						Export Duty	IDR1,500

Source: Processed by the authors (2019)

The export of cocoa beans is subject to export duty, as stipulated in PMK No. 67 of 2010. The export duty on cocoa beans is determined at 0 to 15 percent of the average international price of cocoa beans. Based on the calculation scheme in Table 5, it is assumed that the applicable export duty tariff is five percent; thus, the exporters are required to pay an export duty of IDR1,500. The export duty payable must be paid before exporting the cocoa beans, using the self-assessment method. The imposition of export duty on the export of cocoa beans is one of the efforts taken by the government to carry out its regulatory function so that the downstream cocoa industry may develop and export more than the raw materials, to obtain more value-added. The export duty impacts increasing investment through the establishment of the cocoa processing industry. Juarez and Manrique (2018, p. 5) suggest that one of the objectives of tax incentives is to encourage investment in start-up companies. Thus, it is argued that export duty is one of the tax incentives provided by the government for the development of the downstream cocoa industry.

However, the development of the downstream cocoa industry is not perceived by the upstream cocoa industry due to the decline in cocoa bean production. The majority of the existing cacao plants are old plants with declining productivity. Therefore, rejuvenation is required to produce Indonesian cocoa beans that meet the needs of the domestic downstream industry. The Ministry of Agriculture is currently discussing incentives for the upstream industry in the form of levies used for rejuvenating and replacing old cocoa plants, by allocating or earmarking a certain amount of the revenue obtained from export duties. The earmarking of export duties for the improvement of the upstream industry is challenging to implement, due to the instability of there venue obtained from the export duty, considering the current decline in the export of cocoa beans (in-depth interview with Haula Rosdiana, tax expert, 2019). It is feared that the idea of earmarking revenue from export duties will transform the function of export duties into the function of revenue providers. Related to the issue of cocoa, export duty is imposed on the export of cocoa beans to reduce the exports of the raw material, allowing the cocoa beans to be absorbed by the domestic downstream industry and processed into products with higher value-added. The desire of the government to utilize the revenue obtained from the export duty on cocoa beans as a source of funds means that the government desires great erre venues from the export duty. Greater revenues obtained from the export duty indicate an increase in the exporting of Indonesian cocoa beans. It means that the export duty cannot serve as an instrument to suppress the export of raw materials, leading to the impossibility of achieving higher value-added from cocoa products.

Table 6 shows the calculation scheme if the VAT incentive is not collected and is applied to the delivery of cocoa beans. The policy of not collecting VAT significantly affects wholesalers and exporters. Previously, exporters had to bear overpaid VAT on purchases of cocoa beans from wholesalers. With the non-collected VAT policy, the input VAT on the purchase of cocoa beans is IDR 0, so the VAT owed by exporters becomes zero. This provides an advantage for exporters because they do not need to undergo a tax audit to obtain the overpaid VAT. Exporters' cash flows will be better if this no-collection VAT policy is implemented.

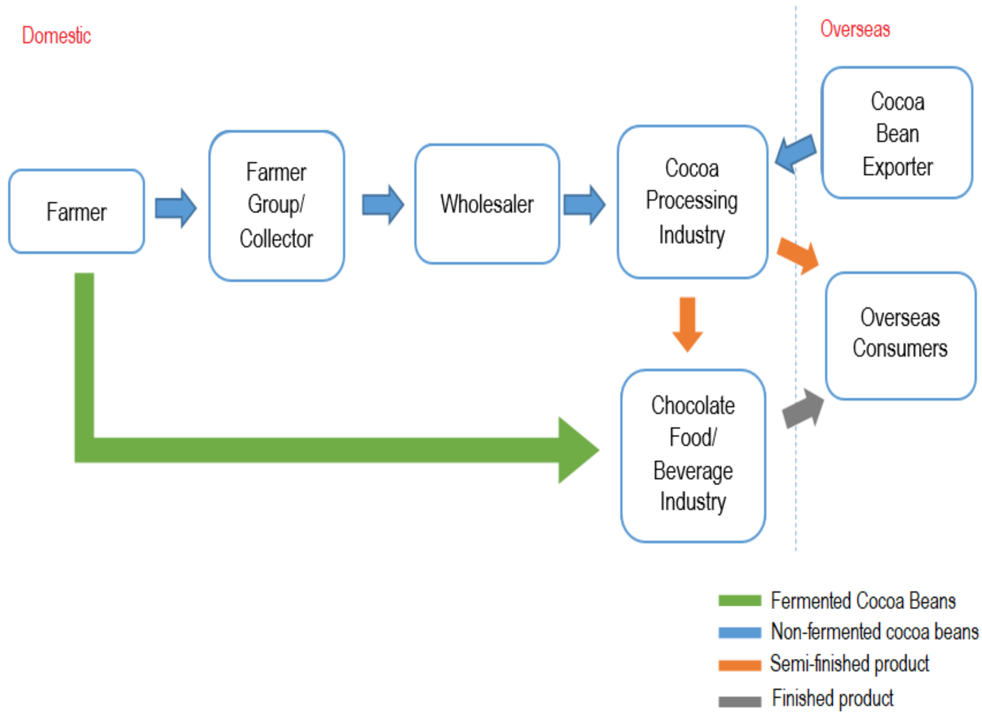
Table 6. The scheme of zero percent VAT for the export of cocoa beans

No	Party	Input		Output		Tax Burden	
1	Farmers (non-taxable entrepreneurs)	Purchase of seeds, fertilizers, etc.	IDR20,000	Non-fermented cocoa beans	IDR23,000	Input VAT	IDR2,000
						Output VAT	-
						Overpaid VAT	IDR2,000
2	Farmers groups/collectors (non-taxable entrepreneurs)	Non-fermented cocoa beans	IDR23,000	Non-fermented cocoa beans	IDR25,000	Input VAT	-
						Output VAT	-
						Underpaid VAT	-
3	Wholesalers (taxable entrepreneurs)	Non-fermented cocoa beans	IDR25,000	Non-fermented cocoa beans	IDR27,000	Input VAT	-
						Output VAT	IDR 0
						Underpaid VAT	IDR 0
						Income Tax Art. 22	IDR 67.5
4	Exporters	Non-fermented cocoa beans	IDR27,000	Non-fermented cocoa beans	IDR30,000	Input VAT	IDR 0
						Output VAT	IDR 0
						Overpaid VAT	IDR 0
						Export Duty	IDR1,500

Source: Processed by the authors (2019)

2.2. Tax Policy on the Export of Processed Cocoa and Chocolate Products

Figure 3. Business processes of the export of chocolate products and processed cocoa



Source: Processed by the authors (2019)

Figure 3 depicts a supply chain for the export of processed cocoa and chocolate products. Raw cocoa beans can be obtained from farmers, wholesalers, and importers. Semi-finished products from the cocoa processing industry are exported, as are chocolate-based products from the chocolate food/beverage industry. The aspects of taxation related to each party are presented in Table 7.

Table 7. Tax imposition schemes for the export of processed cocoa and chocolate products

No	Party	Input		Output		Tax Burden	
1	Farmers (non-taxable entrepreneurs)	Purchase of seeds, fertilizers, etc.	IDR20,000	Non-fermented cocoa beans	IDR23,000	Input VAT	IDR2,000
				Fermented cocoa beans	IDR30,000	Output VAT	-
						Overpaid VAT	IDR2,000
2	Farmers groups/collectors (non-taxable entrepreneurs)	Non-fermented cocoa beans	IDR23,000	Non-fermented cocoa beans	IDR25,000	Input VAT	-
						Output VAT	-
						Underpaid VAT	-
3	Wholesalers (taxable entrepreneurs)	Non-fermented cocoa beans	IDR25,000	Non-fermented cocoa beans	IDR27,000	Input VAT	-
						Output VAT	IDR2,700
						Underpaid VAT	IDR2,700
						Income Tax Art. 22	IDR 67.5
4	Cocoa processing industry (non-users of bonded zone facility)	Non-fermented cocoa beans	IDR27,000	Cocoa butter	IDR60,000	Input Vat - Domestic	IDR4,200
		Others	IDR15,000	Cocoa powder	IDR20,000	Input VAT - Import	IDR2,940
		Imported cocoa beans	IDR28,000			Output VAT	IDR 0
						Overpaid VAT	IDR7,140
						Import Duty	IDR1,400
						Income Tax Art. 22 Import	IDR 735
	Cocoa processing industry (users of bonded zone facility)	Non-fermented cocoa beans	IDR27,000	Cocoa butter	IDR60,000	Input VAT - Domestic	IDR4,200
		Others	IDR15,000	Cocoa powder	IDR20,000	Input VAT - Import	-
		Imported cocoa beans	IDR28,000			Output VAT	IDR 0
						Overpaid VAT	IDR4,200
						Import Duty	-
						Income Tax Art. 22 Import	-
5	Chocolate food/beverage Industry	Fermented cocoa beans	IDR30,000	Chocolate bar (80gr)	IDR55,000	Input VAT	IDR1,500
		Others	IDR15,000			Output VAT	IDR 0
						Overpaid VAT	IDR1,500
		Cocoa powder	IDR20,000	Chocolate bar (80gr)	IDR45,000	Input VAT	IDR3,500
		Others	IDR15,000			Output VAT	IDR 0
						Overpaid VAT	IDR3,500

Source: Processed by the authors (2019)

As previously explained, the delivery of cocoa beans is classified as a delivery of taxable goods, and therefore is subject to VAT. Based on Article 7 paragraph (2) of Law No 42 of 2009 (from now on referred to as the 2009 VAT Law), the export of taxable goods is subject to VAT of zero percent. Based on Table 7, the cocoa processing industry purchases non-fermented cocoa beans from wholesalers at IDR27,000, other raw materials at IDR15,000, and imported cocoa beans at IDR28,000. This transaction includes input VAT of 10 percent of the purchase price or import value. Thus, the cocoa processing industry must pay an input VAT of IDR7,140. However, when the cocoa processing industry exports half-finished products overseas, the output VAT is zero. This is regulated in Article 7 paragraph (2) of the 2009 VAT Law that the export of tangible taxable goods is subject to VAT of zero percent. Thus, the cocoa processing industry experiences overpaid VAT ofIDR7,140. This amount can be restituted in any tax year, as stipulated in Article 9 paragraph (4b) of the 2009 VAT Law and further regulated in PMK No 72 of 2010 on Procedures for Refunding Overpaid Value-Added Tax or value-added tax and sales tax on luxury goods. According to Article 4 of PMK No 72 of 2010, requests for refunds of overpaid taxes could be processed through an examination of the following:

a. Taxable entrepreneurs for specific criteria as referred to in Article 17C of the General Provisions and Procedures for Taxation (KUP) Law;
b. Taxable entrepreneurs fulfilling specific requirements as referred to in Article 17D of the KUP Law; or
c. Taxable entrepreneurs at low risk as referred to in Article 9 paragraph (4c) of the VAT Law.

In addition to the aforementioned taxable entrepreneurs, the refund of the overpaid tax is carried out through a tax audit. The tax audit is carried out within 12 months of the Director General of Taxes obtaining the request. The long period for refunding over paid input VAT disrupts the company's cash flow since the country holds its working capital.

The cocoa processing industry that imports cocoa beans is obliged to pay import duty on the import of cocoa beans. Import duty is one of the tax instruments aiming to provide educational protection for domestic industries. In this regard, import duty is imposed on cocoa beans to allow the domestic upstream cocoa industry to exist and develop. The production of cocoa beans continues to decline, increasing the import of cocoa beans. The downstream industry argues that domestic cocoa beans have yet to meet industry needs. However, the tax burden for imports is relatively high. Therefore, the industry proposes that the import duty is temporarily cancelled. In response, the Ministry of Agriculture continues to impose import duties on imported cocoa beans, to protect domestic cocoa farmers.

The downstream cocoa industry that produces export-oriented cocoa products may utilize one of the customs facilities provided by the government, namely the bonded zone facility. Utilizing this bonded zone facility, import duty and tax, in the framework of purchasing imported raw materials, are deferred. Based on the calculation scheme in Table 7, should they utilize the bonded zone facility, the cocoa processing industry is merely obliged to pay input VAT when purchasing raw materials domestically, valued at IDR4,200. If the cocoa processing industry does not utilize this facility, it is apparent that the amount of input VAT to be refunded is smaller. It indicates that, in terms of cash flow, the utilization of the bonded zone facility allows better cash flow due to less working capital held by the country.

However, to utilize this facility, the cocoa processing industry must meet several criteria stipulated in PMK No 131 of 2018, including being located in an industrial or a cultivation area. Should the industry be located in a cultivation area, it must cover an area of at least 10,000 m^2. Due to such requirements, only a few large companies can utilize the bonded zone facility. Based on the Directorate of Customs' facilities data, the number of downstream cocoa industry companies that are entitled to utilize the bonded zone facility amounts to merely four companies, comprising three cocoa processing companies and one chocolate food/beverage company. The number of downstream cocoa industry companies that utilize the bonded zone facilities is relatively small compared to the total number of companies in the downstream cocoa industry, as this consists of 20 cocoa processing companies and hundreds of chocolate food/beverage companies. It signifies that the bonded zone facility has yet to encourage the downstream cocoa industry to increase its exports. Exporting processed cocoa products such as cocoa butter and cocoa powder is an attempt to diversify Indonesian cocoa products worldwide, to provide higher value-added.

Table 8. The scheme of zero percent VAT for the export of processed cocoa and chocolate products

No	Party	Input		Output		Tax Burden	
1	Farmers (non-taxable entrepreneurs)	Purchase of seeds, fertilizers, etc.	IDR20,000	Non-fermented cocoa beans	IDR23,000	Input VAT	IDR2,000
				Fermented cocoa beans	IDR30,000	Output VAT	-
						Overpaid VAT	IDR2,000
2	Farmers groups/ collectors (non-taxable entrepreneurs)	Non-fermented cocoa beans	IDR23,000	Non-fermented cocoa beans	IDR25,000	Input VAT	-
						Output VAT	-
						Underpaid VAT	-
3	Wholesalers (taxable entrepreneurs)	Non-fermented cocoa beans	IDR25,000	Non-fermented cocoa beans	IDR27,000	Input VAT	-
						Output VAT	IDR 0
						Underpaid VAT	IDR 0
						Income Tax Art. 22	IDR 67.5
4	Cocoa processing Industry (non-users of bonded zone facility)	Non-fermented cocoa beans	IDR 0	Cocoa butter	IDR60,000	Input VAT - Domestic	IDR1,500
		Others	IDR15,000	Cocoa powder	IDR20,000	Input VAT - Import	IDR2,940
		Imported cocoa beans	IDR28,000			Output VAT	IDR 0
						Overpaid VAT	IDR4,440
						Import Duty	IDR1,400
						Income Tax Art. 22 Import	IDR 735
	Cocoa processing industry (users of bonded zone facility)	Non-fermented cocoa beans	IDR 0	Cocoa butter	IDR60,000	Input VAT - Domestic	IDR1,500
		Others	IDR15,000	Cocoa powder	IDR20,000	Input VAT - Import	-
		Imported cocoa beans	IDR28,000			Output VAT	IDR 0
						Overpaid VAT	IDR1,500
						Import Duty	-
						Income Tax Art. 22 Import	-

No	Party	Input		Output		Tax Burden	
5	Chocolate food/beverage Industry	Fermented cocoa beans	IDR30,000	Chocolate bar (80gr)	IDR55,000	Input VAT	IDR1,500
		Others	IDR15,000			Output VAT	IDR 0
						Overpaid VAT	IDR1,500
		Cocoa powder	IDR20,000	Chocolate bar (80gr)	IDR45,000	Input VAT	IDR3,500
		Others	IDR15,000			Output VAT	IDR 0
						Overpaid VAT	IDR3,500

Source: Processed by the authors (2019)

Table 8 illustrates the calculation scheme if the VAT incentive is not collected and is applied to the delivery of cocoa beans. The non-collected VAT policy impacts wholesalers and the cocoa processing industry in this case. For the cocoa processing industry, VAT overpayments are smaller than before. This condition impacts the companies' cash flow, allowing it to become smoother. In this scheme, the overpaid VAT that the government must bear is IDR 4,400.This has the potential to be returned (restitution) by the government. However, the bonded zone facility can further reduce the overpaid VAT that is refunded. Based on this scheme, the overpaid VAT that needs to be refunded by the government is only IDR 1,500. Reducing the amount of VAT refunded by the government can reduce the administrative costs of examining VAT refunds. On the other hand, this condition cannot be avoided due to the policy of the payable VAT not being collected on input VAT.

CONCLUSION

There are differences in the tax policies for cocoa's local and export-oriented business processes. The main issue for the local-oriented business processes is VAT. The imposition of VAT on cocoa beans is ultimately detrimental to farmers, since most farmers are not taxable entrepreneurs. Thus, they reduce their margins instead of using the input VAT as a tax credit.

On the other hand, tax policies on export-oriented cocoa commodities are divided into two categories: those for exporting cocoa beans and those for exporting processed cocoa and chocolate products. Regarding the export of cocoa beans, the tax policies for cocoa farmers selling to wholesalers are no different from those for the local-oriented business processes. However, the exporters have to bear overpaid VAT and export duty on the export of cocoa beans. Meanwhile, concerning the export of processed cocoa and cocoa products, the tax policies for cocoa farmers selling to wholesalers are similar to those for the local-oriented business processes. Should the cocoa processing industry utilize the bonded zone facility, there will be overpaid VAT to refund. Otherwise, the cocoa processing industry has to pay tax in the framework of import son importing raw materials. The chocolate food/beverage industry also experiences overpaid VAT on the export of its products, which can also be refunded.

In order to increase the cocoa commodities value-added, the government is expected to review the VAT policy on cocoa commodities. The existence of VAT has resulted in the decline of the farmers' margin since the wholesalers can reduce the purchase price of cocoa beans to reduce their VAT burden indirectly. In addition, the government is expected to maintain import duties on cocoa beans to protect domestic cocoa farmers and impose additional levies, such as a tax on palm oil export. The revenue is allocated to revitalize and rejuvenate the upstream cocoa industry instead of utilizing export duties or import duties on cocoa beans.

This study is limited by the absence of interviews with the export-oriented chocolate food/beverage industry and the use of customs facilities to ease imports for export purposes. This makes these findings less generalizable to other tax facilities. In addition, the chocolate food/beverage importers should be interviewed, to estimate the impact of the tax policy on finished goods. Future research might explore by mapping the tax policies on imported chocolate food/beverages (finished goods). This can be used to compare the tax posture between imported chocolate products and domestically produced chocolate products.

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REFERENCE

Anderson, B. (2008). *Tax expenditure in OECD countries*. Paper presented at 5th Annual Meeting of OECD-Asia SBO. Bangkok.

Circular Letter of the Director General of Taxes Number SE/24/PJ/2014 concerning Implementation of the Decision of the Supreme Court of the Republic of Indonesia Number 70/P/HUM/2013 concerning Value Added Tax on Agricultural Products Produced from Business Activities in Agriculture, Plantation, and Forestry. (2019, June).

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches.* United States: SAGE Publications.

Gheost, F. (2018). Astronomical, geographical and geological location of Indonesia and its advantages (*Letak astronomis, geografis dan geologis negara Indonesia serta keuntungannya*). Retrieved from https://www.geologinesia.com/2018/09/letak-astronomis-geografis-dan-geologis-indonesia.html

Government Regulation Number 12 of 2001 concerning Import and/or Delivery of Certain Strategic Taxable Goods Exempted from Value Added Tax (State Gazette of the Republic of Indonesia of 2001 Number 24). (2019, June).

Government Regulation Number 31 of 2007 concerning the Fourth Amendment to Government Regulation Number 12 of 2001 concerning the Import and/or Delivery of Certain Strategic Taxable Goods Exempted from the Imposition of Value Added Tax (State Gazette of the Republic of Indonesia of 2007 Number 69). (2019, June).

International Cocoa Organization (ICCO). (2018). *Quarterly Bulletin of Cocoa Statistics, Vol. XLIV, No. 3.* Retrieved from https://www.icco.org/about-us/international-cocoa-agreements/doc_download/2582-production-qbcs-xliv-no-3.html

Juarez, L. G.O., & Manrique, D.C. (2018). Introduction to tax incentives in the BEPS era. In Cotrut, Madalina & Munyandi, Kennedy (Ed.). *Tax Incentives in the BEPS Era.* Netherland: IBFD.

Khan, M. H. (2001). Agricultural taxation in developing countries: a survey of issues and policy. *Agricultural Economics*, *24*(3), 315–328.

Klemm, A. (2010). Causes, benefits, and risks of business tax incentives. *International Tax and Public Finance*, Vol.17, Iss. 3. Springer.

Lamensch, M. (2015). *European value added tax in the digital era: A critical analysis and proposals for reform*. Netherland: IBFD.

Law Number 17 of 2006 Concerning Amendments to Law Number 10 of 1995 concerning Customs (State Gazette of the Republic of Indonesia of 2006 Number 93). (2019, June).

Law Number 18 of 2000 concerning the Second Amendment to Law Number 8 of 1983 concerning Value Added Tax on Goods and Services and Sales Tax on Luxury Goods (State Gazette of the Republic of Indonesia of 2000 Number 128). (2019, June).

Law Number 42 of 2009 concerning the Third Amendment to Law Number 8 of 1983 concerning Value Added Tax on Goods and Services and Sales Tax on Luxury Goods (State Gazette of the Republic of Indonesia of 2009 Number 150). (2019, June).

Mattyasovszky, M. (2018). *Top 10 Cocoa Producing Countries.* Retrieved from https://www.worldatlas.com/articles/top-10-cocoa-producing-countries.html

Ojeda, G. (2017). *Cocoa Production and Chocolate Markets Worldwide.* Retrieved from https://farmfolio.net/articles/cocoa-production-chocolate-markets-worldwide/

Purwito, A, & Indriani. (2015). *Export, import, harmonization system, customs value and tax in customs* [*Ekspor, impor, sistem harmonisasi, nilai pabean dan pajak dalam kepabeanan*]. Jakarta: Mitra Wacana Media.

Purwito, A. (2010). *Customs and excise (goods traffic tax): Concept and application (Kepabeanan dan cukai[pajak lalu lintas barang: Konsep dan aplikasi*]. Jakarta: Penerbit FHUI.

Regulation of the Minister of Finance Number 110 of 2018 concerning Amendments to Regulation of the Minister of Finance Number 34/PMK.010/2017 concerning Collection of Income Tax Article 22 concerning Payment for Delivery of Goods and Activities in the Import Sector or Business Activities in Other Fields (State Gazette of the Republic of Indonesia Year 2018 Number 1234). (2019, June).

Regulation of the Minister of Finance Number 131/PMK.04/2018 concerning Bonded Zone (State Gazette of the Republic of Indonesia of 2018 Number 1367). (2019, June).

Regulation of the Minister of Finance Number 160/PMK.04/2018 concerning Exemption from Import Duty and Not Collecting Value Added Tax or Value Added Tax and Sales Tax on Luxury Goods on the Import of Goods and Materials to be Processed, Assembled or Installed on Other Goods with the Purpose of Export (State Gazette of the Republic of Indonesia of 2018 Number 1669).(2019, June).

Regulation of the Minister of Finance Number 161/PMK.04/2018 concerning the Return of Paid Import Duty on the Import of Goods and Materials to be Processed, Assembled, or Installed on Other Goods with the Purpose of Export (State Gazette of the Republic of Indonesia of 2018 Number 1670). (2019, June).

Regulation of the Minister of Finance Number 6 of 2017 concerning Stipulation of the Goods Classification System and Imposition of Import Duty Tariffs on Imported Goods (State Gazette of the Republic of Indonesia of 2017 Number 176). (2019, June).

Regulation of the Minister of Finance Number 67/PMK.011/2010 concerning Stipulation of Export Goods Subject to Export Duty and Export Duty Tariff (State Gazette of the Republic of Indonesia of 2010 Number 143). (2019, June).

Rifin, A. (2015). The impact of export tax policy on cocoa farmers and supply chain. *The International Trade Journal, 29*(1), 39–62. Taylor & Francis.

Rosdiana, H., & Irianto, E. S. (2014). *Introduction to taxation: Policy and implementation in Indonesia* [*Pengantar ilmu pajak: Kebijakan dan implementasi di Indonesia*] (3rd ed.). Jakarta: Rajawali Pers.

Rosdiana, H., Irianto, E. S., & Putranti, T. M. (2011). *Theory on value-added tax* [*Teori pajak pertambahan nilai*]. Bogor: Ghalia Indonesia.

Schenk, A., & Oldman, O. (2007). *Value added tax: A comparative approach.* United Kingdom: Cambridge University Press.

Sukardji, U. (2009). *Value added tax* [*Pajak pertambahan nilai*] (Revised ed.). Jakarta: Rajawali Pers.

Suranovic, S. M. (2000). *International Trade Theory & Policy Analysis*. International Economics Study Center.

Susanto, F.X. (2007). *Cacao plant cultivation and product processing* [*Tanaman kakao budidaya dan pengolahan hasil*] (6th ed.). Yogyakarta: Percetakan Kanisius.

Tait, A. A. (1988). *Value added tax: International practice & problems*. New York: IMF.

Terra, B, & Kajus, J. (2011). *A Guide to the Europian VAT Directives: Introduction to European VAT 2007 (Vol.1).* Netherland: IBFD.

The Directorate General of Plantations of the Ministry of Agriculture of the Republic of Indonesia. (2016). Statistics on Indonesian plantation: Cocoa 2015-2017 [*Statistik perkebunan Indonesia: Kakao 2015-2017*]. Retrieved from: http://ditjenbun.pertanian.go.id/tinymcpuk/gambar/file/statistik/2017/Buku-Kakao-2015-2017.pdf

Veen, H. van der, et al. (2007). *Exploring agricultural taxation in Europe.* The Hague: LEI.

Zain, M. (2008). *Tax Management* (*Manajemen perpajakan*) (3rd ed.). Jakarta: Salemba Empat.

Zolt, E. M. (2014, June). Tax incentives: Protecting the tax base. *Paper presented at "Tax Base Protection for Developing Countries" Workshop*. New York.